

**THE NATIONAL REGIONAL GOVERNMENT OF OROMIYA**

**OROMIYA PLANNING AND DEVELOPMENT COMMISSION**

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF ARSI ZONE AND ITS 24 DISTRICTS**

**April, 2022**

**Finfinne**

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**1. Introduction**

In the contemporary information age ,the systematic collection, analysis compilation and utilization of socio economic and natural resources data of a specific geographical area is a basic prerequisite for proper development planning and relevant local sustainable development intervention today in the developing countries ,the need for reliable, relevant and timely data and information on various aspects for local development planning and formulation of other development related research activities is increasing at large. It is helpful to the public officials to undertake appropriate economic and political activities that can properly respond to infinite needs and aspirations of citizens, set intervention priority to countless problems identify potential demands and gaps in a more comprehensive manner develop culture of transparency and accountability, build trust between the government institution and the public carry out their duties and responsibilities starting from planning to monitoring of the implementations of different development programs on the basis of accurate information in efficient manner comprehensive socio-economic profile of Asella city which of offers a wide array of facts about the city of Asella reflects the real current image of.the city has passed through and present and depicts success stories in different spheres of development, demanding efforts are made to portray the reality on the ground in undeniable manner

Basically socioeconomic factors from which a socio economic profile is made are both social and economic factors that make people who they are. It is the tool that provides the bird-eyes-views of the group of community in order to ensure sustainable development in the community.

**The following are the** **importance of socio-economic profile**:-

* It helps to provide a comprehensive picture about communities on sustainable development of a certain community for present and future.
* It helps the decision makers to get perspective about the community of the study site for social and economic planning for sustainable development.
* It helps the decision maker to get lesson and to learn from interdependence of spatial, social and economic profile data.
* It helps to provide a base line data for efficient planning and evaluation on social and economic issues at a certain spatial areas.
* It helps to indicate the best land use in the certain spatial area such as village and urban where majority of community invested more their funds.
* It helps to provide information about infrastructure services available in certain area for more improvement.

Thus socio-economic profile is very important for sustainability of any region and its community members. These are why we study the socio economic profile of Asella town.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Asella town that reflects the existing situation, development problems and potentials of the town to be used by government and non- Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used.

This document is compiled from the data collected from the different sectors of the town.

**Limitation of the document**

* Lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document.
* Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the town.

This paper has five chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focusedon socio-economic condition , population size and distribution, the third chapter deals with economic condition while the fourth, and fifth, with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively

## **CHAPTER ONE**

**1. PHYSICAL SETTING**

**1.1 Location and Area**

According to the information gathered from Asella city land Administration office Asella is one of the administrative towns of Arsi Zone. Astronomically, it is located 7o58’ Latitude and 39o07’ Longitude or the directional location of the city is 7054’55’’N- 8000’05’’N, latitude and 39006’10’’E-39010’00’E.Longitudes at average altitude of 2210-2700m above mean sea level (map) Asella city spatially positioned at south east finfine at distance of 175km from Adama but 159 kms from Finfine along the express way of Finfine - Adama.

Relatively the city is surrounded by peasant associations in all direction;

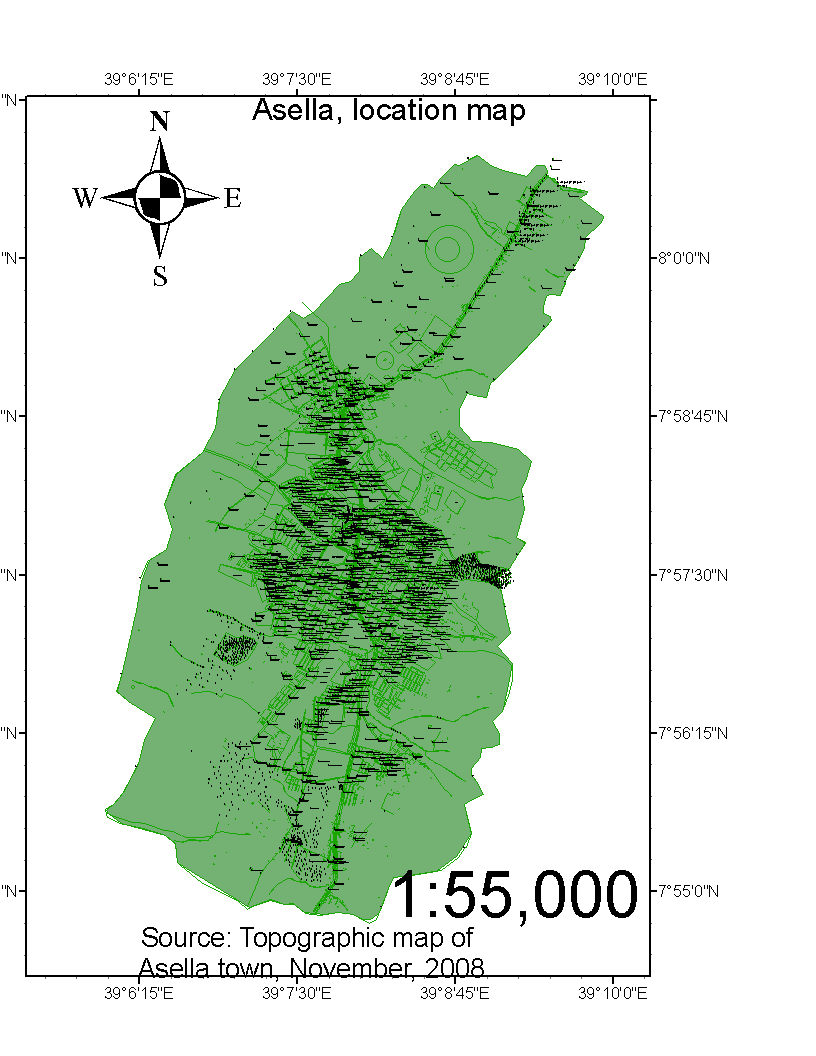
* Gora Silingo in the north and northeast,
* Lalo Cheka in the west and south west,
* Qonicha in the east and
* Burqa Chilalo in the south and southeast.

In the town currently there are **Eight (8)** administrative villages. Refer to the map below, Asella city covers the total area land surface of 46.23 km2. It is a capital city of Arsi Zone and Tiyo district.

**Map 1. Map of Asella town**

The peasant associations that are found in the east direction have hills facing and inclining towards west direction or to Asella town. That means the altitude of the land gradually declines from the eastern peasant associations to west direction. Similarly, the steepness of land also declines from east to west letting seasonal streams and rivers

Asella is categorized secondary level cities of Oromia and found at the South Eastern of Oromia and the country, at about 175 KM from the capital city of the country Finfine and it is the capital city of Arsi Zone. The city is located at the main transport route that connects the South-Eastern part of the country- to Finfinne, and other Cities. Based on the Federal census of 2007, currently, the population size of the city is found to be more than 100 thousand. Assela has the actual area of 4,623ha. As the city is accommodating all these people, the public infrastructure development and service delivery of the city should be at increasing rate of supply. The city has a big and strategic vision to become a center of trade/commerce, conference, Athletics Sport and Tourism for the whole Ethiopia, and Oromia in particular.

 **Source:-Asella ULGDP II**

Flow within west wards during the rainy season. The people residing in different peasant associations surrounding Asella town get different services like education, health, market services and land for different purposes. The people at the periphery of the town also get water service from the public water points found at the peripheries of some parts of the town. In some areas where public water points of the town are not available as in the case of western peasant associations, people harvest rain water to be used for their animals and for themselves.

The major agricultural products of the peasant associations bordering Asella town are the results of climate and soil of the surrounding areas. The types of crops grown are also depending on the altitude of the area. The higher altitude of the eastern peasant associations is favorable for the production of different types of cool weather crops like wheat, barley, potato and others.

**Historical Back Garaund of the Town**

**Naming of Asella Town**

Derived from one of Arsi Oromo Clams called Asella, which have two branches siko and mendo. Oral tradition elaborates that two brothers, Asso and jilo were living in the area where present day Asella town is situated. The Asso gradually reproduced and enlarged and occupied the whole area.

**Historical Emergence (modern era)**

**Evidence**

Minilik’s expansion to the south, southwest and east in the 19th and 20th centuries that motivated by political strategies and economic interests. Economic exploitation was supplemented by political consolidation. Therefore ,toll posts (Kellas) established near Walkessa River of present day Asella Town in 1915 E.C. Important market place were developed at the area and near other place of Arsi. The activities of the toll at Walkessa and Silingo were intensified and attracted more and more attention latter transformed in to few strong custom posts. Walkessa toll post (kella) was later transformed into Asella costume office (Gumruk) in 1930. Asella began to take urban form settlement.

**Status of Asella Town throughout its History**

* Historically Asella Town has had different position (status) in its formation in the Oromia national Regional state Emanated from small toll posts. Asella town has chronologically served as.

1. Small toll Posts
2. 1930s take a form of urban settlement
3. In 1942 Administered under municipal
4. From 1944 Asella as seat of whole Arsi Zone Administration till 1990s.
5. From 2003 the town has got **2nd A** rank town of Oromia to administer itself.

**1.2. Relief, Drainage, Geology and Climate**

The altitude of the town is 2210-2700 meters above the mean sea level. The lowest place is found in Walkessa area (2210m) while the highest place is located in Burkitu area (2700m). Due to its location the town has high network of river systems. The major permanent rivers of the town are;

* **Walkessa**,
* **Hanku**,
* **Konbolcha** **and**
* **Dosha**.

On the other hand, there are no major seasonal streams. Generally, the town has high potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**CLIMATE**

Hence, the dominant type of climatic condition of the town is moderately cool (badda- daree) agro-ecological zone. Cool weather condition with the highest amount of average annual temperature 17.30C and annual average minimum temperature 10.50C.Almost rain type is Bio modal with height mean rain fall 32.9 and lowest 12.4.The rainfall pattern is bi-modal,(aerographic type) which are short rainy season (Belg from February to March) and summer or long rainy season (from July to September).

**Chapter Two**

1. **Socio-Economic Condition**

**2.1. Population**

According to census of CSA 1999 the population number of Asella town is accounted to 74,268 towns had 110433 and 115055 populations in the year 2011 & 2012 respectively.

**Table: 2.1.Population distribution by sex for the town.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Urban** | | |
| Area | Male | Female | Total |
| 2011 | 55531 | 54902 | 110433 |
| 2012 | 57855 | 57200 | 115055 |

**Source: Projected based on 1999 CSA.**

**2.2 Population Density and urban settlement**:

Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the town had a crude density 2389 p/km2 in 2011, and 2489 p/km2 in 2012 respectively. An estimated population of Asella town 115055(2012) was distributed over an area of about 46.23km2 of Asella town .This gives an average crude population density of about 2488 persons per km2 .However, there is great variation from kebele to kebele .

* 1. **Urbanization**

The history of urbanization is of a recent phenomenon both in the, country as well as in Asella town .Most of the town owe their origin due to three major historical events.

1. Menelik’S southward expansion
2. Introduction of the Djibouti-Finfinne railway line
3. The Italian occupation

Menelik’s territorial enlargement after the 2nd half of the 19th century had in the emergence of some important garrison towns like Asella town established as bases for armed settlers following Menelik’s conquest and thereafter.

**2.4. Mineral Resources and Industry**

**Mining:** Like other parts of country in general and the Zone in particular, the mineral resources potential of the town is not investigated and known. Yet the town does not start to utilize these minerals resources.

**Industry:** In Socio-economic profile indicate the opportunities available for industrial investment in a certain area so as to ensure the well economic growth by providing more employment opportunities and allowing further investment opportunities.Similar to other parts of the Zone, industrial development is at good stage in Asella town. Mostly it is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. Most of them are food processing and privately owned. There are also some medium and large scale industrial established in the town.

**Table: 2.4 name of Industries and their capital in 2011**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Industry | Owner | Total Capital | Man Power | | | | | | | |
| Permanent Workers /A | | | Temporary Workerers/B | | | Total  A&B | |
| M | F | Total | M | F | Total | M | F |
| 1 | H/Werke Flour Factory | Priv. | 10483415 | 20 | 1 | 21 | 15 | 0 | 15 | 35 | 1 |
| 2 | Makilit(Mesfin) “ “ | Priv. | 23529480 | 143 | 340 | 483 | 20 | 0 | 20 | 163 | 340 |
| 3 | Hafiza “ “ | Priv. | 7650230 | 8 | 0 | 8 | 4 | 0 | 4 | 12 | 0 |
| 4 | H.H.Agro industry “ | Priv. | 10,600,000.00 | 10 | 4 | 14 | 10 | 0 | 10 | 20 | 4 |
| 5 | Idget Flour Factory | Priv. | 14129000 | 35 | 45 | 80 | 16 | 11 | 27 | 51 | 56 |
| 6 | Arsi Kater “ “ | Priv. | 600000000 | 27 | 14 | 41 | 20 | 0 | 20 | 47 | 14 |
| 7 | Sagure food complex | Priv. | 3576128 | 2 | 11 | 13 | 11 | 1 | 12 | 13 | 12 |
| 8 | Cilalo Food Complex | Priv. | 900000000.00 | 380 | 723 | 1103 | 70 | 0 | 70 | 450 | 723 |
| 9 | W.D Hawii | Priv. | 2500,000.00 | 2 | 3 | 5 | 10 | 0 | 10 | 12 | 3 |
| 10 | W.D Sodaree | Priv. | 30,000,000.00 | 12 | 8 | 20 | 30 | 2 | 32 | 42 | 10 |
| 11 | W.D Jamaal Awale | Priv. | 8328625 | 10 | 0 | 10 | 5 | 2 | 7 | 15 | 2 |
| 12 | W.D Allichoo | Priv. | 5000000 | 7 | 0 | 7 | 5 | 0 | 5 | 12 | 0 |
| 13 | W.D Asallaa | Priv. | 2,177,588.00 | 6 | 8 | 14 | 8 | 0 | 8 | 14 | 8 |
|  | Ida’ama | | 1,077,974,466 | 341 | 566 | 907 | 265 | 48 | 313 | 606 | 614 |

**Table: 2.5 name of Industries and their capital in 2012**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Industry | | Owner | Total Capital | Man Power | | | | | | | |
| Permanent Workers /A | | | Temporary Workerers/B | | | Total  A&B | |
| M | F | Total | M | F | Total | M | F |
| 1 | Gadaa Flour Factory | | Priv. | 7158256 | 5 | 20 | 25 | 15 | 0 | 15 | 35 | 1 |
| 2 | Makilit(Mesfin) “ “ | | Priv. | 11205700 | 143 | 340 | 463 | 20 | 0 | 20 | 483 | 143 |
| 3 | Hafiza “ “ | | Priv. | 10695688 | 6 | 27 | 33 | 5 | 0 | 5 | 11 | 27 |
| 4 | H.H.Agro industry “ | | Priv. | 9439875 | 7 | 26 | 27 | 10 | 0 | 10 | 20 | 4 |
| 5 | Idget Flour Factory | | Priv. | 46148004 | 57 | 109 | 166 | 5 | 2 | 7 | 62 | 111 |
| 6 | Arsi Kater “ “ | | Priv. | 16479490 | 309 | 390 | 699 | 5 | 2 | 7 | 314 | 392 |
| 7 | Cilalo Food Complex | | Priv. | 449,059,880 | 885 | 1475 | 2360 | 10 | 15 | 25 | 895 | 2375 |
| 8 | Jamaal Awale Flour Factory | | Priv. | 16488211 | 2 | 26 | 28 | 3 | 0 | 3 | 5 | 26 |
| 9 | Allichoo Flour Factory | | Priv. | 20948632 | 21 | 43 | 64 | 5 | 0 | 5 | 12 | 0 |
| 10 | ANB food complex | Priv. | | 4573177 |  |  |  |  |  |  |  |  |
| 11 | Kenenus garment | Priv. | | 9870000 | 50 | 80 |  |  |  |  |  |  |
| 12 | Zannabaa Barihee Flour Factory | Priv. | | 1,1000,000 |  |  |  |  |  |  |  |  |
|  | Ida’ama |  | | 613,066,913 | 1484 | 2536 | 4020 | 78 | 19 | 97 | 1837 | 3079 |

* 1. **Agriculture**

Agriculture is the dominant sector of the country economy it provides food stuffs, industrial raw materials, generates employment for about 85 percent of the economically active population of the region accounts for the largest share of the export items and constitutes the largest proportion of the regional gross domestic products .Asella town is endowed with the existence of agro –ecology and fertile soils that’s are good for agricultural activities. Agriculture is the primary sources of income and the dominant economic means of employment for the majority of farmers residing around the city. Agriculture sector as a basis of economic means employment for the majority of farmers residing around the city. Agriculture sector as a basis of economy has potential sources to a rising urban demand for food, meet the demand for crop production, achieve rapid agricultural growth, contribute food self-sufficiency efforts, improve income, increase nutrition, enhance the welfare of farming population and generate primary surplus to fuel the growth of other sectors of economy. with this view in mind ,the city agricultural desk adopted the policy introduced by the government of Ethiopia for better agricultural practices in combination with application of modern farming technology ,better soil fertility management effective and methods in harvesting which increases agricultural yield .Accordingly ,farmers residing in the modern technologies of agriculture in farming and animal husbandry like crop production ,dairy production poultry and animal fattening that the production has increased during the two years since the adoption of these technologies by farm families .

**2.5.1 Livestock Development**

In general livestock plays a significant role in the economy of the city in general and the farmers and households in particular .still promising to share great contribution to the economic development of the city livestock provide milk, meat, egg hides and skins livestock population (cattle ,sheep, goats ,horse, donkey).Asella was more the heads.

Asella indicated in the table below

2.5.1 Number of livestock population by types

|  |  |  |
| --- | --- | --- |
| Livestock population | 2011 | 2012 |
| Cattle | 16565 | 16723 |
| sheep | 4664 | 4671 |
| goats | 458 | 456 |
| horse | 685 | 671 |
| donkeys | 378 | 389 |

Source: Asella town Agricultural and natural resource office

**2.5.2 Major livestock disease (by types of livestock)**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Cattle diseases | Sheep and goats disease | Poultry |
| 1 | Black lel | Ovine pasknolisis | NCD |
| 2 | Bovine paskurolosis | orq | Marels |
| 3 | FMD | Sheep and goat pox | gumboro |
| 4 | Blont | Parasitiz diseases | fowl |
| 5 | Parasitiz disease |  | Pox,coccidis ,parasitiz |

Source: Asella town Agricultural and natural resource office

**Availability of veterinary services by type**

1. AI –Services
2. Health services
3. Vaccination services

**Availability of animal health institution by type**

No animal health institution still. Number of veterinary personnel (doctor of veterinary medicine

(DVM)-1 animal health assistant -3

**Factors affecting livestock rearing poultry and beekeeping in the city**

* **livestock :feed shortage and lost**

1. land availability shortage
2. lack of vaccination
3. shortage of animal health institution
4. coasty of veterinary drugs

* **factors affecting factors affecting poultry production**

1. coasts ofpoultry feed
2. less availability of day old chicken
3. coasts of 3 month old chicken
4. disease problem
5. Vaccination problem
6. No enough area poultry production (less availability of land for poultry

* **factors affecting beekeeping**

1. shortage of modern hives
2. shortage of land availablits.

**2.6. Micro and Small Scale Enterprise**

* Small scale micro enterprises play a great role in economic development by reducing poverty.

**Table 2.6. Services provided for micro and small scale enterprises by types of services, in the year 2011& 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Number of MSSE | Land allocated for  MSSE (hek.) | Loan disbursed to MSEs | Members received training | Total capital |
| 2011 | 282 | 13 | 29,506,139 | 155 | 282,000 |
| 2012 | 17 | 6 | 5,206,000 | 71 | 5,726,600 |
| Total | 299 | 19 | 34,712,139 | 226 | 6,008,600 |

Source: - Asella city Micro and small scale enterprise office

**Table 2.6. Number of Micro and Small scale Enterprise by type, year 2011 & 2012**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Number of MSSE by Types in Asella Town | | | | | | | |
| Industry | Serves | Agriculture | Constriction | Trade | Mineral | others | Total | |
| 2011 | 31 | 67 | 1 | 55 | 89 | 0 | 44 | 287 | |
| 2012 | 68 | 136 | 67 | 138 | 124 | 0 | 0 | 533 | |
| Total | 99 | 203 | 68 | 193 | 213 | 0 | 44 | 820 | |

Source: - Asella city Micro and small scale enterprise office 2011 & 2012

* Number of MSSEs cooperatives in 2011 & 2012 are **1053 & 840** respectively.
* Five main division of work type namely, **Industry, Serves, Agriculture, Constriction & Trade were types of work under which MSSEs are working.**
* Their starting capitals were 1,954,808.66 and **16,839,273 Birr** in 2011& 2008 respectively.
* Through the expansion of micro and small scale enterprise, the standard of life and life expectancy of the residents in the town changed from the previous some misery type of living style. In addition, expansion of job opportunity in the town through the cooperation of micro and small scale by different job types is becoming to the solution for the problem of unemployment rate.

**2.7. Investment**

In Asella town has large resource potential ,favorable climate, affordable labor, suitable investment policies and many opportunities that are suitable for profitable investment .The conditions have contributed a lot for the expansion development of investment in the town .As the data obtained from Asella Administration Investment office indicate from 2011 to 2012 there were **284** investment project having a total capital of **2152791755** Ethiopia birr .These projects have created a job opportunity for **8995** (**4516** male **4479** female) permanent and **5715** (male **2467**and female **3248**) temporary workers .from the indicated projects were **12** education **10** health **22** Hotel **75** Trade and **20** Industry projects the policy and strategy designed by the city encouraged the overall development of investments .The conditions play a key role accelerating the growth of trade, Hotel and IndustryAsella Town investment Activity from 2011-2012E.C.

**Table 2.7. Operational investment activities by sector and capital for the year 2011-2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sectors | year | No of  projects | Capital | Approved land (Hek) | Permanent job opportunity | Temporary job opportunity |
| Agriculture | 2011 | 3 | 64581251 | 24.1 | 159 | 492 |
| 2012 | 3 | 12,200,000 | 23.8 | 48 | 76 |
| Construction | 2011 |  |  |  |  |  |
| 2012 |  |  |  |  |  |
| Education | 2011 | 12 | 158794545 | 5.37 | 120 | 86 |
| 2012 | 11 | 26128922 | 3,27 | 195 | 208 |
| Health | 2011 | 10 | 145781622 | 1.56 | 610 | 150 |
| 2012 | 9 | 175220855 | 1.275 | 274 | 84 |
| Hotel | 2011 | 22 | 158468000 | 8.51 | 1027 | 406 |
| 2012 | 20 | 66078673 | 3.54 | 228 | 271 |
| Industry | 2011 | 20 | 302154542 | 12.14 | 4576 | 2145 |
| 2012 | 20 | 458693427 | 11.73 | 1257 | 956 |
| Mining and Energy | 2011 | - | - | - | - | - |
| 2012 |  |  |  |  |  |
| Real Estate | 2011 | 1 | 12450000 | 500m2 | 2 | 9 |
| 2012 |  |  |  |  |  |
| Trade | 2011 | 75 | 268975000 | 4.25 | 262 | 412 |
| 2012 | 74 | 217643518 | 3.53 | 231 | 408 |
| Transport | 2011 |  |  |  |  |  |
| 2012 |  |  |  |  |  |
| Others | 2011 |  |  |  |  |  |
| 2012 | 4 | 85621400 | 1.73 | 6 | 12 |
| Total |  | 284 | 2152791755 | 105.305 | 8995 | 5715 |

Source: Asella Administration Investment office

**2.8. Trade Activities**

**Trade:** Asella town has 4804 licensed traders in2011 and 3786 license renewed trader ,while the number of traders that taken new license in 2012 are **1305** and license returned/canceled are **373 in 2012** .On the other hand, there were trades who engaged on whole seller, retail, service and industry trading activities in the town. In the year 2012 there were 87 whole sellers, with capital 7673634.00 service provider and 214 industries in the town. Not only this but also the following table shows types of trader with respective capital and number in 2011 and 2012.

**Table:- 2.8. Traders in the town by type of trading**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Types of trader** | **2011** | | **2012** | |
| **No** | **Capital** | **No** | **Capital** |
| 1 | Whole seller | 87 | 7673634 | 249 | 8329637 |
| 2 | Retailer | 3665 | 18342612 | 4752 | 854941657 |
| 3 | Service |  |  |  |  |
| 4 | Industry | 214 | 179786523 | 229 | 442647942 |
| 5 | Others | 2623 | 367256890 | 100 | 300000 |

Source: - Asella town administration Trade office

**2.9. Natural sites of tourism:**

Asella town is graced and blessed with abundant tourism resources that attract tourists seeking enjoyment and make the city unique in the eyes of tourists .Asella have several tourist attractions and home to different natural sites geographical features and ever green jungle forest .Naturally ,the presence of magnificent, resplendent tourist sites and relatively developed tourism infrastructure facilities around the Asella city like chilalo mountain ,bio-farm recreation site and several heritages standardized hotels (including the great runners Derertu Tulu,Kenenisa Bekele hotels),Solgam hotele, Berihe hotel.Asella has been examined the home of many Ethiopian worldwide and popular track athletes .Such as Derertu Tulu ,kenenisa Bekele ,Fatuma Roba Gezahgne Abera,Turunesh Dibeba,Ejegayhu Dibeba ,Genzebe Dibeba, Aana Dibeba ,Mohammed Aman, Asha Gigi, Husen Shibo Haji H/Adilo are some of them .These green flooded runners are the golden generation of Asella as well as the oromia and Ethiopia.The presence of notable and oldest Millennium park at the vicinity of Asella which is natural home of different species attracts many tourists to the city .In the millennium park compound there are different tourism attractive events such as especial big trees called **father of tree in** the millennium primitive water reservoir and different species of endemic plants, birds and wild animal

### Asella town is known by the most beautiful Arsi Oromo traditional dressing style can be seen in and around Asella with unique hairstyle also various cultural equipments. Asella is a town of multi diversity in nation and religious that live together in harmonized love and peace among them

Seven parks were inventoried in the city covering a total area of **710164.8 m2**, Ashebeka Lake Park is the largest covering 238 hectares. Seedling site inside Millennium Park covers 3.6 hectares.



Figure -Millenium Park

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/N** | **Name** | **Location** | **Status** | **Area** |
| 1 | Diaspora Park | Burkitu Kebele | Functional | 122,956.76 |
| 2 | Millennium Park-1 | Burkitu Kebele | Functional | 35,814.36 |
| 3 | Millennium Park-2 | Burkitu Kebele | Functional | 169,414.28 |
| 4 | Millennium Park\_3 | Kombolcha Kebele | Functional | 139,953.91 |
| 5 | Ashebeka Lake Park | Halila Kebele | Functional | 238,067.46 |
| 6 | City Administration Area park | Chilalo Kebele | Functional | 338.93 |
| 7 | Assela Seedling Site | Burkitu Kebele | Functional | 3,619.10 |

**Hotels and tourism**

Asella has nice fresh air, vibrant trade, and location in the center of the country at two hour drive from Finfinne many people come to refreshments and vacations, leisurely walk in the city to get great enjoyments and refresh their mind and cultivate joy. Special at the October, November and December Asella has an outstanding reputation for providing excellent hotel services from these there are shovels standard hotel of star and 48 medium standard hotels in the town

**Table 2.9. Tourist attraction centers by Type**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name of attraction** | **Specific town** | **Distance in km**  **From** | | **Type of the site** | **Current**  **status** |
| **Finfinne** | **Zonal**  **Capital**  **Asela** |
| Millennium park | Asella | 175 | 4 | (conserved) | Excellent |
| Bio-park | Asella | 168 | 3 | Attractive site | Good |
| Bio farm | Asella | 169 | 3 | Man-made | Good |
| Tekle haymanot | Asella | 175 | 4 | - | - |

**Source: Asella town** culture and tourism Office

**Sport:** The town had different types of sport activities like Foot-ball, basketball and Athletics.

**Table2.10. Sport Clubs and members in the town**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of club** | **Member** | **Number of club** | **Member** |
| Foot-ball | 6 | 200 |  |  |
| Volleyball | - | - |  |  |
| Badmentan project | 1 | 25 |  |  |
| Athletics | 2 | 180 |  |  |
| Tennis | 1 | 10 |  |  |
| Basket ball | 2 | 60 |  |  |
| Others | 4 | 88 |  |  |

Source: Asella town sport office

**2.13 Social security**

**Number of criminal recorded by types and civil cases lodged, decided and pending in the city.2011**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Criminal case | | | Civil case | | | total | | |
| lodged | decided | pending | lodged | decided | pending | lodged | decided | pending |
| 2011 | 209 | 191 | 13 |  |  |  | 209 | 191 | 13 |
| 2012 | 212 | 182 | 40 |  |  |  | 212 | 182 | 40 |

**2.11. Finance and Financial Institutions**

Finance is the study of the rule of the government in the economy which assesses government revenue and expenditure of the public authorities and the adjustment of one or more to achieve desirable effects and undesirable ones.

**2.14.1 Revenue Collection**

People need decent wages, education, road, water power and health care among others that requires sustainable revenue collection with prudent financial discipline. Governments received from income taxes return earning for which the taxpayer is liable.

|  |  |  |  |
| --- | --- | --- | --- |
| No | categories | 2011 | 2012 |
| 1 | A | 530 | 320 |
| 2 | B | 836 | 787 |
| 3 | C | 2950 | 1617 |
| 4 | T | 4316 | 2724 |

Source: Asella town sport office

Asella city has fiscal autonomy to raise revenue manage revenues and expenditures collect taxes and inject capital for public investment on infrastructure ,finance recurrent and development expenditure. Regarding revenue collection Asella city has not strong economic bases and promising potentials .The major sources revenue in the city consists title deed of land rent fees ,collateral agreement registrations and confirmations ,vehicle registrations, driver ,license, the lease of land ,bus terminal services emblems and sign board and any advertising service fees ,provision of cart chariot service trade license fees, property transfer taxes sales taxes, revenues from miscellaneous fees frights charges frees and services charges like abattoir service fees ,technical services, sanitary services, marriage and birth certificate construction licenses fees, house rent fees etc.

**2.14.2 Expenditure**

**T**he city administration injects sturdy money to finance its economic and social development, improve its infrastructure and enhance power and water supply, physical infrastructure construction and poverty reeducation activities like education, health etc. take the lion share of the city budget over years which increasing from year to year to lift more people from swamp of poverty and bring remarkable progress in well-being and poverty reeducation

|  |  |  |  |
| --- | --- | --- | --- |
| No | expenditure | 2011 | 2012 |
| 1 | capital | 1,762,182.83 | 29,606,703 |
| 2 | salary | 109,714,980.61 | 174,438,785 |
| 3 | operation | 8,814,470.87 | 22,200,761 |

**Annual budget allocation**: Annual budget requirement of town is covered mainly from two sources: regional government grants and town in land revenue. Regional government contribution shares the largest amount.

In the year 2011 and 2012 the total budget allocated for the town is Ethiopian Birr 116,158,997.00 and 153,965,918.00. According to the data obtained from Finance and Economic Development office, the budget allocated for the town showing an increasing trend from year to year.

**Table 2.10. Annual Budget Allocated for the Town**

|  |  |  |
| --- | --- | --- |
| Year (EFY) | Annual Budget Allocated | Growth Rate (%) |
| 2011 | 116,158,997 |  |
| 2012 | 153,965,918 |  |

Source: Asella town Finance and Economic Development office

**Financial Institution:**

Financial institution is an establishment that conducts financial transactions such as investments, loans and deposits. Banks and insurances are the major financial institutions that that facilitate these functions banks also aggregate the activities of many borrowers and lenders .insurance is a form of risk management agreement, legal promise of reimbursement in the case of loss, paid to people or companies or are consumed about hazards that they have made prepayments to an organization or any individual. Finance is used by individual’s government.

The availability of various financial institutions like banks and Insurance, urban Credit and Saving Association play a significant role in the transformation the economy of the town. The town has five branch of Commercial Bank of Ethiopia, one Development Bank of Ethiopia, two branch of Awash International Bank, two branch of Cooperative Bank of Oromia, two branch of Oromia International Bank Hibrat Bank, Absina bank, Nib bank, Deshin Bank, Adiss Bank, Birhan Bank, Buna Bank Wogagan, Abay Bank and other micro saving institutions such as Wasasa, ,PEACE, Busa Gonfa, Walko and Metemamen.

**Financial institutions in Asella Town**

|  |  |  |  |
| --- | --- | --- | --- |
| year | Financial institution | | |
| Banks | Micro finance | insurance |
| 2011 | 21 | 5 | 2 |
| 2012 | 21 | 5 | 2 |

Source: Asella town Finance and Economic Development office

**CHAPTER THREE**

**3.1 Infrastructure and Social Facilities**

**3.1.1. Transport and Communication**

**Roads:** is one of the major componentsof infrastructural facilities which allow the movement of goods and services to markets .Without efficient and effective road network economic and social developments that have a positive impact on socio economic development and multiplier effect on the city development and strengthen urban economic productivity. without road .service delivery growth is unthinkable .urbanization and economic growth rely on adequate road coverage and development that support social and economic development .efficient road network has greater impact on the livelihood and benefits of the people living in the locality and overall economic development by connecting them with each other and facilitating the movement of goods and services .It is a powerful instrument in creating job opportunities ,prolonging life span of vehicles, facilitating transport networks, slashing down transaction coasts .connecting and transporting goods, improving users, conveniences, the quality of life and economic development ,attracting the expansion of trade ,investment and industry hastening general economic development of the city realizing economic suitable for living and work ,changing the image of the city .According to the present urban policy 30% of the total area of the city allocate to road development .But in Asella the existing land use pattern show less than 30% of the total area of the city covered with the road construction.

**Table 3.1:- description of road infrastructure item**

|  |  |  |  |
| --- | --- | --- | --- |
| **year** | **Asphalt (m)** | **Cobble (m)** | **Red ash road (m)** |
| 2011 | 20.93 | 22.97 | 118.34 |
| 2012 | 21.55 | 29.62 | 153.3 |

Source: - Asella town ULGDP II office

**3.2 Bus Station**

Asella has one restless bus stations of bus stops that swarmed by passengers from day break to evening .it bus stations have been located in the heart of the city. The city’s terminal found in the heart of the city region which is known for its hustle and crowdedness mobility of people moving from sunrise to sunset and north to south of contries.

**3.3 Cattle Slaughtering House**

The city administration has its own modern abattoir that is located on the extreme located on the extreme east of the city (gander Konbolcha).it provides up-to-date slaughter services and help the community obtains quality and healthy meat and protect the environment from pollution slaughtering house is an establishment were animals like cattle, sheep and goats are slewed .Abattoir house helps cities to control illegal activities and manage slaughtering of animals that to be held in confined place by healthy and skilled persons and up-to-date butchery equipment to avoid unhealthy food ,mitigate disease transmission from animals to humans ,reduce illegal. Cattle slaughterer and generate revenue for city administration. It has the capacity to slaughter 65 cattle per a day.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the town had branch type of postal services in the town which provides both domestic and international service.

The postal office of Asella town was established in 1937 E. C. It is giving its service in its own office found in chilalo Keble Asella town. The major services rendered by the postal office of the town are E.M.S service, money order issuing and paying service, money fax issuing and paying service. There is a continuous rise in both incoming and outgoing domestic and international letters in Assela. Refer to the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| year | Domestic | | International | |
| Incoming | outgoing | Incoming | outgoing |
| 2011 | 423 | 193 | 240 | 213 |
| 2012 | 338 | 168 | 228 | 196 |

Source: Asella town postal office

**3.3. Water and Energy Supply**

**Water supply:** potable water coverage of the town is good. According to data obtained from Asella Water Resource Office, of the total population of the town about 105,205 is supplied with potable water in the year.

The water supply system of Asella city mainly comprises production of water at the source, transmission of water to distribution centers and distribution of water to customers. The major assets being used for provision of the water supply service includes water production and treatment plant, water lines, reservoir, pumps, valves, chambers, public water taps, water meters and joints. Accordingly; the inventory result revealed that, the water Supply Network Asset inventory of Assela city revealed that the city has **73.7**kilometer length of distribution line 41.8Kilometer transmission line and 2Kilometer bono laterals. Besides, the Water Supply of Assela city has a point location asset are described in table 13 which includes public tap (Bono) with a total count of 35, Reservoir (8), Pumps (4), Booster Pumps (5), and Hydrant (2).

**Table 14: Inventory Result of Asella Water Supply Assets**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Water Supply Category** | **Unit** | **Quantity** |
|  | Water Supply Distribution Line | Meter | 73720.3 |
|  | Water Supply Transmission Line | Meter | 41845.8 |
|  | Bono Laterals | Meter | 1992.25 |
|  | Deep Well | No. | - |
|  | Pumps | No. | 4 |
|  | Booster Pump | No. | 5 |
|  | Reservoir (for water distribution) | No. | 8 |
|  | Public Tap (Bono) | No. | 35 |
|  | Hydrants | No. | 2? |
|  | Valves | No. | 176 |
|  | Spring Water | No. | - |
|  | Break Pressure Pump | No. | 2 |
|  | Generators | No. | 2 |
|  | Office | Number | 1 |

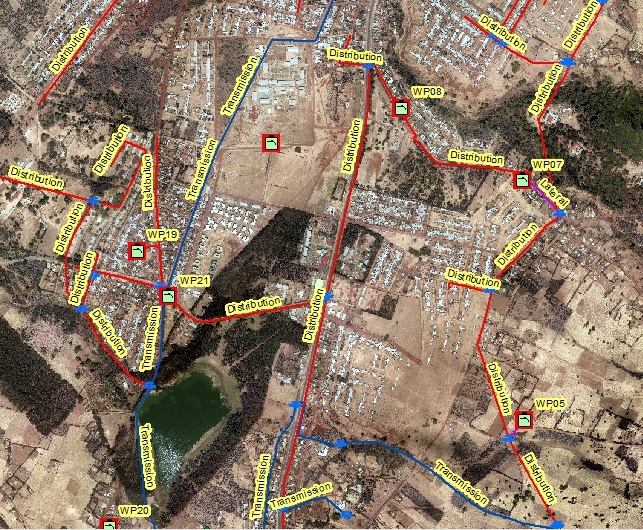


Figure Water Supply Network

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. All Kebles of the town have supplied with electric power.

However, in the town traditional sources of energy are still the dominant form of energy for cooking and other purposes that play a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the town. In urban area, Firewood is the most important energy source followed by electricity, charcoal, and animal dung.

**CHAPTER FOUR**

1. **Social Service and Infrastructure Condition**

**4.1 Education**

Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits education can take place formal or informal settings and any experience that has affirmative effect on the way one thinks, feels or acts may be considered educational.

Education is commonly divided formally in to such stages as pre-school or kindergarten, primary school, secondary school and then college or university .In order to reveal the performance of education system indicators play an important role an indicator is a measure, which can be used to predict economic ,social or political or organizational development trends since indicators are used by policy makers ,planners and other stakeholders for different purposes, it is very important having them timely .

However, it should be noted that a single indicator may not be enough to give a full picture of a certain phenomenon and thus the use of two or more indicators in combination will maximize the power of the indicators in explaining a given situation hence in this publication .The data of few indicators that are assumed to be the most important for the majority of the stake holders in education are presented.

Table ---Number of educational institutional

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | School type | Number of school in 2011 | | | Number of school in 2012 | | |
| Government school | Non-Government school | Total | Government school | Non-Government school | Total |
| 1 | kindergarten | 8 | 32 | 40 | 8 | 33 | 41 |
| 2 | Elementary school (1-8) | 9 | 24 | 33 | 9 | 24 | 33 |
| 3 | High school (9-10) | 4 | 4 | 8 | 4 | 4 | 8 |
| 4 | Preparatory school(11-12) | 2 | - | 2 | 2 | - | 2 |
| Total number schools | | 23 | 59 | 82 | 23 | 60 | 83 |

Source: Asella town Education office

1. **Pre-primary education**

Pre-primary education is basically intended for children of ages 4-6 the program is the initial stage of organized instruction provided as a bridge between home and school. The main purpose of early childhood education is to develop the mental and physical capability of children.

As the chart below depicts the number of kindergarten (kg) schools has increased tremendously from year to year between 2011 and 2012 E.C.

Table Number of KG School by the year.

Source: Asella town Education office

**Enrolment in Pre- Primary Education**

As it is seen from the table below from 2011 to 2012ec the number of enrolment of children in kindergarten education has increased from 4511(male 2315 and female 2196)2011 to 4800(male 2476 and female 2324) 2012

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Government kindergarten | | | Non-Government kindergarten | | | Total | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 187 | 179 | 366 | 2128 | 2017 | 4145 | 2315 | 2196 | 4511 |
| 2012 | 199 | 228 | 427 | 2277 | 2096 | 4373 | 2476 | 2324 | 4800 |

Source: Asella town Education office

Source: Asella town Education office

Table GER of kindergarten education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| kindergarten | 97 | 98 |

Source: Asella town Education office

Table NER of kindergarten education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| kindergarten | 91 | 81 |

Source: Asella town Education office

**Primary Education**

Primary Education is absolutely critical for nation’s development .providing on the average the highest public returns to investments for our city (town) primary education is defined as education given from grades 1-8 in two cycles .The first cycle includes grades 1-4 while the second cycle includes 5-8 .The number of primary school for this two years not increase .

Table ---Number of educational institutional

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | School type | Number of school in 2011 | | | Number of school in 2012 | | |
| Government school | Non-Government school | Total | Government school | Non-Government school | Total |
| 2 | Elementary school (1-8) | 9 | 24 | 33 | 9 | 24 | 33 |

Source: Asella town Education office

**Primary school in Asella town**

In order to enhance the accessibility of primary school in the Asella town ,various efforts have been made and accordingly large number of children have started their primary education in the nearly schools .the number of primary schools (1-8) for this two year not increase .

Source: Asella town Education office

**Enrolment in primary education**

An increment in the establishment of primary school has increased the number of enrolments of primary education in the town. As it is seen from the table below the number of enrolment in the primary education (1-8) has increased from 17,693 (Male 8,376 and female 9,317) in 2011 to 18,201 (male 9,010 and female 9,191) in 2012 E.C. This indicated that the number students increased in the current year.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | year | Government primary(1-8) | | | Non-Government primary(1-8) | | | Total | | |
| M | F | T | M | F | T | M | F | T |
|  | 2011 | 4886 | 6018 | 10904 | 3490 | 3299 | 679 | 8376 | 9317 | 17693 |
|  | 2012 | 5015 | 6128 | 11143 | 3995 | 3063 | 7058 | 9010 | 9191 | 18201 |

Source: Asella town Education office

**Pupil Section Ratio (PSR) Of Primary Education**

Pupil section ratio (PSR) is one of the educational quality indicators. It indicates an average number of pupils per class .It give a rough estimation of class size .The national standard set for PSR of primary education is 50:1.The situation of Asella town is indicated as follows As it is seen from the table ,pupil to section ratio of primary education (1-8) was 37:1 in 2011 and 30:1 in 2012.

Conclusion: From the above figure, we can conclude that in both years the number of students and sections ratio is above the standard we expect. Since it is good that there is enough class and suitable for teaching-learning activities in our town.

Table number of primary school section

|  |  |  |
| --- | --- | --- |
| No | Year | Number of section |
| 1 | 2011 | 476 |
| 2 | 2012 | 602 |

Source: Asella town Education office

**Pupils: Teacher Ratio (PTR) Of Primary Education**

Pupil to teacher ratio (PTR) is also one of the common educational indicators. It indicates the efficiency and quality of education. There are two major views regarding PTR. The first view is that the lower the PTR is the better the opportunity for making good contact between the teacher and pupils and this creates favorable conditions for the teachers to support the students individually and thereby improving the quality of education on the other hand, very low PTR may indicate inefficient use for or underutilization of teachers and thereby results in low efficiency. Hence, low or high PTR alone does not show the quality of education, because the quality of education depends on other factors such as mode of delivery, commitment, qualification of teachers, supply of educational materials and others. Any how the indicator is useful for setting minimum standards throughout the Asella town. The national standard set for PTR IS 50:1 at primary (1-8) and 40 at secondary level. With this in mind the situation of Asella town is indicated in the table below. As it is seen from the above chart, the PTR for primary (1-8) education in Asella town was 64:1 in 2011 and 62:1 2012

The PTR of our town exceeds the national standard set for this level by 12 and this initiates some efforts to minimize PTR in order to bring to the national standard. Even if the current standard is good than the previous year, still it is not achieve the national standard.

Table: number of primary school (1-8) teachers by sex

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Years | Number of teachers | | |
| M | F | T |
| 1 | 2011 | 108 | 170 | 278 |
| 2 | 2012 | 103 | 191 | 294 |

Source: Asella town Education office

**Gross Enrolment Rate (GER) Of Primary Education**

Gross enrolment ratio is the total enrolment in specific level of education, regardless of age, expressed as percentage of the official school-age population corresponding to the same level of education in a given school year. GER is accrued measure of education coverage and since it includes under-aged and over-age students. It can be higher than 100% .This is frequently, the case in countries attempting to address the backlog of students interested in attending school but previously unable to do so because of several problems like financial, family issues and the like .The situation of GER of primary education in Asella town in the last two year is education in Asella town in the last two year is indicated in the table below

Table GER of primary education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| Grade 1 | 111 | 98 |
| 1-4 | 98 | 99 |
| 5-8 | 95 | 92 |
| 1-8 | 96 | 97 |

Source: Asella town Education office

**Net Enrolment Rate NER of Primary Education**

Net enrolment rate is the rate of the official age group for a given level of education expressed as a percentage of the corresponding school age population.

NER is the best way of measuring organized timely school participation and is a more refined indicator of the school enrolment coverage in terms of explaining the proportion of pupils enrolled from the official school age group. The theoretical maximum value of NER is 100% NER is usually lower the GER since it excludes over age and underage students. the status of NER of primary education of Asella town in the last two years is indicated in the table below.

Table number NER of primary education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| Grade 1 | 74 | 78 |
| 1-4 | 95 | 92 |
| 5-8 | 84 | 89 |
| 1-8 | 90 | 91 |

Source: Asella Town Education office

**Gender Parity Index (GPI) Of Primary Education**

Gender parity index is the ratio of the value for female to the value for male .A gender parity index of 1 indicates perfect equality between perfect equality between males and females, while a GPI closer to zero indicates high disparity between school participation of females coppered to males. In class of 100 students, if 50 are female, then the GPI IS 1. The situation of GPI of primary education, i.e. .first cycle primary (1-4), second cycle (5-8) and full primary education (1-8) of Asella town in the last two consecutive years (2011-2012) is indicated in the following manner.

Table number GPI of primary education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| Grade 1 |  | 78 |
| 1-4 | 0.9 | 0.93 |
| 5-8 | 0.88 | 0.86 |
| 1-8 | 0.9 | 0.98 |

Source: Asella town Education office

The above table shows primary GPI calculated from GER for two consecutive years (2011-2012)As it is seen from the table ,the disparity between male and female in the primary second cycle (5-8) was in 2011 this disparity has been deceased 0.88 to 0.86 in 2012 E.C.

## **Secondary Education**

Secondary education is education given for grade 9-12 in two cycles .The first cycle includes grade 9 and 10, while the second cycle(preparatory ) includes grade 11 and 12. National examination is given at grade 10 to certify completion of general secondary education and identify students who qualify for the next higher level of education (preparatory or TVET) program.

Table ---Number of educational institutional

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | School type | Number of school in 2011 | | | Number of school in 2012 | | |
| Government school | Non-Government school | Total | Government school | Non-Government school | Total |
| 1 | High School(9-10) | 4 | 4 | 8 | 4 | 4 | 8 |
| 2 | Preparatory school(11-12) | 2 | - | 2 | 2 | - | 8 |

**Enrolment of secondary education**

Table enrolment of secondary schools by cycle from 2011-2012

|  |  |  |  |
| --- | --- | --- | --- |
| Year | 9-10 | 11-12 | 9-12 |
| 2011 | 7867 | 3244 | 11111 |
| 2012 | 8550 | 4771 | 13321 |

Source: Asella town Education office

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| no | year | High school(9-10) | | | Preparatory school (11-12) | | | 9-12 | | |
| M | F | T | M | F | T | M | F | T |
|  | 2011 | 4124 | 3743 | 7867 | 2116 | 1128 | 3244 | 6240 | 4871 | 11111 |
|  | 2012 | 4401 | 4149 | 8550 | 2863 | 1908 | 4771 | 7264 | 6057 | 13321 |

Source: Asella town Education office

**Pupil: Section Ratio (PSR) of secondary education**

As it has been mentioned under the primary education PSR is generally quality indicator in education .It is recalled that the national standard for pupil section ratio for secondary education is 50:1.

The table below shows the situation of pupil to section ratio of secondary education in Asella town.

Table. Pupil section ratio (PSR) of secondary education by cycles from 2011-2012 E.C.

|  |  |  |
| --- | --- | --- |
| Grade | 2011 | 2012 |
| 9-10 | 62:1 | 68:1 |
| 11-12 | 75:1 | 72:1 |
| 9-12 | 66:1 | 70:1 |

Source Asella: town Education office

As it can be seen from the table pupil to section ratio of first cycle secondary education (9-10) was 62:1 of in 2011 and 68:1 ratio was obtained in 2012 took on the other hand pupil to section ratio of secondary cycle secondary education (11-12) was 75:1 in 2011 and also reduced to 72:1in 2012 pupil to section ratio of (9-12) was 66:1 in 2011 and also increase 70:1

**Pupil: Teacher ratio (PTR) of secondary education**

The national standard set for PTR of secondary level of education is 40:1 The table below shows the relative change in PTR for the secondary education during the last two year in Asella town .The PTR for secondary first cycle (9-10)was 32:1in 2011 and 28:1 in 2012 .The PTR of the secondary cycle has been (11-12) was 27:1 in 2011 and 34:1 in 2012 pupil to teacher ratio of (9-12) was 30:1 in 2011 and 30:1in 2012

Table. Pupil section ratio (PSR) of secondary education by cycles from 2011-2012 E.C.

|  |  |  |
| --- | --- | --- |
| Grade | 2011 | 2012 |
| 9-10 | 32:1 | 28:1 |
| 11-12 | 27:1 | 34:1 |
| 9-12 | 30:1 | 30:1 |

Source: Asella town Education office

**Secondary Schools Gross Enrolment Rate** **(GER)**

Gross enrolment rate (GER) compares those students enrolled, regardless of their age with the population of the appropriate age group rage .the age group for the first cycle secondary education is 15-16 years .While that of the secondary cycle secondary education (preparatory) is 17-18 years.

Table secondary education GER by year and cycle

|  |  |  |  |
| --- | --- | --- | --- |
| Year | 9-10 | 11-12 | 9-12 |
| 2011 | 113 | 62 | 87 |
| 2012 | 110 | 65 | 87 |

Source: Asella town Education office

**Net Enrolment Rate (NER) Of Secondary Education**

Net enrolment rate (NER) Measures the enrolment of children of the appropriate age that is 15-16 years old for the first cycle secondary education and 17-18 years old for the second cycle secondary (preparatory) education with school age population of the level NER is ideally 100% but for secondary education it is rarely achieved and very low NER suggest that large numbers of school age population are out of the school. The chart below shows the NER of secondary education in two cycles.

Table secondary NER (2011-2012)

|  |  |  |  |
| --- | --- | --- | --- |
| year | 9-10 | 11-12 | 9-12 |
| 2011 | 67 | 47 | 57 |
| 2012 | 80 | 50 | 65 |

Source: Asella town Education office

**Gender Parity Index (GPI) Of Secondary Education from GER**

Gender parity index (GPI) is the ratio of the value for females to the value for male. The table below shows the gender parity index (GPI) calculated from the Gross enrolment rate (GER) of first and second cycle secondary education. As it is seen from the table gender disparity is high in the secondary education in 2011 E.C. The disparity index of the first cycle secondary education (9-10) was 0.7 in 2011 ec and 0.9 in 2012 ec similarly ,gender disparity index of the second cycle secondary education (11-12) was 0.9 in 2011 reduced to 0.6 in 2012 ec in the similarly gender disparity index of the (9-12) was 0.8 in 2011 and 0.8 in 2012..In general when gender parity index of primary and secondary education in Asella town is compared there is high gender disparity index in secondary education than primary education that huge efforts should be made in order to mitigate the gender disparity in secondary education of the town.

Table number GPI of secondary education (2011-2012)

|  |  |  |
| --- | --- | --- |
| Cycle | years | |
| 2011 | 2012 |
| 9-10 | 0.7 | 0.9 |
| 11-12 | 0.9 | 0.6 |
| 9-12 | 0.8 | 0.8 |

Source: Asella **town** Education office

**Number of students sat for National Examination (EGSCE) and promoted for preparatory by sex and ownership,**

Results of Ethiopia general secondary education certificate examination by location and sex (government)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Set for exam | | | Poromted | | | detained | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 730 | 799 | 1529 | 695 | 746 | 1441 | 35 | 53 | 88 |
| 2012 |  |  |  |  |  |  |  |  |  |

Results of Ethiopia general secondary education certificate examination by location and sex (NGO )

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Set for exam | | | Poromted | | | detained | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 810 | 640 | 1450 | 477 | 147 | 624 | 333 | 193 | 826 |
| 2012 |  |  |  |  |  |  |  |  |  |

Results of Ethiopia general secondary education certificate examination by location and sex (gov’n and non gov’t)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Set for exam | | | poromted | | | detained | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 1540 | 1439 | 2979 | 1172 | 893 | 2065 | 368 | 546 | 914 |
| 2012 |  |  |  |  |  |  |  |  |  |

Number of students sat university entrance and promoted for degrees by sex and ownership,

**Table Results of Ethiopian Higher Education Entrance Certificate Examination by sex (government)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Set for exam | | | poromted | | | detained | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 795 | 519 | 1314 | 783 | 443 | 1226 | 12 | 76 | 88 |
| 2012 |  |  |  |  |  |  |  |  |  |

* 1. **Education Quality**

The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Actually, only depending on the above ratios are not enough to measure educational quality of a town. Hence we have to look into other factors mainly Teacher Development Program (TDP), Continuous Professional Development (CPD) program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say**.** To improve the quality of education student teacher ratio, student class room ratio and others are very essential, so as we see from the given information Education office of the town expected to do more to improve the quality of education by increasing the needed variables of education quality.

**TVET:** the town has two vocational and technical schools in the town that provides training by different fields of study to students even though there is no reliable data about number of students and fields of study. In addition to these the town has two TVET governments, four private TVET and one teacher’s training collage

**4.3. Health**

Health care is one the crucial components of basic social service that has a direct linkage to the growth and development of the country as well as to the welfare of society The growth and progress of a given nation is largely dependent up on the health status of its population that needs adequate protection and care to promote their holistic health and overall wellness. Therefore , health care service is one of the basic demands of the people and a number one concern of every individual .the health problems are largely attributed preventable infectious ailments and nutritional deficiencies .it is widely known that pneumonia, acute febrile illness, acute upper respiratory infection ,diarrhea, trauma, urinary tract infection, helminthiasis dyspepsia and disease of the musculoskeletal system and connective tissue are the ten top leading causes of morbidity in the Asella town .health care and related services are one of the crucial components of basic social services in making the citizens the longest living demographic society in the world

Health care services are more essential where many people live and work together in close proximity on small area of land like Asella city to improve the overall health status of citizens ,make residents lead a healthy and productive live, ensure the quality of life ,promote general health ,alleviate chronic communicable disease ,reduce child and maternal mortality rate and improve health status of its residents through providing and regulation a comprehensive package of promoting ,preventive ,curative and rehabilitation health services in Asella town .

Health care in Asella can be divided in to public, private and NGOs health institutions with better health facilities and highly trained medical professional those are making the city famous for medication in Asella, many health services are owned by private sectoring the city.

Health care facilities in the city are categorized as referral Hospital, two general, two general hospital 21 medium clines three health center, 30 pharmacies.

**4.3.1 Health Institution:** there were 2 Government and 2 non-government Health center, no government clinic and no Health posts (Governmental) during the year 2011 and 2012 there is one government referral hospital and one private hospital there were 3 government Pharmacy and 30 private Pharmacy in Asella town.

**4.3.2 Health Personnel:**. In 2012, from all health professionals, 723 there were 165 doctor,26 health officer 63 Laboratory Technician 54 Pharmacist and 404 Nurses, and 11 sanitarian giving services in governmental health institution of Asella health center respectively. For more information we can see the table below.

**Table:4.3. Number of health Institution and Personnel by ownership (2007-2008).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Institution/Health Personnel | 2011 | | 2012 | |
| Gov | Non-Gov | Gov | Non-Gov |
| Health Institution | - | - | - | - |
| Hospital | 1 | 1 | 1 | 1 |
| Health Center | 2 | 1 | 2 | 1 |
| Medium clinic | - | 20 | - | 21 |
| Higher clinic | - | - | - | 1 |
| Clinic | - | 2 | - | 2 |
| Health Post | - | - | - | - |
| Rural Drug Vender | - | - | - | - |
| Pharmacy | 3 | 27 | 3 | 30 |
| Health Profession(Dr) | 158 | 8 | 155 | 10 |
| Health Officer | 15 | 1 | 23 | 3 |
| Nurse | 277 | 62 | 340 | 64 |
| Health Assistance |  | - |  |  |
| Laboratory Technician | 20 | 15 | 47 | 16 |
| Pharmacist | 27 | 8 | 44 | 10 |
| Sanitarian | 5 | - | 11 | - |

Source: Asella town health office

**Maternal Mortality Rate**

Actions take to decrease maternal and child death in our town includes

* Post and pre-birth test
* Mother and child Vaccination

Pregnancy related deaths are a subject of all female deaths that are occurred during pregnancy or child birth or within 42 days after the birth or termination of pregnancy

**Antenatal care**

**A**ntenatal care is a pregnancy care received from skilled providers, such as doctors and nurses, midwifes, health officers and health extension workers .As data obtained from Asella town health office reveal, every pregnant women in the Asella town is receiving antenatal care service before giving birth

**Postnatal care**

To reduce maternal death rate antenatal care and skilled delivery are not enough mothers have to get delivery health services up to 42 days after.

**Skilled delivery**

One method that is used to reduce maternal is skilled delivery by birth attendants at health institution .To do this government allowed free service at any governmental health institution

Table Number of mothers received antenatal, postnatal and family planning services, in the year 2011 and 2012

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| year | Types of services given to mothers | | | |  |  |
| Antenatal care | Delivery service given by skilled professionals | Postnatal care | Family planning service | Others | Total |
| 2011 | 7287 | 6888 | 3969 | 13526 | 5735 |  |
| 2012 | 7940 | 8141 | 10543 | 17647 | 4523 |  |

Source: Asella town health office

As the country health policy in general, the region and the zone specifically the towns have been followed pre-prevalence diseases control policy. With this manner, the town with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the town.

In addition, the town health office provides different type of treatment and children and mothers vaccination to improve the health coverage of the town. The available data shows health service provision improvement from time to time. The following table indicates the major vaccination type given to the children and mother.

**Child vaccination coverage**

To protect child death, different vaccination types are recommended by world health organization, among this, full immunization, measles and pentavalent vaccine are most widely used vaccine types.

Full immunization refers to children having received all the required doses of vaccines given in the first year of life. As the data obtained from Asella health office show the highest is recorded in 2012 E.C.

While the lowest is recorded in 2011e.c

Table number of mothers and children’s vaccinated by type of vaccination in the year 2011and 2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Types of children vaccination | | | | | | | | | | Types of mothers vaccinations | | |
| BCG | | Measles | | DPT1/PENTA | | | | Fully vaccinated children | | PWTT2+ | NPWTT+ | others |
| F | M | M | F | M | F | M | F | M | F |  |  |  |
| 2011 | 1773 | 1387 | 1185 | 929 | 2045 | 1227 | 1165 | 942 | 1165 | 942 | 2981 |  |  |
| 2012 | 1965 | 1723 | 1273 | 1375 | 1765 | 1888 | 1597 | 1655 | 1347 | 1293 | 3172 |  |  |

**Source: Asela town health office**

As we can see from the above table Number of Mothers and children vaccinated by type of vaccination, were increased, when we compared the changes in two years.

**HIV/AIDS Case**

**Number of HIV carriers and AIDS patients identified in 2011and 2012 in two health centers.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **‘HIV’ Patients** | | | | | | |
|
| **Year** | **HIV Positive** | | **Newly identified HIV Carriers** | | **Death due to HIV/AIDS** | |
| **M** | **F** | **M** | **F** | **M** | **F** |
| 2011 | 1994 | 2516 | 145 | 132 | 1 | 1 |
| 2012 | 18 | 20 | 20 | 41 | 0 | 0 |

Source: Asella town health office

The current trend of HIV /AIDS in the town is worse and it may affect the towns socially and economically if not controlled. Warnings about falling life expectancy, increasing numbers of orphans, extra costs for business and the destruction of family and community structures are not new. It reached far and getting under manages.

Malnutrition and low awareness for improved environmental sanitation account for low health status in the town. In addition, poor eating habit and under-utilization of health services also play a great role for the existence of different diseases.

**Causes of Morbidity:** According to the data obtained from the town health office indicated, the highest prevalent disease in the town were **Acute Febrile illness (AFI) and (Pneumonia) on the first and second rank in 2011 and 2012.**

**Table: 3.8.** Ten top diseases existed in the town in the year 2011 and 2012

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | 2011 | | | 2012 | | |
| Type of Diseases | No. of  population | % | Type of Diseases | No. of population | % |
| 1 | Urinary tract infection (urinary tract infection site not specified) | 7049 | 18.14 | Severe febrile disease (other specified fever) | 6694 |  |
| 2 | Pneumonia (pneumonia unspecified) | 6564 | 13.34 | Pneumonia (pneumonia unspecified) | 6217 |  |
| 3 | Typhoid fever | 6057 | 13.14 | Typhoid fever | 5776 |  |
| 4 | Severe febrile disease (other | 4991 | 12.17 | Urinary tract infection (urinary tract infection site not specified) | 5159 |  |
| 5 | Respiratory infection (acute upper respiratory infection unspecified) | 4659 | 9.53 | Abdominal pregnancy | 4561 |  |
| 6 | Dyspepsia(inability to swallow) | 4195 | 8.11 | Other and unspection infectious diseases | 4087 |  |
| 7 | Abdominal pregnancy | 3143 | 7.74 | Respiratory infection (acute upper respiratory infection unspecified) | 3718 |  |
| 8 | Pain(ocular pain) | 2978 | 6.66 | Dyspepsia(inability to swallow) | 2930 |  |
| 9 | Injury (injury unspecified) | 2514 | 5.97 | Gastro-oesophageal reflux(gastro oesophageal reflux disease | 2646 |  |
| 10 | Bronchitis(acute bronchitis) | 2211 | 5.19 | Pain (ocular pain) | 2487 |  |

Source: Asella town Health office

**NGOs Operating in Asella Town**

Although government and citizens are the main actors in resolving different problems in the country and putting an end to the spiral poverty could not be solved by these parties only**.** The deep rooted poverty requires the interventions of many partners and .Stakeholders. During past two years many NGOs have be involved in the frame work of the government policies and plans with aspirin of ensuring development effectiveness and enabling citizens gain. Meaningful benefits from the endeavor. as well as to provide income-generating mechanisms.

In the past two years 14 international and local NGOs with attitude of humanity are working on different social and economic issues in partner with the city administration to support the effort of city government for the success of goals and overall development of the city particularly on health ,education and crosscutting issues and are engaged in community service with worldwide responsibility and performing noble duties and provide variety of assistances to people in needs.

**General situation of NGO In Asella town**

There are 14 legally registered Ngo’s in Asella town, out of these two NGOs are International accounting for (14%) and 12 are Local that accounting for (86%) . These NGOs are implementing 17 projects in the town area, on different development activities .The total fund they are currently using to implement these on-going projects is now over 100,000,000 Ethiopian Birr, throughout the project life.As a result 115,829 of people are directly benefited from the project through the project life.

**Budget and beneficiary through the project life**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| types of NGOS | Number of NGOs | Number of Projects | Total Budget | Projects of Beneficiary |
| International | 2 | 2 | 10,342,290 | 16,505 |
| Local | 12 | 15 | 91,364,027.45 | 99,342 |
| Total | 14 | 17 | 101,706,517.45 | 115,829 |

# *NGOs intervention in Asellaa town by sector*

|  |  |  |
| --- | --- | --- |
| Sector of intervention | Number of NGOs | Major of activities |
| Women and childern | 8 | Child Sponsorship orphans |
| Health | 3 | HIV/AIDS Protection, provision of health services |
| Elders | 1 | Supplying food, cloth, and renew house & etc to the elders |
| Dis ability | 1 | give support to dis abilities / education |
| Youth | 1 | Give training for youth |

# CHAPTER FIVE

# 5. PROBLEMS AND POTENTIALITIES

## **5.1. Major Problems**

* **Environmental problem**: Soil degradation, variability of rain fall, high pollution rate, and air pollution,& uncontrolled disposal of wastages from residents, are the major ones.
* **Economic problem**: even if there are sufficient financial institutions, their collateral requirement is not easily attained by small households. Low investment activities and industrial development.
* **Social service problem**: rapid population growth and large family size, high unemployment, under-utilization of health institution and education facilities, underdeveloped transportation and communication facilities, Poor waste disposal and management, low sewerage facilities, absence of public toilet services, high prevalence HIV/ AIDS, high dropout rate etc are mentioned as an example.

**Major problems of ongoing project**: failure to accomplish the project as per plan, poor construction quality, dalliance of the project, speculating the investment land , lack of sustain monitoring and evaluation , dalliance in decision of bid documents and mobilization of construction is the major problem during the construction.

* **Infrastructures facilities**: comparing with high population growth in the town there were not enough primary education schools (kindergarten, Primary schools, senior and secondary schools), lack of health institution like health center and clinics.

## **5.2. Potentialities**

The potential (Opportunity) OF Asella town Administration it’s environmental

* It has a good opportunity for investment.
* It has a good air condition to live in it
* It has a attractive environment for truisms like chilalo mountain and lake danbel would give (make it ) beautiful or attractive.
* Its surrounding would be very essential for harvesting wheat ,barley ,been ,bees ,potato and potato and other farming products
* Its earth crust would have a fuel of water.
* The population of Arsi Asella have good hospitality to embrace the gusts and they have attractive cultures
* The town has amble land resource potential suitable for different investment activities. Moreover, the town is known by having large market center suitable for trading activiti

**CHAPTER SIX**

# 6. Conclusions and recommendations

## **6.1. Conclusion**

Asella Town is found in Arsi Zone which has eight urban administrative units having total areas of 17.2 km2. The town gets its present name from Asella tribe residing in the area. The town is not known by the production of crops. However, there is a production of crops like vegetables, coffee, Enset, potato, etc in their garden. Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural input to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. However the agriculture activities get less emphasis even though the town had high potential for urban agriculture.

Poultry production is one of the important sources of family income and food in the town. The prevalence of disease and low productivity due to traditional method of rearing is the major constraints of poultry production.

The Infrastructure development like water supply, energy supply and postal services are well developed. The town road construction was slightly increasing from time to time especially coble stone construction by small scale enterprise. Moreover, the water supply facility was increasing due to expansion of water supply done by enterprise.

Regarding social service sectors development the town has 40 kindergarten, 9 primary and four secondary schools &two preparatory schools.. The town has two vocational and technical schools in the town that provides training by different fields of study to students even though there is no reliable data about number of students and fields of study. In addition to these the town has one teacher’s training collage.

On the other hand, the town provides health services within one hospital and two health centers. The town has a high potential of land resource that is suitable for different investment activities. In addition, the district has large market which is a potential for trading activities.

## **6.2. Recommendation**

To overcome the existing social and economic problems prevailing in the town the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, water supply, and communication network facilities are needed. So the concerned body has to develop these facilities. Moreover, toilet services, sewerage disposal, toilet services, sewerage disposal, etc has to be developed in the town.
* So as to improve urban agriculture the use of inputs like technology, fertilizers improved seeds and modern method of farming were important. Livestock production and increase its share in the international market high quality breed has to be distributed and more focus has to be given to quality rather than quantity. Moreover, health facilities have to be constructed and provide health services.
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the town is quit sufficient. However, the educational level of the teachers has to be improved.
* The health coverage of the district is at its low stage. To overcome these problems additional health facilities have to be constructed.
* Since the town has land used for investment activities, the local and regional government has to invite investor to invest in the town.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and well developed urban plan has to in practice.

**PHYSICAL AND SOCIO- ECONOMIC PROFILE OF ASEKO DISTRICT YEAR 2011 AND 2012 E.C**

# Introduction

Aseko is one of the 27 districts of Arsi Zone. It is divided into 18 administrative units of which 17 are Peasant Associations while one is urban administrative unit. Aseko town is the capital town of the district which is located at **243** km from Regional Capital City Finfinne and **218 km** from Zone capital Asella town to East direction.The total area of the Woreda is **527.90** km2.

The objective of preparing this document is to create scientifically organized physical and socio economic condition of Asekodistrict that reflects the existing socio economic situation and development problems and potentials of the district. The document is very essential for Government and Non-Governmental organizations to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are **12** months of **30** days each with an addition of a short period often referred to as **pagume**, which has five days for three consecutive years and six days on the fourth year.

This document is compiled from the data collected from the district and Woreda sectoral departments, 1999 population and Housing Census report for Oromia region and other related documents available in our office. Lack of accuracy and required data, lack of attention and untimely response from the concerned bodies are some of the major problem faced while organizing the document. Even if it has these limitations, it is very useful to show the physical and Socio-economic condition of the district.

This document has **seven chapters**. The first chapter deals with physical features like **location**, **relief, drainage, soil, vegetation and wild life**. The second chapter focused on **demographic characteristics**, the third chapter deals with **economic condition** while the fourth focused on **social services and infrastructure condition**, fifth deals with **Development Activities**, sixth deals with **Problems and potentiality** and seventh chapter deals with **Conclusion and Recommendation.**

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Figure 1 map of the district

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# CHAPTER ONE

# PHYSICAL SETTING

## **1.1. Location and Area**

Aseko is one of the administrative units of Arsi Zone. Astronomically, it is located between **8023’59’’ N** to **8005’04’’N** latitude and **40006’40’’E** to **39052’17’’E** Longitude. Regarding relative location, the district shares a boundary line with **West Hararge Zone** in the north, north east and east, **Shanan Kolu** district in the East, Gololcha district in the South, **Guna** district in the South and **Merti** district in the North West, West and South West direction having a total area of **527.90** km2 which accounts for **2.9**% of the total are of the Zone.

## **1.2. Relief, Drainage, Geology and Climate**

***Geology:*** The present surface rock distribution, the land configuration and other features of the district was formed during different period of Cenozoic era as a result of both internal and external forces acting up on the earth surface. Accordingly, some of the central and north central, most of the south eastern and eastern part of the district was covered by **Adama** series. **Alagae** formation covers some parts of the southern tip, the whole western and south western. The central part and some eastern part of it are covered by Adama series. On the other hand, the whole northern part of the district was covered by Dino formation and Rhyolitic Volcanic while a small pocket area of the south eastern tip and eastern boarder of the district was covered by Tarmaber Megezez formation.

***Relief*:** The relief structure of the district consists of mountain ranges stretched from west Hararge zone to Gugu Mountain. It is part of Arsi-Bale massif and surrounded by undulating low laying plateau. These mountain ranges are dissected by major and small rivers. The altitude of the district ranges between 2946 and 1177 meters above the sea level. Moreover, the district has many hills. The major one are Gulliso, Komicha, Simo, Woranbus etc having an altitude more than **2100m** above sea level.

***Drainage:*** the district has both permanent rivers and seasonal streams.The major permanent rivers of the district are Bogdo, Sirba, Arba Guracha, Dibu and Chulul .The district has high potential for both traditional and modern **Irrigation** system which can be used to increase agricultural productivity if the available water bodies are efficiently utilized.

In addition to these water potential there is also a **natural lake** known as **Munyuk** which is estimated to **150m** length, **170m** wide and **20m** depth which is currently used for fishery recently. It is found on the **1900m** altitude above sea level.

***Climate:*-** Due to its altitudinal location, the climatic condition of the district is dominated by moderately cool having a temperature of 150C-200c.The remaining type of climate are cool and moderately warm having a temperature of 100C-150C and 200C-250C respectively.

***Rain fall: -*** The district receive rain fall for more than 150 days in a year. The rainfall pattern is **bi-modal**, which are short rainy season or Belg [from March to April] and a little at may and summer or long rainy season/ Maher [from June to September and sometimes up to October).

## **1.3. Land Use, Vegetation, Soil and Wildlife**

**Land Use: -** According to the information obtained from Aseko district Agricultural Development office, the lands of the district was classified under different types of socio-economic uses. However, the types of land use changes from time to time depending on socio-economic change. Accordingly, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing with time.

**Soil: t**he major types of soil found in the district include **Orthic Luvisols, Orthic Solonchack, Lithosols and Orthic Acrisols.** In addition, **Eutric Nitosols, Eutric Fluvisols, Dystric Nitosols and Dystric Cambisols** are found in few areas of the district.

**Vegetation:** Regarding the vegetation covers different species of natural forest**,** bushes and shrubs are found in the district. There are also government and community protected forests in the district. In the district the forest coverage of the district was 10787hectare in the year 2012E.C.

|  |  |
| --- | --- |
| **Name of forsest cover (No.of sites)** | Area of Demarcated Forest (He) |
| Kara Dibu | 10787 |
| Chefa Kuyo |
| Lencha Oda |
| Haro Ale |
| Ribu Ketema |
| Dima Asako |

***Wild Life:*** The major wild animals are Fox, Leopard, different species of Birds, Ape, Hyena, Monkey, etc can be mentioned as an example.

**CHAPTER TWO**

2. Population Characteristics

## **2.1. Population Size**

According to the estimation made from 1999 population and housing census Report for Oromia Region the total population of the district was increased from **98,232** to **119,430** in between the year 2005 and 2012. According to this information, the total population of the district was increased from **113,187** to **119,430** in between the year 2010 and 2012. Of the total population, females accounted for 49.6% (47.3% for urban area and 49.7% for rural area). From total population of the district, only 5.4 % are living in urban areas. This indicated that more than 94.6% of the population of the district is living in rural area depending on agricultural activities. Out of the total population in urban areas more than 50% are also depending on agricultural activities.

An overall sex ratio of the district is 101 which indicate 100 females for 101 males. By place of residence, the ratio is 101.19 in rural area and 111.24 in urban area.

**Table: 2.1 Population Distribution by Urban, Rural and Sex for the District**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Rural | | | Urban | | | Total | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 55184 | 54535 | 109719 | 3447 | 3099 | 6547 | 58632 | 57635 | 116266 |
| 2012 | 56638 | 55972 | 112610 | 3592 | 3229 | 6821 | 60290 | 59201 | 119430 |

Source: Projection made from 1999 CSA census report

## 

## **2.2. Population density and rural settlement**

Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the district had a crude density of district **226.2** people per km2 in 2012. Concerning the settlement pattern of the district, most Dega and weina dega parts of the rural areas of districts are characterized by **grouped** settlement while kola parts are characterized by **scattered** settlements. This is because the surface rock structure, the soil condition and other features of the district is the main influence for the settlements not to be uniform in all over the district.

## **2.3. Age –Sex Distribution**

Of the total population of the district, young age group (0-14) population is 28.99% (rural 27.43% and urban 1.56 %) while old age (65+) consist for 6.99% (rural 6.62 % and urban 0.37%). On the other hand, the economically active population (age 15-64) account for 63.99%, which is 60.54% for rural and 3.45% for urban.

The total dependent ratio (number of population age under 14 + number of population age +65 and above divided for number of population aged 15-64) x100 of the district is 56.23%. Total young age dependent is 45.29 %. On the other hand, total old age dependent population is 10.93%.

**Table: 2.2. Age sex Distribution of Aseko District Population by Place of Residence (2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **Male** | | **Female** | | **Total** | |
| No of Pop | % | No of Pop | % | No | % |
| **Rural** | **56638** | **50.3** | **55972** | **49.7** | **112610** | **100.0** |
| 0-14 | 15536 | 50.3 | 15353 | 49.7 | 30,889 | 100.0 |
| 15-64 | 34289 | 50.3 | 33885 | 49.7 | 68174 | 100.0 |
| 65+ | 3749 | 50.3 | 3705 | 49.7 | 7455 | 100.0 |
| **Urban** | **3592** | **52.7** | **3229** | **47.3** | **6821** | **100.0** |
| 0-14 | 962 | 52.7 | 946 | 47.3 | 1908 | 100.0 |
| 15-64 | 2122 | 52.7 | 2089 | 47.3 | 4,210 | 100.0 |
| 65+ | 233 | 52.7 | 229 | 47.3 | 461 | 100.0 |
| **Total** | **60290** | **50.4** | **5992** | **49.6** | **119430** | **100.0** |
| 0-14 | 16,988 | 50.4 | 16,718 | 49.6 | 33,706 | 100.0 |
| 15-64 | 37,497 | 50.4 | 36,902 | 49.6 | 74,399 | 100.0 |
| 65+ | 4096 | 50.4 | 4031 | 49.6 | 8,127 | 100.0 |

Source: 1999 Population and Housing Census Report

## **2.4. School Age population**

School age population is the most important parameters to plan education demand and facilities. Moreover, it is very crucial to assess the level of child accessibility to education services. As indicated in table below, the total number of school age population of the district was increased by 8.16% between 208 and 2012 which indicates an increase of demand for an additional budget to construct additional school and class room, to employ additional teachers and supply text books. With school level primary school age population was increased from 25,266 in 2010 to 25386 in 202012 while, secondary level education school age population was increased from 1948 in 2010 to 2064 in 2012.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2009** | | | **2010** | | | **2011** | | | **2012** | |  |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
|  | Rural | | | Rural | | | Rural | | | Rural | |
| (4-6) | 5,682 | 5,588 | 11,270 | 5,832 | 5,735 | 11,567 | 5954 | 5890 | 11844 | 6123 | 5962 | 12085 |
| (7-14) | 12,002 | 11,662 | 23,664 | 12,319 | 11,969 | 24,288 | 13545 | 12352 | 25897 | 14123 | 12963 | 27086 |
| 15\_18 | 4,586 | 4,468 | 9,054 | 4,707 | 4,587 | 9,294 | 4921 | 4756 | 9677 | 5132 | 4956 | 10088 |
| Total | 52,388 | 51,772 | 104,160 | 53768 | 53136 | 106903 | 55184 | 54535 | 109719 | 56638 | 55972 | 112610 |
|  | Urban | | |  | | |  | | |  | |
| (4-6) | 201 | 204 | 405 | 210 | 213 | 423 | 225 | 230 | 455 | 241 | 254 | 495 |
| (7-14) | 759 | 658 | 1,417 | 789 | 687 | 1,476 | 796 | 702 | 1498 | 812 | 786 | 1598 |
| (15-18) | 395 | 324 | 719 | 412 | 339 | 751 | 421 | 365 | 786 | 462 | 389 | 851 |
| Total | 3176 | 2855 | 6032 | 3309 | 2975 | 6284 | 3447 | 3099 | 6547 | 3592 | 3229 | 6821 |
|  | **Rural + Urban** | | |  | | |  | | |  | |
| (4-6) | 5,883 | 5,792 | 11,675 | 6,042 | 5,948 | 11,990 | 6645 | 6123 | 12768 | 6851 | 6245 | 13096 |
| (7-14) | 12,761 | 12,320 | 25,081 | 13,108 | 12,656 | 25,764 | 14232 | 12892 | 27124 | 14862 | 13426 | 28288 |
| (15-18) | 4,981 | 4,792 | 9,773 | 5,119 | 4,926 | 10,045 | 5821 | 5123 | 10944 | 6253 | 5734 | 11987 |
| Total | 55,564 | 54,627 | 110,191 | 57077 | 56110 | 113187 | 58632 | 57635 | 116266 | 60290 | 59201 | 119430 |

Table:-2.3. School Age population Of the District by Place of Residence and Sex

Source: 1999 Population and Housing Census Report

**CHAPTER THREE**

# 3. ECONOMIC CONDITION

## **3.1. Crop Production and Livestock Rearing**

### 3.1.1. Crop Production

## Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of crops and use the same land twice a year for Meher and Belg season and sometimes traditional irrigation are also some practiced in some kebeles twice a year. However, Meher is the largest season in terms of both cultivated land and crop produced. For instance, in **2011/2012** about **3318** hectare lands were cultivated from which 93839 quintals of productions was obtained both in Meher and Belg seasons. From this we conclude that the productivity of the land is rapidly increased because of some factors such as the use of modern and scientific way of cultivation, use of fertilizers and applications of the recommendations given from agricultures experts. The major annual crops grown in the district are cereals, Pulses and oil seeds. From cereal crops Barley, Teff, Wheat and Maize are the most widely produced crops in the district. In addition, it is known in producing some cash crops like Tomato, Onion and Oilseeds.

In Maher season of 2009/2010 about **10535** hectares of land was cultivated which was decreased to **9574** hectares in 2011/2012 but the total production obtained was increased from **303518.3** quintals in 2009/2010 to **367787** quintals in 2011/2012 because of some factors such as the use of modern and scientific way of cultivation, use of fertilizers and applications of the recommendations given from agricultures experts. These give an average productivity **28.81** quintals per hectare in 2009/2010 and **38.41** quintals per hectare in 2011/2012.

By crop type Maize with 51.24 quintals per hectare followed by Wheat with 45.54 quintals per hectare, sorghum with 44.77 quintals per hectare and Barly with 38.35 quintals per hectare are the most productive while Teff with 19.02 quintals per hectare and oats with 22.52 quintals per hectare are the least productive in 2011/2012. In size of area cultivated and production obtained wheat and barley are the most important crops in the district.

Similarly in Belg season of 2009/010, **2109** hectares of land cultivated from which **49231** quintals of production obtained. In 2011/012 the cultivated land was increased to **3318** hectares and the production obtained was increased to 93839 quintals. These give an average productivity **23.34** quintals per hectare in 2009/2010 and **28.28** quintals per hectare in 2011/2012.

Table: 3.1B. Area Cultivated and Production Obtained for Private Peasant Holdings by Seasons

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2009/2010** | | | | **2010/2011** | | | | **2011/2012** | | | |
| **Meher season** | | **Belg season** | | **Meher season** | | **Belg season** | | **Meher season** | | **Belg season** | |
| Area Cult (he) | Prod. (Quit) | Area Cult (he) | Prod. (Quit) | Area Cult (he) | Prod. (Quit) | Area Cult (he) | Prod. (Quit) | Area Cult (he) | Prod. (Quit) | Area Cult (he) | Prod. (Quit) |
| **Cereals** | 8042 | 259908 | 2051 | 48184 | 8181 | 153136 | 3013 | 34768 | 8092 | 335903 | 3087 | 87560 |
| Wheat | 2012 | 67960 | 583 | 15274 | 1527 | 31216 | 853 | 11681 | 1613 | 73461 | 930 | 32740 |
| Teff | 1044 | 15592 | 70 | 630 | 980 | 16220 | 450 | 2313 | 1009 | 19189 | 457 | 7380 |
| Barley | 2088 | 63837 | 1389 | 32091 | 1969 | 22814 | 1690 | 20554 | 1803 | 69153 | 1700 | 47440 |
| Maize | 1524 | 64048 | 0 | 0 | 1796 | 39756 | 0 | 0 | 1772 | 90792 | 0 | 0 |
| Sorghum | 1278 | 45909 | 0 | 0 | 1831 | 38450 | 0 | 0 | 1826 | 81754 | 0 | 0 |
| Tiritikale | 0 | 0 | 0 | 0 | - | - | - | - | - | - | - | - |
| Oats | 96 | 2562 | 9 | 189 | 78 | 4680 | 20 | 220 | 69 | 1554 |  |  |
| **Pulses** | 1106 | 25852 | 58 | 1047 | 1349 | 24861 | 270 | 2660 | 1455 | 31684 | 231 | 6279 |
| beans | 265 | 6600 | 0 | 0 | 270 | 7890 | 0 | 0 | 298 | 8802 | 0 | 0 |
| Field peas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lentils | 14 | 164 | 11 | 13 | 14 | 450 | 20 | 84 | 14 | 199 | 21 | 29 |
| Haricot beans | 725 | 16865 | 47 | 1034 | 713 | 12901 | 250 | 2576 | 661 | 14191 | 210 | 6250 |
| Chick peas | 102 | 2223 | 0 | 0 | 352 | 3620 | 0 | 0 | 482 | 8492 | 0 | 0 |
| **Oilseeds** | 1387 | 17758 | 0 | 0 | 1387 | 13037 | 0 | 0 | 27 | 200 | 0 | 0 |
| Linseed | 1373 | 17670 | 0 | 0 | 1373 | 12984 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rapeseed | - | - | - | - | - | - | - | - |  | - | - | - |
| Neug | 3 | 9.3 | 0 | 0 | 3 | 7 | 0 | 0 | 11 | 103 | 0 | 0 |
| Sun Flower | 7 | 53 | 0 | 0 | 7 | 28 | 0 | 0 | 8 | 20 | 0 | 0 |
| Sesame | 4 | 26 | 0 | 0 | 4 | 18 | 0 | 0 | 8 | 77 | 0 | 0 |
| Fenugreek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Grand Total** | **10535** | **303518.3** | **2109** | **49231** | **10917** | **191034** | **3283** | **37428** | **9574** | **367787** | **3318** | **93839** |

Source: - Aseko district Agriculture and Natural Resource Office

**Table: 3.2. Productivity of major crops**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | 2007/2008 | | 2008/2009 | | 2009/2010 | | 2010/2011 | | 2011/2012 | |
| **Meher** | **Belg** | **Meher** | **Belg** | **Meher** | **Belg** | **Meher** | **Belg** | **Meher** | **Belg** |
| **Cereals** | **75** | **101** | **34** | **38** | **183.92** | **79.3** | **151.72** | **41.99** | **221.44** | **79.26** |
| Wheat |  |  | 8 | 12 | 33.8 | 26.19 | 18.72 | 11.54 | 45.54 | 35.20 |
| Teff | 6 | 5 | 6 | 9 | 14.93 | 9.00 | 16.55 | 5.14 | 19.02 | 16.15 |
| Barley | 22 | 38 | 6 | 10 | 30.57 | 23.10 | 11.59 | 12.16 | 38.35 | 27.91 |
| Maize | 25 | 43 | 7 | 0 | 42.03 | - | 22.14 | 0 | 51.24 | 0 |
| Sorghum |  |  |  |  | 35.92 | - | 21.00 | 0 | 44.77 | 0 |
| Oats | 0 | 1 | 7 | 7 | 26.69 | 21 | 60 | 11 | 22.52 | 0 |
| **Pulses** | **95** | **100** | **20.5** | **18** | **81.67** | **23.18** | **89.73** | **14.5** | **82.84** | **31.14** |
| beans | 24 | 0 | 5.5 | 0 | 24.91 | 0 | 29.22 | 0 | 29.54 |  |
| Field peas | 3 | 0 | 5 | 7 | - | 0 | 0 | 0 | 0 | 0 |
| Lentils | 1 | 0 | 5 | 5 | 11.71 | 1.18 | 32.14 | 4.20 | 14.21 | 1.38 |
| Haricot beans | 67 | 100 | 5 | 6 | 23.26 | 22.00 | 18.09 | 10.30 | 21.47 | 29.76 |
| Chick peas |  |  |  |  | 21.79 | 0 | 10.28 | 0 | 17.62 | 0 |
| **Oilseeds** | **99.44** | **0** | **14** | **0** | **30.04** | **0** | **89.73** | **0** | **7.41** | **0** |
| Linseed | 99 | 0 | 5 | 0 | 12.87 | 0 | 29.22 | 0 | 7.41 | 0 |
| Rapeseed | 0.22 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neug | 0.22 | 0 | 5 | 0 | 3.10 | 0 | 32.14 | 0 | 9.36 | 0 |
| Sun Flower |  |  |  |  | 7.57 | 0 | 18.09 | 0 | 2.50 | 0 |
| Sesame |  |  |  |  | 6.50 | 0 | 10.28 | 0 | 9.63 | 0 |
| **Grand Total** | **269.44** | **201** | **68.5** | **56** | **295.63** | **102.48** | **331.18** | **56.49** | **323.55** | **110.4** |

**Source: -** **Aseko district Agriculture and Natural Resource Office**

**Irrigation:** in addition to rain fall agriculture, irrigation is a system through which agricultural production and food security can be ensured. Accordingly, though the district has **10,194.29** hectares of potential irrigable land, only 60% was used till the end of 2012. Even if the irrigation potential utilized was limited, the total area under traditional irrigation was increased from **12,293** hectare to **15,094** and the production obtained was increase from **3,945,942** to **5,236,015** between the year 2011 and 2012.

Table: - 3.3. Area cultivated and production obtained from Traditional irrigation

|  |  |  |  |
| --- | --- | --- | --- |
| **Years** | **Area(hect)** | **Production (qun.)** | **No Beneficiaries** |
| **2006** | 10,194.29 | 1,489,604 | 3,462 |
| **2007** | 11,182.5 | 1,705,663 | 6,765 |
| **2008** | 12,799 | 1,576,667 | 7,229 |
| **2009** | 7,948 | 987,249 | 6,925 |
| **2010** | 11,576 | 2,801,384 | 7,536 |
| **2011** | 12,293 | 3,945,942 | 8329 |
| **2012** | 15,094 | 5,236,015 | 8948 |

Source: - **Aseko district Agriculture and Natural Resource Office**

**3.1.2. Livestock, Poultry and Bee-keeping**

***Livestock:*** Like crop production, the district is known by livestock rearing. Accordingly, the livestock population was increased from **370,603** to **403,388** between the year 2010 and 2012. Of the total livestock population of the district, cattle, sheep and goat accounts for more than 80% of the total livestock population in the year 2012.

High prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds are forage and crop residues, which are limited in nutritional values.

***Poultry:*** Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population of the district was increased from **115,272** **to 121836** between the year 2010 and 2012. Though poultry population was increased between the indicated years, poor method of rearing and management as well as the prevalence of disease were the major problems of poultry population

**Table: 3.4. Number of Livestock population and Poultry (2002 – 2010)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Type of livestock | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| 1 | LiveStock (total | **336735** | **343,106** | **350599** | **362,842** | **351,012** | **363,100** | **370,603** | **375,531** | **403,388** |
|  | Cattle | 90,234 | 920,38 | 94317 | 94753 | 94,338 | 94,488 | 97,523 | 98,434 | 99,435 |
|  | Sheep | 93,576 | 95,447 | 98438 | 98599 | 98,458 | 99,883 | 101,217 | 100,986 | 115,344 |
|  | Goat | 86,541 | 88,270 | 89826 | 99142 | 89,845 | 99,396 | 101,109 | 10,3121 | 114,233 |
|  | Donkey | 32,209 | 32,853 | 33166 | 33544 | 33,220 | 33,235 | 33,641 | 33,857 | 34,673 |
|  | Horses | 17,560 | 17,735 | 17927 | 19127 | 18,017 | 18,690 | 19,318 | 20,256 | 20,657 |
|  | Mules | 13,277 | 13,409 | 13535 | 14125 | 13,659 | 13,903 | 14,226 | 15,256 | 15,342 |
|  | Camel | 3338 | 3,354 | 3390 | 3552 | 3,475 | 3,505 | 3,569 | 3,621 | 3,704 |
| 2 | Poultry | 103,151 | 105,214 | 110321 | 107,071 | 106,432 | 122,003 | 115,272 | 119,836 | 121,836 |
|  | Total | **439,886** | **448,320** | **460920** | **469,913** | **457,444** | **485,103** | **485,875** | **495367** | **525,224** |

Source: **Aseko district Agriculture and Natural Resource Office**

**Bee-keeping activities**: Bee-keeping farming is another source of income for farmer family. Using herbicides, pesticide and insecticides are the main problems in bee farming. Most of the time in the district farmers uses different types of pesticides for their onion production this kills millions of worker Bees and influences their productivity.

***Fishery*:** In the district there are one traditional fish production practices, even though, the product is not still well known. This farming activity is started in our woreda as the simplest form of farming in munguck natural lake. Fish rearing is as simple as that of poultry production and other livestock rearing. Although the activity is limited to some farmers in the Woreda, there is a good condition for animal fattening in the woreda.

**3.1.3. Agricultural Input and Infrastructures**

***Agricultural Service Cooperatives:*** In 2012 there were 17/seventeen/ Agricultural Service cooperatives in the district. They are irrigation participant which has **7229** members, having capital of **2,616,425** About **503** members of family of Farmers service cooperatives were benefited from the service cooperative. The cooperatives engage in delivering different services such as agricultural input, different types of consumer commodities, for local peasants. Hence, about **14210** local people were benefited from the services.

***Fertilizer and Improved Seeds supply:*** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to increase crop production and productivity in order to meet rapid increase of demand for food and industrial raw materials. Accordingly, in 2010 only **1,449.1** quintals of fertilizers were distributed to the farmers. However, in 2012 its amount was increased to **8798** quintals. Similarly, improved seeds supplies were incecrease from **8,511.45** quintals in 2011 to **12,427** quintals in 2012. Because farmers use local improve seeds. Herbicide utilization was also decreased from time to time because the awareness of the farmer is increased and the total governments issue were also to improve our farmers’ life style.

**Table: 3.5. Amounts of Agricultural Inputs Distribute to Farmers by type**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of input** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| Amount(qt) | Amount(qt) | Amount(qt) | Amount(qt) | Amount(qt) | Amount(qt) | Amount(qt) | Amount(qt) |
| **Fertilizers** | 5654 | 7863 | 4471.5 | 1369.5 | 747.5 | 1,490.5 | 4754.1 | 8,798 |
| **DAP(qt)** | 4058 | 3943 | 1722.5 | 98 | 59.5 | 24 | 0 | 0 |
| **NPS(qt)** | 0 | 0 | 0 | 0 | 0 | 0 | 351.5 | 0 |
| **NPSB(qt)** | 0 | 0 | 0 | 0 | 0 | 0 | 4,403 | 5,825 |
| **Urea(qt)** | 1596 | 1120 | 928.5 | 1271.5 | 688 | 1,466.5 | 1,605.5 | 2972.5 |
| **Improved Seeds(qt.)** | 155.325 | 98 | 99.9 | 4.55 | 339 | 78 | 8,511.45 | 12,427 |
| **Wheat** | 90 | 20 | 76 | 0.0 | 15 | 48 | 49 | 145 |
| **Teff** | 0.45 | 0 | 1.65 | 1.8 | 63 | 3.5 | 5.45 | 37.1 |
| **Barley** | 0 | 0 | 0 | 0.0 | 164.5 | 0 | 13.75 | 55 |
| **Maize** | 90 | 70 | 22.25 | 2.75 | 96.5 | 26.38 | 49.25 | 39.93 |
| **Sorghum** | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 |
| **Others** | 15 | 8 | 0 | 0.0 | 0 | 0 | 0 | 0 |
| **Herbicides** | 2370 | 0 | 0 | 0 | 3,502 | 3,197 | 4197 | 6075 |
| **Herbicides(lit)** | 907 | 0 | 1561 | 1021 | 3,502 | 3,197 | 4197 | 6075 |

Source: **Aseko district Agriculture and Natural Resource Office**

***Development Agents and Farmers Training Centres:*** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. The number of farmer Training centres was as it is 17 between 2010 and 2012 while the number of Development Agents was increased from **52** to **53** between **2011** and **2012**. In other words, the farmer Training centres was as it is while the number of development Agents was increased by 6%. The reasons for the increasing of number of DAs were the vacance of the profession to the Development agents. However, according to the standard each kebele is expected have three Development Agents with the profession of plant science, Animal science and Environmental protection. These Development agents help the farmers in all aspects of agricultural practices such as in crop production animal husbandry and management and environmental protection. The number of farmers served by DAs is increasing from year to year.

**Table: 3.6. Number of Development Agents and FTC**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Description** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| Number of Farmers training centres | 15 | 16 | 17 | 17 | 17 | 17 | 17 | 17 |
| Number of Development Agents | 54 | 53 | 47 | 53 | 47 | 51 | 52 | 53 |
| Number of beneficiaries | 13,507 | 13,507 | 13,507 | 13,507 | 13,507 | 13,641 | 14,210 | 14,210 |
| Development agent ratio to Beneficiaries farmer | 1:250 | 1:255 | 1:287 | 1:254 | 1:287 | 1:268 | 1:273 | 1:268 |

Source: **Aseko district Agriculture and Natural Resource Office**

***Agricultural Calendar****:* It is well known that the farmers of the district are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy seasons, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-Climatic Zone and types of crop cultivated. In Aseko districts these activities are started earlier while in other districts they started later.

The time of performing agricultural Activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Maher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district. Agricultural calendar of Aseco district is shown in table below

**Table: 3.7. Agricultural Calendar of Aseco District**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of Activities** | **Maher Season** | **Belg Season** |
| 1 | Land preparation | April to May | February to March |
| 2 | Planting (Sowing) | June to July | March to April |
| 3 | Weeding | August to mid of September | May |
| 4 | Harvesting | October to November | July to August |

Source: **Aseko district Agriculture and Natural Resource Office**

***Livestock Health Infrastructure*:** Availability of animal health infrastructure is very important to control animal diseases and improve their productivity. From this point of view, great efforts were made to increase the number of animal health services. The district has 6/six/ health post **(D-type clinics)** and one **C-type clinics.** According to the data, the numbers of animal health clinic and health posts are 7/seven/ for the year under consideration.

**Table: 3.8. Distribution of Aseko district Animal Health Infrastructure (2004 – 2012)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Description** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| Veterinary Personnel | 6 | 6 | 10 | 11 | 14 | 14 | 15 | 14 | 22 |
| Animal Health Assistance | 4 | 6 | 9 | 10 | 12 | 12 | 12 | 11 | 16 |
| Animal Health Technician | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| DVM | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| Health Infrastructure | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| Clinic (A,B,C,) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Health Posts | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |

Source **Aseko district Animal Resource development Office**

So as to provide quality health services, qualified health personnel are necessary. Accordingly, the number of health professionals was increased from **15** to **22** between the year 2010 and 2012. However, the available health professionals were below the standard as compared with the animal population and available health infrastructures.

***Methods for maintaining Soil Fertility:***  There are two ways of maintaining soil fertility in the Zone particularly in the Aseko district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning), fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizers).

***Methods for Soil Conservation:*** According to Aseco district Agricultural Development Office, Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation, Stone bund, soil bund, hill side terrace, Agro forestry, area closure, gully reshipping, Micro basin are modern way of soil conservation in the district.

**3.1.4. Constraints of Agricultural Production**

***Households Affected by Drought****: -* in the year 2011/2012 there were 47035 households affected by drought. Although there are kebeles that are under safety-net program, from time to time they are trying to secure their food and their need.

***Crop Pests and disease:*** The major crops pests in the district are Aphids while the major diseases are rust, smut and others. Weeds and rain fall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases*:*** Black leg, Lumpy skin, Sheep pox, Goat pox, New castle, Fowl typhoid, Fowl pox, AHS, lymphatic diseases and anthrax, Internal and External parasites are the major livestock and poultry disease in the district. Moreover, poor livestock management, shortage of fodder and limited health service delivery, shortage of medical supply due to shortage of budget are also the major problems that hamper livestock production and development.

To overcome, such health problems the district livestock development and management agency provide vaccination and treatment services. Accordingly, the number of animals vaccinated for different types of diseases was dicreased from **244,167** in 2010 to ***241,117*** in year the 2012. On the other hand, the number of animals got treatment was dicreased from **275,797** in 2010 to **201833** in the year 2012.

**Table: 3.9. Number of Animals Got Health Services by type and type of service given**

|  |  |  |  |
| --- | --- | --- | --- |
| Type of service | 2010 | 2011 | 2012 |
| Vaccination | *244,167* | *242,772* | *241,117* |
| Blackleg | 12,006 | 0 | 3,000 |
| Hemorrhagic septicaemia | 0 | 5900 | 12,900 |
| Anthrax | 0 | 0 | 0 |
| Others | 232,161 | 236,872 | 225,207 |
| **Treatment** | **275,797** | **35,949** | **201,833** |
| External Parasites | 36122 | 13028 | 102038 |
| Internal Parasites | 91,957 | 20,627 | 97,360 |
| Operation | 93 | 16 | 90 |
| Others | 147,625 | 2,278 | 2,345 |
| Masteries | 0 | 0 | 0 |
| Infectious dt | 0 | 0 | 0 |
| Non-infectious | 0 | 0 | 0 |

## 

## **3.2. Mineral Resources and Industry**

***Mining:*** Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However some data obtained from office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as for construction purpose, solar Energy, Wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there is insignificant rock quarrying, pottery making mining activities by local communities in the district.

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in Aseko district. Their number is very small and is dominated by small-scale industries. They had small capital and able to generate job opportunities for small number of employees. In the district there were only 30 grain mill in the year 2012. These small scale establishments create job opportunity for 51 peoples in their localities. All of them are privately owned.

## **3.3. Trade Activities and Tourism**

**Trade:** Aseko district is one of the market centres in the zone where large transaction of different commodities were traded by many traders. Between the year 2010 and 2012, the number of licensed and license renewed traders were increased from **718** to **951** and **139** to **205** respectively. While licences returned was decrease from **108** to **52** during the year under consideration. These trades were engaged on trading of skin and hides, oilseeds, pulses and other food crops.

Regarding tradable items and cash crops production activities, the district is known in the production of Hides and skins, Oilseeds, Chat Onion. Out of this hides and skins, Oilseeds and the like are the main exportable items produced in the district.

**Table: 3.10. Type and number of linseed traders**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Type of License** | **2005** | **2006** | **2007** | **2008** | 2009 | 2010 | 2011 | 2012 |
| 1 | Licensed | 235 | 291 | 407 | 573 | 752 | 718 | 888 | 951 |
| 3 | Licenses given(New) | 113 | 80 | 106 | 128 | 282 | 139 | 152 | 207 |
| 4 | Licenses renewed | 228 | 317 | 468 | 553 | 713 | 579 | 736 | 744 |
| 5 | Licences returned | 12 | 14 | 12 | 31 | 39 | 108 | 73 | 52 |

Source: Aseko Trade Office

**Tourism and Its Amenities:** Due to lack of promotion and tourist amenities like standard Hotels, Roads and the social infrastructures, Tourism economy is not yet developed in the Arsi Zone in general and Aseko district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centres which were identified by culture and tourism Office of the district. These are Cultural heritage (Najate Muda ceremony) and attractive earths like Natural Bridge, Shanos Water Fall, and Natural Cave are the main tourist attraction sites of the district. All of them are under developed

**Table: 3.11. Existing Tourist Attraction Sites in the year 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Name of the attraction site** | **Its Distance in Km from** | | **Type of the site** | **Its Situation** |
|  |  | Finfinne | Asella |  |  |
| **1** | Najate muda area/ place | 264 | 250 | Cultural as well as Religious | Its highly conserved and hosts upto 40,000 people per year |
| **2** | Shano Water falls | 240 | 235 | Natural tourist attraction site | The ev't contain large forest with different Animals |
| **3** | Mugnuk crater lake | 225 | 208 | Natural lake | It hosts irecha festivals of upto 10,000 peoples |
| **4** | The Komicha caves and land scapes | 240 | 243 | Natural land scape | Its conserved |
| **5** | The land bridge on chulul river | 250 | 229 | Naturally formed bridge | its existans is naturally created bridge |
| **6** | Chafe caves and land bridge on dibu river | 250 | 250 | natural caves and land bridge | the surround land |
| **7** | Ganales muda place | 240 | 230 | Cultural muda celebration area | it hosts muda people of about 8000 per year |
| **8** | Kara Fanisa Historical place | 260 | 250 | Historical place | It need to be surrounded by fence |
| **9** | The Katir spring which is the source of river in Asako | 260 | 250 | Natural land scape | It is surrounded by natural forest. The source of chulul river found on the borders of Arsi and West Hararghe zone. |
| **10** | Mortholo conserved forest | 250 | 240 | Natural forest | Its conserved by the people in area |

## Source: Aseko Woreda Culture and Tourism Office

## These all sites are the very beautiful and attractive. Although the economies of tourism are not yet developed the woredas land escape and mountain formation itself is very attractive.

## **3.4. Financial Institutions and Finance**

**Financial Institution:** The availability of various financial institutions like banks and Insurance Rural Credit and Saving Association play a significant role in the transformation the economy of the district. However, the district has only one Oromia Credit and saving Association (OCSA) financial institutions during the year under study.

***Finance*:** Annual budget requirement of district is covered mainly from two sources: regional government grants and district in land revenue. Regional government grant shares the largest amount which accounts for more than 84.21% of the total annual budget allocated for the districts. This indicates that current Inland Revenue share of the district is low.

According to the data obtained from Finance and Economic Development office, the budget allocated for the district showing an increasing trend from year to year. In 2010 the total annual budget of the district was **91,851,408** birr. However, in 2012 it was increased to **107,818,292** birr which shows an increment by 15.16%.

**Table: 3.10. Annual Budget Allocated for the District**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Subsidy from government** | **% share** | **Inland Revenue** | **% share** | **Total budget** | **Growth Rate (%)** |
| 2005 | 25,205,639 | 84.6 | 4,570,629 | 15.4 | 29,776,268 | 17.00 |
| 2006 | 31,456,530 | 84.26 | 5,892,979 | 15.74 | 37,440,053 | 25.78 |
| 2007 | 46,749,998 | 87.43 | 6,718,500 | 12.57 | 53,468,498 | 42.8 |
| 2008 | 60,356,992 | 86.8 | 9,146,914 | 13.2 | 69,292,251 | 29.59 |
| 2009 | 65,331,128 | 86.901 | 9,848,238 | 13.099 | 75,179,366 | 8.49 |
| 2010 | 77,744,903 | 84.64 | 14,106,505 | 15.36 | 91,851,408 | 22.17 |
| 2011 | 88,840,125 | 87.315 | 12,906,766 | 12.685 | 101,746,891 | 9.73 |
| 2012 | 90,800,034 | 84.216 | 17,018,258 | 15.784 | 107,818,292 | 5.63 |

Source: Aseko District Finance and Economic Development Office

**Annual Budget Allocated for the District by graph**

**Revenue**: In 2012 the total revenue collected by the district was increased to **14,202,564** Ethiopian Birr. The main sources of revenue in the district are Direct tax, Indirect tax and non-tax items as Inland Revenue Office of the district annual report shows.

**Table: 3.12. Total Inland Revenue collected in the district by type of revenue source**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non-Tax revenue** | **Total** |
| 2007 | 4,837,977 | 191,954 | 485,092 | 5,515,023 |
| 2008 | 5,505,545 | 479,445 | 733,510 | 6,718,500 |
| 2009 | 8,251,744 | 0.00 | 895,170 | 9,146,914 |
| 2010 | 6,256,731 | 2,614,670 | 976,837 | 14,106,505 |
| 2011 | 7,054,681 | 2,802,483 | 1,499,602 | 14,156,766 |
| 2012 | 8,923,564 | 4,272,533 | 1,006,467 | 14,202,564 |

Sorce: Aseko Atorty Revenue Office

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# CHAPTER FOUR

# 4. Social Service and Infrastructural Condition

## **4.1. Education**

***Kindergarten:*** There are 1/one/ public kindergarten school and there is no any private kindergarten school in the district until 1012.

***Primary Schools:*** According to data indicated in table below, the number of primary school was the same us to in 2010 while the number of student was increased from 26,057 to 26,904 between the indicated years. Similarly, the number of teachers were increased from **526** (27.69% females) in 2010 to **671** (3175% female) in 2012 while the number of class room were increased from 485 to 589 during the same years. Accordingly, students-teacher ratio was decrease from 50:1 in 2012 to 41:1 while student class-room ratio was increased from 46:1 to 52:1 during the same year. This indicates a lot has been done by the district education office to achieve the standard set by Oromia education bureau.

**Table: - 4.1. Student enrolment, number teachers and class room for Primary School (1-8)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **years** | **No school** | **Student enrolled** | | | **No teachers** | | | **No classroom** |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2003 | 31 | 11,454 | 10,209 | 21,663 | 352 | 79 | 431 | 417 |
| 2004 | 33 | 11,276 | 10041 | 21,317 | 365 | 94 | 459 | 417 |
| 2005 | 33 | 10,579 | 9,649 | 20,228 | 377 | 90 | 467 | 404 |
| 2006 | 33 | 11087 | 9648 | 20735 | 400 | 106 | 506 | 448 |
| 2007 | 35 | 11,097 | 9,648 | 20,745 | 402 | 124 | 487 | 468 |
| 2008 | 35 | 11,754 | 10,390 | 22,144 | 342 | 131 | 473 | 485 |
| 2009 | 36 | 14309 | 12,163 | 26,472 | 304 | 138 | 442 | 496 |
| 2010 | 36 | 14,014 | 12,043 | 26,057 | 359 | 167 | 526 | 489 |
| 2011 | 36 | 14704 | 11600 | 26904 | 350 | 231 | 581 | 524 |
| 2012 | 36 | 13632 | 11754 | 25386 | 412 | 259 | 671 | 535 |

Source:- District Education office

***Senior Secondary Education (9-12):*** the district has only four senior secondary (9-12) school. However, the number of student enrolled to school was increased from 1948 in 2010 to 2064 in the year 2011 .also the number of teachers who teach at this level was increased from 86 to 144 while the number of classroom was increased from 33 to 40 during the indicated years. This causes the district student to teacher’s ratio and student to classroom ratio to be increase from 22:1 to 28 and 48:1 to 54:1 respectively between the year 2010 and 2012. As we can see from the data the number of class-rooms for senior secondary school was not enough to improve the education quality. Hence it needs further intervention.

**Table: - 4.2. Student enrolment, number teachers and class room for secondary school (9-12)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **years** | **No school** | **Student enrolled** | | | **No teachers** | | | **No classroom** |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2003 | 1 | 956 | 677 | 1633 | **54** | **1** | **55** | 24 |
| 2004 | 1 | 809 | 714 | 1523 | 56 | 4 | 60 | 26 |
| 2005 | 2 | 927 | 818 | 1,745 | 62 | 1 | 63 | 30 |
| 2006 | 3 | 815 | 639 | 1621 | 67 | 9 | 76 | 34 |
| 2007 | 3 | 815 | 631 | 1446 | 80 | 2 | 82 | 25 |
| 2008 | 3 | 874 | 669 | 1543 | 78 | 1 | 79 | 29 |
| 2009 | 3 | 1034 | 758 | 1792 | 79 | 3 | 82 | 29 |
| 2010 | 3 | 1152 | 796 | 1948 | 81 | 5 | 86 | 33 |
| 2011 | 4 | 1238 | 826 | 2064 | 126 | 6 | 132 | 38 |
| 2012 | 4 | 1163 | 751 | 1914 | 136 | 9 | 144 | 40 |

Source: District Education office

***TVET***: until 2012 there was no any governmental or non-governmental technical and vocational education schools in the district.

**Education Quality:**  The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma level) to teach grade 1-4 are but still there is TTI and certificated teacher in the district Hence it needs further intervention.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (Diploma for 1-6, Degree 7-8 and Degree and above for secondary school) the number of TTI teachers was increased from 24 to 69 in primary school (1-8) between the year 2010 to 2012 Hence it needs further intervention.

Likewise, the number of diploma teachers was also increase from11 4 to 17 teachers in high school Class (9-12) during the year under consideration. Hence it needs further intervention to improve quality of education Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below

Actually, only depending on the above ratios are not enough to measure educational quality of the district. Hence, we have to look into other factors mainly Teacher Development Program (TDP), Continuous professional development program, teachers’ commitment to teach and students’ commitment to receive what teachers teach. Hence, the number of teachers has been trained continuous professional development program was decreased from493to 390 between the year 2010 and 2012 which have an important participation on improving the performance of teacher’s and education quality too. To improve the quality of education student teacher ratio, student class room ratio and others are very essential, so as we see from the given information Education office of the district expected to do more to improve the quality of education in secondary school so as to improve student to classroom ratio by constructing additional classroom.

**Table: 4.3A. Number of Teachers has been trained CPD program by sex**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Number of Teachers Trained** | | | |
| **Male** | **Female** | **Total** | **% Female student** |
| 2004 | 219 | 53 | 272 | 19.48 |
| 2005 | 339 | 84 | 423 | 90.57 |
| 2006 | 460 | 114 | 574 | 19.86 |
| 2007 | 385 | 111 | 496 | 28.83 |
| 2008 | 462 | 74 | 536 | 13.80 |
| 2009 | 381 | 102 | 483 | 21.11 |
| 2010 | 410 | 83 | 493 | 16.83 |
| 2011 | 325 | 65 | 390 | 20.0 |
| 2012 | 0 | 0 | 0 | 0 |

Source: Aseko District Education Office

**Table: 4.3C. Number of Teacher’s by Level of School and Education**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2009 | | | 2010 | | | 2011 | | | 2012 | | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | | Male | Female | Total |
| Primary (1-8) | 220 | 93 | 313 | 283 | 86 | 369 | 360 | 233 | 593 | | 363 | 174 | 637 |
| TTI | 11 | 1 | 12 | 14 | 9 | 24 | 35 | 6 | 41 | | 39 | 30 | 69 |
| Dip | 209 | 92 | 301 | 269 | 77 | 346 | 325 | 227 | 552 | | 324 | 144 | 568 |
| % o Diploma | 95 | 98.92 | 96.17 | 95.05 | 89.53 | 93.77 | 90.28 | 97.42 | 93.09 | | 89.26 | 82.76 | 89.17 |
| Secondary  School (9-12) | 94 | 6 | 100 | 99 | 6 | 105 | 103 | 9 | 112 | | 136 | 15 | 151 |
| Diploma | 8 | 1 | 9 | 9 | 2 | 11 | 4 | 2 | 6 | | 11 | 6 | 17 |
| BA/BSc | 86 | 5 | 91 | 90 | 4 | 94 | 99 | 7 | 106 | | 125 | 9 | 134 |
| %of BA/BSc | 91.49 | 83.33 | 91.00 | 90.91 | 66.67 | 89.52 | 96.12 | 77.78 | 94.64 | | 91.91 | 60.00 | 88.74 |

Source: **District Education Office**

Table: 4.4. Student performance and Drop out condition by level of school

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SN | Description of activities | 2009 | | 2010 | | 2011 | | 2012 | |
| Primary school | Secondary school | Primary school | Secondary school | Primary school | Secondary school | Primary school | Secondary school |
| 1 | Student enrolment | 26,472 | 1792 | 26,057 | 1936 | 26904 | 2064 | 25386 | 1914 |
|  | Male | 14,309 | 1034 | 14,014 | 1180 | 14704 | 1238 | 13632 | 1163 |
|  | Female | 12,163 | 758 | 12,043 | 756 | 11600 | 826 | 11754 | 751 |
| 2 | Promoted students | 25,775 | 1,335 | 23,918 | 1,443 | 26292 | 1651 | 25386 | 1914 |
|  | Male | 13801 | 788 | 13158 | 900 | 14473 | 1022 | 13632 | 1163 |
|  | Female | 11974 | 544 | 10760 | 543 | 11219 | 629 | 11754 | 751 |
| 3 | Student drop out | 697 | 457 | 2139 | 493 | 612 | 413 | 0 | 0 |
|  | Male | 508 | 246 | 856 | 280 | 231 | 216 | 0 | 0 |
|  | Female | 189 | 214 | 1283 | 207 | 381 | 197 | 0 | 0 |

Source: - District Education Office

As shown in the above table, of the total student enrolled to primary school, the number of student promoted to the next grade level was increased from 84.69% to 95.79% between the year 2010 and 2011. However, during the same year, the number of secondary school promoted to the next grade level was increase from 69.99% to 74.53%. This indicates that, there is a gradual improvement of quality of education in primary school. On the other hand, the achievement rate of female student was 86% in both years in primary school.

As remedy to student participation and student performance, drop out of student was decreased from **2139** to **612** between the years 2010 and 2011 in primary while drop out of secondary school was decreased from **493** to **413**.This figure indicates the dropout rate of student in primary school was decrease from 15% to 6% and secondary school was decrease from 25.38% to 20.46% in the year 2011 to 2012.

Such high rate of student dropout from school is due to economic problem (uniform, educational material, fees), unwillingness of some parent not to send their child to school, migration to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc are mentioned as an example.

## **4.2. Health**

***Health Institution:*** so as to improve the health service delivery, increasing the number of health institution and improving its quality is important. From this point of view, the number of health centre was increased from 1 to 3 while the number of health post was increased from 16 to 17 between the year 2008 and 2012.

Though, the government has as a standard proposed at least one health post in every kebele, still all kebele has one health post during the indicated years. This gives the district have a potential health coverage of 79.2%. The ratio of population to Health centre and health post was 36,730:1 and 6,481:1 respectively in the year 2012 which indicates low health coverage of district as compared with WHO standard which is 25,000, for health centre and 5,000 for health post respectively.

***Health Personnel:*** The total number of health personnel was increased from 71 to 75 between 2010 and 2012. When we see with the profession, the number of nurses was decreased from 20 in 2010 to 17 in 2012 because luck of human power. While the number of health extension workers was increased from 39 to 41 during these years. On the other hand, the number of health officers increase from8 in the year 2010to 9 in the year 2012,while the number of laboratory technician was increase creased from 2 to 3 in the 2010,2012 respectively.

Table: 4.5. Number of health Institution and Personnel by Ownership

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Institution/Health Personnel** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **Health Institution** | **23** | **23** | **22** | **26** | **26** |  |  |
| Health Centre | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Clinic | 0 | 0 | 0 | 4 | 4 | 4 | 4 |
| Health Post | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| Pharmacies | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| **Health Profession** | **82** | **74** | **82** | **75** | **71** | **70** | **75** |
| Health Officer | 5 | 5 | 8 | 10 | 8 | 8 | 9 |
| Nurse | 33 | 27 | 29 | 22 | 20 | 15 | 17 |
| Health Assistance | 1 | 1 | 2 | 2 | 0 | 0 | 0 |
| Laboratory Technician | 5 | 5 | 5 | 2 | 2 | 2 | 3 |
| Pharmacy Technician | 3 | 2 | 0 | 0 | 0 | 2 | 3 |
| Sanitarian | 2 | 2 | 2 | 3 | 2 | 2 | 2 |
| Junior Health professions | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Health Extension Workers | 33 | 32 | 36 | 38 | 39 | 41 | 41 |

Source: - Aseko District Health Office

**4.3. Women and Children Issue**

### 4.3.1. Women Issue

**4.3.1.1. Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was increased from 3872 and 1686 in the year 2010 to 3023 and 355 in the year 2012 respectively. On the other hand, the number of women gets delivery services was 1600 and 1888 in the year 2010 and 2012.

Though such improvement was observed, still there are women attended delivery traditional at their home in due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 1540 to 23860 between the year 2010 and 2012 while the number of mother get NPWTT2 vaccination was increased from1273 to 16993 during the year under consideration. This indicates the provision of health service was improved from time to time. The following table indicates the major vaccination type given to the children.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and the district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods was 18,449 and 24580 in the year 2010 and 2012 respectively.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates, the number of women participated as woreda council members was 18 both in the year 2010 and 2012. Moreover, the number of women who are member of woreda cabinet was decreased from 9 to 8 in the year 2010 and 2012 respectively.

**Table: - 4.6. Women’s socio economic indicators in the district**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | Measurement | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| 1 | Access to save delivery service | Number | 10,081 | 10,852 | 9873 | 7158 | 9908 | 8466 |
|  | Women's used ANC/Antenatal care/services | Number | 4101 | 3985 | 3368 | 3872 | 5896 | 3023 |
|  | Women's used PNC /Postnatal care/services | Number | 3563 | 3801 | 3358 | 1686 | 2446 | 3555 |
|  | Women’s assisted delivery | Number | 2417 | 3066 | 3147 | 1600 | 1566 | 1888 |
| 2 | Mother Vaccination |  | 6,814 | 7,938 | 2868 | 2814 | 46318 | 40853 |
|  | PW TT2 | Number | 3431 | 4014 | 1469 | 1540 | 24658 | 23860 |
|  | NPW TT2 | Number | 3383 | 3924 | 1399 | 1274 | 21660 | 16993 |
| 3 | Family planning condition | Namber | 17,260 | 19,864 | 16888 | 18449 | 19980 | 24580 |
|  | Modern methods | Number | 17,260 | 19,864 | 16888 | 18449 | 19980 | 24580 |
| 4 | Women elected at different level |  | 28 | 28 | 27 | 27 |  |  |
|  | Member of regional council | Number | 1 | 1 | 1 | 1 | 1 | 1 |
|  | Member of woreda council | Number | 18 | 18 | 18 | 18 | 18 | 18 |
|  | Member of woreda cabinet | Number | 9 | 9 | 9 | 9 | 9 | 8 |

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Haemorrhage, sepsis, obstructed labour, pregnancy induced hypertension and abortion. On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**4.3.2. Children**

**4.3.2.1. Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from **15,667** in the year 2010 to **19956**in the year 2012

**4.7. Number of Children Vaccinated by year and type of Vaccination**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Vaccination** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **BCG** | 2730 | 2938 | 2652 | 2816 | 3585 | 3577 | 3129 | 3777 | 4080 |
| **Measles** | 3225 | 3400 | 3119 | 3324 | 3504 | 3253 | 3090 | 2919 | 3924 |
| **DPT** | 6924 | 3432 | 6122 | 6923 | 7252 | 6934 | 6634 | 7332 | 8028 |
| **Polio** | 3146 | 3302 | 3302 | 6923 | 7252 | 3009 | 2814 | 2944 | 3924 |
| **Total** | **16025** | **13072** | **15195** | **19986** | **21593** | **16773** | **15667** | **16972** | **19956** |

Source: Aseko District Health Office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 3,218 and 3231 children to be orphan and vulnerable in the year 20010 and 2012. These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 12 in the year 2008 which was increase to 82 in the year 2012. This does not indicate all of them get holistic support (food, education, health and psycho-social).

In addition to this, there were also 64 and 714 children with different types of disability in the district in the year 2010 and 2012 respectively, who are in most cases not benefited from social services and the economy to in the district. From the total disabled children, 70.37% are female in the year 2012.

In the district there were also 284 and 1243 malnourished children who get nutritional support from government health facilities for free.

Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Diarrheal, Pneumonia, Acute fibril illness, Tetanus and infection of skin.

Moreover, from 18 rural and urban kebeles, 10 of them are malaria prone areas. In the district, 67 and 37 children were affected by malar in the year 20010 and 2012 all of them were treated and cured from malaria. To decrease prevalence of malaria the ITN coverage of the district was 100% in the year 2012.

**Table: - 4.8. Children Socio economic indicators in the district**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **1** | **Number of Orphan and Vulnerable children** | Number | **541** | **1066** | **2986** | **3218** | **3221** | **3231** |
| **2** | **Disabled children** | **Number** | **50** | **70** | **70** | **64** | **68** | **71** |
|  | Male | Number | 28 | 31 | 31 | 26 | 28 | 28 |
|  | Female | Number | 22 | 39 | 39 | 38 | 40 | 43 |
| **3** | Full immunization | Number | 3021 | 3384 | 3384 | 3594 | 3621 | 3627 |
| **4** | **Malnourished children** | Number | **1341** | **5251** | **5251** | **1284** | **1265** | **1243** |
|  | Male | Number | 657 | 2573 | 512 | 647 | 625 | 613 |
|  | Female | Number | 684 | 2678 | 504 | 637 | 640 | 630 |
| **4** | **Child disease and causes of death** | **Number** |  |  |  |  |  |  |
|  | Malaria prone area | Number of kebele | 10 | 10 | 10 | 10 | 10 | 10 |
|  | Children affected by Malaria | Number | 95 | 67 | 34 | 28 | 31 | 37 |
|  | Children treated for malaria | Number | 95 | 67 | 34 | 28 | 31 | 37 |
|  | Children died due to malaria | Number | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Children born with HIV/AIDS | Number | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Children Died due to HIV/AIDS | Number | 0 | 0 | 0 | 0 | 0 | 0 |
|  | ITN Coverage | % | 100 | 100 | 100 | 100 | 100 | 100 |

Source: District Health Office

### 4.3.3. Hygiene and Sanitation issue

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was increased from 51,708 to 61,820 between the year 2011 and 2012 from which only 48.20% and 56.10% of household uses their own latrine in the year 2010 and 2012 respectively.

As a result of this, the health condition of the community was improving through time in the district.

However, though a continuous health education and awareness creation session was done; all health centres in the district were not access to full improved sanitation facilities. Likewise, all school in the district was access to toilet facilities. However, all school in the district were not access to potable water supply facilities.

**Table: - 4.9. Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Health Centre** | | | | | **Health post** | | | | |
| 2008 | 2009 | 2010 | 2011 | 2012 | 2008 | 2009 | 2010 | 2011 | 2012 |
| **1** | Number of health institutions in the district | 3 | 3 | 3 | 3 | 3 | 17 | 18 | 18 | 18 | 18 |
| **2** | Number of health institution access to improved sanitation facilities(full sanitation) | 3 | 3 | 3 | 3 | 3 | 7 | 18 | 18 | 18 | 18 |
| **3** | Number of health institution n access to water supply | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| **4** | Number of health institution access to toilet facilities | 3 | 3 | 3 | 3 | 3 | 17 | 18 | 18 | 18 | 18 |
| **5** | Number of Health institution access to dry waste disposal facilities | 3 | 3 | 3 | 3 | 3 | 17 | 18 | 18 | 18 | 18 |
| **6** | Number of Health institution access to liquid waste disposal facilities | 0 | 3 | 3 | 3 | 3 | 17 | 18 | 18 | 18 | 18 |

Source: - District Health Office

**Table: - 4.10. School access to hygiene and sanitation**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Primary school** | | | | | **Secondary school** | | | | |
| 2008 | 2009 | 2010 | 2011 | 2012 | 2008 | 2009 | 2010 | 2011 | 2012 |
| **1** | Number of school in district | 35 | 36 | 36 | 36 | 36 | 4 | 4 | 4 | 4 | 4 |
| **2** | Number of school access to water supply | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| **3** | Number of school having toilet | 35 | 36 | 36 | 36 | 36 | 4 | 4 | 4 | 4 | 4 |

Source: - District Education Office

***Diseases prevalence including HIV/AIDS*:** In the year 2011 and 2012 the number of women get counselling for HIV/AIDS 7606 and 6,888 and all of them were tested for HIV/AIDS. Only three women was newly HIV/AIDS +ve in the year 2012.However, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition or eating habit and under-utilization of health services also play a great role for the existence of different diseases.

***Causes of Morbidity:*** According to the data obtained from Aseko district health office, the highest prevalent disease in the district was all other new Diarrheal (25.73%) followed, by Pneumonia (24.01%) and upper respiratory tract (infection), see the table below.

**Table: 4.11. Top diseases existed in the district in the year**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Diseases | YEAR | | | | | | | | | | | |
| 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| No. of pop | % | No. of pop | % | No. of pop | % | No. of pop | % | No. of pop | % | No. of pop | % |
| Pneumonia | 702 | 16.08 | 1272 | 21.09 | 1241 | 24.7 | 1536 | 31 | 2310 | 24.1 | 2362 | 24.0 |
| Diarrheal/non bloody/ | 632 | 14.47 | 594 | 9.85 | 1819 | 95.4 | 2436 | 31.07 | 2556 | 26.69 | 2532 | 25.7 |
| AFI/Acute fabric illness | 54 6 | 12.5 | 840 | 13.93 | 866 | 12 | 925 | 11.8 | 961 | 10.03 | 954 | 9.70 |
| Violence & other injury | 519 | 11.88 | 555 | 9.20 | 592 | 8.2 | 674 | 8.6 | 612 | 6.40 | 587 | 5.97 |
| Malaria | 479 | 10.97 | 441 | 7.31 | 302 | 4 | 249 | 3.17 | 685 | 7.15 | 564 | 5.73 |
| Trauma | 405 | 9.27 | 495 | 8.21 | 538 | 7.45 | 613 | 7.82 | 568 | 5.93 | 612 | 6.22 |
| Typhoid fever | 284 | 6.5 | 392 | 6.50 | 419 | 5.8 | 423 | 5.4 | 362 | 3.78 | 382 | 3.89 |
| Helmintiasis | 270 | 6.18 | 397 | 6.58 | 375 | 5.2 | 376 | 4.8 | 356 | 3.72 | 416 | 4.23 |
| Upper Respiratory tract inf | 265 | 6.07 | 611 | 10.13 | 577 | 8 | 800 | 10.2 | 745 | 7.78 | 798 | 8.11 |
| Urinary tract infection | 265 | 6.07 | 433 | 7.18 | 447 | 6.2 | 502 | 6.4 | 423 | 4.44 | 632 | 3.42 |
| Total | 4367 | 100.0 | 6030 | 100.0 | 7216 | 100 | 7841 | 100 | 9578 | 100 | 9839 | 100 |

Source: - District Helth Office

***Harmful Traditional Practices:*** Like the Zone as a whole, there are many harmful traditional practices that are being widely practiced in Aseko district too. Among these, raping, inheritance marriage (Dhala), Female circumcision, ‘Gebara’ etc can be mentioned as an example. But now a day’s these harmful traditional practices decreases from time to time because the awareness creation by the health extension workers increases from time to time. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district. There are many useful traditional practices in Aseco district. Among these, Debo, Ikub, Idir and the like are mentioned as an example.

## **4.4. Sport**

There were different types of sport activates like football, Athletics in the district. However, there were no well-organized and standardized sport facilities like stadium, provision of material support for the teams etc.

**Table: - 4.12.Types of sport, number of teams and sports men in the year 2012**

|  |  |  |
| --- | --- | --- |
| **Type of sport** | **Number of teams** | **Number of sports men** |
| **Athletics** | 1 | 20 |
| **Foot ball** | 1 | 24 |
| **Tequando** | 2 | 30 |
| **Volley ball** | 6 | 54 |

Source: - **Aseko Youth and sport affairs office**

## **4.5. Basic Infrastructure Development**

***Roads*:** According to Aseko district rural road office, Aseko District is found 218 km away from Zone Capital town, Asella and 243 km from Regional Capital city, Finfinne. It has only 13 km length of gravel road (all weather) road. This gives a road density (for all weather roads) of 0.78km per 1000 people (projected population of 2012).

***Telecommunication*:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with Wireless type of telecommunication. On the other hand, all Peasant Associations of the district has supplied with wireless type of telephone services. Now a day’s most of the residents of the district has a mobile phone. As a crucial problem there is only one network pole in the woreda and that is not enough for all of the kebeles this makes the access to be not enough.

***Post Office:***Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has no postal service.

***Water Supply***: potable water coverage of the district is high. According to the data obtained from Aseko district Water Resource Development Office, of the total rural population of the district 119,430 (51.50%) was supplied with potable water in the year 2012 which is good.

***Energy supply:*** Energy sources can be traditional or modern. The traditional sources of energy are charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. **Aseko Town, Sengo and Chefa Quyo** have supplied with 24 hours hydroelectric power, though very low continuous of hydroelectric power. Biogas is also one of the energy source in the woreda 26 biogas were built for farmers. On the other hand, the rest parts of the rural areas have no electric services. According to the data obtained from Statistical Abstract of Aseko district, in the year 2012 around 100 % of the total population of the town has supplied with electricity.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, firewood is the most important energy source followed by Charcoal, Kerosene, crop residues, electricity and animal dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene. Regarding fuel filling station, there is no fuel filling station in the district.

**Table: 4.13. Sources of Domestic Energy Supply**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Source of Energy Supply | Rank | |
| Urban | Rural |
| 1 | Charcoal | 2 | 4 |
| 2 | Fire wood | 3 | 1 |
| 3 | Animal Dung | 5 | 3 |
| 4 | Crop Residue | 6 | 6 |
| 5 | Kerosene | 4 | 2 |
| 6 | Electricity | 1 | 5 |

Source: Aseko District water mineral, and Energy Office

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# CHAPTER FIVE

# 5. DEVELOPMENT ACTIVITIES

## **5.1. On Going Development Projects**

The on-going major development activities in the di trict are carried out by government, non-government and community participations. The annual budget of the district is divided in two ***Recurrent and Capital*** budget. Of the total annual budget the share of capital budget is atleast10% every year. It is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps of the district. Accordingly, the ongoing development projects during the year under consideration are the following.

***Administration and general service:*** up to 2012 budget year in the Administration and general service of the district there were different types of projects constructed by budget obtained from different sources. From these projects, different offices, wereda Administration Of Conference Hall Construction, building of fence and kera were constructed by the government, community and others contribution of budget.

***Social Sector Development Projects:*** up to 2012 budget year in the social sector of the district there were different types of projects constructed by budget obtained from different sources. From these projects, different, water Scheme Construction, operational Room and different additional class room were constructed by the government, community and others contribution of budget.

***Economic Sector Development projects:*** in the same budget year in the district water scheme, modern irrigation road and DA by the government, community and others contribution of budget.

**Private Investment**

In the year 2012, there was one private investor that invests on health sectors. In the district, it needs a great promotion activity to attract investors to the district.

## **5.2. Problems of ongoing Development projects**

The major problems of on-going development projects are Lack of budget, Poor construction quality, in accessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction are the major problems during the construction.

# CHAPTER SIX

# 6. PROBLEMS AND POTENTIALITIES

## **6.1. Major Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting.

**Economic Problem:** shortage of farm land High prevalence of crop diseases and pests, shortage of Agricultural inputs and lack of capacity to buy, lack of suitable road, lack of Financial Institutions (Bank Saving and Credit Association and well organized rural credit services), acute shortage or grazing land which leads to over utilization of the same land for a long period of time, absence of investment activities and industries development are the major economic problems.

**Social Service problem:** rapid population growth and large family size which leads to fragmentation, unemployment, low productivity, under-utilization of health institutions and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, high dropout rate, low potable water coverage, low electric power supply.

## **6.2. Potentialities**

**Land resource:** the district has amble resources of fertile agricultural land resources. This land resource is very comfortable for production of different types of crops cereals, pulses and oilseeds. In addition to these the land resource found in the district is very useful for rearing livestock production.

**Tourist attraction site**: the topography of the district is very attractive naturally. Moreover, according to the data obtained from the cultural and tourism office of the district there are many natural and man-made tourist attraction sites in the district. From these sites wild animals, natural bridge, cultural religious place are mentioned as an example.

**Forest resources:** the district has also natural and manmade forest potentialities. Even though we could not get the size of forests found in the district it is expected that the district has wide size of forest resources and if these forests are widely used and protected by concerned bodies it has a very good advantage to keep the environment climatic condition and other forest products.

**Investment opportunities:** even though there are no enough infrastructures like roads, enough electric power, means of communication, enough potable water coverage the district has a great potential of investment opportunities. From these opportunities of investment fertile land for production purpose, livestock rearing, animal fattening, skilled and unskilled labour power with low labour cost, and the like are mentioned as an example.

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# CHAPTER SEVEN

# 7. Conclusions and Recommendation

## **7. 1. Conclusions**

Aseko district is one of the administration units of Arsi Zone. It is found 218km and 243km away from the capital town of Arsi (Asella Town) and the Regional Capital City of Finfinne respectively. The district has 18 administration units of which 17 are rural peasant associations and 1 is urban administration unit.

The district has **119,430** populations size in the year 2012. From the total population of the district, only 5.4 % are living in urban areas in the year 2012. This indicated that more than 94.6% of the population of the district is living in rural area depending on agricultural activities. Most of the districts economy is depending on agricultural activities.

In the year 2012, there were 17farmers training centres (FTCs) in the district. During the same years, there were ***51 /*fifty one*/*** Development agents, which are three in each peasant association with profession of plant science, Animal science and Environmental protection. These Development agents help the farmers in all aspects of agricultural practices such as in crop production animal husbandry and management and environmental protection.

In addition to these the district has four health posts, one C-type of animal health clinics that served the livestock found in the district. Comparing to the livestock population found in the district the animal health clinics is very small in number to give enough services for the livestock resources.

The district is known with shortage of rain fall and most of the community of the district is under support of Safety-net program for a long period of time. This is mainly because of the topography of the district. But if this condition is supported by irrigation activity the district has amble resources of fertile land that can be used for irrigation activity.

In the social sector of the district the district have four senior secondary schools with 1948 students and 86 teachers and 36 primary schools with 26057 students and526 teachers in the year 2012.It has no any governmental and non-governmental technical and vocational education school in the same year of 2012. In the health sector the district has three health centers, and 17/seventy/ health posts with 75 health professionals in the year 2012 it is not enough Regarding to the total populations of the district.

Regarding the potable water coverage, from the total populations of the district 51.9% of the populations were supplied with potable water in the year 2012.

The district has only 30.96 km length of gravel road (all weather) road and 94.29km gravel road (seasonal road). This gives a road density (for all weather roads) of 0.78 km per 1000 people (projected population of 2012).

## **7.2. Recommendation**

* To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organizations as well as the surrounding community has to perform the following activities:
* The services given in the farmers training centers was because of lack the equipment in the FTC and the cover all the rural kebeles of the district so it is expected from the district agriculture and rural development office and the concerned bodies to construct additional farmers training center and At the same time it should fulfil the equipment which is used for the training.
* The number of health infrastructures in the district was not enough when compared to the number of livestock population need the services it is very low so it should be constructed additional animal health clinics to improve the quality of the livestock population.
* Most parts of the district is supported by Safety-net program, in other way there are a large size of fertile land that can be used for production purpose, so to utilize the potentialities of the resource and to minimize the risk behind the concerned bodies should take the needed measurement.
* Regarding health coverage the district has very low health coverage it has only 3 health centers, 17 health posts when we compare to the WHO it is far away from the standard. So to minimize the gap it is expected to do more from the concerned bodies.
* The portable coverage of the district is only 50%. So to improve the potable coverage of the district it is expected to do more from the concerned bodies.
* When we compared to the other districts found in the zone the district has very low coverage of development infrastructures in general so to minimize the gap it is expected to do more.
* Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction are the major problems on the ongoing projects so the concerned body should take action to reduce these problems.
* More over the problem of the road is very high in the district, hence it needs further intervention.

**PHYSICA LAND SOCIO-ECONOMIC PROFILE OF BOKOJI TOWN YEAR 2011 AND 2012 E.C**

**CHAPTER ONE**

1. **Introduction**
   1. **Back Ground of the study**

Bekoji town Administration is one of the 27 administrative unit of Arsii zone which is located at **231km** from finfinne & **56Km** from Asella to the south east. The town was **established in 1929** E. C & the name of the town is derived from the native **Oromo Arsi** tribe called **Bekoji**. The town has got recognition of **Mayor in July 1997 E.C** At this time the town has two brood kebeles but the division of those Kebele is not comfortable to access good governance. Social services infrastructure & community participation so that we have a plan to divide in to four Kebele’s with short time.

The ecology of the town is **3,409hectar** area of the land for residential service **2027.57hectar** for investment & 51,460\_Km2 (5.146 hekter) area of the land is covered with green area **404.4 hectar**. The Objective of preparing this profile is to create scientifically organized physical and socio economic data base of Bekoji administrative town that reflects the existing situation development problems and potentials of the district to be used by government & Non- governmental organization to identify development gaps and the like.

* 1. **Sources of information**

This document is compiled from the data sectoral departments, like office of land administration and environmental protection Investment desk office, read & transport office, office of water supply, post office, telecommunication, education office, health office & finance and economic development office moreover, different data and the back ground of the town is organized from kebele administrative and elder society of the district. This document has four parts. The first part deals with the historical back ground of the town. The second part focused on physical features like location relief, drainage vegetation and wild life, the third socio-economic condition like urban Agriculture, education, health, infrastructure & financial activities. The fourth chapter deals with problems & potential &the last chapter deals conclusions & recommendation of the town problem.

**CHAPTER TWO**

1. **Physical Setting**
   1. **Location and area**

Bekoji town is one of the administrative units of Arsi zone Astronomically it is located between **70 5l N – 70 45l N** Latitude **39 5l E - 390 5l E** longitude relatively, the town share boundary line with Lemu Bilbilo woreda has a total area of 10 Km2 which accounts for **0.04%** of the total area of the zone .The town is found at distance of **231 km** from f**infine**&**56 Km** from **Asella** to the south east direction.

**2.2 Relief Drainage & Climate**

**Geology:** - The Present surface rock structure indicates that most of the land forms of the town were formed as a result of internal forces like Volcanism, folding & faulting Acting up on the surface of the earth during Cenozoic era of tericiary period. Relief and Drainage: - The relief structure of is undulating flat toped plateau. The altitude of the town ranging **2780**highest place in taming area due to high altitude of the town there is no net- work of the towns are koladima&sadoyie/Hellish/ crossing the town to the east west on the other hand. The major seasonal streams are Mito and deleleny river valley.

**Climate** :- Due to its altitudinal location the climate condition of the town is cool having temperature of **10 c – 15 0 c** Hence, the dominant type of climate condition of the district is cool agro- ecological zone the mean annual rain fall is ranging between **1100** mm- **1200** mm and the average rainy days are more than **120** days in the year .The rain fall pattern is bimodal That is long rainy season /Maher from ( June to September) and short rainy season/ Belt ( from March to may)

**2.3 Vegetation and Wild life**

The Major types of Vegetation in the town are Afro- alpine & sub – Afro Alpine. There are Community protected coniferous forests like equalaptas three in green area of town accounts for 1.5 %( 15 hectares) urn though, we have forest in green area and at the bank of the river, we haven’t so much wild life in the district.

**CHAPTER THREE**

**3. Socio Economic Conditions**

**3.1 Population**

According to data obtain data from Keble in 2012; **34,404 & 37,343** male and female respectively from the total population of the town **47.95%** is male and **52.04%** of the Population was female in the year 2012 in the same year an overall sex ratio of the town male per. **1:1.07** female. Table 31 Population size of Bekoji administrative town by sex % school age

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Age | Urban | | |
| Male | Female | Total |
| 2008 | 0-5 | 3,568 | 3,852 | 7,420 |
| 6-18 | 8,237 | 8,225 | 16,462 |
| 19-64 | 17,346 | 17,282 | 34,628 |
| Above 64 | 1,381 | 1,359 | 2,740 |
| 2009 | 0-5 | 2,650 | 3,271 | 5,921 |
| 6-18 | 2,628 | 4,076 | 6,756 |
| 19-64 | 18,899 | 20,058 | 48,957 |
| Above 64 | 866 | 1,000 | 1,866 |
| 2010 | 0-5 | 2,650 | 3,271 | 5,921 |
| 6-18 | 2,628 | 4,076 | 6,756 |
| 19-64 | 28,899 | 30,058 | 58,957 |
| Above 64 | 866 | 1,000 | 1,866 |
| 2011 | 0-5 | 2,650 | 3,271 | 5,921 |
|  | 6-18 | 9,544 | 11,414 | 20,962 |
| 19-64 | 21,035 | 22,720 | 43,754 |
| Above 64 | 1,430 | 1,436 | 2,863 |
| 2012 | 0-5 | 2,650 | 3,271 | 5,921 |
|  | 6-18 | 9,544 | 9,916 | 19,464 |
| 19-64 | 20,780 | 22,720 | 43,499 |
| Above 64 | 1,430 | 1,436 | 2,863 |

As it is indicated in the above table the young age population (0**-18**) productive age **(19-64**) & old age population (38 **%)** are **60 %, 4%**& respectively economically active population (age **19-64**) accounts **60%** from the total population of the town. The school age populations (**6-18**) are **27**% from the total population. The dependency ratio of the town is **38** there is rapid rate of migration from rural to urban which is in migration rate **40%**& out migration rate is **15%**.

**4. Urban agriculture**

In the town agricultural activities are not widely practiced how, ever the urban micro enterprise practice agricultural activities in the town accordingly the micro enterprise of the town produce. Vegetables and small amount of crop production year of 2011/2012 the district was cultivating two hectares of land and producing --quintals in addition the potential of vegetable (patter) production in the same year produced --- quintals from one hectare. The utilization of land resource in our town **86.41 hectar** for commercial **2027.57hectar** for residential\_--\_\_\_\_M2 for industrial &**404.40 hectare** for green area

**Livestock** – Bekoji town is famous in livestock resources cattle, sheep, Goats, Horse, and donkeys are the major livestock population in the town as a result there is two dairy farms in the town producing milk products. The high prevalence of disease, traditional method of rearing, shortage of feeds and the like are the major constraints in livestock production in the district. To prevent animal diseases the town can be served from Lemuna Bilbilo wired of governmental veterinary. In addition, there are three private veterinary services served in the town. Gardening- horticulture agriculture is the agriculture which practiced in urban area. There is a little gardening practiced is applied in a few area at the bank of a river. Poultry: - Poultry Production is one of the important sources of family income & food in the town However, the Prevalence of disease and low productivity due to traditional method of rearing is the major Constraints

**Table 4.1 distribution of livestock& Poultry in the town**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Type of live stock | 2008 | 2009 | 2010 | 2011 | 2012 |
| 1 | Livestock ( total) |  |  |  |  |  |
|  | Cattle | 1,146 | 893 | 1,598 | 1,952 | 2,212 |
| Sheep | 1,231 | 611 | 991 | 1,4235 | 1,578 |
| Goat | 141 | 431 | 887 | 1,324 | 1,794 |
| Horses | 187 | 280 | 1,368 | 145 | 170 |
| Donkeys | 189 | 53 | 299 | 825 | 912 |
| Mules | 4 | 2 | 4 | - | - |
| 2 | Poultry | 1124 | 1058 | 1508 | 1,253 | 1,477 |

Source: - Bekojii town of 01 & 02 kebele Office

**5. Industries & Producers Cooperatives**

**Industry** – similar to other parts of the zone industrial development is at infant stage in bekoji town. Their number is Very small and dominated by small – scale industries. At the same time they have small and able to generate job opportunities for small number of employees. Most of them are food privately owned. There are also medium scale industrial establishments in the town.

**Table 5.1 Number of medium scale industries by type**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of industry | **2011** | | | | | **2012** | | | | |
| Number | Capital (birr) | Permanent employee | | | number | Capital(birr) | Permanent employee | | |
| Male | Female | Total |  | Male | Female | Total |
| Grain Mill | 17 | 1,450,000 | 58 | 29 | 87 | 16 | 3,450,000 | 40 | 25 | 65 |
| Edible Oil | 3 | 100,000 | 2 | 0 | 2 | 6 | 2,317,131 | 16 | 7 | 23 |
| Metal | 4 | 80,000 | 4 | 0 | 4 | 6 | 90,000 | 18 | 15 | 33 |
| Woods | 15 | 70,000 | 14 | 7 | 21 | 21 | 80,000 | 30 | 15 | 45 |
| Furniture | 6 | 45,000 | 15 | 3 | 18 | 4 | 50,000 | 20 | 4 | 24 |

**Source: - Bekoji town Trade Office.**

In addition there is Two grain mill large scale industries called “ Arsi Betasab flour fabric “ and Tukuna Dadi flour fabric with capital of **2,161,711** and 3,530,020 respectively, The producing more than 1,349,987 quintals of floor Per/year & establishing job opportunity for **30** Permanent employees and **20** temporary employs in the year 2012. There are also small scale Private industries like cottage, or “shamanic” Potter & metal works in the Town. Small Scale micro enterprises - The Economic development policy of our country focuses on organizing and strengthens small scale micro enterprise to reduce independent youngster to generate their own job & income in the town. Regarding this there were **255** licensed small scale micro enterprises having member 257 male **191** Female in town in the year 2011&2012 their profile in town in the following table.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Type of small scale micro center price |  | | | 2011 | | | | | 2012 | | | | |
| Member | | | No. | Capital | Member | | |  |  | Member | | |
| M | F | Total | M | F | T | Number | Capital | M | F | T |
| 1 | Coble I stone | 14 | 10 | 24 | 3 | 745,985.94 | 15 | 24 | 39 | 4 | 538,779 | 22 | 14 | 36 |
| 2 | Industry | 21 | 3 | 24 | 14 | 1,750,000 | 13 | 5 | 18 | 4 | NA | 8 | 3 | 11 |
| 3 | Agriculture |  |  |  | 5 | NA | 12 | 11 | 23 |  | - | - | - | - |
| 4 | Trade | 90 | 41 | 131 | 56 |  | 37 | 22 | 59 |  | 1,204,308.75 | 49 | 65 | 114 |
| 5 | G.service | 50 | 15 | 65 | 26 | 50,000 | 21 | 20 | 41 | 46 | NA | 68 | 24 | 92 |
| 6 | Construction | - | - | - | 3 | 1,781,99.45 | 3 | - | 3 | 5 | 2,340,151 | 8 | 3 | 11 |

**6. Infrastructure& Social facilities**

**Transport accessibility:** - The road facility of the town is 138.5 km gravel rood inside the town. In addition **3.4 km** double rood asphalt and **9.5km** cobblestone Ironed is on the construction the means of transportation which serve in the town is public bus flight, Motorcycles as we obtain data from office of road and transport there were private buses **230** Private freight &**9** gov’t freight 185 private motor cyclea &1**139 Bajaji ,** 8 gov’t motor cycle garbed in the town in the year 2012.

**Tele-Communication:** - is fastest & effective way of transmitting both business % /administrative information especially in areas whereas root transport system under developed & one of Infrastructure social facility is Tele Phone Services. Regarding this there is one telecommunication office in the district. There was Digital, Mobile, & Automatic type telephone services in the district number of telephone calls in the town were -- Domestic, -- international – outgoing & -- incoming telephone service in the year 2012. There were served in the telecommunication office.

**Postal Service: -** It is the ancient means of communication in our country moreover; it is one of the means of communication that plays signify cantrole in transmitting information and message, especially in rural areas where other means of communication is under developed, Accordingly, there was one regular type of postal service in the town. The type of service in the year 2012 is indicated under the following table.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| type of service | Domestic | | | International | | | Total | | |
| In coming | Out going | Total | In coming | Out going | Total | In coming | Out going | Total |
| Non registered | 7200 | 5300 | 12500 | 4000 | 1500 | 5500 | 11200 | 6800 | 18000 |
| Registered | 1402 | 1368 | 2770 | 220 | 250 | 470 | 1622 | 1618 | 3240 |
| Parcels | 40 | 100 | 140 | 30 | - | 30 | 70 | 130 | 170 |

Source: – Bekoji town post Office

**Water Supply:** - potable water coverage of the Administration is very low. According to data obtained from Zone Water Resource Office, of the total urban population of the Administration only **34,048** was supplied with potable water in the year 2011.However, in the year 2012, the number of population access to potable water supply was increased to 45,220 were supplied with potable water, which is for urban areas. Regarding potable water schemas, **19** bonus development schemes were used in providing water to the local community. There were **45,220** Public bono **19** Pipe line **8000** water meter in the administration of town.

**Water Supply:** - The source of drinking water in the town is tape- water & spring in the town. The Potable water coverage is medium. According to the data obtained from Bekoji town water resource office of the total population of the town 57% of the population was supplied with Potable Water in the year2012.

**Energy supply** – energy sources can be traditional or modern. The traditional sources of energy are charcoal, animal dung – crop residue and firewood while the modern energy sources are electric, biogas fossil fuel & solar energy. In Bekoji town 6.8 % of population have their own electric counter more than 80% a population ware electric counter. Of people in other hand there was a one fuel station having \_\_\_\_\_\_\_\_ litters the source of in rank indicate under the following table

|  |  |  |
| --- | --- | --- |
| No | Type of energy supply | Rank |
| 1 | Fire wood | 1st |
| 2 | Charcoal | 2nd |
| 3 | Crop residue | 3rd |
| 4 | Animal Dung | 4th |
| 5 | Kerosene | 5th |
| 6 | Electricity | 6th |

**Source: – Bekoji town electric district Office**

**Annual budget allocation:** Annual budget requirement of administration is covered mainly from two sources: regional government grants and administration in land revenue. Regional government contribution shares the largest amount which accounts for more than 80% of the total annual budget allocated for administrations. Annual budget allocated for the administration

|  |  |  |
| --- | --- | --- |
| Year | Annual budget Allocated | Growth Rate |
| 2011 | 61,015,102 | 20 |
| 2012 | 68,552,095 | 12.35 |

**Source**: - Bekoji town Administration Finance and Economic cooperation Office.

**Annual budget:** The increment rate was 12.35 % between the year 2011 and 2012

**Revenue:** - Between the year 2011 and 2012 the total annual revenue collected by the town was increased from 25,303,829.11birr to 28,111,930.54 birr. The increment rate was 11 %

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **Direct**  **Revenue** | **%** | **Indirect**  **Revenue** | **%** | **Non-Tax**  **Revenue** | **%** | **Total** |
| 2011 | 20,000,000 | 85 | 5,000,000 | 10 | 303,829.11 | **5** | 25,303,829.11 |
| 2012 | 25,000,000 | 78 | 3,000,000 | 12 | 111,930.54 | **10** | 28.111,930.54 |

**Source**: - Bekojii town Administration Inland Revenue Office

**Financial Institutions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Types of services/ facilities | Ownership | Name | Number |
|
| 1. | Banks | Government | Commercial Bank of Ethiopia | 2 |
| Non-Government | Awash Inter Bank | 1 |
| Coop. Bank ofOromia | 1 |
| Dashin bank S.C | 1 |
| Oromia Int.Bank S.C | 1 |
| Birhan Int.Bank S.C | 1 |
| Absinia Bank | 1 |
| 2 | MicroFinancial Institution | Government and /or  Non- Government | -WLQO | 1 |
| -BUSAA GONOFA | 1 |
| -PC | 1 |
| -HARBUU | 1 |
| 3. | Other ( Specify) |  |  |  |

**6.2 Education**

**Kindergarten**: - According to the data obtained from education office of the town in the year 2012 there **5** were private kindergarten school with **25** teachers (**10** Male **15**Female) and **658** Students (**295** Male **363** female) in the town. **Primary, School (1-8):-** In the year 2011& 2012, there were four primary schools (**1-8**) in the district with more than 8,589 **(49%** male) and **8,913 (51 %** female) enrolled in government schools.

**Student participation in primary (5-8**) school: Gross enrollment ratio 49 & 51male & female respectively in the year 2012. **1,965** & 2,094male and female respectively. Net enrollment ratio was **49**&**51** male & female respectively in the year 2012. Likewise in the yare 2011, 1,905&1,902male and female respectively.

**Secondary School**: Student enrolment in secondary school **(9-10) 1,290** &**1,133** male &female respectively in the year 2011. Likewise in the year 2012 **1,261**&**1,189** male &female respectively. Gross Enrollment ratio **52**&**48** male & female respectively in the year 2012.Likewise in the year 2012; 51&**49** Male & female respectively.

Net enrollment ratio was 76.5 &23.3 male & female respectively in the year 2011. Likewise in the year 2012 70.21& 29.79male & female respectively.

**preparatory school (11-12):** Student enrolment in preparatory school **474**&**222** male & female respectively in the year 2011. Likewise in the year 2012; **580** & **300** male & female respectively. Gross enrollment ration **66 &34** male & female respectively in the year 2011.Likewise in the year 2012; **68.5** & **31.5** male & female respectively. Net- enrollment ration was **55** &**45** Male & female respectiv1.5ly in the year 2011. Likewise, in the year 2012 55 & 45male & female respectively. In the town there was one secondary school preparatory school. Student enrollment **(9-10**) **1,290((51.8%)**&1,133 **(48.2%)** male & female respectively in the tear 2011.Likewise, in the year 2012; **1,261(50.10)**&**1,189 (49.9%)** male & female respectively. Enrollment of preparatory school (**11-12) 474 (76%)**&**222 (24%)** male & female respectively in the year 2011. Likewise in the year 2012; **580(70.1%)**&**300(29.9%)** male & female respectively.

There were 1,290 (51.8%) &1,133(48.2%) Male & Female respectively thought in the year 2011 in secondary school (9-10). Likewise, in the year 2012, 1,261 **(50.10%) & 1,189 (49.9%)** male and female respectively. In the same year there were 66(83%) & 13 (17%) male & female teaches respectively thought in the year 2012 in secondary school (11-12). Likewise, in the year 2012; **31 (91%) & 3 (8%)** male & female respectively.

**Table 6.2 Student enrollment** **First cycle (1-4)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Owner ship | Enrollment | | | Drop Out | | | Detained | | |
|  | M | F | T | M | F | T | M | F | T |
| 2011 | GOV’t | 2,214 | 2,297 | 4,511 | 159 | 171 | 330 | 75 | 79 | 154 |
| NGO | 120 | 160 | 280 | 8 | 13 | 21 | 7 | 3 | 10 |
| Total | 2,334 | 2,457 | 4,791 | 167 | 184 | 351 | 82 | 82 | 164 |
| 2012 | GOV’t | 2,231 | 2,303 | 4,534 | 156 | 157 | 303 | 154 | 121 | 275 |
| NGO | 123 | 133 | 256 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2,354 | 2,436 | 4,790 | 156 | 157 | 303 | 154 | 121 | 275 |

**Second cycle (5-8)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Owner ship | Enrollment | | | Drop- Out | | | Detained | | |
|  | M | F | T | M | F | T | M | F | T |
| 2011 | GOV’t | 1,830 | 1,815 | 3,645 | 78 | 68 | 146 | 99 | 85 | 184 |
| NGO | 72 | 87 | 156 | 0 | 0 | 0 | 1 | 2 | 3 |
| Total | 1,905 | 1,902 | 3,807 | 78 | 68 | 146 | 100 | 87 | 187 |
| 2012 | GOV’t | 1,898 | 2,010 | 3,908 | 124 | 175 | 299 | 65 | 54 | 119 |
| NGO | 67 | 84 | 151 | 0 | 1 | 1 | 4 | 3 | 7 |
| Total | 1,965 | 2,094 | 4,059 | 124 | 176 | 300 | 69 | 17 | 126 |

**Secondary School first Cycle (9-10)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Owner ship | Enrollment | | | Drop- Out | | | Detained | | |
|  | M | F | T | M | F | T | M | F | T |
| 2011 | GOV’t | 1,290 | 1,133 | 2,423 | **17** | 20 | 37 | **149** | 63 | 212 |
| 2012 | GOV’t | 1,261 | 1,189 | **2,450** | 19 | 23 | **42** | 123 | 171 | **194** |

**Preparatory (11- 12)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Owner ship | Enrollment | | | Drop- Out | | | Detained | | |
|  | M | F | T | M | F | T | M | F | T |
| 2011 | GOV’t | 474 | 222 | **696** | 0 | 0 | **0** | 7 | 0 | **7** |
| 2012 | GOV’t | 580 | 300 | **880** | 16 | 10 | **26** | 18 | 11 | **29** |

**Number of students sat for national Examination**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Grade | No of students sat for examination | | | Promoted | | | % |
|  | M | F | T | M | F | T |  |
| 2011 | 10 | 497 | 524 | **1,021** | 141 | 60 | **201** | 20 |
| 12 | 185 | 115 | **300** | 104 | 42 | **146** | 49 |
| 2012 | 10 | 0 | 0 | **0** | 0 | 0 | **0** | 0 |
| 12 | 187 | 77 | **264** | 0 | 0 | **0** | - |

**Number of students sat for grade 8 national Examination**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Grade | No of students sat for examination | | | Promoted | | | % |
|  | M | F | T | M | F | T |  |
| 2011 | 8 | 413 | 451 | **864** | 372 | 376 | **748** | 87 |
| 2012 | 8 | 495 | 506 | **1,001** | 471 | 464 | **935** | 94 |

Source: - Bekoji town Education Office

**TVET**- There were One governmental Vocational education schools in the town .There were **263 (30%) & 628** (70%) male & female students respectively learned in the year 2011.Likewise in the year 2012; 633 **(54%) &544 (46%)** male & female pupils learned respectively indifferent department.

**Number of Kindergarten, primary school (1-8) and Secondary School with Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Years | Kindergarten School | | | | Primary School( 1-8 ) | | | |
|  | Number of School | Male | Female | Total | Number of School | Male | Female | Total |
| 2011 | 5 | 219 | 258 | 477 | 6 | 4239 | 4359 | 8598 |
| 2012 | 5 | 295 | 363 | 658 | 6 | 4350 | 4554 | 8904 |

Source: - Bekojii town Administration Education Office

**Education Quality:** The quality of education can be measured from educational qualification of teachers’, students-teacher ratio, student-class ratio, Student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (Diploma level) to teach primary level are **63 ( 37 %)** from the total teachers teaching this level. Actually, only depending on the above ratios are not enough to measure educational quality of an administration. Hence we have to look into other factors mainly Teacher Development Program (TDP). Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above in primary school),the number of TTI teachers was decreased from 10 to 8 in primary school (1-8). Such an improving the quality of education. So as we from the given information education office of the Town expected to do more to improve the quality of education by increasing the needed variables of education quality.

**Number of teachers by Level of Education and school (2007-2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Level of**  **education** | **2011** | | | **2012** | | |
| **male** | **female** | **Total** | **Male** | **female** | **Total** |
| TTI | 5 | 6 | 11 | 3 | 1 | 4 |
| Diploma | 31 | 74 | 105 | 15 | 48 | 63 |
| Degree | 42 | 31 | 73 | 47 | 57 | 104 |
| 2nd Degree |  |  |  |  |  |  |
| **Total** | 0 | 0 | 0 | 0 | 0 | 0 |
| Diploma | 0 | 0 | 0 | 1 | 0 | 1 |
| BA/Degree | 65 | 11 | 76 | 69 | 11 | 80 |
| 2nd Degree | 1 | 1 | 2 | 0 | 2 | 2 |
| **Total** | 66 | 12 | 78 | 70 | 13 | 83 |

**11-12**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of**  **education** | **2011** | | | **2012** | | | |
| **male** | **Female** | **Total** | | **male** | **female** | **Total** | |
| Diploma | 0 | 1 | 1 | | 0 | 1 | 1 | |
| BA/BSC | 18 | 1 | 19 | | 23 | 2 | 25 | |
| 2nd Degree | 14 | 1 | 15 | | 11 | 1 | 12 | |
| **Total** | 32 | 3 | 35 | | 34 | 4 | 38 | |

**Number of teachers of Bekoji Administration town.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **1-8** | | | **9-10** | | | **11-12** | | |
|  | **Male** | **Female** | **Total** | **Male** | **female** | **Total** | **male** | **female** | **Total** |
| 2011 | 78 | 111 | 189 | 66 | 12 | 78 | 32 | 2 | 35 |
| 2012 | 65 | 106 | 171 | 70 | 13 | 83 | 35 | 4 | 39 |

**Number of students of Bekoji Administration town./TVET/**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Bekoji TEVT** | | | **Bekoji Agri &Technique College TVET** | | |
|  | **Male** | **Female** | **Total** | **Male** | **Female** | **total** |
| 2006 | 154 | 220 | 374 | 199 | 204 | **403** |
| 2007 | 239 | 339 | 578 | Change to Arsi University Branch | | |
| 2008 | 289 | 413 | 702 |  | | |
| 2009 | 425 | 593 | 1,018 |  | | |
| 2010 | 651 | 648 | 1,299 |  | | |
| 2011 | 263 | 628 | 891 |  | | |
| 2012 | 633 | 544 | 1,177 |  | | |

**Health**

**Health Institution**: The number of government health facilities was one health center and one Primary Hospital. The ratio of population to government health was 36,930:1 health center. This indicates that the health coverage of the administration is very medium as compared with WHO standards (25,000; 1 for health center, 5,000:1 health post).Health personnel: so as to improve the quality of health service having the required professional is very important in view of this, the administration health office increase the number of health professional working in the health facilities from 39 to 45 between the year 2011 & 2012. By type of profession, there were 6 health officer, 9 nurses ,2 Sanitarian, 3drust,1 technicians,6 midwifers 12 health extension and 1 HIMS workers during the year 2012.These gives the ratio of health personnel was health officer, 12,310;1 for nurses, 5,275:1 for technicians 18,465;1&3693;1 for health extension workers. For more information see the table below.

**Number of health Institution & personnel by owner (2009-2012**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Institution/Health personnel | 2009 | | 2010 | | **2011** | | 2012 | |
| Gov. | Non-Gov | Gov. | Non-Gov | **Gov.** | Non-Gov | **Gov.** | Non-Gov |
| Health Institution |  |  |  |  |  |  |  |  |
| Hospital | 1 | - | 1 | - | 1 | - | 1 | - |
| Health center | 1 | - | 1 | - | 1 | - | 1 | - |
| Clinic |  | 10 | - | 12 |  | 12 |  | 12 |
| Health post | 1 | - | 1 | - | 1 |  | 1 |  |
| Private drug Vender | - | 3 | - | 3 | - | 6 |  | 6 |
| Private clinic | - | 10 | - | 12 | - | 12 |  | 14 |
| Health profession |  |  |  |  |  |  |  |  |
| Health officer | 3 | - | 5 | - | 6 |  | 4 |  |
| Clinical Nurse |  |  |  |  | 9 |  | 10 |  |
| Mide Wife | - | - | 5 | - | 6 |  | 9 |  |
| Health Assistance | - | - | - | - | - |  |  |  |
| Drugst | 2 | 7 | 2 | 5 | 3 |  | 3 |  |
| MSc Nurse | 12 | 10 | 7 | 14 | 12 |  |  |  |
| Technician |  |  |  |  |  |  |  |  |
| LAB. Technician | 2 | - | 2 | - | 1 |  | 1 |  |
| Lab Technologist |  |  |  |  | 1 |  | 1 |  |
| Sanitarian | 3 | - | 2 | - | 2 |  | 2 |  |
| Health Extension  Workers | 10 | - | 11 | - | 10 |  | 12 |  |
| HIMS | 1 | - | 1 | - | 1 |  | 3 |  |
| Total | 36 | 40 | 38 | 46 | 54 | 30 | 48 | 32 |

**Source: - Bekoji town Administration Health Office**

**Maternal Health Care**

The Health policy of the country is focused on primary health care policy. To implement this policy, health extension workers are assigned in each Keble. Hence, the administration with the help of health extension workers provides different type primary health services such as house to house services delivery like family planning, awareness creation on environmental health, personnel hygiene & sanitation, toilet construction & refuse disposal. Moreover, they use model family graduation to scaling up best practices & the services for all household &family members. To this end, five health extensions workers were assigned for each Keble. Totally there were **48** health workers in the town in **year 2012**.

In addition, the administration health office provides different type of maternal-child health service to improve the health service of the administration. The available data shows that the number of children who get vaccination was increased from **6144** to **6789, between** the year 2011 & 2012 because many defaulted.

**Number of children Vaccinated by year & type of Vaccination**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of  Vaccination | 2008 | 2009 | 2010 | 2011 | 2012 |
| BCG | 979 | 876 | 144 | 1405 | 1497 |
| Measles | 749 | 699 | 696 | 888 | 1120 |
| DPT | 2,655 | 1,645 | 1,950 | 2652 | 2890 |
| Polio | 2,397 |  |  | 1199 | 1282 |
| **TOTAL** | 6,780 | **3,220** | **2,790** | |  |  | | --- | --- | | 6144 |  | | **6789** |

**Source: - Bekoji Administration Health Office**.

**Diseases Prevalence including HIV/AIDS**: there was one VCT (Voluntary Counseling Testing) centers. To decrease the prevalence rate of diseases including HIV/AIDS the administration health office has been under taking different type of prevention measures such as awareness creation & community dialogue program .**Inadequate potable water supply**, malnutrition and low awareness for improved environmental sanitation account for low health status in the administration. In addition, Poor eating habit and underutilization of health services also play a great role for the existence of different diseases.

**Cause of Morbidity:** According to the data obtained from Administration health office, the highest prevalent disease was **Acute febrile ilene’s with 27 %Fever**) followed by **Tonalities’ with 13 %/** and Intestinal parasitswith**12.89%** from the total population treated in the 2009, However, **in the 2010** the highest prevalent disease was **Acute febrile Ilene’s** with **16.6%** followed by **Other unspecified disease of respiratory system** with **14.9%** and **Pnemonia**with **13.44%** of total population treated different diseases. From this one can understand, the highest prevalence diseases changes from year to year. For detail see table below.

**Table: 4.5 Major Causes of morbidity and mortality in the district in the year 2011 and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | 2011 | | | 2012 | | |
| Type of diseases Diarrhea | No of  population | % | Type of diseases Diarrhea | No of  population | % |
| 1 | Acute febrile Ilene’s | 495 | 16 | Acute febrile Ilene’s | 626 | 21 |
| 2 | Margin Headache | 10 | 10 | Other Respiratory system | 16 | 20 |
| 3 | Tonsillitis | 226 | 21 | Pneumonia | 466 | 18 |
| 4 | Intestinal parasite | 15 | 7 | Other unspecified d/s of digestive system | 125 | 11 |
| 5 | Gastritis | 92 | 13 | Diarrhoe( non-body) | 267 | 10 |
| 6 | Acute respiratory infection | 93 | 13 | Other unspecified infection parasite disease | 0 | 13 |
| 7 | R/Arthritis | 0 | - | Typhoid fever | 231 | 6 |
| 8 | Pneumonia | 730 | 10 | Dyspepsia | 126 | 8 |
| 9 | Sexual transmission infection | 5 | 10 | Trauma(injury, fracture) | 210 | 12 |
| 10 | Diarrhea without dehydration | 15 | 5 | Violence & other intentional injury | 0 | 14 |
|  | **Total** |  |  |  |  |  |

Source: - Bekojii Health Office

**Sports**

Bekoji is the source of worldwide known and famous athletes such as kenenisa Bekele, Tirunesh Dibaba, Darartu Tulu, and the like. In addition, the administration is known in Football and Volleyball sport activities.

**Sport clubs and member in the town.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of Club or team** | **2011** | | **2012** | |
| Number of  club | Number of  Members | Number of  Club | Number of  Members |
| Foot-ball | 8 | 160 | 15 | 300 |
| Volleyball | 1 | 16 | 1 | 16 |
| Athletics | 3 | 175 | 3 | 195 |
| Tokondoo | 3 | 300 | 4 | 400 |
| Pere olmpic | 1 | 9 | 1 | 9 |
| Chiz | 1 | 25 | 1 | 25 |
| TebleTenese | 1 | 10 | 1 | 10 |
| Jimee | 1 | 30 | 1 | 40 |
| Total | 19 | 725 | 27 | 995 |

Source: - Bekoji Administration Youth and Sport Affairs Office

**Conclusion and Recommendation**

**Conclusion**

Bekoji Administration Town is one of the 26 administrative units of Arsi Zone which is further sub divided in to 2/two/ kebeles. The Administration has a total area of 3,409 hector and total population of **73,500 in the** year 2012. So as to achieve universal primary education coverage, the administration provides education in **6** primary schools for more than 4,350, male (**48.5**), 4,554 female(**51.5%) in 2012,** 4,239 male (**49.17%)** **4,359((50.83%**female) students in year 2011. The number of female student was slightly increased in 2012 1.3%.Has also one secondary school (9-10) and one (11-12) preparatory school. A lot has been done by the Administration education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

The Administration has a high potential of investment places in the town is suitable for investment. In addition the administration has suitable Asphalt road, tell communication center, Water supply, Electric power, Health center, etc. So, everybody who wants to invest in Bekoji Town we are ready to enjoy with him and help him within a short period of time. At last we thank.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF CHOLE DISTRICT YEAR 2011 AND 2012 E.C**

# CHAPTER ONE

**Background of the District**

# Introduction

Chole is one of the 27 Districts of Arsi zone. The historical name of the district is derived from the competition of Horse race practiced in the surrounding area. There was a horse that ran very fast and wins the race. In Oromic such Horses are called 'Chole Horse' which means horses that run very fast and the district obtains its name from this historical event. Later on, it is renamed Chole.

Chole district is sub divided in to 20 administrative units of which 18 are Peasant Associations and two are urban administrative units. Chole town is the capital town of the district. It is located at 219 km from Regional Capital City, Finfinne and 144 km from zonal Capital, Asella Town to East direction found on the Dera-mechara main road.

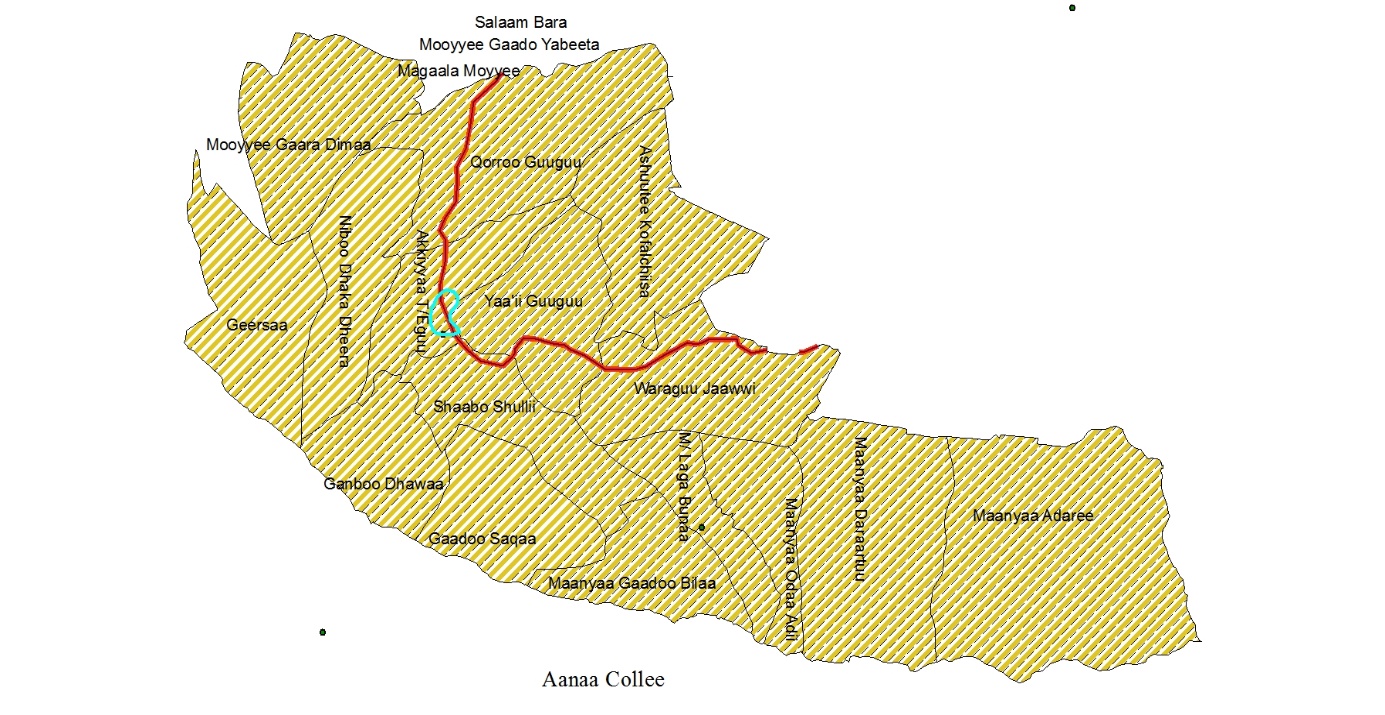
The objective of preparing this profile is to create scientifically organized physical and socio-economic data base of the district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as *pegume,* which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district Sector Offices and other related documents available in our office. The problem faced during organizing this document include lack of documented base data in each office, work load on planning experts to give the necessary data are the major obstacles especially shortage of base and documented data is the chronic problem in the district during organizing this document

The paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

# 



# CHAPTER TWO

## 2. Physical Setting

### 

# Remark:-Moye town and town Kebales(Moye gadoya beta & selam Bere) Has not Included i this map Because of wrong data Of CSA

### 2.1. Location and Area

Chole District is one of the administrative units of Arsi zone. Astronomically, the district is located between 7043’08’’N to 8004’09’’N latitude and 39044’59’’E to 40005’03’’E longitude. With relative location, the district shares a boundary line with Gololcha district in the East and south east, Sude districts in the south and south west, Guna district in the north and North West and Amigna district in the south east direction having a total area **of 560.6 km2**(2.67% ) of the total area of the zone.

### 2.2. Geology, Relief, Drainage and Climate

***Geology: -***The present land form of the district was created during the different periods of the Mesozoic and Cenozoic era as a result of internal forces like faulting, folding and volcanism. Some eastern part of the district was covered by AmbaAradam formation formed during cretaceous period of Mesozoic era. The central, south west central and the northern and north-eastern peripheries of the district was covered by Termaber Megezez formation while most central part from north west to north east tip was covered by Alajae formation during Cenozoic era of quaternary period. In addition to this the southern peripheries where the district shares boundary line with Sude district was covered by Nazeret Series during quaternary period of Cenozoic era.

***2.3.* Relief and Drainage*:***

The relief structure of the district consists of mountain ranges like Gugu Mountain, undulating and flat topped high plateau on the high land and undulating low lands. The altitude of the district is ranging from 1000-3500 m above sea level. The Lowest place is found in Tuja area while the highest place is located in Sheik Kemsare. Due to its location, the district has high network of river systems. The major permanent rivers of the district are Lega Buna, Dibayo, Koro, Hidesa, Gura, Buren, Sinkele and Kofelchisa. On the other hand, the major seasonal streams are Berca, Jawi can be mentioned as an example. Generally, the district has high potential for irrigation systems which can be used to increase agricultural production if they are efficiently utilized.

***Climate:*** Due to its altitudinal location, the climatic condition of the district ranges from 3 C0 -28 C0 the lowest temperature is 3 degree centigrade and the highest is 28 degree centigrade. the dominant type of climatic condition of the district is cool agro-ecological zone; the mean annual rain fall is ranging between 800-1200mm.The rainfall pattern is bi-modal, which are short rainy season (Belg from February to April) and summer or long rainy season (Meher from June to September).

**2.4. Soils** The major types of Soil found in the district are: Eutric Cambisols, Pellicvertisols, Chromic Luvisols, EutricFluvisols, Lithosols and Calcic Fluvisols. Most of these types of soil are known as one of the fertile soil types for suitable production of different types of crops if they are managed well.

2.5. Land use, Soil, Vegetation and Wildlife

***Land Use and Cover:*** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, man-made forest and residential lands, natural forest and fallow lands are now increasing from time to time while cultivated, are increasing.

Table: 1.1 Forest resources

|  |  |  |
| --- | --- | --- |
| **Types of forest** | **Area in/*hec*/ 2011** | **Area in/*hec*/ 2012** |
| Natural forest | 19,725.45 | 19,860 |
| Woodland forest | 5409 | 6359 |
| Shrub land or bush land forest | 2214 | 2973 |
| Man-made forest | 408 | 448 |
| **Total** | **27,756.45** | **29,640** |

In the year **2011** and **2012** the vegetation covered land (Natural forest **27,756.45** and 29,640 woodland **15,409 and 16,800** while for shrub land it accounts about 5462 and 5973 Hectare in 2011 and 2012 EC respectively .

|  |  |  |
| --- | --- | --- |
| **Type of natural vegetation** | **2011 per hect.** | **2012** |
| Forest | 27,756.45 | 29,640 |
| Woodland | 15,409 | 16,800 |
| Shrubland | 5462 | 5,973 |

Source: **- District Agriculture Office**

**Vegetation**

**Wild Life**

The major wild animals found in the district are Mountain Nyala, Minilik Bush Back, and Clip Springer, Leopard, Common Jackal, Warthog and Hyena.

# 

# CHAPTER THREE

## **3. Socio-Economic Condition**

### 3.1. Population

According to the data obtained from 1999 population and housing census of Ethiopia the total population of the district was 134,673 in **2011**. Based on the estimation made, it was increased to 142,716 in **2012**. From the total population of the district, only 8.72% are living in urban areas in 2009. This indicated that 91.28% of the population of the district is living in rural area depending on agricultural activities. Of the total population, females accounted for 49.67% (which is % 49.94 for urban and % 49.64% for Rural) in 2011.

An overall sex ratio of the district were 102 male per 100 female (102 male per 100 female in urban and 99 male per 98 female in rural) by the year 2011.

**Table: 2.1. Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | **Rural + Urban** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | **61,903** | **61,028** | **122,931** | **5,877** | **5,865** | **11,742** | **67,780** | **66,893** | **134,673** |
| 2012 | **65,600** | **64,673** | **130,273** | **6,228** | **6,215** | **12,443** | **71,828** | **70,888** | **142,716** |

Source: CSA report of 1999

### 3.1.1. Population Density and rural settlement

Population density indicates relationship between population and resource such as social service, economic and land resources. Regarding population land resource ratio/relation, the district is one of the densely populated districts of the zone. The ratio of the population to area of the district was

240 and 254 persons per km2 in the year 2011 and 2012 respectively.

# *3.1.2.* Age –Sex Distribution

Of the total population of the district, the population age from (4-14) is 29.71% (rural 29.15 % and urban 27.5%) while old age group (

Of the total population of the district, young age group (0-14) population is 50.97% (rural 51.82 % and urban33.85 %) while old age (65+) consist for 2.88 % (rural 2.88 % and urban 3.10%). On the other hand, the economically active population (age 15-64) account for 46.15%, which is 45.3 % for rural and 63.14 % for urban.

The total dependent ratio (number of population age 15-64 divided for number of population aged 0-14 + 65 and above) of the district is 116 % (rural 120% and urban 58.38 %). Total young age dependent is 110.44 % which is 114.38 % for rural area and 53.61 % in urban area. On the other hand, total old age dependent population is 6.25 % while it is 4.77 % in urban and 6.35 % in rural area.

**Table: 2.2. Projected School Age Population of Chole district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Rural** | | | | | | |
| 4\_6 | 5,868 | 5,700 | 11,568 | 6,021 | 5,850 | 11,871 |
| 7\_14 | 12,796 | 12,418 | 25,214 | 13,133 | 12,745 | 25,878 |
| 15\_18 | 5,019 | 4,935 | 9,954 | 5,150 | 5,066 | 10,216 |
| Total | 23,683 | 23,053 | 46,736 | 24,304 | 23,661 | 47,965 |
| **Urban** | | | | | | |
| 4\_6 | 318 | 323 | 641 | 331 | 336 | **667** |
| 7\_14 | 1,338 | 1,256 | 2594 | 1,394 | 1,309 | 1,394 |
| 15\_18 | 718 | 661 | 1379 | 749 | 690 | 1,439 |
| Total | 2374 | 2240 | **4614** | 2,474 | 2,335 | **4,809** |
| **Rural + Urban** | | | | | | |
| 4\_6 | 6,186 | 6,023 | 12,209 | 6,352 | 6,186 | 12,538 |
| 7\_14 | 14,134 | 13,674 | 27,808 | 14,527 | 14,054 | 28,581 |
| 15\_18 | 5,737 | 5,596 | 11,333 | 5,899 | 5,756 | 11,655 |
| Total | 26,057 | 25,293 | 51,350 | 26,778 | 25,996 | 52,774 |

**Source: -** Education office

### 3.1.3. School Age population

School age population is one of the best indicators for planning and budget preparation of education facilities, health and other facilities. Moreover, to measure the education facility with the help of students to classroom ratio, students’ teachers’ ratio, students’ text-book ratio, and others school age population is crucial. Consequently, the numbers of school age population of the district was increased from **51,350** students to **52,774** (2.77%) students between the years **2011** and **2012**. These groups of population account for 39.2% of the total population of the districts which is almost near to half of the total population of the district. As far as different school age population was concerned the number of kindergarten, primary and secondary school population was increased from 12,209 to 12,538, 27,808 to 28,581, 11,333 to 11,655 respectively between the year 2011 and 2012 Ec. This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth center, and different recreation centers both in urban and rural areas of the District.

## 

## **3.2. Agriculture**

### 3.2.1. Crop production and Livestock Rearing

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop type** | ***2011 EC*** | | | | ***2012 EC*** | | | |
| **Meher** | | **Belg Prod. (Quit** | | **Meher** | | **Belg** | |
| **Area Cult** | **Prod. (Quit** | **Area Cult** | **Prod. (Quit** | **Area Cult** | **Prod. (Quit** | **Area Cult** | **Prod. (Quit** |
| **Cereal** | 10,594.5 | 351,762 | **4191** | **93,385.5** | 15,231 | 475,333 | 3,901 | 86,559 |
| Wheat | 4129 | 146,580 | 296 | 6512 | 4162 | 116536 | 292 | 5840 |
| Teff | 676 | 2474.2 | 0 | 0 | 1976 | 31616 | 0 | 0 |
| Barley | 3284 | 118,224 | 3010 | 69616 | 5820 | 232,420 | 2623 | 55,083 |
| Maize | 2093 | 79534 | 885 | 17257.5 | 2223 | 71136 | 986 | 25636 |
| Sorghum | 412.5 | 4950 | 0 | 0 | 1050 | 23625 | 0 | 0 |
| Millet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Pulses** | **3740** | **51129** | **37** | **407** | 4708 | 96466 | **42** | **546** |
| Fava Beans | 2266 | 36256 | 0 | 0 | 3238 | 71236 | 0 | 0 |
| Field Peas | 950 | 10992 | 37 | 407 | 1010 | 20200 | 0 | 0 |
| Lentils | 54 | 270 | 0 | 0 | 80 | 960 | 0 | 0 |
| Haricot Beans | 220 | 1760 | 0 | 0 | 270 | 2970 | 42 | 546 |
| Chick Peas | 114 | 798 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vetch | 136 | 1053 | 0 | 0 | 110 | 1100 | 0 | 0 |
| **Oil Seeds** | **721** | **6768.5** |  |  | **1105** | **13,184** |  |  |
| Linseeds | 715 | 6759 | 0 | 0 | 1097 | 13,164 | 0 | 0 |
| Rape Seed | 3 | 3.5 | 0 | 0 | 4 | 8 | 0 | 0 |
| Sesame | 3 | 6 | 0 | 0 | 4 | 12 | 0 | 0 |
| **Grand Total** |  |  |  |  |  |  |  |  |

**Source**: Chole District Agricultural Development Office

### 3.2.2. Crop Production and Productivity

Bi-modal pattern of the rainfall gives a wide opportunity for the district to produce different types of crops and use the same land twice a year that is, Meher and Belg. However, Meher is the largest season in terms of both cultivated land and crop production. The major annual crops grown in the district are cereals, pulses and oilseeds. From cereal crops Wheat, Teff, Barley, and Maize and Sorghum are the most widely grown ones. From Pulses, Horse Beans, Field Peas, Lentils, Haricot Beans and Chick Peas are very known and produced in the district. The district also produces Oilseeds such as Linseed, Rape Seed, and Sesame. In addition, it is known in producing some cash crops like Fruits (Banana, Orange, Mango, Papaya, Sugarcane and others), Vegetable (Onion, Tomato, Carrot), Spices and Root crops. For instance, in the year **2011** cultivated land for **cereal** accounts for **10,594.5**hectares and **351,762**quintals of production was obtained in the Meher season. This was decreased to **15,231** cultivated land and increased **475,333** quintals of productions was obtained in the year **2012.** This means the average production per hectare in Meher season is 33.2 in 2011 EC which decreased to 31.2 in 2012 EC. The other is Pulses, in 2011 EC from 3740 hectare 51,129 quintals was produced in Meher season. This means the average production of pulses in Meher season 2011 EC is about 13.67 quintals per hectare. In 2012 EC this amount of production is increased to 96,466 quintals from 4,708 hectare. In average it accounts about 20.45 quintals per hectare.

In Belg season from 4,191 hectare , about 93,385.5 quintals of Cereal is produced in 2011 EC.

This means in average 22.28 quintal per hectare of Cereal is produced in Belg season. In 2012 EC the average production of Cereal in Belg Season is decreased to 22.19 quintals per hectare.

***Irrigation:*** The district has large potential of irrigable land but it is not surveyed. In the production year of ***2011 about*** **4,682.75** hectares of land were cultivated by traditional irrigation system of which **2330.25** hectares was occupied by annual crops and **2352.5** hectares of land by perennial crops, and served for about **6950** (male 6,281 & female 669) farmers. The production obtained during the production year was **7,048.58** quintals. On the other hand, in the production year of **2012** the traditional irrigation land was dramatic decreased to 1035 hectares of which 82 hectares of land were covered by annual crops while **953** hectares of land was covered by perennial crops which produced a production of **124,200** quintals which benefited about **4,326** (male 4095 & female 231) farmers.

**Table: 3.3. Land cultivated by Irrigation and Farmers Served**

|  |  |  |
| --- | --- | --- |
| **Activities** | 2011 | **2012** |
| Land cultivated by Traditional Irrigation System | 4682.75 | 1035 |
| Annual crops | 2330.25 | 82 |
| Perennial Crops | 2352.5 | 953 |
| Production obtained | 393852 | 124200 |
| **Farmers Served** | **6,950** | **4,326** |
| Male | 6,281 | 4095 |
| Female | 669 | 231 |

Source: Chole district Water resource Development Office

# 3.2.3 Livestock, Poultry and Bee-Keeping

**Livestock:** in 2011 EC the total amount of Livestock is about 233,420 this amount is decreased to 219,000. Cattle, goats, sheep, horses, mules, and donkeys are the major type of livestock rearing in the district. From the total livestock found in the district cattle, goats and sheep account for about **88** % from total livestock in the district in 2011 EC only 12 % of the total Livestock accounts for Horses, Mules and Horses .when we see in 2012 EC these livestock (Cattle, Goats and Sheep) accounts 89 % of the total livestock in the woreda only 11 % is for Horses, Donkey and Mules.

High prevalence of diseases, traditional method of rearing and shortage of the feeds are the major constraints in livestock population of the district. The major types of animal feeds are plant residue, hay, forage, which are limited in nutritional values.

***Poultry:*** Poultry production is one of the important sources of family income and food in the district. Accordingly, poultry population of the district was increased from **70149** in **2011 EC** to **83,707** in **2012** shows 19 % growth. Higher prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 3.4. Distribution of Livestock and Poultry**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Types of Livestock** | **2011** | % | **2012** | % |
| **1** | **Livestock** | **233,420** | **100** | **219,000** | **100** |
|  | Cattle | 112,580 | 48.23 | 94,671 | 43.2 |
|  | Sheep | 47,580 | 20.38 | 53,439 | 24.4 |
|  | Goats | 45,680 | 19.6 | 46,647 | 21.3 |
|  | Donkey | 13,570 | 5.8 | 8976 | 4.1 |
|  | Horses | 8,960 | 3.8 | 11061 | 5.1 |
|  | Mules | 5,050 | 2.16 | 4206 | 1.9 |
| **2** | **Poultry** | **70149** | **100** | **83,707** | **100** |

Source: Chole District Animal Health office

### 3.2.4. Bee Keeping and Fishery

***Bee-Keeping Activities:*** Bee-keeping farming is another source of cash income for farmer family. Deforestation and using of Herbicides and Insecticides are the main problems in bee farming. However, there are some activities in bee-keeping at the current time in the district. There are traditional and very few modern bee-keeping activities. **Traditional** beehives were decreased from **7060** to **5009** between **2011** and **2012** respectively while modern beehives were increased from **824** to **842** during the same year. When we see the transitional beehives, it decreased from 2917 to 2398 between 2011and 2012 EC respectively.

**Table: 3.5. Number of Traditional and Modern type of Bee-keeping Boxes and Beneficiaries**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Bee-keeping Box | **2011 EC** | | **2012 EC** | |
|  | No. of box | No. of beneficiaries | No. of box | No. of beneficiaries |
| Traditional Box | 7060 | 705 | 5009 | 501 |
| Modern Box | 824 | 275 | 842 | 281 |
| Transitional Box | 2917 | 584 | 2398 | 479 |

Source: Chole Animal Health Development Agency

### 3.2.5. Agricultural Input and Infrastructure

***Agriculture service Cooperative:*** There were 27 Peasant Associations (PAs) in the district with 9,752 and 9,308 member farmers in the year **2011 and 2012** respectively. During the same years, there was 27 and 22 Agricultural Service Cooperative with 9,752 and 9,308 member farmer’s service cooperative respectively.

**Table: 3.6. Number of peasant associations and farmers service cooperatives**

|  |  |  |
| --- | --- | --- |
| Year | 2011 | 2012 |
| Number of Peasant Associations (PAs) | 27 | 22 |
| Number of member of Pas | 9,752 | 9,308 |
| Male | 7,768 | 7,378 |
| Female | 1,984 | 1,930 |

**Source**: Chole District Cooperative Office

**Table: 3.7 .Number and member of Farmers Service Cooperatives**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | 2011 | | 2012 | | |
| Registered | Non-Registered | Registered | Not-Registered | Total |
| Number of FSC | 27 |  | 22 |  | 19 |
| No of member farmers FSC | 9,752 |  | 9,308 |  | 6,472 |
|  |  |
| Male | 7,768 |  | 7,378 |  | 5,712 |
| Female | 1,984 |  | 1,930 |  | 760 |

Source: Chole District Cooperative Office

***Fertilizer and Improved Seeds Utilization****:* Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to increase crop production and productivity and meet rapid increase of demand for food and industrial raw materials. Accordingly, in **2011 only** **11,876**quintals of fertilizers were distributed to the farmers. However, in **2012** production season the amount of fertilizer distributed to the farmer was increased to ***14,233***quintals. Similarly, improved seeds supplies were decreased from **491** quintals in **2011** to 344.55 quintals in **2012**. The most important improved seeds utilized in the district are wheat and barley. The utilization of herbicides in our district was highly increased from **4,997**lit in **2012** to **5,717to** **2012** of the production year.

**Table: 3.8.Amounts of agricultural inputs distributed to farmers by type**

|  |  |  |
| --- | --- | --- |
| **Types of Input** | **2011** | **2012** |
| **Amount (qt)** | **Amount [qt]** |
| **Fertilizers** | **11,876** | **14,233** |
| DAP (qt.)/NPSB/ | 10,877 | 12,575 |
| Urea (qt) | 999 | 1658 |
| **Improved Seeds (qt)** | **491** | **344.55** |
| Wheat | 341 | 197 |
| Maize | 150 | 147.55 |
| **Herbicides/lit/** | **4,997** | **5,717** |
| Liquid (liter) | 2,322 | 3,290 |
| Pesticides(liter) | 2635 | 2,380 |
| Horticultural Seeds | 40 | 47 |

**Source**: Chole District Agricultural Development Office

***Development Agents and Farmers Training Canters:*** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. The farmer training center also plays an important role too. Due to this number of farmer Training centers were also increased from year to year so as to increase the productivity of our district’s farmers. As a result the number of farmers training center was full between the production year of **2011** and **2012** but the number of Development Agents was decreased from 61 to 56 between the indicated years. In other words, the farmer Training centers were balanced while the number of development Agents was decreased by 8%. According to the standard each kebele has three Development Agents with the profession of plant science, Animal science and Environmental protection. These Development agents help the farmers in all aspects of agricultural practices such as in crop production animal husbandry and management and environmental protection. The number of farmers served by DAs is increasing from year to year.

**Table: 3.9.Number of Development Agents and FTC (2011 and 2012)**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 18 | 18 |
| Number of Development Agents | 61 | 56 |

Source: Chole District Agriculture and rural Development Office

**Agricultural Calendar:**It is well known that the farmers of the district are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy but during some season they are an idle. Even during busy seasons, some farmers do not fully engaged in farming activities due to some socio-cultural related ceremonies.The time of performing agricultural activities such as land preparation, planting; weeding and harvesting vary with season depending on agro-climatic zone and types of crops cultivated. In some areas these activities are started earlier while in other areas they are started later in the district. Agricultural Calendar of Chole district is shown in table below. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Meher and Belg), the type of agro-climatic zone and types of crops cultivated in the district. For instance, the agricultural activities of maize started earlier while that of wheat is later.

**Table: 3.10. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of Activities** | **Meher Season** | **Belg Season** |
| 1 | Land Preparation | April-May | October-January |
| 2 | Planting(Sowing) | June-September | March |
| 3 | Weeding | July-September | April-May |
| 4 | Harvesting | November-January | July-August |

**Source**: Chole District Agricultural Development Office

**3.2.6. Method of Maintaining Soil Fertility and Soil Conservation**

*Methods for Maintaining Soil Fertility***:** There were two ways of maintaining soil fertility in the district. These are the Traditional and Modern methods. The traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning), fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizer).

*Methods for Soil Conservation***:** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforestation are the modern way of soil conservation in the district.

### 3.2.7. Agricultural constraints

**Crop Pests and Disease**: The major crop pests in the district are barely shut fly, lady bird, cut warm, stock barer, African boll warm and locust while the major diseases are wheat rust, leaf rust, steam rust, coffee barley disease, white mildew and root rot potato. Weeds and rain fall variation decrease/increase are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rainfall water harvesting and river diversion systems.

**Livestock and Poultry Diseases:** The major livestock diseases include Bloat, Grain over load, Simple indigestion, Traumatic Reticuloperitontis, Urolithiasis, Anthrax, Babesiosis, Fasciolosis, GIT parasitism, Hemorrhagic Septicemia, Black leg, Dermatophilosis, Infectious keratoconjuntivitis, Lumpy skin disease, Rabies, Salmonellas, Tetanus tuberculosis, Aspiration Pneumonia, Pneumonia, Pneumonic Pasteurollosis, Germanous Pneumonia, Bovine Mastitis, Dystocia,Contagious Bovine, Pleuro pneumonia, Metirtis, Pyometra,Retained fetal membrane, Uterine evection, Foot Rot, Paste Des pestits Ruminants, sheep and goat pox, African horse sickness, Colic in horses and Neonatal Diarrhea. Regarding poultry disease, Coccidiosis, Fowl Typhoid, GIT parasitism and New Castle disease are the major one in the district.

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. During the year **2012** and **2012** there were two (2) C-type and four (4)D-type Clinics with 24 and 20 animal health personnel's respectively. These health services have been staffed by 3 veterinary Doctors and 21 animal health Assistances and 3 Medical Doctor and 17 Animal Health Assistance in 2011 and 2012 EC respectively.

**Table: 3.11.Distribution of Chole District Animal Health Infrastructure (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Description** | 2011 | **2012** |
| **Total** | 24 | 20 |
| Veterinarian | 3 | 3 |
| Animal Health Assistance | 21 | 17 |
| **Health Infrastructure** | 6 | 6 |
| Clinics (A,B,C,D-Type) | C=2,D=4 | C=2,D=4 |

Source: Chole Animal Health Development Agency

Accordingly, the district animal health office should do well as the above table indicates to increase the number of animal health infrastructure to improve the productivity and quality of livestock found in the district. The following table shows the type of vaccination and treatment given to the livestock.

**Table: 3.12.Number of Animals got health Services by type of services given.**

|  |  |  |
| --- | --- | --- |
| **Type of Services** | 2011 | **2012** |
| **Vaccination** | 52,370 | **37,010** |
| Black Leg | 32,500 | 15,100 |
| Hemorrhagic Septicemia | 19,870 | 21,910 |
| Anthrax | 0 | 0 |
| **Treatment** | 59,346 | **299,896** |
| External Parasites | 24,565 | 140,309 |
| Internal parasites | 32,681 | 149,610 |
| Trypanosomiasis | 400 | 1893 |
| Operation | 820 | 8084 |
| Others | 880 |  |

**Source:** Chole Animal Health Development Agency

As it is seen from the above table, in relation to the number of livestock found in the district, the health service provide to livestock was very low. It means the health service given to livestock is not sufficient. This implies that the district Animal Health Infrastructure is not able to deliver the necessary service to the livestock population. So it should increase the number of animal health infrastructure to deliver sufficient services.

**3.2. Mining Resources and Industry**

**Mining:** Like other parts of a country in general and zone in particular, the mineral resources potential of the district is not investigated and known. However, there is small amount of white and black stone mining and covers about 3378m cube and 120 m cube respectively in 2011 EC. And in 2012 the name mentioned above covers 890 m cube for white stone and 200 m cube black stone mining is takes place. Some data indicate that, the district has a high potential of mineral resources which are still not surveyed that can be used for different purpose, solar energy, wind energy and Biogas for alternative energy resource. Yet the district does not start to utilize these mineral resources. However, there are insignificant rock quarrying and pottery making activities by local communities in the district.

**Industry:** Regarding industrial development, there are no any activities of industrial development in Chole district until now as the data obtained from Chole district Industry office shows. There are about 172 (28.48 % for Business, 25 % for Cattle, 21 % goes to service and son on) small scale industries and about 1037 (795 male and 242 Female) have got work in this sector in 2011. in 2012 the association of small scale industries is decreased to 153. But there were increment regarding creating work for the young. Work chance created in this year was 1240 (821 male and 429 are females).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Types of small Industry | 2011 | | | | 2012 | | | |
| **Association** | **Male** | **Female** | **Total** | **Association** | **Male** | **Female** | **Total** |
| Manufacturing | 24 | 68 | 22 | 90 | 11 | 30 | 19 | 49 |
| Business | 49 | 82 | 70 | 152 | 41 | 233 | 124 | 357 |
| Service | 37 | 139 | 40 | 179 | 11 | 53 | 11 | 64 |
| Construction | 10 | 40 | 8 | 48 | 8 | 44 | 17 | 61 |
| Farm | 9 | 92 | 14 | 106 | 3 | 12 | 4 | 16 |
| Mineral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cattle | 43 | 374 | 88 | 462 | 79 | 449 | 244 | 793 |
| Total | 172 | 795 | 242 | 1,037 | 153 | 821 | 419 | 1240 |

## 3.3. Trade Activities and Tourism

**Trade:-** Chole District has **1,135 and 1,362** permanently licensed traders in the year **2011** and **2012** respectively. Likewise, the number of traders who renewed their license was increased from **987** to **1,312** from the year **2011** to **2012** but the traders those who were not renewed their license was decreased their number from **148** to **50** in the year **2011** and **2012** respectively .Regarding tradable items and cash crops production activities, the district is known in the production of Oil seeds (linseed, rape seed), Pulses and others. In addition, the district has exportable items like hides and skins but not widely traded and still unexploited resource in the district.

**Table: 3.13.Type and number of licensed traders**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Type of trade** | ***2011*** | **2012** |
| 1 | Licensed | *1,135* | 1362 |
| 2 | Licensed Renewed | 987 | 1312 |
| 3 | Not renewed | 148 | 50 |
|  | **Total** |  |  |

**Source**: *Chole District Trade, Industry and Transport*

**Cash Crops and Exportable Items Production:** There are different types of cash crops and exportable items produced in the district. Moreover, there are high potential of cash crops like coffee, linseed, hides and skins produced in the district.

**Table: 3.14. Inspected skins and hides sent to the central market**

|  |  |  |
| --- | --- | --- |
| **Types** | **2011** | **2012** |
| Hides | 2133 | 3683 |
| Skins(Total) | 20,408 | 18222 |
| Sheep | 16119 | 13140 |
| Goat | 4289 | 5082 |
| **Total** | **22,541** | **21,905** |

Source: Chole Agricultural Development Office

**Table: 3.15. The following table shows the main tourism amenities of the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of the attraction sites | Place/location | Distance from | | |
| Finfinne | Asela | Chole town |
| Sh/Adere mountain | WerkiAdere | 279 | 205 | 57 |
| Sh/Nure Mountain |  | 276 | 202 | 54 |
| Adere mountain cave | WerkiAdere | 278 | 204 | 56 |
| Sinkile river water fall | WereguJawi | 244 | 170 | 22 |
| Buren River water fall | WeregJawi | 231 | 157 | 9 |
| Rare River water fall | Ya’I Gugu | 236 | 162 | 14 |
| Koro River water fall | Koro Gugu | 213 | 139 | 9 |
| Telisa River water fall | Weregu Jawi | 237 | 16 | 15 |
| Hachwer River water fall | Shabo shuli | 227 | 153 | 5 |
| Gugu forest heritage place | Koro Gugu | 228 | 154 | 6 |
| Lemen forest | WereguJawi | 237 | 16 | 15 |
| Hindesa forest |  | 218 | 144 | 4 |
| Gugu forest | KoroGugu | 217 | 143 | 5 |

Source: District Culture and Tourism Promotion Office

**Tourism and Its Amenities:**Due to lack of promotion and tourist amenities like standard Hotels, Roads and other infrastructures, tourism economy is not yet developed in the Arsi zone in general and Chole district in particular. Similarly, meaningful survey and study are not conducted to asses’ tourist attraction sites potential of the area. However, there are some main centers which were identified by Culture and Tourisim Office. These are religion places, monuments and very beautiful waterfalls. These include: Sheik Abdurrahman Guchi Monument, Sheik Kemsare Religion place, Sheik Ismael Chole Religion place (Sokora) and OdaMuda religion place. Regarding, Waterfalls, Sinkele river water fall, Burene river water fall, Gura river water fall, Adare mountain cave, kofolchisa river water fall,koro river water fall,Gugu forest are the most famous cultural and historical tourist attraction areas in the chole district.

## **3.4. Finance and Financial Institutions**

**Financial Institution**: The availability of various financial institutions like Banks and Insurance, Rural Credit and Saving Association play a significant role in the transformation of the economy of the district. The amount of capital disbursed (paid) in the year **2011** was **3,404,500** from this 1,854,000 birr is disbursed for Male which means 54.5 % of total disbursed birr. The rest 44.5 % of total birr Disbursed in the same year is go to women. The amount of disbursement and the numbers of beneficiaries were increased from **5,011,500 in 2012 Ec from the total of Disbursed birr 2,856,500 is for male and 2,155,000 birr is for**. The number of financial institution found in the district was very few. This is a series obstacle for the flow of finance and even for the development of the district.

**Table: 3.16. Rural Credit, Number of Beneficiaries (by Sex)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Rural Credit Association | **2011** | | | **2012** | | |
| OCSSCO | Male | Female | **Total** | male | female | **Total** |
| Amount Disbursed (paid) | 1,854,000 | 1,550,500 | 3,404,500 | 2,856,500 | 2,155,000 | 5,011,500 |
| Number of Beneficiaries | 207 | 160 | 367 | 260 | 189 | 449 |

Source: Chole District OCSSCO Office.

Table 3.17

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2005 | 35,222,791 |  |
| 2006 | 45,222,791 | 28.39 |
| 2007 | 67,227,813 | 48.65 |
| 2008 | 83,202,404 | 23.76 |
| 2009 | 105,332,960 | 26.6 |
| 2010 | 111,785,659 | 6.12 |
| 2011 | 125,112,507 | 11.92 |
| 2012 | 144,331,039 | 15.36 |

Source: Chole District Finance and economic Development Office

**Annual Budget Allocation:** Annual budget requirement of district is covered mainly from two sources:- Regional government grants and district in land revenue. According to data obtained from Chole District Finance and Economic Development office, the budget allocated for the district was increasing from year to year. Consequently, the total annual budget of the district was 35,222,791 birr in **2005** was increased to **144,331,039** birr in **2012**.

**Revenue: -** The total revenue of the district was increased from **18,801,436.69 to 20,793,049.75** between **2011** and **2012** which indicate **10.59%** growth. The major type of revenue source of the district was direct tax which increased by **12.41%** between the indicated years. The increment of indirect tax type of revenue (**14%).** Expansion of illegal traders, lack of transport services to collect taxes, tax payer lack of awareness to pay taxes is the major problem in collecting revenue.

**Table: 3.18. Total Inland Revenue collected in the district by type of revenue source.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct Revenue** | **Growth Rate** | **Indirect Revenue** | **Growth rate** | **Non-Tax Revenue** | **Total** | **Growth rate** |
| 2011 | 15,259,963.62 |  | 2,172,546.12 |  | 1,368,926.95 | 18,801,436.69 |  |
| 2012 | 17,154,269.76 | 12.41% | 2,469,528.53 | 14% | 1,169,251.46 | 20,793,049.75 | 10.59% |

Source: Chole District Revenue Office

# 

# CHAPTER FOUR

## **4. Social Services and Basic Infrastructure Condition**

### 4.1. Education

**Kindergarten:** According to data given in table below, in **2011**, there were (3) private kindergarten schools with 17 (Male 4 and 13 female) teachers and 437 students (male 224, female 213) in the year **2011**. Likewise in the year **2012** there were 3 private kindergarten schools with 25(Male 11 and 14 female) teachers and 455(236 Male and 219female) students. One of the main problems related with kindergarten school is lack of attention and lack of clear management system.

**Primary Schools (1-8):** In 2011 there were 47 primary schools in the district with **27,297**students of which **45.7** % females. In **2012** the number of primary school was the same as 2011 which is 47 and the number of students was decreased to 24,740 of which 46.3 % were females; here the increment of female students when we compare to 2011 EC is 0.6% even though there is decrement of total students. During the same year, the number of teachers were decreased from **615**(417 Male and 198 female) to **586** (369 Male and 217 female) also the number of class room is decreased from 501 to 462 between 2011 and 2012**.** Student-text book ratio was 1:1 during both years.

**Senior Secondary Education (9-10):** in 2011 the district has 4 senior secondary (9-10) schools located in Chole, waragu, Laga Buna and Moye towns. In this yearthere were **3,114** (41.1% females) students.

**Senior secondary school (9-12).** In 2012 both high school and preparatory school is merge together. In this year the number of teachers is increases to 164 (145 male and 19 are Females) f when we compare to 2011. In 2011 Ec the number of teachers was 148 (129 male and 19 Female).

**TVET:** In **2004** TEVT college has opened having total students of 502 (253 male and 249 females) However, the TEVT has **655** and **413** students in the year **2011** and **2012** respectively. this show high decrement of enrollment between this two years.

Table: 4.1. Number of kindergarten, Primary (1-8) and Senior Secondary Schools (9-12) with their Students Enrolled

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** |  | **Government** | | | | | | **Non-Government** | |  |
| Kindergarten school | Primary (1-8) | Senior Secondary (9-10) | Senior Secondary (11-12) | High  School(9-12) | TVET | Kindergarten School | Primary (1-8) | Senior Secondary (9-10) |
| **2011** | No of School | 0 | 47 | 5 | 1 | DNA | 2 | 3 | 0 | 0 |
| No of class rooms | 0 | 501 | 50 | 9 | DNA |  | 12 | 0 | 0 |
| Male | 0 | 14,798 | 1837 | 236 | DNA | 347 | 224 | 0 | 0 |
| Female | 0 | 12,499 | 1277 | 157 | DNA | 308 | 213 | 0 | 0 |
| **Total** | **0** | **27,297** | **3114** | **393** | DNA | 655 | **437** | **0** | **0** |
| **2012** | No of School | 0 | 47 | DNA | DNA | 5 | 1 | 3 | 0 | 0 |
| No of class rooms | 0 | 462 | DNA | DNA | 48 |  | 9 | 0 | 0 |
| Male | 0 | 13,288 | DNA | DNA | 2504 | 214 | 236 | 0 | 0 |
| Female | 0 | 11,452 | DNA | DNA | 1793 | 199 | 219 | 0 | 0 |
| **Total** | **0** | **24,740** | DNA | DNA | **4297** | 413 | **455** | **0** | **0** |

Source: Chole District Education Office

**Education Quality:-**The quality of education can be judged from education qualification of teachers, students- teacher ratio, students-classroom ratio, students-text book ratio, etc. Accordingly, according to data given below, from total primary school teachers, those who meet the minimum qualification (TTI level) to teach grade 1-8 are 93.9% in 2011 EC which increased to 96.41% in 2012 EC**.** Similarly, the numbers of teachers who meet the minimum required/***Diploma***/ qualification to teach grade 9-12 is almost 100 % in both 2011 and 2012 EC. However, depending on the above factors only not enough to measure educational quality of the district. Hence, it is important to look into other factors mainly Teacher Development Program (TDP), Continuous Professional Development Program, Teachers commitment to teach and students' commitment to receive what teachers teach.

**Table: 4.4. Number of Teachers by level of education and school (2012 & 2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Schools** | **2011** | | | **2012** | | |
| **M** | **F** | **Total** | **M** | **F** | **Total** |
| **Government Kindergarten** | **0** | **0** | **0** | **0** | **0** | **0** |
| **12 complete** | **0** | **0** | **0** | **0** | **0** | **0** |
| **ILB** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Dip** | **0** | **0** | **0** | **0** | **0** | **0** |
| Non-Government Kindergarten | 4 | 13 | 17 | **11** | **14** | **25** |
| 12 complete | 4 | 13 | 17 | **8** | **7** | **15** |
| ILB | 0 | 0 | 0 | **2** | **4** | **6** |
| Dip | 0 | 0 | 0 | **1** | **3** | **4** |
| **Government** |  |  |  |  |  |  |
| No of teachers in Primary(1-8) | **417** | **198** | **615** | **369** | **217** | **586** |
| 12 complete | 26 | 11 | 37 | 18 | 3 | **21** |
| TTI | 81 | 10 | 91 | 15 | 7 | **22** |
| Diploma | 240 | 154 | 394 | 287 | 178 | **465** |
| **Degree** | 70 | 23 | 93 | 49 | 29 | **78** |
| **Non-Government** | 0 | 0 | 0 | 0 |  |  |
| TTI | 0 | 0 | 0 | 0 | 0 | 0 |
| Diploma | 0 | 0 | 0 | 0 | 0 | 0 |
| **Government** |  |  |  |  |  |  |
| S. Secondary School(9-12) | **129** | **19** | **148** | **145** | **19** | **164** |
| Diploma | 9 | 7 | 16 | 14 | 4 | **18** |
| B.A/BSc | 113 | 10 | 123 | 122 | 14 | **136** |
| MA/MSC | 7 | 2 | 9 | 9 | 1 | **10** |

Source: Chole District Education Office

**Table: 4.5. Student performance and Drop out condition by level of school**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | **2011** | | **2012** | |
| **Primary school** | **Secondary school(9-12)** | **Primary school** | **Secondary school (9-12)** |
| **1** | **Student enrollment** | **27,297** | **3,507** | **24,740** | **4,297** |
|  | Male | 14,798 | 2,073 | 13,288 | 2,504 |
|  | Female | 2,499 | 1,434 | 11,452 | 1,793 |
| **2** | **Promoted students** | **21,852** | **3,191** | **20,039** | **3,932** |
|  | Male | **11,682** | 1,844 | 10,763 | 2,249 |
|  | Female | **10,169** | 1,347 | 9,275 | 1,683 |
| **3** | **Student drop out** | **5,445** | **316** | **4,701** | **365** |
|  | Male | **3,116** | 229 | 2,525 | 255 |
|  | Female | **2,330** | 87 | 2,176 | 110 |

Source: - **District Education Office**

As shown in the above table, of the total student enrolled to primary school were 27,297 and 24,740 in the year 2011 EC and 2012 EC respectively. the number of primary school students promoted to the next grade were decreased from 21,852 to 20,039 between the year 2011 Ec and 2012 EC respectively.in other case the number primary school students those who drop out from school is decreased from 5,445 to 4,701 between the year 2011 and 2012 EC. This indicates that, there is a gradual improvement in awareness creating among students.

**Secondary school (9-12)** from above figure we can conclude that, the dropout rate in primary school decreased from **19.94**% to **19**% between the year 2011 and 2012 EC. As well as the dropout rate in secondary school (9-12) decreased from 9 % to 8.49% in 2011 and 2012EC respectively. The main reason behind dropout includes economic constraints such as (unable to afford school uniform, scarcity of educational material, unable to pay school fees), unwillingness of parents not to send their child to school, migrating to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc are mentioned as an example of causes for school dropout

**4.2. Health**

**Health Institution:** In the year **2002,** there was only two health centers, one clinic which is found in Gersa kebele and 18 Health Posts in the district. Both are government. In **2011,** also there were **4** governmental health centers and **18** health posts and 4 pharmacies. Moreover, there was **10** non- governmental clinic and 1 Medium clinic. Meanwhile in 2012 Ec the number of governmental clinics and Health posts is also the same as 2011 which is 4 and 18 respectively, also the number of non-governmental Clinics haven’t change with respect to 2011 EC. The ratio of population to Health Center, Clinic and Health Post was **33,668**; **16,834** and **7,481** respectively in the year **2011,** indicates low health coverage of the district compared with **WHOM** standard (25000, 10,000 and 5,000 respectively).

**Health Manpower*:*** according to data given below, there were only **91** health personnel in **2011** of which 26 (28.57%) and 42 (46.15%) were **nurses** and health **extension** worker respectively. However, in **2012 the number of Health professional increased to 95 of which 30(31.57%) of total Heallth professionals are Nurses; meanwhile in the same year (2012) the number of Health extensions were decreased to 39 (41% of total health professionals)**. The rests are pharmacy and Laboratory technicians, urban health extension worker and sanitarians.

**Table: 4.6. Number of Health Institutions and Health Personnel by ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health Personnel** | **2011** | | **2012** | |
| **Gov.** | **Non.Gov.** | **Gov.** | **Non.Gov.** |
| **Health Institution** | **22** | **16** | **22** | **16** |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 8 |  | 11 |
| Health Post | 18 | 0 | 18 | 0 |
| Pharmacy | 0 | 5 | 0 | 6 |
| Rural drug vender | 0 | 3 |  | 2 |
| **Health Profession** | **91** | **0** | **95** | **DNA** |
| Health Officer | 12 | DNA | 9 | DNA |
| Nurse | 26 | DNA | 30 | DNA |
| Health Assistance | 0 | DNA | 0 | DNA |
| Laboratory Technician | 3 | DNA | 5 | DNA |
| Pharmacy Technician | 3 | DNA | 6 | DNA |
| Environmental Health | 1 | DNA | 2 | DNA |
| Health Extension Workers | 42 | DNA | 39 | DNA |
| Urban health extension worker | 4 | DNA | 4 | DNA |

Source: Chole District Health Office

**Diseases Prevalence including HIV/Aids:** In the year 2011 cumulative number of HIV carries is 155 from this most of them (66.45%) are females. in only 2011, the number of new HIV case identified were 20 peoples (75 % of total are females) and about 7 death is recorded due to this virus .

In 2012, the cumulative HIV carriers increased to 156 and from this two (2) peoples are newly identified for the Virus. But no one is died due to this Virus in 2012. This data indicated that, currently the trends of diseases like HIV were in decreasing trends because of awareness creation through community conversation program and coffee ceremony held by different health centers.

To decrease the prevalence of the Virus, the district health office is taking different actions. Among these, awareness creation about the virus on community meeting during holidays, “Idir” and “Ikub”.

Inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and underutilization of health services also play a great role for the existence of different disease.

***Causes of Morbidity:*** According to the **2011** data obtained from Chole district health office, the highest prevalent disease in the district are typhoid, respiratory case, disorder of Urinary system amoeba, gastric and so on .

***Harmful Traditional Practices:*** Similar to the zone as a whole, there are many harmful traditional procedures that are being practiced in Chole district. Among these, raping, Buta, Dhala, female circumcision, Gebareetc can be mentioned as an example. However, compared to the past, the rate of their occurrence has been decreased due to awareness given to the community. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and being used by the people of the district. These include Debo, Idir, Ikub, etc. They are way of helping each other during ploughing, harvesting, funeral ceremonies and the like.

## **4.3 Women and Children Socio-economic Issue**

### 4.3.1 Women Issue

**Table: 4.8. Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2012 |
| 1 | **Types of services given to mothers** | Number | **9,703** | **11,101** |
|  | Women's used ANC/Antenatal care/services | Number | 3,917 | 4,051 |
|  | Women's used PNC /Postnatal care/services | Number | 3,182 | 2,999 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 2,604 | 4,051 |
|  | In their home traditionally | Number | DNA | DNA |
| 2 | **Mother Vaccination** | Number | **30,668** | **26,538** |
|  | PW TT2 | Number | 3,969 | 3,454 |
|  | NPW TT2 | Number | 26,699 | 23,084 |
| 3 | **Family planning condition** |  | **25,636** | **22,498** |
|  | Modern methods | Number | 25,636 | 23,084 |
| **4** | **Women elected at different level** |  | **30** | **29** |
|  | Member of regional council | number | 2 | 2 |
|  | Member of woreda council | number | 22 | 22 |
|  | Member of woreda cabinet | number | 6 | 5 |

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from chole district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets anti natale and postnatal service was 3,917 and **3,182** in the year **2011** the number of anti natale increased to 4,051 while the number of postnatal is decreased to 2,999 in the year **2012**. On the other hand, the number of women gets delivery services in the health institution by health professional was 2,604 and 4,051 between the year **2011** and **2012.**

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get **PWTT2** vaccination decreased from **3,969 to 3,454** in the year **2011** and **2012 respectively** also the number of mother get NPWTT2 vaccination was **26,699 to 23,084** in the year 2011 and 2012 respectively.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Chole district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was **22** in the year **2011** and same figure for the year **2012.** Moreover, the number of women who are member of woreda cabinet was 6 and 5 during the year under consideration.

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion.The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 19,617 to 20,276 in the year 2011 and 2012 respectively. Though the below figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 3,733 and 3,815 in the year **2011** and **2012** which accounts for 19% and 18.8% from total children who get vaccination. In the district the health coverage in the year 2011 and 2012 increased from 80.57% to 87% respectively.

**Table: 4.9. Number of children vaccinate by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 4,104 | 4,225 |
| Measles | 3,723 | 3,848 |
| DPT1 | 4,153 | 4,315 |
| DPT3 | 3,904 | 4,073 |
| Fully Vaccinated | 3,733 | 3,815 |
| **Total** | **19,617** | **20,276** |

**Source**: Chole District Health Office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes many children become orphan in the district. These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 12 in the year **2011** which was increased to 18 in the year **2012**.This does not indicate all of them get holistic support (food, education, health and psycho-social).

Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Malaria, Intestinal Parasite, acute fiber illness, Sepsis, Preterm, Tetanus and infection of skin.

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 63,500 and 65,562 in the year **2011** and **2012** from which only 43% and 45% of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district.

Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities.

As we have understand from the table below the health institution access to improved sanitation facilities (full sanitation) was 2 in 2011 which increased to 3 in 2012 EC, the number of health institution access to water supply is also increased from 2 to 3 in the year 2011 and 2012 respectively.

**Table: 4.10 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | Health post | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 4 | 4 | 18 | 18 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 2 | 3 |  |  |
| 3 | Number of health institution access to water supply | 2 | 3 |  |  |
| 4 | Number of health institution access to toilet facilities | 4 | 4 | 18 | 18 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 4 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | **4** | **4** | **0** | **0** |

Source: - District Health Office

**Table: 4.11. School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | High school | |
| 2011 | 2012 | 2011 (9-10) | 2012 (9-12) |
| 1 | Number of school in district | 47 | 47 | 5 | 5 |
| 2 | Number of school access to water supply | 11 | 14 | 4 | 4 |
| 3 | Number of school having toilet | 47 | 47 | 5 | 5 |

Source: - Chole District Education Office

## **4.4. Basic Infrastructure Condition**

***Roads:*** Chole District is found 194 km far away from zonal capital town, Asella and 219 km from Regional Capital City, Finfinne. It has **127.7** km length of gravel road (all weather) and the district also have 25.5km, **asphalt** road in the district.

**Telecommunication:** One of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with digital type of telecommunication services but most of the kebeles of the district are still did not supplied a mobile net-work so that the concerned body should have to think over it so as to fill the gap that seen under here.

**Post office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Although, the district has a postal office the service that provided to the community of the district is very low most of the people want to use mobile rather than postal services.

***Water Supply:*** According to the data given by Chole district Water Resource Development office, potable water coverage of the district is very low. There is no still adequate potable water supply in the district. From total population only 46.33% of people have got potable water supply.

Regarding potable water schemes, there were 87 and 102 functional schemes in the year of 2011 and 2012. Meanwhile there were 19 and 16 non-functional and renewable schemes in mentioned years.

***Energy Supply:*** Energy sources can be traditional or modern. The traditional sources of energy are charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Among the Chole district two towns and three rural kebelas is supplied with Electric power.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, Charcoal is the most important energy source followed by firewood, Kerosene, Animal Dung, Crop Residue and electricity. On the other hand, firewood is the major energy source in rural areas followed by crop residue, animal dung and kerosene. Regarding fuel filling station, Chole district has no any type of fuel filling station. However in the year of **2011** and **2012** the district has been constricted in the rular area of the wereda modern means of energy such as Biogas. As a result many farmers were constricted bio gaze in the year of **2011** and **2012**

**Table: 4.12. Sources of domestic Energy supply**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2011** | | | | **2012** | | |
| **No** | **Source of Energy supply** | **Rank** | | **Source of Energy supply** | **Rank** | |
| **Urban** | **Rural** | **Urban** | **Rural** |
| 1 | Charcoal | 2 | 4 | Firewood | 2 | 4 |
| 2 | Firewood | 1 | 1 | Charcoal | 1 | 1 |
| 3 | Animal Dung | 3 | 2 | Kerosene | 3 | 2 |
| 4 | Crop Residue | 4 | 3 | Animal Dung | 4 | 3 |
| 5 | Kerosene | 6 | 5 | Crop Residue | 6 | 5 |
| 6 | Electricity | 5 | 0 | Electricity | 5 | 0 |

**Source**: Chole District Agricultural Development Office

**Sport:** there are different types of sport activities in the district. From these Footballs, Volleyballs and Athletics are the main types of sport activities practiced in the district. Accordingly, the number of **football** club of the district decreased from **1** in **2011** to **2** in the year **2012** as the same time the number of its members decreased from 28 to 48 during the same years. On the other hand, the number of volley ball club decreased from **9** to **8** as the same time the number of its members was also decreased **125** to **96** between the indicated years. There were three (1) athletics clubs in the year **2009** with **30** members but the number of clubs and its members increased from 20 and 30 respectively.

**Table: 4.13. Sport Clubs/Teams and Members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Types of Club or Team | 2011 | | 2012 | |
|
| Number of Clubs | Member | Number of Clubs | Member |
| Football | 1 | 28 | 2 | 48 |
| Volleyball | 9 | 125 | 8 | 96 |
| Athletics | 1 | 20 | 1 | 30 |

Source: Chole District Youth and Sport Office

**Chapter Five**

## **5. Development Activities**

### 5.1. On Going Development Projects

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The Government annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to narrow the development gaps of the district. Accordingly, the ongoing development projects during the years under consideration are discussed below.

**Social Sector Development Projects:** up to budget year of **2012** different types of Social sector development projects were constructed by budget obtained from different sources. From these projects, TVET workshop, health center and Road which connect the kebeles with the capital city of the district. These projects were constructed by the government, community participation and assistance of non-governmental organizations.

**Economic Sector Development projects*:*** in the same budget year, one animal health clinics, spring development on spot and small springs under construction by government budget and local community participation.

## **5.2. Major Problems of Ongoing Development Projects**

Poor construction quality, inaccessibility of the site, shortage of budget, dalliance in starting the construction, dalliance in the construction materials supply, dalliance in decision of bid documents, lack of construction machinery, lack of engineers and mobilization of construction is the major problem during the construction.

## 

## **CHAPTER SIX**

## **6. Problems and Potentialities**

### 6.1 Major Problems of the District

**Environmental Problem*:*** Soil degradation due to over cultivation, free grazing and over grazing and rapid deforestation rate and low soil and water conservation practice. On the other hand, variability of rain fall which results into failure of crop production and uncontrolled hunting are the major environmental problems. One of the major causes of the environmental problem is rapidly population growth and low commitment to stop the problem.

**Economic Problem*:*** Shortage of farm land, high prevalence of crop diseases and pests, shortage of agricultural inputs and lack of capacity to buy due to high price, lack of financial institutions (banks, insurance, saving and credit association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and lack of any industrial development activities are the major economic problems of the district.

**Social Service Problem*:*** Rapid population growth and large family size which leads to land fragmentation, un employment, low productivity, low health institutions ( lack of hospital, very few health center) and lack of educational facilities, high dropout rate, under developed transportation and communication facility ( mobile, postal service), some prevalence of harmful traditional practices, HIV/AIDS prevalence, very low potable water coverage, low electric power supply and very low density of roads in the district which connect kebeles are the most series social problems in the district.

### 6.2. Potentialities

**Tourist Attraction Sites*:*** The district has many attractive resources. But, these sites are not deeply surveyed and far from the main road which leads the leads the zone not to benefit from this interesting sites in general the district in particular. Some of the attracting sites include very Beautiful Waterfalls, Religious ceremonies and monument. In addition, there is one control hunting area in the district.

**Minerals and Energy Resources***:* Regarding the potential of the district, no any survey is under taken until now. However, the district has abundant/plenty of resources, hence; successful survey should be under -taken to utilize these unexploited resources of the district.

**Labor Resources *(Skilled and Unskilled):*** The availability of labor resources is unquestionable as a zone in general, in Chole district in particular. Hence, the district has high potential of labor resources both skilled and unskilled.

**Types of Investment Opportunities***:* The district has many investment opportunities. The district’s environment suitable to produce high land fruits like Apple, Fruit and vegetable production and Coffee production and Irrigation development. Due to its favorable climate condition the district has also a potential for honey and livestock production.

# 

# CHAPTER SEVEN

## **7. Conclusions and Recommendations**

### 7.1. Conclusion

Chole District is one of the administrative units of Arsi zone. It has 18 peasant associations, while two are urban administrative units. It is located at 219 km from regional capital city, Finfinne and 194km from Zonal capital town Asella. The districts have the total Area of 560.6 square kilometers.

According to the data obtained from projected population census report of the year **1999** the district has 142,716 (49.67% females) populations in **2012**. From the total population of the district, more than 90% of the population of the district is living in rural area depending on agricultural activities.

The district has suitable environment condition to produce different types of crops in both Meher and Belg season. Wheat, Barley, Teff, Bean and others are the main cereal crops produced in the district. In addition to these the low land of the district is known in producing different types of commercial crops like Coffee, Chat, Fruits, sugar keen, banana etc. are the main commercial crops produced in the district. Accordingly, in the year 2011 cultivated land for cereal accounts for 10,594.5hectares and 351,762quintals of production was obtained in the Meher season. This was decreased to 15,231 cultivated land and increased 475,333 quintals of productions was obtained in the year 2012. This means the average production per hectare in Meher season is 33.2 in 2011 EC which decreased to 31.2 in 2012 EC. The other is Pulses, in 2011 EC from 3740 hectare 51,129 quintals was produced in Meher season. This means the average production of pulses in Meher season 2011 EC is about 13.67 quintals per hectare. In 2012 EC this amount of production is increased to 96,466 quintals from 4,708 hectare. In average it accounts about 20.45 quintals per hectare.

The district utilizes different type agricultural inputs to increase the agricultural productivity. Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to increase crop production and productivity and meet rapid increase of demand for food and industrial raw materials. Accordingly, in 2011 only 11,876 quintals of fertilizers were distributed to the farmers. However, in 2012 production season the amount of fertilizer distributed to the farmer was increased to 14,233quintals. Similarly, improved seeds supplies were decreased from 491 quintals in 2011 to 344.55 quintals in 2012. The most important improved seeds utilized in the district are wheat and barley. The utilization of herbicides in our district was highly increased from 4,997 lit in 2012 to 5,717 to 2012 of the production year.

Agricultural infrastructures are the most important to facilitate and to increase the agricultural productivity and general agricultural activities. So as to satisfy these needs the National government made a very good strategy and policy and distribute up to the rural kebeles. Accordingly in each rural Kebele of the nation and the zone and the district specifically farmers training centers should be constructed and three development agents with different profession should be employed. The farmers are trained on different training courses like environment and soil conservation science, plant science and animal science. With the same principle in the district **18** farmers training centers were constructed and **56** development agents employees were in the year **2012.**

Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

The district has large potential of irrigable land but it is not surveyed. In the production year of **2012,** about **4,682.75** hectares of land were cultivated by traditional irrigation system of which **2,330.25**  hectares was occupied by annual crops and **2,352.5** hectares of land by perennial crops, and served for about **6,950** (male 6281 & female 669) farmers. The production obtained during the production year was **393,850** quintals.

Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. During the year **2012** and **2012** there were two (2) C-type and four (4)D-type Clinics with 24 and 20 animal health personnel's respectively. These health services have been staffed by 3 veterinary Doctors and 21 animal health Assistances and 3 Medical Doctor and 17 Animal Health Assistance in 2011 and 2012 EC respectively.

Regarding the social sectors the district has three private kindergarten schools, in the year 2012 there were 3 private kindergarten schools with 25(Male 11 and 14 female) teachers and 455(236 Male and 219female) students. In the same year the number of primary school was the same as 2011 which is 47.

In 2011, also there were 4 governmental health centers and 18 health posts and 4 pharmacies. Moreover, there was 10 non- governmental clinic and 1 Medium clinic. Meanwhile in 2012 Ec the number of governmental clinics and Health posts is also the same as 2011 which is 4 and 18 respectively, also the number of nongovernmental Clinics haven’t change with respect to 2011 EC. The ratio of population to Health Center, Clinic and Health Post was 33,668; 16,834 and 7,481 respectively in the year 2011, indicates low health coverage of the district compared with WHOM standard (25000, 10,000 and 5,000 respectively).

According to the data obtained from the district’s water resource office, there is no still adequate potable water supply in the district. From total population only 46.33% of people have got potable water supply.

Regarding potable water schemes, there were 87 and 102 functional schemes in the year of 2011 and 2012. Meanwhile there were 19 and 16 non-functional and renewable schemes in mentioned years.

**7.2. Recommendations**

To overcome the indicated problems and to sustain the beginning development of the district’s activities the following points are given as recommendation:

* Infrastructure development like road (specially the road that connects Dera to Mechara which is hot issue in current situation, energy supply and transportation network facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural and rural development office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover, modern inputs have to be supply in sufficient amount and on time to the farmers.
* To make it the farmers out of the traditional production activities the farmers in the district should trained in all farmers training centers and the farmers training centers should be constructed in all rural kebeles of the district.
* The animals health clinics and the animals health professionals in the district were small in number and the services given related to the livestock population was very small so it is expected to construct additional animals health facilities and staffed with animal health professionals,
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (**FTC**), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* The potable water coverage of the district is very low. So to improve this services the concerned bodies government, non-government and the communities should construct additional water distribution schemes,
* In the health sector the services given to the population when related to the WHO it is very low. So as to minimize the gap ,the concerned bodies should do more in this sector,
* To improve the education quality the student class-room ratio and student teachers ratio and other indicators are very essential. So to meet the goal of the indicated qualification it is expected to do more from the concerned bodies,
* Since the district has cultivable land and tourist attraction potential, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF DIGELU AND TIJO DISTRICT 2011AND 2012 E.C**

**Introduction**

Digaluna Tijo is one of the 27 districts of Arsi Zone. The historical name of the district is derived from two clans Digalu and Tijo living in the area. The district is established in 1945 as one of the zone administrative units. It has 27 administrative units of which 23 are peasant Associations while 4 are urban administrative. Sagure town is the capital town of the district, which is established in 1928. It is located at 198 km from Regional capital city, Finfine and 23 km from zonal capital, Asella town to south direction on Finfine-Bale main road.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Digalu-Tijo district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization, to identify development gaps for researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district and zonal level sectors departments, 1999 census result report and other related documents available in our office. The Problem faced during compiling these documents are Lack of well-organized and consistent data in the district and zonal sectors etc.

This paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

**Chapter – One**

**1. Physical Setting**

**1.1 Location and Area**

**Digeluna Tijo** is one of the administrative units of Arsi zone. Astronomically, it is located between 7019’22’’N to 7036’54’’N Latitude and 39020’59’’E to 38033’26’’E Longitude. Relatively the district share a boundary line with Shirka district in the south east, Hetosa district in the north east, Lemuna Bilbilo district in the south and south east, Munessa district in the west and south west and Tiyo district in the north, north east and north west direction. The district has a total area of 927.4 Km2 which accounts for 4.41% of the total area of Arsi Zone

**1.2 Geology, Relief, Drainage, and climate**

**Geology: -** The present surface rock distribution and land features of the district was the result of the past geologic history and tectonic movement in the upper mantle lithospheric portion of the horn of Africa. Regarding the surface rock distribution, all the present surface rock was formed during Cenozoic era of Quaternary period. Dino formation covers the south western and north western part of the district in the form of belt while Upper Chilalo formation covers some of the north eastern and the whole eastern part where the district shares a boundary line with Hetosa and Tena district. The whole central part, the northern part, the southern, west central and some part of the south western and south eastern was covered by Nazeret Series. On the other hand, Lower chilalo formation covers extensively in the form of belt from north east to south eastern tip in between Nazeret Series and Lower Chilalo formation.

**Relief and Drainage: -** The relief structure of the district consists of mountain ranges of Chilalo Galema range, undulating high plateau dissected by major and small rivers of the district and low flat plateau. The altitude of the district is ranging between 2000 meters in Lole area to 3600 meter on Bora Luku area. Due to its location, the district has high network of rivers systems. The major permanent rivers of the district are Ketar, Ashabeka, Gusha, and Temala. On the other hand, the major seasonal streams are Dangalati, Danisa, Girisa, Sokora, Nanawa, Borja and korsa. Generally, the district has high potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate: -** Due to its altitudinal location, the climatic condition of the district is dominantly cold which has a temperature of 10oC-15oc .this type of climate consists about 70% of the total area of the district. The remaining ones are cold and moderately cool having a temperature of less than 10oC and 15oC-20oC respectively. Hence, the dominant type of climatic condition of the district is cool agro ecological Zone, the mean annual rainfall is 1000-1500 ml and the average rainy days are about 150 days in the year. The rainfall pattern is bi-modal, which are short rainy season Belg from (March to April) and summer or long rainy season /Meher (from June to September).

1.3. Land Use, Soil, Vegetation and Wild life

**Land use:** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio- economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing.

**Soil: -** The major types of soil in the district are PellicVert soils that cover more than 85% of the total area of the district. In addition OrthicLome soils and Mollicsund soils covers some part of the western, north western, north eastern, eastern and south eastern tips of the district.

**Vegetation: -** The vegetation including Afro-Alpine on the top of chilalo Galema mountain range, Natural forest like Tid, Zigba, Bisanna, Shola, wanza, etc adjacent to Afro-Alpine vegetation at high altitude of the district and along the upper course of the major rives of the district. In addition the district has also Grass land vegetation at its southern part commonly known as lukuche areas of the district.

Regarding government protected/public forests, 1109 hectares forests like Lukunche forest 928.695 hectares, Digelu forest 180.305 hectares are found in the district. There are also about 1500 hectares of community forest in the district. **Wild Life: -** The major wild animals found in the district are Mountain Nyala, Columbus monkey; Rabbit, Antelope, wolf, red fox, etc are found on Chilalo Galema Massif.

**Chapter Two**

**2. Population**

**2.1 Population Size**

According to the data obtained from CSA of 1999, the total population of the district was increased from 196184 to 201710 between the years 2011 to 2012 showing an increment by 5526. From the total populations of the district, only 11.93% are living in urban areas in the year 2012. This indicates that more than 88.07% of the population of the district is living in rural area depending on agriculture of the total population, females accounted for 50.5% in the year 2012.

**Table: 2.1 Population distribution by urban, rural and sex for the district.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area | Rural | | | Urban | | | Total | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 87351 | 85718 | 173069 | 11777 | 11337 | 23115 | 99128 | 97056 | 196184 |
| 2012 | 89652 | 87976 | 177628 | 11812 | 12270 | 24082 | 99788 | 101922 | 201710 |

Source: Projection made from CSA of 1999.

**2.2. Age and Sex Structure of Population**

The age structure of a population is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district. According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 42.08%, 54.16% and 3.75% of the total population respectively in the year 1999. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 51.08%, 45.61% and 3.29% for rural areas and 33.3%, 63.4%, and3.3%, for urban area respectively.

**Table: 2.2. Population size by wider age group Classification of the year 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Male** | **Female** | **Total** | **%** |
| 79,286 | 80,796 | 160,082 | 100 |
| 41,147 | 40,633 | 81,780 | 51.1 |
| 35,108 | 37,917 | 73,025 | 45.6 |
| 3,031 | 2,246 | 5,277 | 3.3 |
| 10,026 | 10,414 | 20,440 | 100 |
| 3,205 | 3,601 | 6,806 | 33.3 |
| 6,523 | 6,442 | 12,965 | 63.4 |
| 298 | 371 | 669 | 3.3 |
| 180,522 | 91,210 | 180,522 | 100 |
| 88,586 | 44,234 | 88586 | 49.1 |
| 85,990 | 44,359 | 85990 | 47.6 |
| 5,946 | 2,617 | 5946 | 3.3 |

**Source**: Arsi Zone Finance and Economic Development Office

**2.3. Population Density and Rural settlement**

Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, a crude density was increased from 189 persons per km2 to 194.6 persons per km2 between the year 2009 and 2010.This ratio indicates that the district is one of the densely populated districts of the zone and increases pressure on the natural resource endowment of the district. Concerning the settlement pattern of the district, the rural parts are characterized by clustered type of settlement.

**2.4. School age Population**

School age population is important for planning educational facilities like school, class room, teachers, text book and other teaching materials. In addition, it is also important for planning the number of students to be enrolled to the school every year. The following table shows school age population of the district for each educational level.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Year 2011** | | | **Year 2012** | | |
| age | **Rural** | | | **Rural** | | |
| **M** | **F** | **Total** | **M** | **F** | **Total** |
| (4-6) | 207 | 175 | 382 | 135 | 99 | 234 |
| (7-14) | 9381 | 8665 | 18046 | 21156 | 19829 | 40985 |
| (15-18) | 2679 | 2084 | 4763 | 189 | 138 | 327 |
|  | **Urban** | | | **Urban** | | |
| (4-6) | 3704 | 2505 | 6209 | 84 | 111 | 195 |
| (7-14) | 11603 | 10343 | 21946 | 4602 | 4445 | 9047 |
| (15-18) | 2852 | 2151 | 5003 | 3264 | 2469 | 5733 |
|  | **Rural + Urban** | | | **Rural + Urban** | | |
| (4-6) | 3911 | 2680 | 6591 | 219 | 210 | 429 |
| (7-14) | 20984 | 19008 | 39992 | 25758 | 24274 | 50032 |
| (15-18) | 5531 | 4235 | 9766 | 3453 | 2607 | 6060 |

**Source**: Digalu and tijo education Office

Accordingly, the number of school age population of the district was increasing from 56349 School age population to 56521 school age population between the years 2011 to 2012. These groups of population account for 28% of the total population of the districts in the year 2012. As far as school age population by level of school was concerned the number of kindergarten, primary and secondary school population was increased from 6591 to 429, 39992 to and 50032 to 9766 and total 9766 to 6060 respectively between the years 2011 to 2012.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment which in turn improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth center, etc.

**Chapter Three**

**3. Economic Condition**

**3.1. Crop Production and Livestock Rearing**

**3.1.1. Crop Production**

Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg. However, Meher is the largest season in terms of both cultivated land and crop production. For instance, in the year 2011/2012 it accounts for 45% of total cultivated land and 98% of production obtained while in the year 2011/2012, the total land cultivated was increased to 100% but production obtained increased to 73% .

The major annual crops grown in the district are cereals, pulses and Oil seeds. From the total area cultivated the area under cereal crops accounts for more than 78% in the year 2009/2010 which was increased to 81% in the year 2011/2012. While the production obtained was 86% and 87% respectively. On the other hand, 2009/2010 the area under pulses and oil seed crops accounts for 15 % and 4% of total land cultivated in the year 2011/2012 which was decreased to 15.05% and 3.77% while the production obtained was 8.3% and 8.25 for pulses and 1.9% and 1.8% for oilseeds. From the above analysis one can understand that the dominant crops grown in the district is cereal crops.

**Productivity of major crops between the year 2009/2010 and 2011/2012**

In the Meher season, the area cultivated was **31496** and 34559 hectares between the year 2009/2010 and 2011/2012 while the production obtained was decreased from 1427408**quintals to 1197957.** These give an average productivity to be of 45.3 to 34.7 quintals per hectares between the years under consideration.

Likewise, during the same years, Belg season the total area cultivated was increased from **2321 and** **1269 .Also the production obtained was** decreased **from 44466 quintals to 44415** quintals. These give an average productivity to be increased from of 19.15 to 35 quintals per hectares.

**Table: 3.1. Area cultivated and production obtained for private peasant holdings by seasons**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2009/2010** | | | | **2011/2012** | | | |
| **Meher season** | | **Belg Season** | | **Meher season** | | **Belg Season** | |
| **Area Cult (Hec)** | **Prod. (Qut)** | **Area Cult (Hec** | **Prod. (Qut)** | **Area Cult (Hec)** | **Prod. (Qut)** | **Area Cult (Hec** | **Prod. (Qut)** |
| **Cereals** | 31496 | 1427408 | 2321 | 44466 | 34559 | 1197957 | 1269 | 44415 |
| Wheat | 19315 | 892058 | 0 | 0 | 19290 | 624112 | 0 | 0 |
| Teff | 20 | 360 | 0 | 0 | 8 | 248 | 0 | 0 |
| Barley | 11146 | 467720 | 2321 | 44466 | 14290 | 512148 | 1269 | 44415 |
| Maize | 901 | 63070 | 0 | 0 | 883 | 59161 | 0 | 0 |
| Oats | 72 | 2520 | 0 | 0 | 88 | 2288 | 0 | 0 |
| Sorghum | 42 | 1680 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Pulses** | 5869 | 136112 |  |  | 6067 | 157742 |  |  |
| Horse beans | 3866 | 97292 |  |  | 6067 | 157742 |  |  |
| Field peas | 2003 | 38820 |  | 0 | 0 | 0 |  | 0 |
| Lentils | 0 | 0 |  | 0 | 0 | 0 |  | 0 |
| Vetch | 0 | 0 |  |  | 0 | 0 |  |  |
| Check pea | 0 | 0 |  | 0 | 0 | 0 |  | 0 |
| **Oilseed** |  |  |  |  |  |  |  |  |
| Linseed | 949 | 21135 |  | 0 | 539 | 9702 | 201 | 5226 |
| **Grand Total** | 38314 | 2948993 | 2321 | 44466 | 539 | 9702 | 201 | 5226 |

Source: Digeluna-Tijo District Agricultural and Rural Development Office.

**Table: 3.2. Productivity of crops by types of crops and by season**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Crop Type** | **2011** | | **2012** | |
| **Meher season** | **Belg Season** | **Meher season** | **Belg Season** |
| **Cereals** |  |  |  |  |
| Wheat | 53.9 | - | 32 |  |
| Teff | 15 | - | 31 | - |
| Barley | 51.9 | 28 | 35 | 35 |
| Maize | 72.6 | - | 67 | -- |
| Oats | 26 |  | 26 |  |
| Sorghum | 0 | 0 | - | - |
| **Pulses** |  |  |  |  |
| Horse beans | 32 | 3 | - | - |
| Field peas | 26 | 4 | - | - |
| Lentils | 21 | - | - | - |
| -Vetch | - | - | - | - |
| Check pea | - | - | - | - |
| **Oilseed** |  |  |  | - |
| Linseed | 24 | - | - | - |
| Rapeseed | 16 | - | - | - |
| **rand Total** |  |  |  |  |

**Source:-**Agriculture Office

As shown in the above table, from cereal crops Maize with 67 quintals followed by barley and wheat with 35 and 32 quintal is the most per hectares productive while Teff with 31 quintals per hectare is the least productive in the year 2009/2010 and 2011/2012 respectively. Likewise, from pulse crops, horse beans with 32 quintals followed by field peas and lentils and lentils not measured by quintals was the most productive crops per hectare was the least productive crops in the year 2009/2010, 2011,2012 respectively.

**Irrigation**: The presence of large river and small stream flowing in the district causes the district has potentially irrigable land. However, due to the absence of reliable data, we could not say anything about land under modern and traditional irrigation and production obtained too.

**3.1.2. Livestock, Poultry, Bee-keeping and Fishery**

**Livestock:** the district is famous in livestock resources. Cattle, sheep, goats, horses, mules and donkeys are the major livestock population found in the district. The number of livestock populations of the district was increased from 400131to 421191 between the years 2011 and 2012. From the livestock population found in the district, cattle, sheep and horses accounts for the largest proportion which accounts for more than 97% in the year 2012.

However, high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Poultry:** Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population of the district was decreased from 77882 to 74174 between the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 3.3. Distribution of Livestock and poultry (2011-2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | **2011** | **% share** | **2012** | **% share** |
| **1** | Live stock | 421191 | 47 | 421191 | 47 |
|  | Cattle | 239517 | 26.6 | 239517 | 26.6 |
|  | Sheep | 128084 | 2.06 | 128084 | 2.06 |
|  | Goat | 10314 | 3.5 | 10314 | 3.5 |
|  | Donkey | 17464 | 5.10 | 17464 | 5.10 |
|  | Horses | 25477 | 0.06 | 25477 | 0.06 |
|  | Mules | 335 | 0.067 | 335 | 0.067 |
| **2** | **Poultry** | **77882** | 15.6 | **74174** | 15.6 |
|  | **Total** | 499073 | 100 | 495365 | 100 |

Source: District Livestock Health and development office

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Accordingly, the number of animal health clinic was 9 in the year 2010 while the number of health post was one during the same year. The ratio of livestock population to health facilities were improved from 31552:1 to 44008:1 for Clinics which shows low coverage of health services in the district during the year under consideration.

These health facilities provide health services by five veterinary doctors, 29 animal health assistance and none animal health technicians in the year 2012.

**Table: 3.4. Distribution Animal health infrastructure (2009-2010)**

|  |  |  |
| --- | --- | --- |
| **Description** | **2009** | **2010** |
| **Animal health personnel** | **27** | **29** |
| Veterinary Doctor | 4 | 5 |
| Animal Health Assistance | 23 | 24 |
| Animal health Technician | - | - |
| **Health infrastructure** | **10** | **10** |
| Clinic (A.B,C. Type) | C=9 | C=9 |
| Health posts | D=1 | D=1 |

Source: District Livestock Health and development office

**3.1.3. Bee Keeping and Fishery**

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family. In the district in order to improve production obtained from bee farming the district’s agricultural and rural development office provides modern beehives to the farmers of the district. Accordingly, as shown in the table below the number of traditional, transitional and modern bee hives distributed to the farmers was increased 5220, 3239 and 1230 to 4630, 19129 and 61712 between the year 2011 and 2012 respectively. For detail see the table below.

**Table: 3.5. Number of bee-hives by types and honey production between the year 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **2011** | | **2010** | |
| **Types of beehives** | **No of beehives** | **Production (kg)** | **No of beehives** | **Production (kg)** |
| **Traditional** | 5220 | 26000 | 4360 | 30520 |
| **Transitional** | 3239 | 16000 | 19129 | 95645 |
| **Modern** | 1230 | 9000 | 61712 | 7714 |

**Source:- District Livestock Health and development Agency**

**Fishery:** Fishing activity is as simple as that of poultry production and other livestock rearing, however, there is no fishing activity in the district since there is no large water body like lakes, pond and river.

**3.1.4. Agricultural Inputs and Infrastructures**

**Agriculture cooperative: -In** the year 2012, there was 27 multipurpose, 7 Milk, 3 Irrigation participant cooperative,4 consumers cooperative, saving and credit 25 totally 315 cooperative with 2283 female and 1184 male members.

Regarding their total fixed capital is 4421872 they have Ethiopian birr of which 37115430 is used as operational during this year.

On the other hand, there were also different primary cooperatives and urban and rural Credits and saving association engaged on different agricultural activities like milk and milk product producer, irrigation, honey producer and skin and hide producers engage on different agricultural activities with a capital of more than 41537302 birr used as fixed and operational in the district during the year 2012

**Table: 3.6. Number of urban credit and Saving cooperatives, their capital and member in year 2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Milk and milk product producer | 7 | 51 | 2 | 53 | 683507.95 | 891586.01 | 1575094 |
| Irrigation participant cooperative | 3 | 389 | 64 | 453 | 452222.53 | 22754.29 | 474976.8 |
| Multi- purpose | 276 | - | - | - | - | - | - |
| Consumers cooperatives | 4 | 206 | 55 | 261 | 1049716.33 | 28867.97 | 1078584 |
| Saving and credit cooperatives | 25 | 538 | 2162 | 2700 | 34929983.32 | 3478663.58 | 38408647 |
| **Total** | **315** | **1184** | **2283** | **3467** | **37115430** | **4421872** | **41537302** |

Source: Digelu and- Tijo cooperatives office

**Fertilizer and Improved Seeds utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural input to improve crop production and productivity to meet rapid increase of demand for food and industrial raw materials. Accordingly, the amount of fertilizer distributed to the farmer was decreased from 86882.2 quintals to 67250 between the year 2009/10 and 2011/12 .However, Likewise, the amount of improved seed distributed to the farmers vary from year to year due to price escalation, delay in delivery time as well as utilization of existing better quality seed that the local farmers multiply previous year. For details see the table below.

These figures however, may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

**Table: 3.7. Amounts of agricultural inputs distribute to farmers by type (2009/2010-2011/2012)**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2009/20010** | **2011/2012** |
| **Fertilizers** | 86882.5 | 67250 |
| NPSP(qt.) | 70720 | 58050 |
| Urea (qt.) | 15262.5 | 9200 |
| Other (NPS) | 900 | - |
| **Improved seeds (qt.)** | **1755079** | **119521** |
| Wheat | 1045948 | 624112 |
| Barley | 645606 | 512148 |
| Maize | 63525 | 59161 |
| **Herbicides (lit.)** | **50748** | **657444** |

Source: Digeluna -Tijo district Agricultural and Rural Development office

**Development agents and farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. During the years 2009 and 2010, the number of farmers training centers (FTCs) was 23 while there were 68 Development agents. These Development agents help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection.

**Table: 3.8. Number of Development Agents and FTC (2011--2012**).

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 23 | 23 |
| Number of Development agents | 74 | 74 |

Source: Digeluna -Tijo district Agricultural and Rural Development Office.

**Agricultural Calendar:** It is well known that the farmers of the zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on agro- Climatic zone and types of crops cultivated. Accordingly, agricultural calendar of the district is shown in table below.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Meher and Belg), the type of agro climatic Zone and types of crops cultivated in the district.

**Table: 3.9 Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | March -June | Feb-March |
| 2 | Planting (Sowing) | June -July | March-April |
| 3 | Weeding | Aug -sep | May -June |
| 4 | Harvesting | October -December | July – August |

Source: Digeluna -Tijo district Agricultural and Rural Development Office.

**3.1.5. Methods of Soil Conservation and Maintaining soil Fertility**

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning), fallowing and using crop residue while the modern one is the using of chemical fertilizer and compost (organic fertilizers).

**Methods for soil conservation:** Contour ploughing and cultivation is traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforestation are modern way of soil conservation in the district.

**3.1.6. Constraints of Agricultural Production Crop pests and disease:**

The major crops pests in the district are aphid, shut fly while the major diseases are rust, smut, bacteria wild and others. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and poultry diseases:** Black leg, Hemorrhagic Septicemia, external and internal parasites, and Anthrax are the major livestock and poultry disease in the district. But year to year livestock and poultry disease prevalence decreased, because to take high vaccination in the district.

Accordingly, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. Of the total animal population of the district, the number of animal vaccinated was increased from 358700 to 365900 between the year 2011 and 2012. On the other hand, the number of animal get treatment varies from year to year depending on the prevalence of disease in the district. The variation on the amount of animal get vaccination and treatment would be due to shortage of budget allocated for these services were limited in amount.

**Table: 3.10. Number of Animals got health services by type and type of service given**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Service** | **2009** |  | **2010** |
| **Vaccination** | **358700** |  | **365900** |
| Blackleg | 10000 |  | - |
| Hemorrhagic Septicemia | - |  | - |
| Anthrax | 46600 |  | - |
| Other | 302100 |  | 365900 |
| **Treatment** | **283973** |  | **396072** |
| External parasites | 124617 |  | 164653 |
| Internal parasites | 156624 |  | 159498 |
| Operation | 604 |  | 1279 |
| Others )Specify) | 2128 |  | 70642 |

Source: - DigelunaTijo District Agricultural and Rural Development Office.

***3.2. Mineral Resources and Industry***

**Mining**: Like other parts of country in general and the zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as Scoria, Pottery soil and sandy stone for construction purpose. Yet the district does not start to utilize these minerals resources. However, there are insignificant mining activities like rock quarrying, pottery making mining activities by local communities in the district.

**Industry**: Similar to other parts of the Zone, industrial development is at its infant stage in the district. Their number is very small and is dominated by small- scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned. There are also no medium scale industrial establishments in the district.

In the district there were 250 grain mill and 5 metals and wood work small scale industry that create a job opportunity for 90 people during the year 2011. However, in the year 2012 there were 98 grain mills, 2 edible oil, 4 metal and wood work and 1 flour factories in the district that create job opportunity for more than 162 people permanently.

**3.3. Trade Activities and Tourism**

**Trade:** in the district the number of permanently licensed traders was decreased from 1781 to 1767 between the year 2011 and 2012.

Regarding tradable items and cash crops production activities, they engaged on the sale of cereal, pulses, oilseeds, vegetables, etc. in the local market and sending to the central markets. In addition, the district is known by exportable items like hide and skin.

**Table: 3.11. Type and number of licensed traders**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of trader** | **2011** | **2012** |
| 1 | Licensed | 1781 | 1767 |
| 1.1 | Licenses given (New) | 1112 | 302 |
| 1.2 | Licenses renewed | 1520 | 1465 |

Source: DigelunaTijo Trade Development Office.

**Cash Crops and Exportable items production**

There are different types of cash crops and exportable items like linseeds, rape seeds, pulses skins and hides produced in the district. For instance, the number inspected skin and hide sent to central market was 14620 and 13910 in the year 2011 and 2012. For details see the table below.

**Table: 3.12. Inspected Skins and Hides sent to the central market**

|  |  |  |
| --- | --- | --- |
| Type of skins and hides | 2011 | 2012 |
| Hides | 12076 | 12012 |
| Skin | 2544 | 1898 |
| **Total** | **14620** | **13910** |

Source: Digeluna Tijo District Market Development Office

**Tourism and Its amenities**: Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Digelu-Tijo district. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism office. These are Chilalo Galema mountain range, Bore Luku traditional worship area, Gate traditional religious area, Ketar river waterfall are the main tourist attraction sites of the district. All of them are under developed

**3.4. Finance and Financial Institutions**

**Financial Institution: -** The Availability of various financial institutions like banks and Insurance, Rural Credit and saving Association play a significant role in the transformation the economy of the district. However, the district has only ten rural and urban credits and saving association and other two small group micro finance institution in 2012. On the other hand, the member of these cooperatives were increased from 1735 (51% female) to 2469(54% female) between the year 2011 and 2012. For details see the table be

**Table: -3.13A. Number of micro finance institution, their beneficiaries in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Rural Credit Association | 2011 | | | 2012 | | |
| Number of Beneficiaries | | | Number of beneficiaries | | |
| Male | Female | Total | Male | Female | total |
| Abdi Bori | 58 | 38 | 96 | 124 | 61 | 185 |
| Tokuma lole | 57 | 8 | 65 | 67 | 8 | 75 |
| GudinaAshebeka | 70 | 14 | 84 | 60 | 25 | 85 |
| Ifa and Haqa | 37 | 4 | 41 | 38 | 6 | 44 |
| Urji | 50 | 19 | 69 | 53 | 17 | 70 |
| Bufata geejiba M/Saaguree | 220 | 91 | 311 | 374 | 84 | 458 |
| Barsiistoota | 589 | 311 | 900 | 707 | 349 | 1056 |
| AbdiiRabbii | 70 | 24 | 94 | 70 | 16 | 86 |
| DigaluTokkumaa | 60 | 24 | 84 | 58 | 19 | 77 |
| T/Naannoo Xiijoo | 53 | 3 | 56 | 66 | 3 | 69 |
| Liqii Bashananaa | 90 | 40 | 130 | 95 | 46 | 141 |
| Leellaa Maankulaa | - | - | - | 2 | 425 | 427 |
| Guddinaa Digalu | 73 | 21 | 94 | 87 | 36 | 123 |
| Magarisa jallee | 7 | 131 | 138 | 6 | 154 | 160 |
| Bucho Silaasee | - | - | - | 13 | 122 | 135 |
| Abdi Waqaa | 2 | 50 | 52 | 2 | 57 | 59 |
| Jalilisi dhanqolee 2ffaa | 1 | 58 | 59 | 1 | 65 | 66 |
| Liqii jaalalaa | 1 | 28 | 29 | 1 | 31 | 32 |
| Laliisaa | 11 | 192 | 203 | 13 | 207 | 220 |
| Daraartuu | 31 | 79 | 101 | 35 | 88 | 123 |
| Badhaatu Ayimuraa | 72 | 21 | 93 | 75 | 25 | 100 |
| Biftuu Bari | 6 | 61 | 67 | 8 | 64 | 72 |
| Fayyaa boruu | 21 | 72 | 93 | 26 | 75 | 101 |
| Caaltu wacaalee | 21 | 91 | 112 | 24 | 96 | 120 |
| Lolee Bulchaan | 6 | 64 | 70 | 7 | 81 | 88 |
| Tokkuma shaldo jigeessa | 12 | 110 | 132 | 15 | 113 | 128 |
| Jijjirama Ansha lakich | 12 | 80 | 92 | 16 | 90 | 106 |
| Liqi simale | - | 101 | 101 |  | 106 | 106 |
| Total | 1630 | **1735** | 3366 | 2043 | 2469 | 4512 |

Source: DigelunaTijo Cooperative Office

**Table: -3.13B. Number of micro finance institution, their beneficiaries in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Rural Credit Association | 2011 | | | 2012 | | |
| Number of Beneficiaries | | | Number of beneficiaries | | |
| Male | Female | Total | Male | Male | Total |
| WALQO | 2859 | 1252 | 4111 | 3169 | 1560 | 4729 |
| WSASA | 2098 | 2132 | 4230 | 2759 | 2717 | 5476 |

**Annual Budget Allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district Inland Revenue. Regional government contribution shares the largest amount which accounts for more than 85% of the total annual budget allocated for the district. This indicates that the share of Inland Revenue in the budget allocated for the district is very low.

According to the data obtained from finance and economic development office, the annual budget allocated for the district was increased from 122613273, to 161315420 birr between the year 2011 and 2012.

**Table: 3.14. Annual budget allocated for the district**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual budget Allocated** | **Growth Rate (%)** |
| 2011 | 122613273 | 81% |
| 2012 | 161315420 | 92% |

Source: Digelu -Tijo Finance and Economic Development Office

**Revenue:** the revenue collected in the district important for social and economic sector development and also increased the share of Inland Revenue in the total budget allocated for the district. Accordingly, the total revenue collected from the district was increased from 35093182 to 35078629 between the years 2011 to 2012.

The main sources of revenue in the district are direct tax, indirect tax and non-tax items as Inland Revenue office of the district cumulative annual report of both year shows

**Table: 3.15. Total in land revenue collected in the district by type of revenue source.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non-Tax revenue** | **Total** |
| 2011 | 28175699 | 2044835 | 4872648.09 | 35093182 |
| 2012 | 29457190 | 2534801 | 3086638 | 35078629 |

Source: - DigelunaTijo Revenue Office

**3.5. Basic Infrastructure Condition**

**Road:** the district has 218.64 km length of graver and Asphalt road (all weather), 20km of dry weather road. This gives a road density (for all weather roads) of 0.228 per km2 and 8.5km per 1000 persons for all weather road and 0.167km per km2 and 6.21 km per 1000 peoples for dry weather road.

**Telecommunication:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. One urban areas of the district has supplied with Digital type of telecommunication. On the other hand, 23 peasant associations and 5 municipality of the district has supplied with wireless type of telephone services. Moreover, all rural areas and urban areas of the district were supplied with mobile telephone services.

**Post office**: postal service is one of the means of communication that plays a significant role in transmitting information and message; especially in rural areas where other means of communication is under developed. Accordingly, the district has Regular type of postal services in Sagure town.

**Water supply:** potable water coverage of the district is at low stage. However, as a result of efforts made by the district water, mineral and energy office, the district water supply was decreased from 100% in the year 2011 to 69%to 66%. in the year 2012. Regarding potable water scheme, the district has 0 hand dug well and 3 spring development in the year 2012.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy, all towns of Digelu &Tijo district have supplied with electric power. All urban areas and are supplied with electricity .except one peasant association, all rural areas have no electric supply.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity and accelerating deforestation rate in the district. In urban area, firewood is the most important energy source followed by Charcoal, Crop Residue and Animal Dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and charcoal. Regarding fuel filling station, there is no any type of fuel filling station in the district.

**Table: 4.11. Sources of domestic energy supply.**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Source of Energy Supply | Rank | |
| Urban | Rural |
| 1 | Charcoal | Fire wood | Fire wood |
| 2 | Fire wood | Charcoal | Animal Dung |
| 3 | Animal Dung | Animal Dung | Crop Residue |
| 4 | Crop Residue | Electricity | Charcoal |
| 5 | Kerosene | Crop Residue | Crop Residue |
| 6 | Electricity | Kerosene | Electricity |

Source: Digeluna -Tijo District Mining and Energy Resource Office.

**3.6. Education**

**Kindergarten**: According to the data obtained from Statistical Abstract of the district, in the year 2012, there were two governmental and two non-governmental kindergarten schools with 1 and 6 teachers (6 females) and 99 and 135 students respectively. Even though the number of student enrolled to this school significantly increasing from time to time, still lack of clear management system and limited access remain result in low coverage of preschool education in the district.

**Primary Schools:** the numbers of government primary school was 53 between the year 2011 and 2012. During the indicated years, the number of students enrolled to this school was increased from 40323(49.5% female) to 40985(50.7% male). On the other hand, the numbers of class-rooms were decreased from 127 to 122 between the years 2011 to 2012. During the same year, the number of teachers was increased from 718 (47.6% female) to 785 (52% female).Student to classroom ratio was improved from 59;1 to 64;1 while student to teacher ratio was decreased from 56;1 to 52:1 between the year 2009 and 2010 respectively which has a significant impact on improving the quality of education.

**Senior Secondary education (9-12) –** In the district there is four Senior Secondary (9-10) Schools while the number of student enrolled to these schools was increased from 2234(43% females) and 2978(49%female) between the 2011 and 2012. During the indicated, the number of teachers was slightly decreased from 164 to 158 also the number of classroom was increased from 82 to 122. These causes the average student teacher ratio was improved from 2:1 to 1:1 and student to class-room ratio was improved from 27:1 and 24:1 during the year under consideration.

**TVET:** The district has one governmental technical and vocational education school since 2012 that provides training on different fields of study. The number of student attend training was from 552 in the year 2012.

**Table: 4.1A. Number of Kindergarten and primary school (1-8) with Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of school** | **2011** | | | | **2012** | | | |
| **No of School** | **Male** | **Female** | **Total** | **No of School** | **Male** | **Female** | **Total** |
| **Government** |  |  |  |  |  |  |  |  |
| Kindergarten | 3 | 207 | 175 | 382 | 3 | 219 | 210 | 429 |
| Primary (1-8) | 53 | 21020 | 19303 | 40323 | 53 | 21198 | 19787 | 40985 |
| Secondary school (9-12) | 5 | 2938 | 2234 | 5172 | 5 | 3082 | 2978 | 6060 |
| TVET | 1 | 228 | 247 | 475 | 1 | 268 | 284 | 552 |
| **Non-Government** |  |  |  |  |  |  |  |  |
| Kindergarten School | 1 | 610 | 649 | 1259 | 1 | 84 | 111 | 195 |
| Primary (1-8) | 1 | 51 | 51 | 102 | 1 | 52 | 52 | 104 |

Source: DigelunaTijo District Education Office.

**Education quality:** The quality of education can be judged from educational qualification of teachers, Students-teacher ratio, Student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma level) to teach grade 1-8 are 403 (50%) from the total teachers teaching this level in the year 2012. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence we have to look into other factors mainly continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say.

Hence, to improve the quality of education office of district would be expected to do more to improve the quality of education by increasing the needed variables of education quality.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (Diploma for 1-6, Degree 1-8 Degree /MSc and MA and above for secondary school), the number of diploma teachers was decreased from 403 to 262 in primary school (1-8) between the year 2011 to 2012. Likewise, the number of diploma teachers was also avoiding in Secondary school (9-12) during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below

**Table: 4.2A. Number of Teachers by level of education and School 2011/2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Education Level | **2011** | | | | **2012** | | |
| **Male** | **Female** | **Total** | | **Male** | **Female** | **Total** |
| **Government No of teachers in primary (1-8)** | | | | | | | |
| TTI | 4 | 3 | 7 | 30 | | 24 | 54 |
| DIP | 109 | 98 | 207 | 247 | | 156 | 403 |
| BA/BSC` | 59 | - | 59 | 112 | | 0 | 112 |
| Total | 172 | 101 | 273 | 389 | | 180 | 569 |
| **Non-Government** | | | | | | | |
| TTI | - | 11 | 11 | - | | 11 | 11 |
| DIP | 16 | 29 | 45 | - | | 11 | 11 |
| BA/BSC` | - | - | - | - | | - | - |
| Total | 16 | 40 | 56 | - | | 22 | 22 |
| **Secondary School (9-12)** | | | | | | | |
| Diploma | 3 | 3 | 6 | 2 | | 1 | 3 |
| BA/BSC | 114 | 22 | 136 | 124 | | 17 | 141 |
| MSC | 20 | 1 | 21 | 25 | | 5 | 30 |
| **Total** | **137** | **26** | **163** | **151** | | **23** | 174 |

**Table: 4.3. Student performance and Drop out condition by level of school**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **2011** | | **2012** | |
| **Primary school** | **Secondary school** | **Primary school** | **Secondary school** |
| **1** | **Student enrollment** | 40705 | 5581 | 40985 | 6060 |
|  | Male | 21350 | 3197 | 21156 | 3453 |
|  | Female | 19355 | 2384 | 19829 | 2607 |
| **2** | **Promoted students** | 2790 | 4380 | - | - |
|  | Male | 1545 | 2461 | - | - |
|  | Female | 1245 | 1919 | - | - |
| **3** | **Student drop out** | 2090 | 252 | - | - |
|  | Male | 968 | 161 | - | - |
|  | Female | 1122 | 91 | - | - |

Source: - **District Education Office**

As shown in the above table, of the total student enrolled to primary school, 94.8% and 92% as the year 2012 would not be known promoted to the next grade level in the year data because all student breaks out education cause of covid19. Likewise, during the same year 2011, 95% were promoted to the next grade level. This indicates that, there is a gradual improvement of quality of education in the district. As remedy to student participation and student performance, drop out of student was decreased from 2090 in the year 2011 and in the year 2012 in primary and secondary school respectively. This figure indicates that, the dropout rate of the district was 0.5 % and 0.5% in primary and secondary school in the year 20011 while it was increased to 15% and 0.07% in the year 2012. Such high rate of student dropout from school is due to disease problem (covid19), unwillingness of some parent not to send their child to school, migration to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc. are mentioned as an example.

**3.7. Health**

**Health Institution:** the numbers of health facilities were increased to 5 health center and 25 health post as a result of government attention to expand health facilities during the year 2011 and 2012 .In addition, the non-governmental health institutions were increased to 28 between the year 2011 and 2012 in which most of them are medium and low level clinics. During the indicated year, the ratio of population to Health center and health post was 7559:2 and 37038:1 respectively. This ratio indicates low health coverage in the district compared with who Standard (25000 for health center and 5000 for health posts respectively.).Therefore the local government or other concerned bodies has to construct additional health facilities.

**Health personnel:** the number of health personnel in government health institution was 35 and 35 between the years 2011 to 2012. By types of profession, there were 40 nurses, 10 health officer, 10 laboratory and 4 pharmacy technician, 3 sanitarian and 53 health extension workers during the year 2012. This gives the ratio of population to health personnel 1164:1 for health officer, 37,038:2 for nurses and 37,038:8 for technicians (Laboratory and pharmacy), 37,038:2 for sanitarian and 37,038:1 for health extension workers during the year 2012. This ratio indicates there is a need of more health personnel in the district so as to improve health service provision. For more information see the table below

**Table: 4.3. Number of health Institution and personnel by ownership (2011-2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Institution/ Health personnel | 2011 | | 2012 | |
| Gov. | Non-Gov. | Gov. | Non-Gov. |
| **Health Institution** | **35** | **25** | **35** | 27 |
| Health Center | 5 | - | 5 | 5 |
| Clinic | - | 25 | - | 22 |
| Health post | 25/25 | - | 25/25 | - |
| Rural Drug Vender | 5 |  | 5 | - |
| **Health profession** | **149** | **38** | **121** | **26** |
| Health officer | 7 | 6 | 10 | 2 |
| Nurse | 32 | 24 | 40 | 20 |
| Health Assistance | 1 | 1 | 1 | - |
| Laboratory Technician | 8 | 1 | 10 | 2 |
| Pharmacy Technician | 11 | 6 | 4 | 2 |
| Sanitarian | 3 | - | 3 | - |
| Health Extension Workers | 54 | - | 53 | - |

Source: Digalu-Tijo District Health

**Diseases Prevalence including HIV/Aids:** Between the year 2011 and 2012 there was one VCT (Voluntary Counseling Testing) centers in which the number of peoples tested for HIV/AIDS was increased from 18650 to 21661 peoples. In the year 2011 and 2012, the number of women gets counseling for HIV/AIDS 3174 and 4231 and all of them were tested for HIV/AIDS out of which only 121 and 127 living with HIV/AIDS. During the same year, there was 201 and 218 women gets treatment as patient. Only 6 Men and 10 women were died due to HIV/AIDS in the year 2012. This data indicated that, currently the trends of diseases like HIV were in decreasing trends because of awareness creation through community conversation program.

However, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and underutilization of health services also play a great role for the existence of different diseases.

**Causes of Morbidity:** According to the data obtained from the district health office indicated, the highest prevalent disease in the district is acute upper respiratory Infection diseases followed by bronchopneumonia and Infection of skin and subcutaneous tissue which accounts for 1640 and 970 from the total respectively in the year 2011. On the other hand, Pneumonia with 5828 followed by acute upper respiratory Infection and Acute ferrileillins /AFI/ with 5181 and 5611 respectively were the highest prevalent disease the in the year 2012. For detailed information see the table below.

**Table: 4.5.Ten top diseases existed in the district in the year 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | 2011 | | 2012 | |
| Name of Diseases | No. of patients treated | Name of Diseases | No. of patients treated |
| 1 | Acute upper respiratory Infection | 1772 | Pneumonia | 5828 |
| 2 | Bronchopneumonia | 1640 | Acute upper respiratory infection | 5611 |
| 3 | Infection of skin and Subcutaneous tissue | 970 | Acute ferrileillins/AFI/ | 5181 |
| 4 | Streptococcal sore throat | 1040 | Other or unspecified disease of the skin | 6729 |
| 5 | Homicides & Injury purposely Infected by other person | 571 | Diarhari a or /non bleed/ | 4213 |
| 6 | Pyrexia of unknown origin (fiver) | 571 | Infection of the skin and subcutaneous tissue | 1933 |
| 7 | Gastritis and Duodenitis | 537 | Diseases of the musculokeluetal system and connective tissue | 1133 |
| 8 | All other Santo urinary system | 537 | Acute bronchitis | 1410 |
| 9 | Acute Bronchitis | 398 | Uri nary trxctinfcition | 245 |
| 10 | Dysenteries of all farms | 398 | Other or unspecified disease of the respiratory system | 321 |
|  | **Total** | 8434 |  | 32604 |

Source: Digeluna -Tijo District Health Office

**Harmful Traditional practices:** Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in the district. Among these, raping, butta, Dhala, female circumcision, Gebare etc can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices like Debo, Ikub, Idir, jarsuma, etc that should be appreciated and are being used by the people of the district

**3.8. Women and Children Socio-economic condition**

**3.8.1. Women Issue**

**3.8.1.1. Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 10239 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 247 in the year 2011 and 2012 while those who attended delivery service by health extension works was 4570 in the year 2012.Though such improvement was observed, still there were none women attended delivery traditional at their home in the year 2011 and 2012 due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination was 6108 to the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was 3253 during the year under consideration. This indicates that health service provision showing an improvement from time to time. The following table indicates the major vaccination type given to the children.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and DigelunaTijo district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 17536 in the year 2011 to 18641 in the year 2012. As a result of this, according to the data obtained from Demographic health Survey of the year 2011 indicated the contraceptive prevalence rate of the district was estimated at 2.4%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was 36 in the year 2011 which was equally to 36 in the year 2012. Moreover, the number of women who are member of woreda cabine was 14 and 14 during the year under consideration.

**Table: 4.6. Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2010 |
| 1 | **Access to save delivery service** |  |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 6138 | 6450 |
|  | Women's used PNC /Postnatal care/services | Number | 5258 | 3789 |
|  | Women’s assisted delivery | Number | 5213 | 3789 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | - | 3970 |
|  | Deliveries attended by HEWs | Number | - | 247 |
|  | In their home traditionally | Number | - | - |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 6108 | 3253 |
|  | NPW TT2 | Number | 34271 | 1943 |
| 3 | **Family planning condition** |  |  |  |
|  | Modern methods | Number | 35271 | 12600 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council | Number | 1 | 1 |
|  | Member of woreda council | Number | 36 | 36 |
|  | Member of woreda cabinet | Number | 12 | 13 |

Source:-**District health office and women and children affairs**

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. In the year 2011, more than 773 women was affected by the above related problems and disease while their number was increased to 531 in the year 2012. That is why the maternal mortality of the nation to be as high as 676/100,000 women as the data obtained from 2012 demographic health survey indicated.

On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc. By these and other, more than 21 and 19 women was affected in the year 2009 and 2010 respectively.

**3.8.2. Children Issue**

**3.8.2.1. Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was equally from 46263 in the year 2011 to 14436 in the year 2012 while their number was no decreased to 14436 in the year 2012. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 5504 and 2929 in the year 2011 and 2012 which accounts for 24.34% and 24.23% from total children who get vaccination. In the district the EPI coverage was increased from 92% in the year 2011 to 98% in the year 2012.

**Table: 4.7. Number of children vaccinate by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 32041 | 3253 |
| Measles | 5545 | 2929 |
| DPT | 5824 | 3341 |
| Polio | 2853 | 4913 |
| **Total** | **46263** | **14436** |

Source: Digeluna-Tijo District Health Office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 396 and 423 children to be orphan in the year 2011 and 2012 .These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 35 in the year 2011 which was increased to 49 in the year 2012.This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also108 children with different types of disability in the district who are in most cases not benefited from social services and the economy to in the district. From the total orphan and vulnerable children and disabled children, 5% and 3% are female.

Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Asphyxia-ABA-NR, Sepsis, Preterm, Tetanus and infection of skin.

**3.8.3. Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 37,617 and 38,966 in the year 2011 and 2012 from which only 83.2% and 87.4% of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district.

Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities. However, of the total school in the district, only 57.65% of school was access to potable water supply facilities.

**Table: 4.8. Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | Health post | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 5 | 5 | 25 | 25 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 5 | 5 |  |  |
| 3 | Number of health institution access to water supply | 5 | 5 |  |  |
| 4 | Number of health institution access to toilet facilities | 5 | 5 | 25 | 25 |
| 5 | Number of Health institution access to dry waste disposal facilities | 5 | 5 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 5 | 5 | 25 | 25 |

Source: - District Health Office

**Table: 4.9. School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | Secondary school | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of school in district | 53 | 53 | 5 | 5 |
| 2 | Number of school access to water supply | 25 | 30 | 5 | 5 |
| 3 | Number of school having toilet | 53 | 53 | 5 | 5 |

Source: - District Education Office

***3.9. Sport***

The district has different types of sport activities like foot -ball, Volley ball, Tec undo and Athletics. Accordingly, the number of football team and volley ball team was increased from 1 and 1 to 2 and 1 while the number of athletics was no team to between the year 2011 and 2012 .On the other hand, the member of sports men was increased from 48 and 50 to 60 and 20 for football and volley ball respectively whereas the number if sports men for athletics was increased from 68 to 72 during the year under consideration. However; there are no well-organized and standardized sport facilities like Gymnasium, youth center, etc. except one medium stadium in sagure town.

**Table: 4.10. Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of club or Team** | **2011** | | **2012** | |
| **Number of club** | **Member** | **Number of club** | **Member** |
| Foot-ball | 1 | 24 | 2 | 48 |
| Volleyball | 1 | 12 | 1 | 50 |
| Athletics | 1 | 68 | - | 72 |

Source: Digeluna -Tijo sport office

**Chapter Four**

**4. Development Activities**

**4.1. On Going Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the years under consideration are the following.

On the other hand, World Vision is one of the NGO’s that engaged on integrated development activities like food security, education, health, irrigation, water supply and sanitation to improve the livelihood of the peoples in the district since 1998.

**4.2. Problems of ongoing Development Projects**

The major problems of ongoing development project includes Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents & mobilization of construction is the major problem during the construction.

**Chapter Five**

**5. Problems and Potentialities**

**5.1. Major Problems of the District**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and lack of conformability of soil and water conservation practice. On the other hand, variability of rain fall which results in to reduction in crop production and uncontrolled hunting.

**Economic problem:** Shortage of farm land High prevalence of crop diseases, shortage of Agricultural institutions (Bank saving and credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for long period of time, low investment activities and lack of industries development.

**Social service problem:** rapid population growth and large family size, land fragmentation, unemployment, low productivity, low coverage of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low potable water coverage low electric power supply, etc.

**5.2. Potentialities**

The district has cultivable land potential suitable for the production of cereals, pulses, oilseeds, vegetables, etc. In addition the district has grazing land potential for livestock rearing. On the other hand, the district has man-made forest potential used as a raw material for furniture factory, for telephone and electric line pole, for construction, timber for fire wood, etc.

**Chapter Six**

**6. Conclusion and Recommendation**

***6.1. Conclusions***

Digelu-Tijo district is found in Arsi Zone which has 23 peasant association and four urban administrative units having total areas of 927.4 km2. The district gets its present name from Digelu-Tijo residing in the area. It has a total population of 201710 by the year 2012 of which more than 88% are living in rural Areas engaged on agricultural activities.

The district has three climate types. The dominant climatic type is cool. The mean annual rain fall of the district ranges between 1000- 1500mm. It has permanent rivers like Ketar, Ashebeka, Gusha, and Temela that are suitable for modern irrigation. Bi-modal types of rain fall condition causes the district to produce twice a year. Interims of both area cultivation and production obtained Meher is the largest season.

The district is known by the production of both perennial and annual crops. The major types of annual crops growing in the district are cereals, pulses and oil seeds. From cereal crops wheat and barley are the most widely produced interims of area cultivated and production obtained. In addition, the district is known by the production cash crops like vegetables and root crops.

Meher season is the major production season in the district which accounts for 83.61% of the total land cultivated and 98 % of production obtained. These give an average productivity of 47.2 and 53.9 quintals per hectares respectively for all types of crops produced in the district. The above figures indicates that the production obtained was increase from year to year even though the total area cultivated was decreasing due to improved method of farming by the farmers.

Regarding production and productivity the districts Agriculture office motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizers and herbicides and pesticides to produce intensively using extension package on small land as well as how to protect the environment.

Agricultural inputs are distributed by agricultural service cooperatives under cooperative promotion office. However, the amount of chemical fertilizers, pesticides and other agricultural technologies used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

The district is also known by the livestock rearing and bee keeping. From livestock population cattle, sheep and horses account for more 97% of the total livestock population in the year 2012.This indicates the district has a potential for the production of exportable item animal products like skin and hides.

Infrastructure development like Road, energy supply and postal services are under developed. That is, the district has a road density of 0.228km per km2 and 8.5km per 1000 of people, has electric power supply in 4 urban areas and 4 rural administrative kebeles, and has only one regular type of postal services in Sagure town. Moreover, the water supply is at its low stage since only 66% of the total population of the district get potable water supply.

Regarding social service sectors development, the district has been done a lot to improve access to education by constructing both primary and secondary level schools and promoting satellite schools in areas where there is no school. Moreover, to improve the quality of education the district also construct additional classroom and recruit professional teachers so as to improve the student to teacher ratio and student to classroom ratio.

However, the numbers of student enrolled to school decreased from time to time and drop out is also a series problem in the district.

On the other hand, the health service delivery in the district was also improved as compared with the past due to construction of additional health facilities by government and community participation. However, the ratio of population to health facilities was still below the WHO standard. Moreover, the ratio of health personnel to population was also improved due to additional recruitment of health profession.

The district has a high potential of cultivable land that is suitable for the production of cereal, pulses and oil seed crops, mineral resource, energy resource etc. In addition, the district has a potential for the production of cash crop production (like vegetables) and livestock rearing.

***6.2. Recommendation***

To overcome the existing social and economic problems prevailing in the district, the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, water supply, energy supply and transportation net-work facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover, modern inputs and agricultural technologies have to be supply in sufficient amount and on time to the farmers.
* The district has potentially irrigable land and water bodies suitable for irrigation that is used for the production of different cash crops. So, the regional government or the local government has to build modern irrigation in the district so as to benefit the country in general and the surrounding community in particular.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperative cooperatives and rural credit services are need to be done in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* So as to improve Livestock production and increase its share in the international market, high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, Additional health facilities have to be constructed and provide health services.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey and study would have to be conducted.
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is greater than the standard. Hence, additional teacher has to be employed and additional classroom has to be constructed. Moreover, the educational level of the teachers has to be improved.
* The health coverage of the district is at its low stage. To overcome these problems additional health facilities have to be constructed and additional health personnel has to be employed.
* Since the district has cultivable land and potential for cash crop production, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on three farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF DIKSIS DISTRICT YEAR 2011 AND 2012 E.C**

***Chapter One***

1. ***Introduction***

**1.1 Background of Diksis wereda**

Diksis district is one the administrative unit of Arsi Zone. The historical name of the district is derived from the small hill found near the town. The district has 17 administrative units of which 14 are Peasant Associations while three of them are urban administrative units. Hamda town is the capital town of the district. It is located 200 Km from Regional Capital City, Finfine and 74 Km from Zonal capital, Asella Town to the East direction found on Iteya-Robe main road (see fig. 01).

The objective of preparing this profile is to create scientifically organized physical and socio-economic data base of the district that reflects the existing situation, development problems and potentials of the district to be used by Government, nongovernmental and other organization to identify development gaps, researchers, and the like.

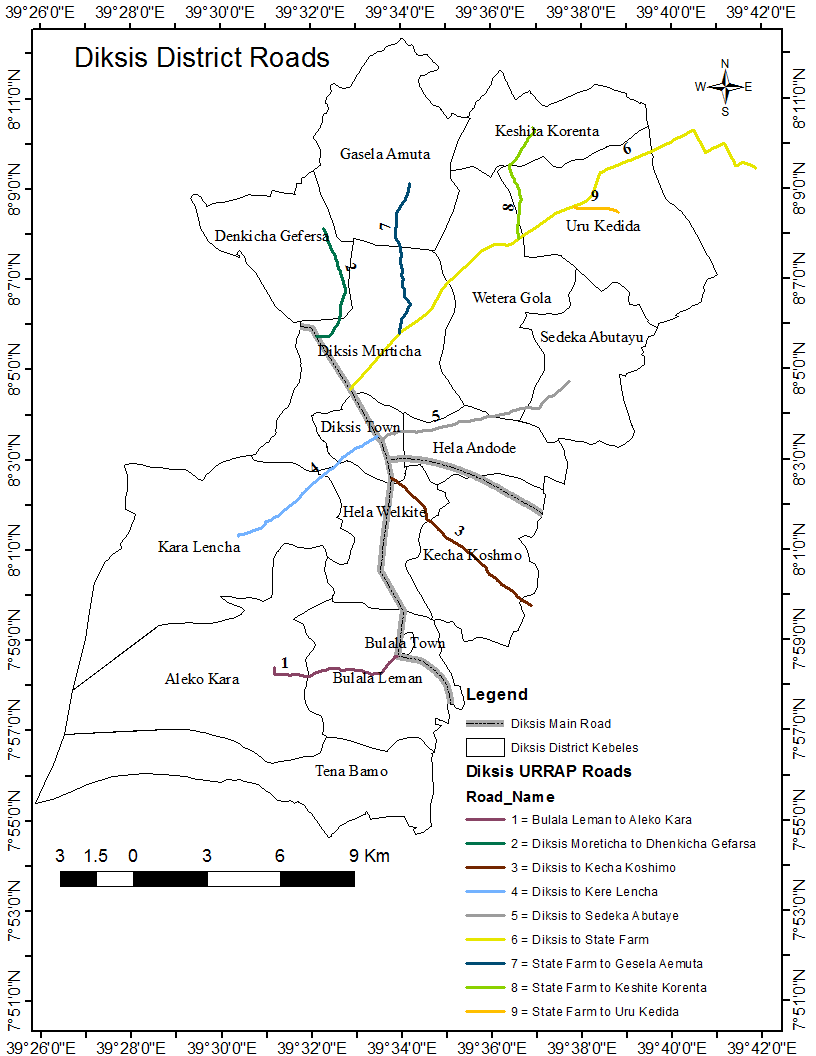
Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are **12 months** of **30 days** each with an addition of a short period often referred to as pegume, which has **five days for three consecutive** years and **six days** on the **fourth year**.

This document is compiled from the data collected from the district and zonal sectoral departments, 1999 population and Housing Census report for Oromia region and other related documents available in our office.

Concerning the problem faced; Lack of accuracy or required data, lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document. Moreover, a regular boundary change among the districts and peasant associations also has become obstacle to obtain the required data and complete the document. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district.

This paper has seven chapters. The first chapter deals with physical setting like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with Infrastructure and social service condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

1**.2 Map of the District.**

****

***CHAPTER Two***

***2. PHYSICAL SETTING***

*2.1 Location and Area*

Diksis is one of the administrative units of Arsi Zone. Astronomically, the district is located between 7038’17’’N-7053’59’’N latitude and 39022’22’’E-39036’26’’E longitude. In relative location the district share boundary line with Sire district in the north and north west, Jeju district the north east, Sude district in the east and south east, Robe district in the south and Lode Hetosa district in the west and south west direction.

**2.2 Area**

Diksis Woreda has the total area of **454.3Km2**(1.4% of the total area of the Arsi Zone).

**2.3 Geology**

Different internal and external forces acting on the earth surface causes for the formation of the present land form of the district. Most of its southern, south-western, eastern and central part was covered by upper part of Chilalo formation where as the northern, north western, south-eastern, north-eastern and the whole eastern part of the district was covered by lower part of Chilalo formation during quaternary period of Cenozoic era.

***2.4. Relief, Drainage and Climate***

***2.4.1 Relief and Drainage:*** The relief structure of the district consists of undulating and flat high plateau. The altitude of the district ranges between 2000-3200 meters above the sea level. The **lowest place** is found in **Wetera Gola** area while the **highest place** is located in **Diksis Moraticha** with **3200m**. Due to its location the district has many network of river systems.

**2.4.2 Drainage:-**The major permanent rivers of the district are Robe, Tona, Cholgadi and Kacha. Generally, the district has potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**2.4.3 Season:-**The rainfall pattern is bi-modal, which is short rainy season or Belg [from March to August] and summer or long rainy season Meher [from September to February].

***2.4.4 Climate:*** Due to its altitudinal location, all parts of the district is known by having cold climatic condition with a temperature of less than 10oc except some pocket areas in its south-western part experiencing cool climatic condition with a temperature ranging between 10oC-26oC.The mean annual rainfall is ranging between 2600-3200 mm and the average rainy days was about 120 days in the year.

***2.5 Soil:-***The major soil type that covers more than 98% of the district is pellicVertisols. The remaining part of the district is covered by OrthicVertisols.

***2.6 Vegetation and Wild life***

***2.6.1 Vegetation:*** Regarding the vegetation coverage, there is Afro-alpine, forest (natural and manmade) and woodland types of forest that found in small pocket areas of the district. There are also government protected and community forest found in the district. From the total forests of the district 12,214.37 hectares, 11,603 hectares are Natural forest while 611.37 hectares are man-made.

***2.6.2 Wild life:*** The major types of wild animals of the district are Monkey, Hyena, Rabbit are found in the man-made and natural forest.

***CHAPTER THREE***

***3. Socio-Economic Conditions***

***3.1. Population***

According to the estimation made from 1999 Population and Housing census report for Oromia Region, the district has 115,765 population of which 57,562 male and 58,203 female in the year 2011 and 119,014 population of which 59,176 male and 59,838 female in the year 2012. From the total population of the district, only 11.1% are living in urban areas in 2011 and 11.2% in 2012. This indicates that more than 89.9 % and 88.7 % of the population of the district is living in rural area in 2011 & 2012 respectively depending on agriculture. Of the total population, females accounted for 50.3 % and 50.2%. in 2011 & 2012 e.c respectively.

**Table: 3.1.Population distribution by urban, rural and sex for the district.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area | **Rural** | | | **Urban** | | | **Total** | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 51,229 | 51,642 | 102,871 | 6,332 | 6,562 | 12,894 | 57,562 | 58,203 | 115,765 |
| 2012 | 52,579 | 53,002 | 105,581 | 6,597 | 6,836 | 13,433 | 59,176 | 59,838 | 119,014 |

Source: Projected based on 1999 CSA, Report

***3.2. Age –Sex Distribution***

The total population of the district, in 2011young age (0-14) accounts for 47.2 % (rural 47.4 % and urban 45.8 %) while old age (65+) consist for 5.2 % (4.8 % for rural and 4.7.9 % for urban). On the other hand, the economically active population (age 15-64) account for 47.4 %, which is 47.6 % for rural and 46.2 % for urban.

**Table: 3.2. Population size of Rural and Urban by wider Age Group**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year/Sex** | **Male** | | **Female** | | **Total** | |
| No | % | No | % | No | % |
| **Rural** |  |  |  |  |  |  |
| 0-14 | 24817 | 47.5 | 24976 | 47.4 | 49,793 | 47.4 |
| 15-64 | 24817 | 47.5 | 25180 | 47.3 | 49,997 | 47.6 |
| 65+ | 2561 | 4.9 | 2553 | 4.8 | 5,114 | 4.8 |
| **Total** | 52,195 | 100.0 | 52,709 | 100.0 | 10,4904 | **100** |
| **Urban** |  |  | 0 |  | 0 |  |
| 0-14 | 3194 | 45.7 | 3278 | 45.9 | 6472 | 45.8 |
| 15-64 | 3221 | 46.1 | 3300 | 46.2 | 6521 | 46.2 |
| 65+ | 566 | 8.1 | 551 | 7.7 | 1117 | 7.9 |
| **Total** | 6,981 | 100.0 | 7129 | **100** | 14,110 | **100** |
| **Rural +urban** |  |  | 0 |  | 0 |  |
| 0-14 | 28011 | 47.3 | 28254 | 42.2 | 56265 | 47.2 |
| 15-64 | 28038 | 47.4 | 28480 | 47.5 | 56516 | 47.4 |
| 65+ | 3127 | 5.2 | 3104 | 5.1 | 6231 | 5.2 |
| **Total** | 59,176 | 100.0 | 59,838 | **100** | 119,014 | **100** |

**3.1.2.1 School Age population**

School age population is one of the best parameters used to plan education facilities, health and other facilities. Moreover, is crucial to assess the level of accessibility to education facilities by calculating student-class ratio, student-teachers ratio, student-text book ratio, and other school age population is crucial. As indicated in table below, the total number of school age population of the district was decreased by 1 % in2012.

**Table: 3.3. Number of School Age populations**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2011** | | | | **2012** | | | |
| **Male** | | **Female** | **Total** | **Male** | **Female** | **Total** | |
| **Rural** | | | | | | | |
| (4-6) | - | - | | - | - | - |  | |
| (7-14) | 7175 | 6626 | | 13,801 | 6889 | 6,656 | 13,545 | |
| 15\_18 | 519 | 411 | | 930 | 520 | 452 | 972 | |
| Total | **7694** | **7037** | | **14,731** | **7409** | **7,108** | **14,517** | |
| **Urban** | | | | | | | | |
| (4-6) | - | | - | - | - | - | - | |
| (7-14) | 2148 | | 2055 | 4203 | 2043 | 2,170 | 4218 | |
| (15-18) | 267 | | 194 | 461 | 297 | 175 | 472 | |
| Total | **2415** | | **2249** | **4664** | **2340** | **2,345** | **4,685** | |
| **Rural + Urban** | | | | | | | |
| (4-6) | - | | - | - | - | - | - | |
| (7-14) | 9323 | | 8681 | 18,004 | 8932 | 8831 | 17,763 | |
| (15-18) | 786 | | 605 | 1391 | 812 | 627 | 1,439 | |
| Total | **10,109** | | **9286** | **19,395** | **9,744** | **9,458** | **19,202** | |

Source: Diksis Education office.

***3.1.2.2. Population Density and Rural settlement***

Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the district had crude density of **255 person p/km2**in 2011 and 262 **person p/km**2 in 2012. Concerning, the settlement pattern of the district, the rural parts are characterized by scattered type of settlement.

***3.2. Agriculture***

***3.2.1. Farmers Association***

There were 14 Peasant Associations (PAs) in the district. The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, agricultural mechanizations services, etc. for local peasants. The other major services delivered by cooperatives for the members are:-

* Rearing and fattening animals.
* Providing credit and saving services for member.
* Supplying agricultural inputs for member.
* Providing customers service for member.

***3.2.2. Service Cooperatives:***

**Table:3.2.2. Number of urban credit and Saving cooperatives, their capital and member (year 2011)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Activity/Cooperatives |  | Number of members | | | Capital | | | Households | | |
| No | Male | Female | Total | Operational | Fixed | Total | Male | Female | Total |
| Consumers | 3 | 800 | 200 | 1,000 | 50,648.52 | 15,630.74 | 66,279.26 | 800 | 200 | 1,000 |
| multi-purpose | 18 | 14,691 | 4,184 | 18,875 | 880,263.3 | 3,246,885.98 | 4,127,149.28 | 14,691 | 4,184 | 18,875 |
| Saving& credit | 5 | 1500 | 750 | 2250 | 273,556 | 159,972 | 433,528 | 1500 | 750 | 2250 |
| **Total** | 26 | 16991 | 5134 | 22,125 | 1,204,467.82 | 3,422,488.72 | 4,626,956.54 | 16,991 | 5,134 | 22,125 |

Source: **District Cooperative Promotion Office**

**Table:3.2.3. Number of urban credit and Saving cooperatives, their capital and member (year 2012)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** |  | **Number of members** | | | **Capital** | | | **Households** | | |
| No | Male | Female | Total | Operational | Fixed | Total | Male | Female | Total |
| **Consumers** | 3 | 298 | 92 | 390 | 735000 | 18500 | 753500 | 298 | 92 | 390 |
| **multi-purpose** | 18 | 13001 | 3322 | 16325 | 5364342 | 15189430 | 20553772 | 13001 | 3322 | 16325 |
| **Saving& credit** | 5 | 802 | 716 | 1518 | 2242455 | 2303883 | 4546338 | 802 | 716 | 1518 |
| **Total** | 26 | 14233 | 4145 | 18443 | 8341797 | 17511813 | 2853610 | 14233 | 4145 | 18443 |

Source: **District Cooperative Promotion Office**

**3.2.5. Land Resource by Use (in hectare)**

**Land use:** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing.

Accordingly, from the total area of the district the cultivated lands (the lands covered by annual and perennial crops) represented about 26,930 hectares (59.28%) in the year 2011 and 27,200 (59.8%) hectares. The vegetation covered land (forest, woodland, bush and shrub) accounted only for 10.75%, 31.39% in 2011 and 2012 respectively.

***3.2.5.1. Land Resources by use (in hectares)***

***Table 3.2.5.1 Type of Land use for different Activity***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *No* | *Type of Land use* | | *Area in Hect* | |
| *1* | *Land under Crop* | *Annual crops* | ***2011*** | ***2012*** |
| *26,930* | *27,200* |
| *perennial crops* | *0* | *0* |
| *2* | *Arable* | | 3038 | 3038 |
| *3* | *Grazing land* | | *1200* | *1376.38* |
| *4* | *Forest* | *land Natural Forest* | *11,603* | *11,603* |
| *Man-made forest* | *1142.5* | *611.37* |
| *5* | *Bush and shrubs* | | 88.25 | 88.25 |
| *6* | *Swampy* | | 1123.37 | 1213 |
| *7* | *Degraded land* | | 304.88 | 300 |
| *8* | ***Total Area of the District*** | | **45,430** | **45,430** |

***3.2.6. Crop production***

Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year for Meher and Belg. In2010**/2011** the total cultivated land during both seasons was **31,244.75** hectare of which **14,023.25** hectares (**44.9**%) was Belg season while **17,221.5** hectares (**55.1**%) was Meher season. Similarly, total production obtained during both seasons was **928,961.55** quintals of which the Belg season account for **412,075.3** (48.4%) while the Meher Season account for **516,886.25** (51.1%). In other hand 2011/2012 the total cultivated land during both seasons was **32,116.25** hectare of which **15,614.5** hectares (48.6%) was Belg season while **16,501.75** hectares (51.3%) was Meher season. Similarly, total production obtained during both seasons was **483,920.35** quintals of which the Belgseason account for **303,108.6** quintals (62.6%) while the Meher Season account for **180,811.75** quintals (37.4%).

The major annual crops grown in the district are cereals, Pulses, Oil Seeds and Vegetation. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown ones. In addition, the district is known in producing some cash crops like Tomato, Onion and Oilseeds.

In 2010/11Meher season **17,221.5** hectares of land was cultivated which **516,886.25** quintals of production was obtained. Additionally, in Meher season of 2011/12 it was decreased **16,501.75** hectares of land was cultivated and **180,811.75** quintals of production was obtained. These give an average yield of **1074.47** and **909.9** quintals per hectares respectively.

Similarly in 2010/11 belg season **14,023.25** hectares of land was cultivated from which **412,075.3** quintals of production was obtained. on the other hand, In 2011/12 while the cultivated land was **15,614.5** hectares the production obtained was increased to **303,108.6** quintals.

These give an average yield of 168.57 and **1017.06** quintals per hectares respectively.

**Table 3.2.6.1. Area cultivated and production obtained for private peasant holdings by seasons**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2010/2011** | | | | **2011/2012** | | | |
|  | **Meher season** | | **Belg season** | | **Meher season** | | **Belg season** | |
| **Crop Type** | **Area Cult** | **Prod.** | **Area Cult** | **Prod.** | **Area Cult** | **Prod.** | **Area Cult** | **Prod.** |
|  | **(Hec)** | **(Quin)** | **(Hek)** | **(Quin)** | **(Hek)** | **(Quin)** | **(Hek)** | **(Quin** |
| **Cereals** | 9,742 | 312,338 | 12,877 | 366,455 | 9,034.75 | 90,886.75 | 14,408 | 241,781.5 |
| Wheat | 5319 | 194156 | 10785 | 312765 | 5,034 | 72,117 | 2,524 | 40,384 |
| Teff | 1187 | 17807 | 0 | 0 | 710 | 4,615 | 0 | 0 |
| Barley | 2286 | 68580 | 2014 | 52364 | 2,493 | 5,024 | 11,787 | 200,379 |
| Maize | 765 | 27540 | 0 | 0 | 748.75 | 8,836.75 | 0 | 0 |
| Oats | 185 | 4255 | 78 | 1326 | 49 | 294 | 97 | 1,018.5 |
| **Pulses** | 4,168 | 122,689 | 991.5 | 14,376.8 | 4,116 | 46,017 | 972.5 | 9,297.1 |
| Faba beans | 4007 | 120210 | 0 | 0 | 3,951 | 44,779 | 0 | 0 |
| Field peas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Peas | 161 | 2479 | 991.5 | 14376.8 | 165 | 1,237.5 | 972.5 | 9,297.1 |
| Vetch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Oilseeds** | 3162 | 49998 | 0 | 0 | 3,209 | 19,693 | 0 | 0 |
| Linseed | 3115 | 49528 | 0 | 0 | 3,155 | 19,477 | 0 | 0 |
| Rapeseed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Negus | 47 | 470 | 0 | 0 | 54 | 216 | 0 | 0 |
| **Vegetation** | **149.5** | **31,861.25** | **154.75** | **31,243.5** | **142** | **24,215** | **234** | **52,030** |
| Carrot | 22 | 4290 | 32.75 | 6353.5 | 22.5 | 4116 | 30 | 5550 |
| Potato | 52 | 9758.75 | 48.75 | 7800 | 48.5 | 10700 | 140 | 28000 |
| Cabbage | 27.5 | 7012.5 | 37.25 | 9349.75 | 25 | 5542 | 36 | 10200 |
| Red root | 48 | 10800 | 36 | 7740 | 46 | 3857 | 28 | 8280 |
| **Grand Total** | **17,221.5** | **516,886.25** | **14,023.25** | **412,075.3** | **16,501.75** | **180,811.75** | **15,614.5** | **303,108.6** |

Source: Diksis District Agricultural Development Office

**Table: 3.2.6.2. Average Yield of major crops per hectare**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2010/2011** | | **2011/2012** | |  |
| **Meher** | **Belg** | **Meher** | **Belg** |
| **Cereals** | 140.5 | 75 | 60.62 | 43.5 | **MidhBiilaa** |
| Wheat | 36.5 | 29 | 14.32 | 16 | Qamadii |
| Teff | 15 | 0 | 6.5 | 0 | Xaafii |
| Barley | 30 | 29 | 22 | 17 | Garbuu |
| Maize | 36 | 0 | 11.8 | 0 | Boqqollo |
| Oats | **23** | 17 | **6** | 10.5 | Ayisaa |
| **Pulses** | 45.4 | 14.5 | 11.33 | 9.56 | **Dheedhii** |
| faba beans | 30 | 0 | 11.33 | 0 | Baaqelaa |
| Field peas | 15.4 | 14.5 | 0 | 9.56 | Daangule |
| Vetch | 0 | 0 |  |  | Gaayyoo |
| **Oilseeds** | **25.9** | 0 | **19.5** | 0 | **Midhzayitaa** |
| Linseed | **15.9** | 0 | **10.5** | 0 | Talbaa |
| Rapeseed | **0** | 0 |  | 0 | Sanyiiraafuu |
| Negus | **10** | 0 | **9** | 0 | Nugii |
| **Vegetation** | 862.67 | 820 | 707.12 | 964 |  |
| Carrot | 195 | 194 | 182.12 | 185 | Kaarooti |
| Potato | 187.7 | 160 | 220 | 200 | Moose |
| Cabbage | 255 | 251 | 221 | 283 | Raafuu |
| Red root | 225 | 215 | 84 | 296 | Hundeediima |
| **Grand Total** | 1074.47 | 909.5 | 168.57 | 1017.06 | **Ida’ama** |

***3.2.6.3. Agricultural inputs and Infrastructures***

***Fertilizer and Improved Seeds****:* Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to increase crop production and productivity and meet rapid increase of demand for food and industrial raw materials. Accordingly, in 2010/11 about **17,646**quintals of fertilizers were distributed to the farmers. However, in 2011/12 it was increased to **18,487** quintals. However, improved seeds supplies were 409.75 quintals in 2010/11 and increased to quintals 670 in 2011/12. The most important improved seeds utilized in the district are wheat and barley in both year. However, there is 1,622 Lit of herbicide in 2010/11 and it decreased to 1,522.55 lit of herbicide utilization in 2011/12.

**Table: 3.2.6.3 Amounts of Agricultural Inputs Distribute to Farmers by type**

|  |  |  |  |
| --- | --- | --- | --- |
| Type of input | 2010/2011 |  | 2011/2012 |
| **Fertilizers (quintals)** | **17646** |  | **18,487** |
| DAP (qt.) | 0 |  | 0 |
| Urea (qt.) | 1252 |  | 1300 |
| NPSB | 16,394 |  | 17,187 |
| **Improved Seeds (qt.)** | **409.75** |  |  |
| Wheat | 325 |  | 585 |
| Barley | 59.75 |  | 50 |
| Maize | 25 |  | 35 |
| Lin Seed | 0 |  | 0 |
| Other | 0 |  | 0 |
| **Herbicides (lit)** | **1,622** |  | **1,522.55** |
| Herbicides (lit.) | 1,622 |  | 1,522.55 |

Source: Diksis District Agricultural Development Office

***3.2.6.5.* Methods for Soil Conservation and Maintaining Soil fertility**

***3.2.6.5. Methods for maintaining Soil fertility****:* There are two ways of maintaining soil fertility in the Zone particularly in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning), fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizers).

***3.2.6.6. Methods for Soil Conservation:*** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforesting are modern way of soil conservation in the district.

**3.2.6.7 Agricultural Calendar: -** It is well known that the farmers of the Zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Diksis district is shown in table below.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Meher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district.

**Table: 3.2.6.7. Agricultural Calendars of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | March ,April –may | January-march |
| 2 | Planting (Sowing) | June –July | March –April |
| 3 | Weeding | January –August | April –May |
| 4 | Harvesting | November- January | Jun –august |

Source: The district Agricultural Development Office

**Table: 3.8. Average number of farm plots per household**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Average farm plot per household | **2011** | | **2012** | |
| No of Farmers | %of farmers | No of Farmers | %of farmers |
| 1 | 6820 | 38.42 | 6842 | 38.3 |
| 2 | 4059 | 22.86 | 4070 | 22.8 |
| 3 | 3185 | 17.94 | 3199 | 17.9 |
| 4 | 2120 | 11.94 | 2134 | 11.9 |
| 5 | 1185 | 1.04 | 1198 | 6.7 |
| 6 | 235 | 1.32 | 246 | 1.4 |
| 7 | 146 | 0.82 | 167 | 0.9 |
| **Total** | **17,750** | **100** | **17856** | **100** |

Source: Diksis district Agricultural Development Office

**3.2.6.8. *Farm Ox Possession:-***For the farmers who entirely rely on traditional farming method, farm ox possession would be a critical factor. The data obtained from the district Agriculture office shows that 4.3 % of the household in 2011 and which decreased to 2.9 % in 2012 are **without farm oxen**. On other hand only 578 (3.26 %) in 2011 and Increased to 605 (3.3%) in 2012 of the household own >3 farm oxen.

**Table: 3.2.6.8. Average number of farm oxen per house hold**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Average number of farm Oxen per household | 2011 | | 2012 | |
| No of farmers | Percent of total | No of farmers | Percent of total |
| 0 | 765 | 4.3 | 532 | 2.9 |
| ½ | 3,956 | 22.29 | 3743 | 20.9 |
| 1 | 9,422 | 53.08 | 9737 | 54.5 |
| 1&1/2 | 1,245 | 7.01 | 1330 | 7.4 |
| 2 | 958 | 5.4 | 983 | 5.5 |
| 2-3 | 826 | 4.65 | 912 | 5.4 |
| >3 | 578 | 3.26 | 605 | 3.3 |
| **Total** | 17,750 | 100 | 17,842 | 100 |

Source: Diksis District Agricultural Development Office

**3.2.6.9 Land Holding Size**

***Land Holding Size:*** An average land holding size of the district is 1.99hectares per household. According to the data obtained from the district Agriculture Development office, about 9204 (57.08%) of the house holds owned less than one hectare in 2012,while 2079 (11.6%) of the house holds owned >3 hectares of lands.

**Table: 3.2.6.9. Average farm land holding size**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Land Holding Size** | **2011** | | **2012** | |
| **No of farmers** | **% of Farmer** | **No of farmers** | **% of Farmer** |
| 0.5 | 7251 | 51 | 9204 | 51.6 |
| 1 | 1564 | 11 | 1190 | 6.7 |
| 1.5 | 1422 | 10 | 1160 | 6.5 |
| 2 | 1280 | 9 | 1140 | 6.3 |
| 2.5 | 1137 | 8 | 1635 | 9.1 |
| 3 | 924 | 6.5 | 1434 | 8 |
| >3 hectares | 640 | 4.5 | 2079 | 11.6 |
| **Total** | **14,218** | **100** | **17842** | **100** |

Source: The District Agricultural Development Office

***3.2.6.10. Crop Pests and disease:*** The major crops pests in the district are Aphids while the major diseases are rust, smut and others. Weeds and rain fall variation {increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and postharvest time.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Types of disease/ natural hazards | 2011 | | 2012 | |
| Area affected(hek) | Loss production (qt) | Area affected (hek) | Loss production (qt) |
| Rainfall variation and ice | 0 | 0 | 9907 | 297,267 |

To overcome, these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

***3.2.6.11. Irrigation:*** In the year 2011 the traditional irrigation land was 72.5 hectare modern irrigation was 6.5 hectare, pump irrigation was 1 hectare and lake irrigation was 0 hectares of which all lands were covered by annual crops no hectares of land was covered by permanent crops. During the same years 16,168 quintals of production was obtained from traditional, modern, lake and pump irrigation. And 2012 the traditional irrigation land was 103 hectare, modern irrigation was 17 hectare, pump irrigation was 1 hectare and lake irrigation was 0 hectares of which all lands were covered by annual crops no hectares of land was covered by permanent crops. During the same years 22,040 quintals of production was obtained from traditional, modern and pump irrigation

|  |  |  |  |
| --- | --- | --- | --- |
| Types irrigation |  | 2011 | 2012 |
| Traditional | Area(hek) | 72.5 | 103 |
| Production(qun) | 15,151 | 19,776 |
| Modern | Area(hek) | 6.5 | 17 |
| production(qun) | 812 | 2,057 |
| pump | Area(hek) | 1 | 1 |
| production(qun) | 205 | 207 |
| Lake | Area(hek) | 0 | 0 |
| production(qun) | 0 | 0 |

***3.2.6.12.* NGO**

* There is only one NGO in our district

**Hunde Plan International Ethiopia**

* With Hunde and plan international funding it put in place a project to address Malnutrition in under five children and pregnant and lactating women as well as well shortage of clean water.
* The project purpose is to save lives and maintain health of vulnerable women and children in district.
* The two main expected outcomes

1. Increased access and uptake of effective treatment of moderate and severe malnutrition for children under five children, and nutrition support for pregnant and lactating women in the district.
2. Increased usage of safe drinking water sources and improved hygiene practices in the district.

* Approximately 997 severely malnourished children <5 admitted for treatment .
* Approximately 4,985 moderately malnourished children <5 admitted to the targeted supplementary feeding programme (TSFP).
* At least 2,000 pregnant and lactating women receive nutrition support through TSFP.
* At least 75 health extension workers of the government health posts and 150 community nutrition volunteers received refresher training on CMAM (early identification and referral of SAM and MAM children).

**3.2.6.12.1 Charity and Development Association.**

In our district there is **no charity** and Development Association.

***3.2.6.13. Development Agents and Farmers Training Centers:*** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. The number of farmer Training centers was **14** in 2011 and 2012 while the number of Development Agents was **39 in** 2011 and Increased to **41** in 2012. According to the standard each kebele is expected to have three Development Agents with the profession of plant science, Animal science and Environmental protection. These Development agents help the farmers in all aspects of agricultural practices such as in crop production animal husbandry and management and environmental protection.

**Table: 3.2.6.10. Number of Development Agents and FTC**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 14 | 14 |
| Number of Development Agents | 39 | 41 |

Source: Diksis District Agricultural Development Office

**3.2.6.15. Constraints of Agricultural Production**

The major crops pests in the district are Aphids while the major diseases are rust, smut and others. Weeds and rain fall variation {increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time. to overcome, these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

***3.2.7. Livestock, Poultry and Bee-keeping***

***3.2.7.1. Livestock****:* The total livestock of the district was **368,815** in 2011 which was increased to **433,015** in 2012. A significant increase was observed in sheep and Cattle population with 29.2 % and 54.25 % respectively while least increase was observed in Goat and Mules population with 1.87 and 0.036% respectively. On the other hand, the while donkey and horse were account for 7.42% and 7.24% respectively in 2011.

A significant increase was observed in sheep and cattle population with 35.2% and 49.9% respectively while least increase was observed in Goat and Mules population with 1.81 and 0.02% respectively. On the other hand, the while donkey and horse were account for 6.4 % and 6.5% respectively in 2012.

The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table: 3.2.7.1.1. Distribution of Livestock and Poultry**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | **2011** |  |  | **2012** |
| **1** | **Live Stock (total)** |  | **368,815** |  | **433,015** |
|  | Cattle |  | 200,100 |  | 216,368 |
|  | Sheep |  | 107,593 |  | 152,462 |
|  | Goat |  | 6,897 |  | 7,877 |
|  | Donkey |  | 27,370 |  | 27,840 |
|  | Horses |  | 26,720 |  | 28,342 |
|  | Mules |  | 135 |  | 126 |
| **2** | **Poultry** |  | **105,240** |  | **125,314** |

Source: Diksis District Agricultural Development Office

***3.2.7.1.2. Livestock and Poultry Diseases:*** Black leg, Hemorrhagic Septicemia, and External and internal parasites and lymphatic diseases are the major livestock and poultry disease in the district.

Accordingly, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district.

The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.2.7.1.2. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** |  |  |
| Blackleg | 2,200 | 20,000 |
| Hemorrhagic Septicemia | 0 | 0 |
| Anthrax | 0 | 0 |
| **Treatment** |  |  |
| External Parasites | 145,875 | 148,241 |
| Internal Parasites | 190,088 | 195,231 |
| Castration | 18,815 | 19,264 |
| Trypanosomiasis | 1,938 | 0 |

Source: Diksis District Agricultural Development Office

***3.2.7.1.3. Availability of veterinary services:*** An availability of animal health infrastructure and animal health personnel are very essential to control the prevalence of animal diseases. However, the district has 4 C-type clinic and 1 D-type. Similarly, there were 13 veterinary personnel in 2011 which was increased to19 in 2012. Both in 2011 and 2012 all of them were Animal health assistance and Doctor (DVM). There were no Animal health technicians. For detail, see table below.

**Table: 3.2.7.1.3 $ 4. Distribution of Diksis district Animal Health infrastructure**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| **Veterinary Personnel** | **13** | **19** |
| Animal Health Assistance | 9 | 14 |
| Animal health Technician | 0 | 0 |
| Doctor (DVM) | 4 | 4 |
| **Health Service** | **5** | **5** |
| Clinic (C=Type) | 4 | 4 |
| Health Posts | 1 | 1 |
| **Total** |  |  |

Source: Diksis District Agricultural Development Office

***3.2.7.2. Poultry:*** Poultry production is one of the most important sources of family income and food in the district. Accordingly, the district has **105,240** poultry population in 2011 and increased to **125,314** in 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

***3.2.7.3. Bee-keeping activities:*** Bee-keeping farming is another source of cash income for farmer family. Using of herbicides and insecticides are the main problems in bee farming. There are 2,298 of traditional bee-keeping box, Intermediate box 618 and 40 modern type of bee-keeping box and obtained products are 20,682kg, 11,124kg and 1,000kg in 2011 respectively.

There are 2,275 of traditional bee-keeping box, Intermediate box 615 and 60 modern type of bee-keeping box and obtained products are 27,300kg, 9,225kg and 1,200kg in 2012 respectively.

|  |  |  |
| --- | --- | --- |
| Honey production | 2011 | 2012 |
| Traditional beehives |  |  |
| No hives | 2298 | 2,275 |
| Production(kg) | 20,682 | 27,300 |
| Intermidiate beehives |  |  |
| No hives | 618 | 615 |
| Production(kg) | 11,124 | 9,225 |
| Modern beehives |  |  |
| No hives | 40 | 60 |
| Production(kg) | 1,000 | 1,200 |

**3.3. Mining and Industry**

**3.3.1. Mining:-**Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as stone for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant (may be rock quarrying, pottery making mining activities) by local communities in the district.

|  |  |  |
| --- | --- | --- |
| Types of mineral | Amount | Location |
| white stone | 0 | SadakaAbutaye |
| Black stone | 0 | DiksisMoranticha, TenaBamo,Alekokara |
| Red scoria | 0 | HellaAndode ,Hellawalqite ,urukadiida |

**3.3.3. Industry: -** Similar to other parts of the Zone, industrial development is at its infant stage in Diksis district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. This means in 2011 and 2012year under Grain mill there are 52 employees and its capita 28.2 million on other hand on **metalwork** there is 6 private IMX has 16 employee with capital of 2,780,000 birr in 2011.

Additionally in 2011 there is 12 private IMX has 57 employee on wood (furniture) with capital of 5,696,447 and wich increased to 14 private IMX and capital also increased to 5,696,447 in 2012.

See below table for more information.All of them are food processing and privately owned. There are also no medium scale industrial establishments in the district.

**Table: 3.3.3. Number of small-scale industries of the district by type**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of industry | | 2011 | | | 2012 | | |
| Number | Employee | Capital (Birr) | Number | Employee | Capital (Birr) |
| Metal | Private | 6 | 16 | 2,780,000 | 7 | 25 | 2,792,000 |
| Wood | Private | 12 | 57 | 5,690,000 | 14 | 109 | 5,696,447 |

Source: - Industry Office

***3.4. Basic Infrastructure and social facilities***

3.4.1 ***Transport and Communication***

***3.4.1.1. Transport:*** Diksis district is located at 74 km from zonal capital town, Asella and 200 km from Regional Capital city, Finfine. It has 118.245 km length of all weather and 117.745 km of dry weather road but no Asphalt road.

|  |  |  |
| --- | --- | --- |
| Types of road | 2011 | 2012 |
| Asphalt(km) | - | - |
| All weather (km) | 117.755 | 118.245 |
| Dry weather(km) | 1.5 | 0 |
| Gravel road(km) | 114.755 | 117.745 |
| Rural road (km) | 1.5 | 0 |

**Source: - Road authority Office**

***3.4.1.2. Communication:*** Telecommunication isone of the fastest and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with Wire and Wireless type of telecommunication. On the other hand, all rural areas of the district has supplied with Wireless type of telephone services. In the district all 14 peasant associations of the district are supplied with wireless telecommunication. Moreover, the district has full mobile service coverage.

***3.4.1.2.2. Postal Office:*** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has **one** agent postal services in Hamda town.

***3.4.2 Water supply:*** potable water coverage of the district is low. According to data obtained from the district Water Resource Office, out of 102,871 rural population of the district only 40,592 (39.5%) and out of 108,362 rural population of the district only 40,592 (37.50%) was supplied with potable water in 2011 and 2012 respectively. During the same year out of 12,894 urban population only 9,502(73.7%) and out of 13,995 urban population only 9,502(68%) was supplied with potable water in 2011 and 2012 respectively.

***Table:3.4.2.1 Rank the following sources of drinking water (pond ,well, spring, river and tap-water) according to their importance in the district***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Rank the above sources of drinking water according to their importance* | *2011* | | *2012* | |
| *Urban* | *Rural* | *Urban* | *Rural* |
| *Spring* | *Tap water* | *Pond* | *Tap water* | *Pond* |
| *Pond* | *Well* | *Well* | *Well* | *Well* |
| *Well* | *Spring* | *Spring* | *Spring* | *Spring* |
| *Tap water* | *Pond* | *river* | *Pond* | *river* |
| *River* | *river* | *Tap water* | *River* | *Tap water* |

***Source: Diksis district Water and Energy office***

***Energy Supply:*** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Hamda and Bulala towns have supplied with hydro-electric power in the district. However, in rural centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, Electricity is the most important energy source followed by firewood, Charcoal, Kerosene, animal dung’s and Crop residue. On the other hand, fire wood is the major energy source in rural area followed by animal dung, Crop residue, kerosene and Charcoal. Regarding fuel filling station, Diksis Distinct has no fuel filling station.

**Table: 3.4.2.2. Rank of sources of domestic energy supply (charcoal, firewood, dung, crop residue, kerosene, electricity) according to their use**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sources of domestic energy supply | **2011** | | **2012** | |
| **Rank** | | **Rank** | |
| Urban | Rural | Urban | Rural |
| Charcoal | Electricity | Firewood | Electricity | Firewood |
| Firewood | Firewood | Animal Dung | Firewood | Animal Dung |
| Animal Dung | Charcoal | Crop residue | Charcoal | Crop residue |
| Crop residue | Kerosene | Kerosene | Kerosene | Kerosene |
| Kerosene | Animal Dung | Charcoal | Animal Dung | Charcoal |
| Electricity | Crop residue | - | Crop residue | - |

Source: Diksis district Water and Energy office

Fire wood is the main sources of domestic energy in rural areas followed by Animal Dung. However Animal Dung is followed by Crop residue are the main sources of energy.

**Table: 3.4.2.3 Name of Towns Supplied with Electricity by Source of Power**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Name of the Town supplied with electricity | Source of Electric power | | | | | |
| 2011 | | | 2012 | | |
| Hydro | Diesel | Biogas | Hydro | Diesel | Biogas |
| 1 | Hamda |  | 0 | 0 |  | 0 | 0 |
| 2 | Bulala |  | 0 | 0 |  | 0 | 0 |

**Source: Diksis district Water and Energy office**

**3.4.3. Education**

***Kindergarten:*** According to data obtained from Statistical Abstract of the district, there was 1 private kindergarten school with 7 teachers and 111 (59 Male and 52 Female) students (46.85% female) in the year 2011 and there was 2 private kindergarten school with 5 teachers and 198 (103Male and 95 Female) students (47.9% female) in the year 2012.

***Primary Schools (1-8):*** In 2011 while the number of primary school 28 the number of students was increased to 19,395 (Male 10,109 and 9,686 Female) of which 49.9% were females. During the same year, the number of teachers was **394**(208 male and female 186). (47.2% was female teachers). In **2012** while the number of primary school 29 the number of students was increased to 19,202 (Male 9,801 and 9,401Female) of which 48.9% were females. During the same year, the number of teachers were Increased to **405**(215male and 190 females).46.9% was female teachers.

The number of class- rooms was 340 in 2011 and 295 in 2012. Consequently, students-teacher ratio was decreased from 62:1 in 2011 and 47:1 in 2012, while student- class room ratio was also (increased) 57:1 in 2011 and 65:1 in 2012 e.c.

***Senior Secondary Education (9-10):*** the district has 2(two) senior secondary (9-10) schools located in Diksis and Bulala towns. According to the 2011 data, there were 1,500 (Male 839 and 661 Female) (44% was female) and Increased the distict has 3 (three) senior secondary(9-12) schools located in Diksis,bulala and diksis Hamda .According to the 2012 data, there were 1749(male 995 and female 754) (43.1 was female).the number of teachers was 67 in 2011 and increased to 92 in 2012.

***Table:3.4.3.1. Total number of enrolled, dropped out, and detained student by level of school, sex, Ownership***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Level* | *Sex* | *Ownership* | *2011* | *2012* |
| *Total number of enrolled* | *1-4* | *Male* | *Gov’t* | *6823* | *6310* |
| NGOs | *-* |  |
| *Female* | Gov’t | *6438* | *6259* |
| NGOs | *-* |  |
| *5-8* | *Male* | *Gov’t* | *3286* | *3449* |
| NGOs | *-* |  |
| *Female* | Gov’t | *2848* | *3232* |
| NGOs | *-* |  |
| *9-10* | *Male* | *Gov’t* | *839* | *844* |
| NGOs | *-* |  |
| *Female* | Gov’t | *661* | *624* |
| NGOs | *-* |  |
| *Dropped out* | *1-4* | *Male* | *Gov’t* | *1433* | *244* |
| NGOs | *-* |  |
| *Female* | Gov’t | *1106* | *218* |
| NGOs | *-* |  |
| *5-8* | *Male* | *Gov’t* | *314* | *129* |
| NGOs | *-* |  |
| *Female* | Gov’t | *213* | *80* |
| NGOs | *-* |  |
| *9-10* | *Male* | *Gov’t* | *99* | *86* |
| NGOs | *-* |  |
| *Female* | Gov’t | *51* | *25* |
| NGOs | *-* |  |
| *Detained* | *1-4* | *Male* | *Gov’t* | *5390* | *6066* |
| NGOs | *-* |  |
| *Female* | Gov’t | *5332* | *6041* |
| NGOs | *-* |  |
| *5-8* | *Male* | *Gov’t* | *2972* | *3321* |
| NGOs | *-* |  |
| *Female* | Gov’t | *2635* | *3125* |
| NGOs | *-* |  |
| *9-10* | *Male* | *Gov’t* | *740* | *758* |
| NGOs | *-* |  |
| *Female* | Gov’t | *610* | *599* |
| NGOs | *-* |  |

***Source: Diksis District Education Office***

**Table: 3.4.3.2. Student Participation by level of school and Sex**

|  |  |  |
| --- | --- | --- |
| **Sex** | **2011** | **2012** |
| **Primary school (1-8)** | | |
| Male | 10,092 | 9801 |
| Female | 9,284 | 9401 |
| Total | **19,376** | **19202** |
| Secondary school | | |
| Male | 839 | 995 |
| Female | 661 | 754 |
| **Total** | **1,500** | **1749** |

Source: Diksis District Education Office

**Table: 3.4.3.3. Number of School by level by ownership**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level of School** | **Ownership** | **2011** | **2012** |
| **Primary (1-8)** |  | 29 | 29 |
| First cycle(1-4) | Government | 3 | 2 |
| NGO | 0 | 0 |
| Private | 0 | 0 |
| Secondary cycle(5-8) | Government | 26 | 27 |
| NGO | 0 | 0 |
| Private | 0 | 0 |
| **Senior Secondary (9-12)** | Government | 2 | 3 |
| NGO | 0 | 0 |
| Private | 0 | 0 |

Source: Diksis District Education Office

**Table: 3.4.3.4. Number of student sat for National examination and promoted for preparatory**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Sex** | **Ownership** | **2011** | **2012** |
| Number of student sat for national examination | Male | Government | 291 |  |
| Female | Government | 235 | The cases of coved-19 there is no student sat for national examination |
| **Total** |  | **526** |
| Students promoted for preparatory | Male | Government | 225 |
| Female | Government | 182 |
| **Total** |  | **407** |
| % Promoted | Male | Government | 77.3 |
| Female | Government | 77.4 |
| **Total** |  | **77.34** |  |

Source: Diksis District Education Office

**Table: *3.4.3.*5. Number of Teachers by level of school, educations and Type of School**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Level of school** | **2011** | | | **2012** | | |
| M | F | Tot. | M | F | Total. |
| ***Primary school (1-8)*** | | | | | | |
| **Government** |  |  |  |  |  |  |
| TTI | 35 | 26 | 61 | 2 | 4 | 6 |
| Diploma | 101 | 137 | 241 | 121 | 139 | 260 |
| Degre | 69 | 23 | 92 | 75 | 34 | 109 |
| **Total** | **208** | **186** | **394** | **198** | **177** | **375** |
| **Non-Government** |  |  |  |  |  |  |
| TTI | 0 | 0 | 0 | 0 | 0 | 0 |
| Diploma | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Secondary school (9-10)*** | | | ***Secondary school (9=12)*** | | | |
| Government |  |  |  |  |  |  |
| Diploma | 2 | 0 | 2 | 2 | 3 | 5 |
| Degree | 52 | 11 | 63 | 56 | 13 | 69 |
| MA/MSc | 1 | 1 | 2 | 15 | 1 | 16 |
| **Total** | **55** | **12** | **67** | **73** | **17** | **90** |

Source: Diksis District Education Office

**Table: 4.10. School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | Secondary school | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of school in district | 29 | 29 | 2 | 3 |
| 2 | Number of school access to water supply | 4 | 4 | 2 | 3 |
| 3 | Number of school having toilet | 29 | 29 | 2 | 3 |

Source: - District Education Office

**3.4.4. Health**

***3.4.4. Health Institution:*** In 2011 and 2012 there was four government health center and 14 Health Posts. There were no Governmental clinics. All clinics, rural drug venders and drug shops were privately owned and there is no Hospital in our woreda.

The ratio of population to Health Center was 28,941 in 2011 and 29,754 in 2012.

***Health Manpower:*** according to data given below, there were 51 health personnel in 2011 of which 25 were Nurses while 14 health officers. However, in 2012 they were increased to 56 of which 28 were nurses while 14 were health officers.

**Table: 3.4.4.2 $ 3. Number of health Institution and Personnel by ownership**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | | **2012** | | |
| **Gov** | **Non-Gov** | **Private** | **Gov** | **Non-Gov** | **Private** |
| **Health Institution** | **23** | 0 | **12** | **23** | 0 | **14** |
| Health Center | 4 | 0 | 0 | 4 | 0 | 0 |
| Clinic | 0 | 0 | 7 | 0 | 0 | 9 |
| Health Post | 14 | 0 | 0 | 14 | 0 | 0 |
| Rural Drug Vender | 1 | 0 | 4 | 1 | 0 | 1 |
| Drug shops | 0 | 0 | 1 | 0 | 0 | 0 |
| Pharmacies | 4 | 0 | 0 | 4 | 0 | 4 |
| **Health Profession** | **51** | **0** | **24** | **56** | **0** | **19** |
| Health Officer | 14 | 0 | 0 | 14 | 0 | 1 |
| Doctor | 0 | 0 | 0 | 0 | 0 | 0 |
| Nurse | 25 | 0 | 19 | 28 | 0 | 14 |
| Health Assistance | 2 | 0 | 0 | 1 | 0 | 0 |
| Laboratory technician | 2 | 0 | 0 | 4 | 0 | 0 |
| Pharmacy Technician | 7 | 0 | 5 | 8 | 0 | 4 |
| Sanitarian | 1 | 0 | 0 | 1 | 0 | 0 |

Source: Diksis District Health Office

***Causes of Morbidity:*** According to the data obtained from the district health office In 2011, Pneumonia increased to (37.24%) followed by Typhoid Fever ( 25.14%), Helminthesis (14.72%) and Tonsillitis (4.94%)from the major top ten diseases of the district. How-ever, Pneumonia decreased to (22%) followed by Diarrhea (shigellosis to shigella dysenteria) (10%), Urinary Traetanfection (14.72%) and decreased Typhoid Fever (6.2%) from the major prevalent diseases in 2012e.c.

As it can be observed from the type of diseases prevalent in the district, lack of environmental sanitation and self-hygiene, lack of enough potable water supplies are the major causes of diseases of diseases.

**Table: 3.4.4.4.The First Ten Top Diseases in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **2011** | | **%** | **2012** | | **%** |
| **Type of Diseases** | **No. of Pop** | **Type of Diseases** | **No.of Pop** |
| 1 | Pheumonia | 2,798 | 37.24 | Pheumonia | 1120 | 22 |
| 2 | Typhoid Fever | 1,889 | 25.14 | Diarrhea (shigellosis to shigella dysenteria) | 477 | 10 |
| 3 | Helminthesis | 1,106 | 14.72 | Urinany Traetanfection | 529 | 11 |
| 4 | Tonsillitis | 371 | 4.94 | Typhoid Fever | 306 | 6.2 |
| 5 | Dyspepsia | 342 | 4.55 | Typhoid Fever (due to salmoneia typoid) | 291 | 6 |
| 6 | Sexual transmision | 273 | 3.63 | Dyspepsia (inability to sulalio) | 430 | 8.7 |
| 7 | Scabies | 133 | 1.77 | Diarrhea (tuntueal diarrhe) | 30 | 1 |
| 8 | Anaemia (iron defficienceanacam) | 255 | 3.39 | Tonsillitis (Acute pharynaits) | 481 | 9.7 |
| 9 | Typhus fever | 242 | 3.22 | Pheumonia (bacteria dale) | 595 | 12.1 |
| **10** | Common cold(acute nasog) | 104 | 1.38 | Respiratory infection (acute upper) | 382 | 8 |
|  | | **7,513** | **100** |  | **4922** | **100** |

**Diseases Prevalence including HIV/Aids:** In both 2011 and 2012 the numbers of people were tested for HIV/AIDS **108** living with HIV/AIDS respectivelly. During the same year, there is **1** number of people died deu to HIV/AIDS.

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 22,233 in 2011 and decreased to 18,258 in the year 2012. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities.

**Table: 4.9. Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | Health post | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 4 | 4 | 14 | 14 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 2 | 4 |  |  |
| 3 | Number of health institution access to water supply | 2 | 2 |  |  |
| 4 | Number of health institution access to toilet facilities | 4 | 4 | 14 | 14 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 4 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 4 | 4 | 0 | 4 |

Source: - District Health Office

**3.4.4.5 Health coverage:-**

Health coverage in our wereda is 86.4% in 2011 and 84.02% in 2012.

**3.4.5.. Women and Children Socio-economic Issue**

**3.4.5.1 Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 3,150 and 1,165 in the year 2011. On the other hand, the number of women assisted delivery services was 964 in the year 2011. As a result, the number of women gets antenatal and postnatal service was 4,567 and 1,775 in the year 2012. On the other hand, the number of women assisted delivery services was 1247 in the year 2012. As we can understand from the data, still there were some women attended delivery traditional at their home due to economic problem and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination decreased from 3150 to 1775 in the year 2012, while the number of mother get NPWTT2 vaccination was 3,810 in 2011 and 1,885 during the year 2012.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Deksis district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 16,281 in the year 2011 to 15,794 in the year 2012. As a result of this, according to the data obtained from Demographic health Survey of the year 2012 indicated the contraceptive prevalence rate of the district was estimated at 74.9%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing.

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion.

**3.4.6 Children issue**

**3.4.6.1. Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the total numbers of children vaccinated during the last 12 months are 14,286 and 15,831 in the year 2011 and 2012 respectively. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 3,577 and 3,369 in the year 2011 and 2012. The number of children vaccinated for measles 2,881 in 2011 and 3,446 in 2012 E.C.

**Table: 4.8. Number of children vaccinate by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 3895 | 4070 |
| Measles | 2881 | 3446 |
| DPT | 7510 | 8315 |
| Polio | 0 | 0 |
| **Total** | **14,286** | **15,831** |

Source: Decsis District Health Office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases is causes of orphan in the district. In addition to this, in 2012 there were 704 children are orphan vulnerable children in the district who are served or helped by society of the district.

**3.4.7. Social Security**

**3.4.7.1. Employment and Unemployment**

In Diksis Woreda unemployed persons are not united and not inter to work. The reason is that students after the chance of their education they go to their individual work like:- agriculture, trade, internal immigration from rural area to town and external immigration. Especially female students after the chance of education they prefer to abroad countries like:-Arab and other countries rather than working in their country Ethiopia. This is the crucial problem of our woreda that unemployed persons do not come to gather and work in small business enterprise. See below table for more information.

Table.3.4.7.1.Number of unemployed persons registered by sex and level of education, and employed by types of occupation, sex and level of education.In 2011 and 2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | **Unemployed persons** | | | | | | | | **Employed persons** | | | | | | | | |
|  | male | femel | Total | **Level of education** | | | | | male | female | Total | **Level of education** | | | | | **types of occupation** |
| BA | Dip. | TTI | 10 | <10 | BA | Dip. | TTI | 10 | <10 |
| 2011 | 993 | 272 | 1265 | 50 | 47 | 8 | 464 | 696 | 877 | 441 | 318 | 518 | 577 | 85 | 98 | 40 | Gov’t employee |
| 2012 | 1318 | 553 | 1871 | 87 | 135 | 30 | 440 | 1179 | 899 | 454 | 1353 | 601 | 409 | 244 | 71 | 28 |

**3.4.7.2. Criminals**

During the 2010 and 2012 year there were 1,799 and 19 criminal and number of cases lodged was 1480 and 116 respectively. For detail, see the table below.

**Table: 3.4.7. Number of Cases Lodged in the District**

|  |  |  |  |
| --- | --- | --- | --- |
| No |  | 2010 | 2012 |
| 1 | Number of cases lodge | 1,480 | 116 |
| **2** | **Type of criminal had been recorded in the district** | **319** | **77** |
|  | 1.Bodly injury | 85 | 40 |
|  | 2.Theft | 31 | 12 |
|  | 3.Receving | 22 | 6 |
|  | 4.Assaults | 39 | 12 |
| **3** | Other (robbery, rape, arson, etc) | 142 | 7 |
|  | **Total** | **1,799** | **193** |

Source: Diksis social affairs office

**3.4.8. Finance and Financial Institutions**

**3.4.8.1. Revenue:-** During the 2011 and 2012, the District collected total revenue of Ethiopian Birr 16,685,646.38 and 19,702,903.08 respectively, indicates 3,017,256.69 birr increment. The main sources of revenue in the district are Direct tax, indirect tax and non-tax items as Inland Revenue Office of the district cumulative annual report of both year shows.

**Table: 3.4.8.1. Total in land revenue collected in the district by type of revenue source**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | **Direct revenue** | **Indirect revenue** | **Non-Tax revenue** |
| 2007 | 4711419.96 | 631998.89 | 961383.15 |
| 2008 | 7276978.06 | 819371.57 | 977615.75 |
| 2009 | 9161956.84 | 1114003.18 | 1626786.81 |
| 2010 | 11,070,387.12 | 1,711,807.90 | 1,252,815.28 |
| 2011 | 13,759,907.42 | 1,749,161.06 | 1,176,577.90 |
| 2012 | 16,548,781.41 | 1,849,093.85 | 1,305,027.27 |

**Source: DiksisWoreda revenue office**

***3.4.8.2. Total expenditure***

***Annual Budget allocation:*** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land rent revenue. Regional government contribution shares the largest amount which accounts for more than 85.81 % of the total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low.

According to the data obtained from the district Finance and Economic Development office, the budget allocated for the district showing increasing trend from year to year. Consequently, the total annual budget of the district was only 97,499,375 birr in 2011. However, in 2012 it was increased to 110,868,339 birr which indicates about 13.7% increases from the 2012 budget.

**Table: 3.4.8.2. Annual budget allocated for the District**

|  |  |  |
| --- | --- | --- |
| Year | Annual Budget Allocated | Growth Rate (%) |
| 2007 | 43977039 | 27.11 |
| 2008 | 69068367 | 57.06 |
| 2009 | 72,489,091 | 4.95 |
| 2010 | 84,898,238 | 17.12 |
| 2011 | 97,499,375 | 14.4 |
| 2012 | 110,868,339 | 13.7 |

Source: The district Finance and Economic Development office

***3.4.8..5 Financial Institution:*** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the performance of the district economy and reduction of household poverty. However, the district has no any governmental or non-governmental financial institutions like Insurance. But there are saving and credit association like WALQO, WASASA and 4 Banks (OIB, CBO, CBE,CB).

**Table: 3.4.8.5. Rural Credit, number of beneficiaries (by sex),**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Rural Credit Association | 2011 | | | 2012 | | |
| No of Beneficiaries | | | No of Beneficiaries | | |
| Male | Female | Total | Male | Female | Total |
| WLQO | 1349 | 1539 | 2888 | 1855 | 2045 | 3900 |
| WASASA | 3591 | 3312 | 6903 | 5010 | 4731 | 9741 |
| Total | 4940 | 4851 | 9791 | 6865 | 6776 | 13641 |

***3.4.9. Trade, Tourism and Sports***

*3.4.9.1* ***Trade:-*** Diksis wereda has 816 and 857 permanently licensed traders in 2011 and 2012. Regarding tradable items and cash crops production activities, the district is known in the production of linseeds, Negus, rape seeds, etc. In addition, the district is known by exportable items like hide and skin

**Table: 4.12. Type and number of linseed traders and number of Hides and skin sent to the central market from district.**

|  |  |  |  |
| --- | --- | --- | --- |
| No |  | 2011 | 2012 |
| 1 | Licensed | 1,078 | 1,102 |
| 2 | License returned/cancelled | 98 | 64 |
| 3 | Licenses given (new) | 262 | 245 |
| 4 | Licenses renewed | 816 | 857 |

Source: Diksis Trade, Industry and Transport Office.

**Table 4.13: Number of private traders and their capital by the year 2011**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Wholesale | | Retail | | Service | | Industry | | Others | |
| Number | Capital | Number | Capital | Number | Capital | Number | Capital | Number | Capital |
| 23 | 1909000 | 772 | 71395484 | 232 | 1706837 | 0 | 0 | 283 | 9921509 |

**Table 4.13: Number of private traders and their capital by the year 2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Wholesale | | Retail | | Service | | Industry | | Others | |
| Number | Capital | Number | Capital | Number | Capital | Number | Capital | Number | Capital |
| 26 | 4225846 | 933 | 71717484 | 227 | 677425.18 | 0 | 0 | 174 | 3480000 |

***3.4.9.2 Cash Crops and Exportable Items production:*** There are different types of cash crops and exportable items produced in the districts. Moreover, there are a high potential of cashcrops like Neuge, peas, hides and skins produced in the district.

**Table:4.13. Inspected Skins and Hides sent to the Central market**

|  |  |  |
| --- | --- | --- |
| **Type of skins and hides** | **2011** | **2012** |
| Hides | 812 | 828 |
| Skin | 14,871 | 12,921 |
| **Total** | **15,683** | **13,749** |

Source: Diksis Tread Industry and Transport Office

***3.4.9.2 Tourism and Its Amenities:*** Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is yet underdeveloped in the Arsi Zone in general and Diksis district in particular. Similarly, meaningful survey was not conducted to assessed tourist attraction site of the district. However, there are some main center which were identified by cultures and tourist office. These are **Hero Kero** (historical place of battle where minelik troops fight against Oromo people and took tragedy actions over Oromo people), Topographic future are the main tourist attraction sites of the district. All of them are under developed.

***3.4.9.3. Sport Activities and Facilities***

The district has different types of sport activities like Foot Ball, Volleyball, and Athletics.

However; it has no well-organized and standardized sport facilities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Club or Team | 2011 | | 2012 | |
| Number of club | Member | Number of club | Member |
| Foot-ball | 1 | 28 | 1 | 26 |
| Volley-ball | 2 | 53 | 1 | 17 |
| Athletics | 2 | 30 | 4 | 35 |

**Table: 3.4.9.3. Sport Clubs and members in the district**

Source: Diksis districts youth and sport office

***3.4.10. DEVELOPMENT ACTIVITIES***

***3.4.10.1. On Going Development Projects***

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided into recurrent and capital budget expenditure. The capital budget is used for construction of different types of development projects. Capital budget allocated for development projects was increased during the past years. It was used for the expansion of potable water supply, education, health services, and road and agriculture infrastructure. The ongoing development projects during the years 2012 under consideration are the following.

* **Agricultural :-**Soil and water conservation projects to minimize the problem of soil degradation and increase water holding capacity of the soil by Agricultural sector support project (ASSP) like hillside terraced soil bund cut of drain, check dam, and water way and pond construction.
* **Educational** projects include construction of Diksis elementary school aditional class-room, purchasing of equipment for Baffis elementary school and construction of TVET workshop and purchasing of its equipment.
* Construction of wereda’s administration office, fence & gates as well as construction of somale region displaced people residential house.
* **Water supply projects**- Spring Developments to supply potable water for Watera Gola, and on spot stream development in Aleko Kara, GaselaAmuta, KashitaKorenta, SadekaAbutaye, Urukedida Keble and Bio-Gas constructions in Urukedida and Kara Lenchakebeles. As well as deep well water construction and development of hand dug well water contraction in Urukadida, helaH and ode, Sadaka Abutaye and construction of pond water and cattle ruff Dhenkicha gafarsa kebeles.
* Construction Haro Kero monument fence in Tourism and cultural sector.
* **Health:-** under health Construction of Diksis woreda Health office and health post in keshita korenta kebeles. And spread of electric line & purchasing of transform to W/Gola kebeles.
* **Animal Health**;- construction of animal health post in Tenabamo.
* Road project, there was 35.99 km Gravel Road under construction from Diksis to Ejeru-Woteragola, Diksis to Kecha, Diksis to Kara Lencha, woteraGola to keshita, Bulala-Bamo&Bulala- Aleko by URRAP & Government Budget.

***3.4.10.2. Problems of ongoing development projects***

The major problems of ongoing development projects includes poor construction quality, inaccessibility of the site, lack of capacity of contractors, dalliance of construction and mobilization of construction is the major problem during the construction. Insufficiency of capital budget with collaboration inflation weather condition spatially with Road construction & Expansion of water Pipe for those far areas of PA kebeles .

***CHAPTER Four***

***4. PROBLEMS AND POTENTIALITIES***

**4.1. Major Problems of the district**

***Economic Problem:*** Shortage of farm land, prevalence of crop diseases and pests, shortage of Agricultural inputs and lack of capacity to buy, acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industrial development.

***Social service problem:*** rapid population growth and large family size and land fragmentation, unemployment, low productivity, education facilities, under developed transportation , high prevalence of harm full traditional practices, HIV/AIDS prevalence, low potable water coverage, and so on.

***Environmental problem:*** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice, variability of rain fall which results into failure of crop production, uncontrolled hunting and the like.

***4.2. Potentialities***

***Land resource:*** suitable topographic situation with its favorable climatic condition creates great opportunity for agricultural activities. In these regard the district has 27,200 hectares(59.9%) of potentially cultivable land used for cultivation of cash crops like oil seed (linseed, Neug, rape seed, pulses) and different cereal crops [barely, wheat] if properly and efficiently utilized. The residential land areas covered about 9.4% during the both years.

***Forest Resource:*** in 2012 the district has 611.37 hectares of man-made forest and 11,603 hectares of natural forest used as a raw material for industry and for construction purpose.

***Tourist attraction site:*** in the district there are different types of tourist attraction site from these **Hero Kero** (historical place of battle where minelik troops fight against Oromo people and took tragedy actions over Oromo people) is one of the main historical site of the district.

***Investment opportunities:*** The district has investment opportunity on 3,209 hectare of potentially cultivable land for production of oil seeds. In addition to this the district has also investment opportunities on sheep rearing since the district is known for its supply of sheep population for large market of the country. These create advantage for investors to establish industry that process meat and produce skin and hides for export.

***Labor Resources:*** From total population of the district more than 47.6% are economically active population (age 15-64), which is 49.73% for rural and 4.78% for urban. The dependency ratio of the district was decreased by 47.4 % (rural 47.2% and 46.2 %) of the total populations in the district.

***4.3. Conclusions and Recommendations***

**4.3.1. Conclusions**

Diksis is one of the administrative units of Arsi zone established in 1996 fiscal year. It has 14 peasant associations and three urban administrative units. It is located 200 Km from Regional Capital City, Finfinne and 74 Km from Zonal capital, Asella Town to the East direction found on Iteya-Robe main road.

The district is one of the densely populated administrative units having total populations of 119,014 in the year **2012** with **262 people per/square kilometer**. Of the total population of the district more than 89% was living in rural areas.

The district is known by having favorable climatic condition and 27,200 hectares of potentially cultivable land suitable for production of different type of crops like oilseeds, cereals and pulses. In the 2011The district is also known by the production of cereal crops like Barley, wheat, maize and Teff with production of 30, 36.5, 36 and 15 quintal per hectare and In the 2012 The district is also known by the production of cereal crops like Barley, wheat, maize and Teff with production of 2.2, 14.32, 11.8 and 6.5 quintal per hectare. Both year Wheat and Barley is the most productive, while, Maize and teff is the least productive respectively. In addition the district is known by livestock production like sheep that contributes the largest share in the central market. This sector of economy is one of the productive sectors if there is proper utilization of these resources.

On the other hand, the farmers of the district employ traditional method of farming both in crop production and livestock rearing. Agricultural input utilization is at its low stage and below its recommended level. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

Regarding development facilities, in the year 2012 in the economic development sector there were 14 farmers training centers, one animal health posts and four animal clinic. In addition to these there were 19 animal health personnel of which 14 animal health assistance, 4 doctor and 0 animal health technicians were served the sector.

In the social service sectors in the year 2012 there were 29 government primary schools and three secondary schools. Student class-room and student teachers ratio was 65:1and 47:1 for primary school and 23:1 and 20:1 for secondary school respectively. This indicates there was shortage of class-rooms in both primary and secondary school. On the other hand there were one TVET schools that trained and equip student with different skill.

The district has 4 health center and 14 health posts that provide health services to the 119,014 population of the district with 14 health officer, 28 nurses, 4 laboratory technician, 8 pharmacists, 1health assistance, 1sanitarians and 31 health extension professionals.

Regarding infrastructural development the district has 118.245 km all weather roads and117.77 km Gravel roads. It has digital telephone service in Hamda and Bullala town, 14 peasant associations has wireless telephone service while all parts of the district is supplied with mobile telephone services. The district’s water supply coverage was at its low stage.

The district has different investment opportunities on Oil seed production, sheep and cattle rearing. Since the district is known for its supply of sheep population for large market of the country, these create advantage for investors to establish industry that process meat and produce skin and hides for export.

**4.3.2. Recommendations**

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, energy supply and transportation network facilities are needed. So the concerned body has to participate on the development of these facilities and establishment of financial institutions.
* Farmers training centers was 14 however the number of development agents were 41 and skills of the development agents to increase production and benefiting the farmers of the district,
* Agricultural Input utilization by the farmers of the district was below the recommended amount per hectare. So to increase the productivity of land the district’s agricultural office as well as other concerned body has to motivate or create awareness among the farmers to use enough agricultural chemical input or compost,
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* To improve the quality of education standard students to class-room ratio, students to teachers’ ratio, students to text-book ratio and others are too important. In case of Diksis district the students to class-room ratio was much more than the standard in primary and secondary schools, Hence to overcome these problems additional class-rooms should be constructed .
* Additional water supply schemes should be constructed to improve water supply coverage of the district at low stage.
* Basic socio-economic Infrastructure development such as road transport andelectric power energy supply so as to attract potential investors,
* Appropriate measures should be taken to improve environmental protection through increasing community awareness, wise use of available resources, strengthening soil and water conservation practices, appropriate tree planting and putting into practice the land use plan policy,
* The district has to invite investors to invest their capital on fertile land for production of cash crops like oilseeds and apple.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF DODOTA DISTRICT YEAR 2011 AND 2012 E.C**

**Chapter - One**

**1. Introduction**

**1.1 Back-ground of the District**

Dodota woreda is one of the 27 administrative unit of Arsi zone. Dodota Was established in 1944 E.C .The historical name of the district is derived from Trees name mostly found in the district and else districts found in desert area named as “Dodoti”.

However, before 1997 the district named as **Dodota-Sire.** But, As a result of decentralization policy of government and Sire was separated from Doddota And established as Sire district , Nowadays Dodota woreda have 15 kebeles of which 12 are rural district and 3 of the districts are urban.

**Dera** is the capital town of the district. It is located at 125 km from Oromia Regional Capital City, Finfine, 25 km from Regional Trade and Industry center, Adama town and 50 km from zonal capital, **Asela** .

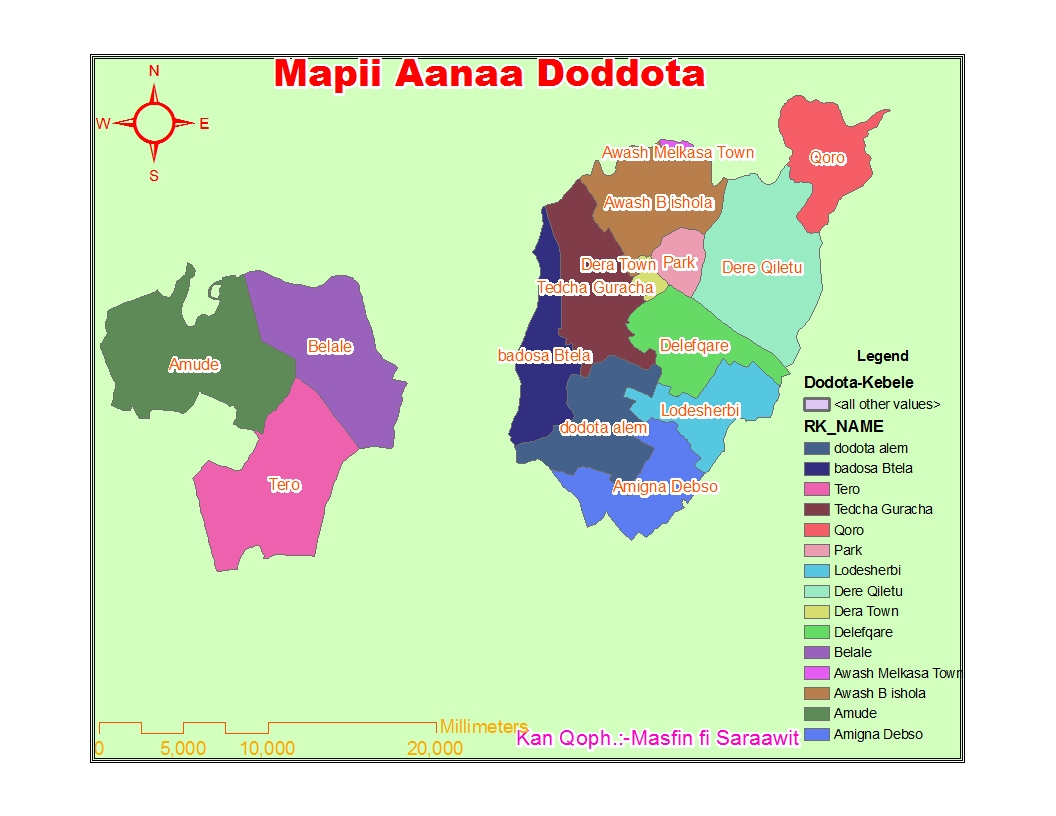
Dera town is located to the North direction on Adama-Asela main road in relative to zonal capital Asela.

Dodota Woreda is a potential district in terms of attracting tourism, agriculture development, construction of hotels, Breeding production and fauna and flora culture etc. The administrative is very ready to accept (to hold) the investors in the District. There is 24-hours of electric service in **three** urban kebeles and in **two** Rural kebeles. In another hand, interims of road facility the district has A good road network of urban with all Rural kebeles .

Dera town is known well in fattening , Breeding production, flora-culture (Horticulture)and poultry farming Since the environment is Suitable especially, for fattening & poultry many investors come to the town to invest in such and related business area.

Dodota has a diverse population, with more than 92% linguistic groups Belongs to Oromo nation Who are Cushitic families of Afan Oromo speaker and the rest (8%) are belongs to non-Cushitic families of which the majors belongs to Semitic family, particularly Amharic and Garage language speaker

This paper is designed to encourage the investors , Fund rising organization ,NGO And Any concerned body to know, more about the District and Dera town for those who come to invest in the Dera town and in District in general . **So, we recommend investors to invest in above mentioned business area.**

 **1.2 Map of the Dodota District**

**1.3 Sources of information (government and other offices where the information where obtained)**

SEP data is the most important data that shows what the district have or not. so, we have seriesly investigate the information by providing questionary ,making format and some cases by using telephone to the concerned body . We have been collecting information from almost all government office and some NGO who are working in our district .From the total government office “SEP ’’ Data collected focuses on :

Agriculture office, Livestock, tourism, trade, finance, sport, cooperative, industry, investment, water, transport, communication, minerals, law and order Road Authority and Revenue Athourithy etc. In addition to this we have been collecting information from other office including NGO found in our district.

**CHAPTER TWO**

**2. Physical setting**

**2.1 Location**

**Astironomical or Absolute location of the District**

The Astronomical location of dodota lies juston 8°N 20°N latitude and 39°E17°E longitude. Extreme point or Edge of the district are **Amude, Tero,Aminya Dabaso,Awash Makasa,and Kora dagaga** rural districts.

**Relative/Vicinal location of the Dodota District**:-Unlike Absolute location relative location refers to the position of place in relation to the location of other geographic features .Relative location can be expressed in two ways, namely vicinal location and Geologic location (natural location). Vicinal location shows the location of the district in relation to other neighboring districts , while the geologic location describes the districts location in reference to big land masses or Water bodies .So Relatively, Dodota district is found at :-

* North- west of Lode Hetosa District,
* West of Sire District,
* South of East showa Zone ( Adama District).
* North of Hetosaa District and East of Zuway Dugda district.

**Area: Total area (km2) of the districts**

The total area of the District is about **511.9** Km2.Dodota district is located 125 km away from the capital city of the Country called **Finfine**  (Addis Abeba), 25 km away from the zonal capital of south east of showa Called **Adama** and 50km away from the zonal capital **Asela**.

**2.3 Geology of the Woreda /District**

Geological location is also called Natural location, Thus, Dodota’s geologic location can be described in the following ways. Dodota is found:-

* South of Awash River
* West of Kelata River
* East of Koka (Rophi) manmade lake and
* In the Rift valley region , etc

**2.4 Relief, Drainage and Climate**

**Relief: -** Refers to Difference of elevation on a surface of the earth. Land forms of dodota woreda are characterized by great diversity of lowlands, plateaus, mountains and river gorges**.** Elevations ranges from **500** meters above sea level at **Awash Bisholla rural kebele** to mountain peaks of **2100 meters above sea level at (Sallan).** The major mountains in the district are Difakar (1800m), Sallan (2100) and Warde (1950).

**Drainage:** Dodota is among few arsi zone districts with only two rivers and one man made (Artificial lakes) called Awash, Keleta, and Koka (Rophi) respectively. Since district is found with in Rift valley drainage system it is the smallest interims of catchment area. So it is characterized by small areal discharge water and relatively lesser volume of water when compared with others.

**The Importance River and Lakes in District:** The two main Rivers in the district has economic importance in generating hydro electric power and irrigation along the banks of Awash and Keleta .The artificial lake found in district also generate hydro electric power.

**2.4.3 Season**

In middle and high latitudes, Seasons are classified as Winter, Spring, Summer, and Autumn .However, in Ethiopia seasons are unique and identified based on annual rainfall distribution and Weather system: These seasons are

1. BEGA (dry Season)
2. BELG (Small rainy season or little rains)
3. KIREMT(The big rains) and
4. TSEDEY (Small rains as that of BELG Season )

The Mean Annual Rainfall in district is about 900mm And Average rainy days are only 29 days in the year. The rainfall pattern is bi-modal, which is short rainy season (Belg from April to March) and summer or long rainy season (Maher from July to September). Conversely, due to extreme shortage of rain in Belg season, to decrease risks and minimize loose there is no such fruit full production. i.e. Due to the absence of rain in the belg there is no production, because the rain is not abundant for plant production during winter season.

**2.4.4 Climate of Dodota Woreda**

Climate is the Average condition of the atmosphere over a long period of time in a given area. A climate element includes precipitation, temperature, humidity, Air pressure, winds and etc. Climate influences all human endeavors. Altitude plays a role in the formation of agro climatic zone.

Table 1, The Altitude of the climate in the district

|  |  |  |  |
| --- | --- | --- | --- |
| Annual Temperature | Weather Condition | Altitudinal Range | Area (%) |
| 20C0 -25C0 | Moderately Warm | 500m-2100m | 100% Desert |

From the above table we can conclude that altitudinal location; the climatic condition of the district is over all moderately warm (hot) which is between 17oC-33oC.This type of climate covers about 100 % of the total area of the district.

**2.5, Soil type of Dodota District and their Suitability for Agriculture**

Soils are a thin layer on the top of most of the earth’s land surfaces. Soil holds nutrients and water for plants and animals. Water is filtered and cleansed as it flows through soil. The food we eat and most of materials we use for paper , building and clothing are dependent on soil . A good soil for growing most plants should have about 45% of minerals, 5% of organic matter, 25% of Air and 25% of water .

***Pie chart 2.1 Shows Soil Type of the District***

***Source:-Dodota Agriculture office 2011/12***

The major types of soil in the district are: sandy loam (24%), sandy (63.81%), and silt (12 %) covered the area of the districts. From this one can easily concluded that the highest number of soil type is sand soil which is estimated to be 64% of the total areal coverage. Among the major types of soil mentioned above sandy loam soil is suitable for agriculture.

**2.6. Vegetation and Wild life**

**2.6.1 Vegetation**

As Dodota woreda agriculture office report shows from the total area of the District about **1774km2** is cultivated land ,about **6300 km2** is covered with forest and about **3993 km2** is grazing land and the left or about **23,245.5** is suited for other purpose.

**2.6.1.2** **Major Natural or Man Made Forests protected by Government Cooperative and Other Organizations**

There are different public /governmental protected / forest in the district .These are Dilfakar regional park (Dera Block) and mount Dabaso Forest.

Dilfakar Regional Park is located at back of Dera town along the mountain called Dilfakar from which the name of the park is derived. The other known forest land is mount Dabaso forest which covers about 0.8% of the total area of the district and the left 0.8% of the total area is covered with community forest.

**2.6.2 Wild Life**

There is variety of wild life found in the forest. These are Greater kudu, Laser kudu, Hyena, Hippo, Fox, Tortoise, Tigers and there are also color full birds in the forest that give Aesthetic value for the forests**.**

**CHAPTER THREE**

**3. Socio-Economic Condition**

**3.1 populations**

**3.1.1 Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Rural** | | | **Urban** | | | **Total** | | |
| Year | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **2009** | 29,863 | 28,870 | 58,733 | 14,226 | 14,707 | 28,932 | 44,689 | 43,577 | 87,666 |
| **2010** | 30,650 | 29,630 | 60,280 | 14,821 | 15322 | 30,143 | 45,421 | 44,953 | 90,424 |
| ***2011*** | *31,457* | *30,411* | *61,868* | *15,441* | *15,963* | *31,405* | *46,899* | *46,374* | *93,273* |
| ***2012*** | *32,286* | *31,212* | *63,498* | *16,088* | *16,632* | *32,719* | *48,373* | *47,844* | *96,217* |

***Source: Population projection of oromia region by zone,woreda ,As Rural ,Urban And Sex from (2017-2020)***

**3.1.1.1 Settlement pattern of the District**

Different types of settlement develop mainly in response to multitude of physical and non-physical factors of the environment. The physical factors influencing settlement types are primarily related to the magnitude of rainfall and availability of water. On the other hand, the most important human factors that influence settlement types include the level of development, the kinds of ownership and the need for community defense.

Based on the Above table, In 2009 E.C the projected total population of the district is estimated to be 87,666, of which about 43,577(49.7%) are female population and About 44,689(50.9%) are Male population. In 2010 E.C The total number of population is increased with about 2758 peoples of which about 60,280 peoples’ lives in the district (Rural), From the total number of population it s estimated to be that about 66.6% the population live in rural area and the rest of them live urban centers 30,143(33.3%).

In Year 2012, the total number of population was increased from 93,273 to 96,217 of which about 63,498(65.9%) peoples’ were inhabited in Rural district where as about 32,719(34%) are inhabited in urban centers.

**3.1.1.2 Sex Ratio and proportions**

**Ratio**: - Relationship between two quantities, calculated by dividing one quantity by the other and usually written using a colon. The ratio of students to teachers in an elementary school that has 600 students and 20 teachers is 30:1. This figure is arrived at by simplifying the division problem 600/20. The ratio 30:1 means that there are 30 students for every 1 teacher in the school.

Ratio is simply any number divided by any another number and the basic demography measurements.

***Sex ratio***: - The total number of males in the year divided the total number of females and multiplying by 100.

***Proportions***: - is the basic demography measurement in which type of ratio in which the

Numerator is included in the denominator

Proportions of Males= Number of Males \* 100

Total Population (M+F)

The proportion range should be between the number 0and 1.

Based on the above table of Population distribution by urban, rural and sex for the district

The proportion of males in the urban in 2012, estimated 0.49 and the proportions of males in the rural estimated 0.50 respectively.

Sex Ratio= Males \*100

Females

**The Sex ratio Male per Female**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ref.No.** | **Total population lived in each year by urban and rural in district** | | | |
| Types | Total population live in district | Rural Ratio | Urban Ratio | Total Ratio |
| 2009 | 87,666 | 1.034 | 0.967 | 1.025 |
| 2010 | 90,424 | 1.034 | 0.967 | 1.010 |
| 2011 | *93,273* | 1.034 | 0.967 | 1.011 |
| 2012 | *96,217* | 1.034 | 0.967 | 1.011 |

***Table 2.3 shows the sex ratio Male per Female***

From the above table we can conclude that the overall sex ratio of the district was 103 males per 100 females in the rural area and when we saw in the urban area 96 Males per 100 females in the year of 2009, 2010, 2011 & 2012, from this figure it can easily estimated that, almost in the past three consecutive years similar sex ratio was recorded.

**3.2 Agriculture**

Is one of the primary economic activities which includes the production of crops and rearing of livestock for either local consumption or commercial purpose .In Ethiopia, agriculture is an old economic activity, which has been practiced since 4000 B.C. But, still agriculture is largely traditional and subsistence in nature. Thus, the productivity of crops and Animal farming is very low. It is very even by African standards. Despite the low productivity of the sector, the country has very high agricultural potential. This is confirmed by the presence of:

* Extensive arable land resource
* Adequate water resource (Rivers and lakes )
* Diverse agro-climatic conditions.

**3.2.2. The cooperative and their capital in 2011 and 2012**

Cooperation (working together) is basic for sustainable development of the country in general and for the radical changes of individual in particular. The data collected from cooperative office shows that, there are 12 Peasant Associations (PAs) in the district with 9,468 and 10,657 farmer members in the year 2011and 2012 respectively. In these two successive years, there were 12 Agricultural Service cooperative with 3125 and 14796 farmer members respectively. And the total capitals of the agriculture service cooperative accounts 389,152,88 and 29,536,903 respectively and the major types of service delivered by the cooperatives for members in the districts agriculture and credit services. In the year of 2012 there are six types of cooperative service with 38 number of cooperative

**3. 2.3, Land Resource**

From the given information mentioned in the table below shows the classification of the land resource under different types of socio-economic uses. The detail of features in two successive years is described in the following ways.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ref No.** | **Land expressed in hec.** | Year | | | |
| 2011 | % | 2012 | % |
| 1 | Cultivated land | 17744 | 39.8 | 17744 | 39.8 |
| 2 | Grazing land | 3393 | 11.9 | 3393 | 11.9 |
| 3 | forest land | 6300 | 14.1 | 6300 | 14.1 |
| 4 | Park | 2500 | 4.8 | 2500 | 4.8 |
| 5 | Irrigable land in hec. | 700 | 0.8 | 700 | 0.8 |
| 6 | Investment | 267 | 1% | 267 | 1 |
| 7 | sugar cane | 2718 | 6.1 | 2718 | 6.1 |
| 8 | Water body | 2020 | 4.5 | 2020 | 4.5 |
|  | Total | 35642 |  | 35642 |  |

***Source: Agricultural & Rural Development Office***

**3.2.4, Crop Production and productivity**

In the District there are different types of crop production as we have seen in the given table below. The predominant types of cereal crop produced in the districts are Wheat, barley and Teff. As a result of the extreme shortage of rain in the Belg season Bimodal, pattern of rainfall could not give a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for **Meher** and **Belg.** Hence, Meher is the only season in terms of cultivation and crop production in the District.

The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown ones.

In addition to this, the district is known in producing some cash crops like tomato, onion, and oilseeds. According to Agricultural development office report; in 2011 land size on which wheat and barley were produced is **6127&3236** hectare respectively. In the same year Wheat and Barley production earned **174,619** and **87,372** quintals respectively. In 2011/2012 Almost in all types of production there is a good yield this shows that with cultivation of plants the former weather condition is improved. Now moderate moisture and almost there is average monthly rainfall in maher season so, production per hectare is increased from year to year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of crops** | **2011** | | **2012** | |
| **Meher season** | | **Meher season** | |
| **Area Cult.(Hac)** | **Prod.(Qut)** | **Area Cult. (Hac)** | **Prod.(Qut)** |
| **Cereals** |  |  |  |  |
| Wheat | 6127 | 174,619 | 6230 | 185,600 |
| Teff | 4251 | 106,275 | 4260 | 106,300 |
| Barley | 3236 | 87,372 | 2801 | 61322 |
| Maize | 2517 | 73,317 | 3433 | 102083 |
| Sorghum | 80 | 1240 | 122 | 1868 |
| Pulses |  |  |  |  |
| Faba beans | 39 | 429 | 27 | 135 |
| Field peas | 98 | 289 | 1634 | 9804 |
| Lentils | 14 | 98 | 10 | 72 |
| Haricot beans | 1368 | 22,577 | 62 | 248 |
| Oilseeds |  |  |  |  |
| Neug | 2 | 8 | 0 | 0 |
| Groundnut | 2 | 20 | 0 | 0 |

**3.2.5. Amounts and types of fertilizers, improved seeds, pesticides and herbicides distributed to farmers in 2011 &2012 E.C**

In 2011 E.C, About 2128 lt. of pesticides and about 218 pesticides in the form tablet are distributed to the farmers. For the distribution 8(Eight) cooperatives are participated.

|  |  |  |
| --- | --- | --- |
| Type of input | 2011 | 2012 |
| Amount(qt.) | Amount(qt.) |
| DAP (qt.)NPS | 12,600 | 13,670 |
| Urea (qt.) | 200 | 500 |
| **Total** | **12,800** | **14,170** |
| Wheat | 600 | 1273 |
| Maize | 50 | 80 |
| Teff | 0 | 59.5 |
| **Total** | **650** | **1412.5** |
| Herbicides (lit.) | 5812 | 6067 |
| Pesticides | 198 | 1413 |
| **Total** | **6010** | **7480** |

*Source: Dodota district Agricultural Development Office 2011/2012*

As it is described in the table above Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. The amount of distributed DAP (qt.) and Urea (qt.) given at 2011 for farmers are 12600 and 200 respectively. In the year of the 2012 the amount of fertilizers distributed /input/to wereda are 13,670 and 500 respectively , In both year DAP Contributed lions share value because it is the most important types of fertilizer in increasing the amount of production . In Another hand , total number of distributed improved seeds is wheat which accounts 600 and 1273 in two consecutive years because in the wereda the most crop produced are wheat due to the improved seeds distributed are much more garter than the other types seeds. The Amount of DAP distributed is more greater than UREA in both year , this shows that peasants are more interested in using DAP than Urea because of low water holding capacity of the soil.

**3.2.6** **Average number of farm oxen per household and percentage of farmers with 0, ½, 1, 2, 3, etc. farm ox (oxen) in the /district, in 2012/2013**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Average ox holding size per household | Number of households by Ox holding size | | | | | |
| 1 ox | 2 oxen | 3oxen | 4 oxen | 5 oxen | >5 oxen |
| Number of households by Ox holding size | 8500 | 519 | 300 | 25 | 12 | 5 |

Source Livestock office 2012/13

According to the data collected from livestock office, Majority of farmers in the district have 1 ox and only 5 households which have greater 5 oxen. This shows that, potential plough capacity the farmers is less due to low accessibility of oxen.

**3.2.7 Average farmland holding size per household in hectare and percentages of farmers land holding 0.5, 1.0, 1.5, 2.0, 2.5, 3.0 and above hectares**

Table Number of farmer households by Land-holding sizes in year 2012/13

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Average land-holding sizes per household (ha)** | Number of farmer households | | | | |  |
| <1 hec | 1-2 hec | 2.01-3 hec | 3.01-4 hec | 4.01-5 hec | >5 hec |
| 28,562 | 5267 | 3474 | 1919 | 1389 | 7 | 1110 |

According to the data collected from Agricultural office , In 2012 of total number of 28, 562 average land holding sizes per house hold only about 13,166 total number farmers holds plots land with < 1ha, 1-2 hec, 2.01-3hec, 3.01-4 hec, 4.01-5hec and >5hec are 5267, 3474, 1919, 1389, 7 and 1110 respectively.

**3.2.8. Crop Pests and disease:**

The major crops pests in the district are (Aphids) while the major diseases are (may rust, smut and others) and at 2012 locusts damage on the crop of Teff is the major event took place that decrease the amount of production in different rural kebele especially in Qorro Dagagga. Weeds and rainfall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rainfall water harvesting and river diversion systems, etc.

Now a day, crop pests and disease is controlled. As a result production and productivity of the wereda increase.

**3.2.9, Methods for maintaining Soil fertility**

There are two ways of maintaining soil fertility in the Zone in general and in the district in particular. There two methods of maintaining soil fertilities, these are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning),tree planting , using plant rotation , mixed planting , traditional traces and using crop residue while the modern one includes artificial fertilizers ,hill side terrace ,soil bund , check dam , micro basin , and area closures

**3.2.10, Methods of Soil Conservation**

Contour plough cultivation is a traditional way of soil conservation method , While cut off drain, check dam construction, terrace construction, mixing cultivation and A forestation are modern way of soil conservation in the district. According to statistics obtained from agricultural extension to conserve soil and water, in 2011/12 About 6 Million seedling are planted of which only about 3.9 million seedling is grown and 2012/13 about 8 million amount of seedling is planted and only about 4.7 million is grown respectively . As data of agricultural office shows the amount of seedling produced and planted is increasing from year to year. However, due to the environmental conditions of the district and in sufficient place of nursery site from the amount planted seedling only half of it is grown.

|  |  |  |  |
| --- | --- | --- | --- |
| Activities | Unit | **2011/12** | **2012/13** |
| Seedling planted | (Mill. Pcs.) | 6 Mill | 8 Mill |
| Seedling grown | (Mill Pcs.) | 3.9 mill | 4.7Mill |
| Trained farmers at FTC | (Number) | 720 | 800 |

*Tables 3.12 the amount of seedling produced and grown in the district*

**3.2.11, Agricultural Calendar:**It is well known thatthe farmers of the Zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Dodota district is shown in table below.

|  |  |  |
| --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** |
| 1 | Land preparation | March –June |
| 2 | Planting (Sowing) | April- July |
| 3 | Weeding | June-September |
| 4 | Harvesting | October-January |

*Table: 3.13 Agricultural Calendar of the district*

**3.2.12, Major constrains of Agriculture in the Districts**

Despite the fact that agriculture is the main stay of the people its productivity is hindered by the following factors:

1. **Subsistence orient*ation***

Most of the farmers of the district produce agricultural products for their own consumption***.*** For instance, peasants retain up to 80% of their product for home consumption**.**

1. **Fragmentation of Farm lands**

The land owned by peasants is getting smaller and smaller through time .This is due to continuous division farm land among the members of families in the form of inheritance.

1. **Traditional Farming Method**

This refers to the dependency of most of farmers on old methods of crop cultivation. They use primitive tools. Their inputs are very low. Despite the increase in the absolute level of fertilizer sold to farmers in the district, the district has still remained to be one with the lowest rate of fertilizer application .Thus, only small proportion of crop land is fertilized.

1. **Soil Degradation**

The sandy types of soil in the district are exposed to erosion.

1. **Limited practice of irrigation**

In Dodota, The area for irrigation is estimated to be 700 hectares. This makes up 4% of the total cultivable area of the districts .However, at present the irrigated land does not exceed 425 hectares, which is only 0.2% of the irrigable land .The low access of drainage added to the problem of finance and technology has been mainly responsible for limited practice of irrigation .As a result there is a great dependence on rain fed agriculture.

**3.2.1.3. Names and functions of Non-governmental organization (NGO) in the district**

In the district there are about **Six NGOs** who are working in different interest area to help the society as to full fill their objectives. It was already Known that our district is the most vulnerable to drought due to the shortage of rain and absence alternative source of underground water that enables the area for different production of crops .On Another hand there is no abundant drainage system that enables the area for irrigation purpose . So, most of the peoples of the district have aided by government and NGOs it is shown in the table below. In general Every NGO has its own interest area. For instance Chadet is engaged to work on the Support of HIV-AIDS infected and Affected orphans and vulnerable Children (OVC), Street and Trafficking children and Orphans and Vulnerable children support. NGOs helps the children affected orphans and Vulnerable children, protect of natural resource(like, Chadet), aid of disability of children and street and trafficking children and infrastructural construction like high school, irrigation, construction of DA house and a direct support (SPNS).

|  |  |  |
| --- | --- | --- |
| **No** | **Names of NGOs** | **Functions of NGOs in the District** |
| 1 | Chadet | Working on the children and elder mother |
| 2 | Compassion(CRS) | Orphans and Vulnerable children support |
| 3 | VoCDA | Working on poor female in terms of Cooperative |
| 4 | Dera Mulu Wongel | Working on the orphan children |
| 5 | ECC-SDCOM | Natural resource, food security and helping of Poor female etc. |
| 6 | Yatim | Supporting Orphan children |

2.7 Table shows the names of NGOs and Their Functions in the District

**3.2.1.4 Development Agents (DA) and Farmers Training Centers (FTC)*:***

DA’s are one of the most important agricultural infrastructures elements that play an important role in improving agricultural production and productivity. In the year 2011and 2012, there were 12 and 12 farmers training centers (FTC) in the district respectively. In both years , there were 39 and 39 Development agent includes super visor), which are three in each peasant association with profession of **plant science, Animal science and Environmental protection** .Development Agents help the farmers in all aspects of agricultural practices ,of which the major are in crop production, and animal husbandry.

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers(FTC) | 12 | 12 |
| Number of Development Agents(DA) | 39 | 39 |
| Number of beneficiaries | 11,481 | 11,447 |

***Source: Dodota district Agricultural Development Office 2011/2012***

**3.2.7.1. Livestock, poultry and Beekeeping**

Dodota district is famous in livestock resources. Cattle, sheep, goats, horses, mules, donkeys and camels are the major livestock population found in the district.

The high prevalence of diseases, traditional method of rearing, shortage of the feeds, disease, and shortage of seeds, are the major constraints in livestock production in the district and the factors affecting bee-keeping are unavailability bee forages, shortage of bee colonies and shortages of wax to prepare comb. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**3.2.7.1.1 Animal Health infrastructure and veterinary personnel in the District**

Dodota district has a good health infrastructure by having 7 total number of clinics (A,B,C,D) and total number of 18 veterinary personnel of which 6 veterinarian(DVM) and 12 animal health assistance .the following table shows Animal health infrastructure and veterinary personnel

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Veterinary Personnel |  |  |
| Veterinarian | **6** | **7** |
| Animal Health Assistance | 12 | 10 |
| **Total** | **18** | **17** |
| **Health Infrastructure** |  |  |
| Clinic (A,B,C,D-Type) | C-1  D-6 | C-2  D-5 |
| **Total** | **7** | **7** |

***Source: - Development health center and market livestock office.***

Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. The above data shows the distribution of veterinary personnel and Animal health assistance in the year 2011and 2012

**3.2.2, Distribution of Livestock**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Year | 2011 | % | 2012 | % |
| ***1*** | ***Livestock(Total)*** | ***124,626*** | 100 | ***124,967*** | ***100*** |
| 1.1 | Cattle | 56,100 | 45% | 56,300 | 45% |
| 1.2 | Sheep | 27,651 | 22% | 27,680 | 22% |
| 1.3 | Goats | 24,991 | 20% | 24,997 | 20% |
| 1.4 | Mules | 99 | 0.07% | 99 | 0.07% |
| 1.5 | Horse | 2226 | 1.78% | 2280 | 1.78% |
| 1.6 | Donkey | 13,532 | 10.8% | 13,640 | 10.9% |
| 1.7 | Camel | 20 | 0.01% | 80 | 0.06% |

**The tables 3.15 shows the Distribution of Livestock**

From the above table of the Distribution of Livestock in the year of 2012 in the district the highest one indicates cattle **56,300 (45%),** the second one sheep **27,680(22%)**, third one is Goat **24,997(20%)** and the least one is Camel which accounts **80(0.06%).** Therefore, livestock resource in the district should be protected by society and the government, because it is potential type of resource for our country in terms of foreign currency exchange. However, people’s awareness in livestock farming is less so awareness creation for the society is the only means to enhance livestock production.

**3.2.7.1.2 The Major Types of Animal Disease and their treatment and vaccinated in 2011/2012**

According to the 2011 livestock and marketing Authority report, about 116,309 heads of livestock were treated with different types of veterinary services , of which 228 got trypanosomes service ,61,775 heads of livestock get internal parasite service ,about 31,750 heads cattle held external service, 2612 operation ,and about 19,944 other service .In Another hand About 73,940 number of livestock vaccinated of which 13,850 blackleg vaccination, 1000 haemorrhagic vaccination, 36,700 Anthrax, and 22,390 other vaccination services.

In 2012 about 129,880 number of livestock were treated with different types of veterinary services of which 328 got trypanosomes service ,71775 number of livestock get internal parasite service ,about 41,750 external service, 3412 operation ,and about 12,615 other service .Mean while , About 130,261 number of livestock vaccinated in different types disease , of which 14,860 blackleg vaccination ,2000 haemorrhagic vaccination ,35,700 Anthrax ,and 77,701 other vaccination services .

According to the data of livestock office with increasing number of veterinary personnel both treatment and vaccination services increase.

**3.2.7.1.3 Poultry Farm**

Dodota District is known by poultry farm next to livestock rearing due to the fact that the environment is moderate for the activities. According to the available data collected from livestock development office , in 2012 the total number of poultry hold by private house hold in urban and rural kebele is estimated to be 47,424 which the most dominant activity to place in the district. In general data shows that poultry population in the district raise from year to year that indicates majority of the inhabitant in the district practice poultry farm.

**3.2.7.1.4, Beekeeping (Traditional, transition and modern bee hives)**

According to the 2012 Dodota Livestock office report, currently of total 1756 number of traditional beehives found in district about 2796 kg of honey produced by 1032 number of participants. The other types of hive are transitional beehives and Modern beehives .The following table shows types of beehives and Amounts in kg.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Types of beehives | Number of beehives | Amount of honey produced in kg | Participants | | |
| M | F | T |
| 2011 | Traditional beehives | 1656 | 276 | 652 | 108 | 760 |
| Transitional Beehives | 6970 | 697 | 728 | 35 | 763 |
| Modern Beehives | 330 | 6600 | 82 | 25 | 107 |
| 2012 | Traditional beehives | 1756 | 279 | 752 | 208 | 950 |
| Transitional Beehives | 7170 | 797 | 828 | 40 | 868 |
| Modern Beehives | 430 | 6800 | 85 | 30 | 115 |

Source : Livestock office 2011/12

**3.3. Mining and Industry**

**3.3.1 Mining:** Mining involves the search for minerals from the crust of the earth. Like other parts of oromia region in general, Dodota woreda in particular has accumulated mineral resources which is investigated for further extraction. Data obtained from Mineral resource development office indicates that, the district has a high potential of some mineral resources such as sand stone, scoria, for construction purpose and kaolin for painting purpose. Dolomite and pumice are used as a raw material for factory production.

For further information see the table below

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of Minerals uses in the district | The Current Uses of mineral | Mineral Under Extraction |
| 1 | Granite | For constriction | *No Mineral Under Extraction in the District* |
| 2 | Scoria | For constriction |
| 3 | Sand stone | For constriction |
| 4 | Dolomite | For factory production |
| 5 | Pumice | For factory production |
| 6 | Kaolin | For industry |

**Source: mineral development office 2012**

**3.3.2. Industry:** It is widely recognized that successful development of industrial sector plays a key role in economic and social progress in a nation. In the district among few manufacturing industries, wonji shewa sugar factor is the prominent that create job opportunity to many skilled and unskilled labor force

**3.4 Infrastructure and social facilities**

**3.4.1 Transport and Communication**

**Transport:** Transportation is a tertiary economic activity by Which persons, goods and information are carried from place to place .It may be viewed as an indicator of wealth and economic development .In addition, transport is considered to be a major factor in industrial location and in determining agricultural land use .More ever, the degree or intensity of the level of transportation network expansion is one of the very important indicators of country’s level of development. Road is one land transport that plays important low in the developments of economy. Dodota district have a good road facilities which is found 50 km away from zonal capital town, Asella and125 km from Regional Capital city, Finfinne. In 2012 the district has 143 km length of road facilities, of which 101.3 km is gravel road and the left 17.28 km and 24 km of road are dry weathered road and asphalt road respectively. In terms of ownership about 34km of road is owned by Ethiopian Road Authority (ERA), of which 24km is Asphalt road and 10km is All weathered road. In another hand about 38km is owned by Oromia Road Authority (ORA).

**Communication:** One of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with Digital (Mobile and telephone) type of telecommunication. On the other hand, most rural areas of the district has supplied with wireless type of telephone services. Though the network is so busy, the coverage of mobile type of telecommunication reached the whole area of the district. There is only digital type of telecommunication in the district.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has Agent type of postal services in Dera town.

**3.4.2 Water and Energy supply:**

**Water:** During the year 2012 E.C, of the total urban population of the district (80737), about 65,397(81%) and from total rural population of the distinct (88,297) about 55,627(63%) supplied with potable water. This indicates that the main challenge of the urban population has been solved. But, in rural area the challenge of water supply for society does not solved. Still many people of the district are killing their time in searching for pure water. However, the most vulnerable area of the district is rural kebeles, Specially Amude and Balale .generally, Social service institution supplied with potable water in 2012 are 24 first cycle school,2 secondary school ,2 health center and 11heath posts .

**Energy Supply:** All towns of the district have been supplied with electric services. On the other hand, 1-peasant Association (Dodota Alem) parts of the rural areas have electric services. According to data projected in 2012, from 32,719 total number of urban population only about 6072 population of town supplied with Electricity.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district.

**Sources of domestic energy supply**.

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | *Charcoal* | 3 | 4 |
| 2 | *Fire wood* | 1 | 1 |
| 3 | *Animal dung* | 4 | 3 |
| 4 | *Crop residue* | 6 | 2 |
| 5 | *Kerosene* | 5 | 5 |
| 6 | *Electricity* | 3 | 6 |

***Source: Dodota district Agricultural Development Office.***

**3.4.3 Education**

This sector key for socio-economic development of the country in general an that of our district in particular**.** So, the number of student per teacher and material needed for education should be planned in proper manner .The following table shows the number of student in 2011/2012**.**

***Table 5.7 student enrollment by sex in 2011/12***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2011 | | | 2012 | | |
| Male | Female | Total | Male | Female | Total |
| **Government** |  |  |  |  |  |  |
| Kindergarten School | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary(1-8) | 8667 | 7950 | 16,617 | 9834 | 6856 | 16,690 |
| Senior Secondary(9-12) | 1244 | 920 | 2164 | 1647 | 1277 | 2924 |

Source : Education Office 2012 E.C

For information on special education designed for persons with particular disabilities or special needs and abilities: see Education of Deaf and Hard of Hearing Students; Education of Students with Physical Disabilities; Education of Students with Vision Impairments; Education of Students with Learning Disorders; Education of Students with Mental Retardation; Education of Students with Behavior Disorders; Bilingual Education; Education of Gifted Students

**Total number of teachers and School**: - All Available data indicate that the current number of teachers is growing rapidly .At present the actual number of teachers in total of **36 school found in our district is 569** as data of education office shows in 2012 academic year. For example, as table 5.7 indicates there are **16,690** number of students attend primary school (1-8) and **2924** number of students attend secondary school(9-12) in 2012 Academic year .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Levels of School Government | NO of School | Level of Education | Academic year of 2012 E.C | | |
| M | F | T |
| First cycle (1-8) | 34 | TTI | 9 | 13 | 21 |
| Dip | 101 | 125 | 226 |
| BA/BSC | 147 | 78 | 225 |
| Second Cycle(9-12) | 2 | TTI | 0 | 0 | 0 |
| Dip | 1 | 1 | 2 |
| BA/BSC | 59 | 13 | 72 |
| MA/MSC | 20 | 3 | 23 |
| **Total** | **36** |  | **337** | **223** | **569** |

**Source: Education Office**

**3.4.4. Health**

Protection and improvement of the health of entire populations through community-wide action primarily by governmental agencies. The goals of public health are to prevent human disease, injury, and disability; protect people from environmental health hazards; promote behaviors that lead to good physical and mental health; educate the public about health; and assure availability of high-quality health services

***Number of health Institution and Personnel by ownership (2011-2012)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| Health Center | 2 | - | 2 | 0 |
| Clinic | - | 13 | - | 15 |
| Health Post | 12 | - | 12 | - |
| Drug shop(pharmacy) | 2 | 3 | 2 | 3 |
| Rural Drug Vender | - | 6 |  | 6 |
| **Health personnel** | | | | |
| Health Officer | 11 | 8 | 10 | 7 |
| Doctor | - | 2 | - | 1 |
| Nurse | 25 | 20 | 30 | 20 |
| Health Assistance | 0 | 0 | 0 | 0 |
| Laboratory Technician | 2 | 7 | 5 | 5 |
| Pharmacy Technician | 4 | 0 | 4 | 7 |
| Sanitarian | 1 | 0 | 0 | 0 |
| Health extension workers | 27 | - | 28 | 0 |

***Source:-Dodota Health office 2011/12***

As indicated in the table above, the total numbers of governmental health institutions in their types are 2 health center 12 health post i. e, one in each rural kebele. In addition to this there were also 13 number of clinics and 6 number of rural drug vender in the district in 2011.surprising enough, laboratory technician and pharmacy technician increased for both government and non government institution from 2 to 5and from 0 to 7 in 2011 and 2012 respectively.

**The top ten diseases in the district**

Generally, the health of the people has been affected by the poor nature quality of health service in the district .this problem has been aggravated by shortage of trained health personnel, and by the lack of drugs and pharmaceutical supplies**.** The dominant disease includes Malaria, TB, HIV AIDS, and nutrition related disease. As data of health office shows , in 2012 About 23 patients are Newly affected HIV and 2 death is caused HIV **.**HIV-AIDS is most dangerous disease in the world there is no cure for this disease .

**Number of HIV Carriers and AIDS Patients Identified In all Health Institutions**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2011** | | | **2012** | | |
| Male | Female | Total | Male | Female | Total |
| HIV carriers | 178 | 357 | 535 | 178 | 357 | 535 |
| AIDS patients | 7 | 23 | 30 | 7 | 16 | 23 |

***Source Dodota Health district office 2011/12***

From the above table, in the year of 2011and 2012 the number of HIV carriers are decreased, it accounts 178 and 357 and the number of AIDS Patients are 7 and 23 respectively. The highest percentage indicates female from the table above, because the female organs by nature is sensitive to affected by disease and they rape by male .

**Number of children vaccinated**

Immunization, also called vaccination or inoculation, a method of stimulating resistance in the human body to specific diseases using micro organisms—bacteria or viruses—that have been modified or killed. These treated micro organisms do not cause the disease, but rather trigger the body's immune system to build a defense mechanism that continuously guards against the disease. If a person immunized against a particular disease later comes into contact with the disease-causing agent, the immune system is immediately able to respond defensively.

Immunization has dramatically reduced the incidence of a number of deadly diseases.

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 3273 | 2573 |
| Measles | 302 | 2684 |
| DPT1 | 2942 | 3042 |
| DPT3 | 3411 | 2484 |
| Polio3 | 2702 | 2673 |

***Table5.3 that shows Number of children vaccinated***

As you notice from the table Above , number of children vaccinated with types of vaccination in the year of 2011 ,the highest taking in the district was DPT3 which accounts 25.68% ,the next ones are BCG and Measles accounts 25.21% the rest one polio 3 indicates amount of vaccinated in the districts it accounts 24.529% in the district

**Maternal and child Health**

Actions take to decrease maternal and death in our district includes

* Post and pre birth taste
* Mother and child Vaccination

Infant Mortality Ratio= Death under one-year \* 100

No of Live Births

Maternal Mortality Ratio = Death of at pregnancy of women \*100

No of live pregnancy of Women

Infant mortality ratio - is conventionally defined as a number of deaths among infants below one year of age per 100 live births the same period. IMR broken into three parts, the formula of IMR of this parts doing.

Early Neonatal MR= Death under one week \*100

Live births

Late Neonatal MR = Death between 1-4 week \* 100

Live births

Post Neonatal MR= Death between 4-52 weeks \* 100

Live births

**MATERNAL VACCINATION AND THEIR TYPES**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| Antenatal care | 2915 | 3479 |
| Post natal care | 3238 | 2154 |
| Delivery service given by skilled | 2915 | 1617 |
| Family Planning | 15,648 | 14156 |
| Total | 21,801 | 21,406 |

Source:- Health office

***Health Coverage of the District***

To sum up about the health coverage and the possible way of suggestion based on the given data in the district. As the country health policy in, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Totally health extensions are 27 in the district.

**3.4.5. Children and Women Socio Economic Indicators (2011and 2012 E.C)**

**3.4.5.1. Women Issue Indicators**

**3.4.6 Social Securities**

**3.4.7 Finance**

From the below table of district are increase year to year, the revenue collected by three types direct revenue, indirect revenue and non-tax revenue from this the highest amount of money gathered from direct revenue ,indirect tax and non-tax

**3.4.7.1. Revenue collected in the district (2011&2012)**

Available data collected from Revenue office indicate that, in year 2012 about 30,862,169.51 birr is collected from different types of tax such as, Indirect tax, Direct Tax Non –Tax**.**

**Number of traders and Farmers tax payers in the district by level**

According to the available data collected from revenue Authority office shows that , In year 2012 E,C there are about 1146 number of traders tax payer of which about 47 number of traders belongs to level –A ,About 36 number of traders belongs to level –B , And 1**063** traders belongs to level- C respectively. In other words **10,915** number of farmers pay tax**.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Level of traders** | **Number of traders** | **Number of Farmers** |
| 1 | Level –A | 47 |  |
| 2 | Level –B | 36 |  |
| 3 | Level –C | 1063 |  |
| \* | Total | 1146 | 10,915 |

**Source: - Revenue Authority Office**

**3.4.7.2. Government expenditure in 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| Table Government budget allocated, adjusted and utilized, year 2012 | | | |
| District/Zone | Budget | | |
| Allocated | Adjusted Budget | Utilized |
| Doddota | 1,076,267,892 | 110,798,087 | 85,130,943 |

Source:- Dodota FED

**3.4.8 Trade, Tourism and Sports**

**Trade:** Trading is a process of exchange of commodity or products. It involves change in the ownership of the commodities. In general the development of trade in the district depends in the development of productive sectors and degree of specialization. As far the distribution of license concerned the district classified in the four type license. These include **licensed, newly licensed, license Renewed and license cancelled**. In the district a total of number of 1546 traders license have been given, about 250 traders have been given new license, 1296 traders license and about 110 traders license is cancelled in year 2011 . The detail information is given in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of license | 2011 | 2012 |
| 1 | Licensed | 1546 | 1512 |
| 2 | Newly Licensed traders | 250 | 210 |
| 3 | License renewed | 1296 | 1302 |
| 4 | License returned/cancelled | 110 | 36 |

*Source: Dodota Trade, Industry, and Transport Office 2011/12*

**The Major local cash crops in the districts**

**Exportable Items by types and amounts supplied to central market**

*These are raw materials which mainly originate from the agricultural sector of the country. They include live animals, hides, and skin, Oilseed, vegetation, Fruits, pulses and fishes*

|  |  |  |  |
| --- | --- | --- | --- |
| ***No*** | ***Types of goods supplied to central market*** | ***2011*** | ***2012*** |
| *1* | *Livestock* | *74502* | *64,515* |
| *2* | *Sheep* | *72198* | *45059* |
| *3* | *Goat* | *64320* | *43160* |
| *4* | *Fish* | *2844* | *2760* |
|  | ***Livestock product*** |  |  |
| *5* | *Milk* | *20* | *15* |
| *6* | *Sheep skin* | *3161* | *140* |
| *7* | *Goat skin* | *3122* | *1379* |
| *8* | *Honey* | *12* | *5* |
| *10* | *Wax* | *0* | *534* |
|  | ***Types of Crop production*** |  |  |
| *12* | *Cereal crops* | *57659 kun* | *4670 ton.* |
| *13* | *Haricot beans white* | *95* | *28 ton.* |
| *14* | *Vegetation* | *1095 ton* | *1563 ton.* |
| *15* | *Fruits* | *0* | *32 ton.* |
| *16* | *Pulse* | *2206* | *28ton.* |

*Source: Market Development office 2011/2012*

*The exportable items supplied to the central market is highly exposed to fluctuation of international prices*

**Tourism:-** deals with the movement of people away from their normal residence for holiday, Recreation and leisure activity, business meeting and other purpose.Dodota district is main centers of tourism as it were identified by culture and tourism Office. These are Dilfakar Park, Tero-Dasta, hot spring, and Shebalo hot water (the main tourist attraction sites of the district.). All of them are under developed but, when we compare to the past year there is development on the aspect of Tourism and as well as hotel.

**5.5.2 1 . Number of tourist Attraction centers by types and Available service facilities**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name of tourist attraction centers | Specific district/area in the district/ | Distance in km  From | | Type of the site | Current  status |
| Finfinne | Zonal  Capital Asela |  |
| Dilfakar regional park | Dera | 125 | 50 | Natural (conserved) | Excellent |
| Dilfakar shrine | Dera | 125 | 50 | Religious | Good |
| Tero Geothermal | Tero dasta | 162 | 112 | Natural | Poor |
| Shabalo Hot water | Mire shire | 132 | 57 | Natural | Poor |
| Belale’s forest | Belale | 152 | 77 | Natural | Good |
| Koka manmade lake | Ammude | 175 | 80 | Manmade | Very good |
| Mount Dabaso | Dabaso | 132 | 58 | Natural | Poor |
| Ammude Haro Rophi Lake | Ammude | 160 | 77 | Natural | Poor |

**Major Hotels Restaurants and Bars in the Districts**

Since the district is found along the main Road of Adama to Asela and there many restaurants and bars in the districts .However, among few hotels found in the district there are only three hotels that meet hotels standard**. These are Bati international wangari and wub miraf,** of the three standardized hotels Wub Miraf is damaged.

**Religious institution:-** are organization who are committed to the practice of religion. In dodota Woreda there are 97 total number of religious institution of which about 71 institutions are mosques, 12 are Orthodox Church and 14 are protestant church. This implies that majority of inhabitants are the followers of Islamic religion and Orthodox is next most populous number in the district. The following map shows where the institutions are found in the woreda

**Sport**

**Types of sport activities and facilities in the District**

According data collected from Sport office in 2012, Dodota is one of potential woreda in having one standardized stadium and about 1(one) Small stadium that enables about 760 total number of sport men in different types sports such as Football, Volley ball, Basketball, karate, World Taekwondo, and Tennis**.** For all types of sports in the district is run out by 30 coaches and 21 referees.

* + 1. **Development Activities**

**Development:-** is a process by which members of society increase their personal and institutional capacities to mobilize and manage resource to sustainable improvement in their quality of life.

* + - 1. **Major on-going governmental and non-governmental projects and programs as well as private investments in the Districts.**

There are about 21 Number of projects in the districts, of which 2 domestic projects are not implemented by sector

**Chapter-Four**

1. **Problems And Potentialities**
   1. **Problems**

Poverty and food insecurity are the main challenges and trend mental issues of economic development in Dodota District. It is evident that in all developing countries the vision is to have a well-developed economy in the long run. However, this is impossible without having a well-developed industrial sector which absorbs more labor force there by reducing the level of unemployment. Apparently, reduction of unemployment and food insecurity, the federal government of Ethiopia has implementing different development program now a day the district have work on different activities to improve the life of society in different manner .These are on natural resource, using modernizations of Agriculture and young people’s have involved in different aspect of socio-economic activities from the past year now a day there is a great change .

As well as the health sector coverage in the wereda are 67% and the main way of disease prevented in the wereda use Public Health, protection and improvement of the health of entire populations through community-wide action, primarily by governmental agencies. The goals of public health are to prevent human disease, injury, and disability; protect people from environmental health hazards; promote behaviors that lead to good physical and mental health; educate the public about health; and assure availability of high-quality health services.

The education activities in the district have increased from year to year. But, the main challenge student economical dependency that results high drop rate.

4.2 **Potentialities**

In the district there is different type of infers structure in all rural kebeles up to urban centers. This is good news for those who want to invest in the district. In another way geographical location of the district is center for Finfine and for zonal town. Lastly, we advise you to read this socio-economic profile as to know more about Dodota background in the aspect of Geographical, social, economic and political and came invest in the Dodota District.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF GOLOLCHA DISTRICT 2011 AND 2012 E.C**

# Introduction

Gololcha is one of the 27 districts of Arsi Zone. The historical name of the district is derived from the name of the river flowing in the district called Gololcha. The district is established in 1945 as one of the zone administrative units. It has 26 administrative units of which 23 are peasant Associations while 3 are urban administrative. Chancho town is the capital town of the district. It is located at 307 km from Regional capital city, Finfine and 285 km from zonal capital, Asella town to East direction on Dera- machara main road.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Gololcha district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization, to identify development gaps for researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district and zonal level sectors departments, 1987 and 1999 census result report and other related documents available in our office. The Problem faced during compiling these documents are Lack of well-organized and consistent data in the district and zonal sectors etc.

This paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

# CHAPTER ONE

## **1. Physical Setting**

### 1.1. Location and Area

### Gololcha is one of the administrative units of Arsi Zone. Astronomically, it is located between 7043’08”N to 8o19’08” N TO Latitude and 39o54’13”E Longitude. The district is found South east of Amigna District, South of Chole district, South West and West of Guna and Aseco district, in the North West and Shenan kolu district, north east and Eastern direction having the total area of 1730.1 which accounts for 8.23% of the total area of the zone. The district is further sub-divided in to 23 rural kebeles and Three urban areas.

### 1.2. Geology, Relief, Drainage and climate

**Geology;** The present surface rock distribution, the land configuration and other features of the district was formed during late Mesozoic era and different period of Cenzoic era as a result of both internal and external forces acting up on the surface. Accordingly, more than 45% of the district was covered by Amba Ardom Formation in the form of belt from Northern part of the district to the Southern and South Eastern part in the form belt through the central part of the district. Moreover, Amba Ardon formation covers some of the eastern part in the form of narrow belt. Likewise, Alajae formation covers extensively form Northern tip to Southern tip adjacent to Amba Ardom formation in the west. In addition, some of the Western border of the district was covered by Tarmbar Megezez formation. On the other hand, the whole eastern and east central part of the district was covered by Lower part of Cilalo formation except few areas covered by Amba Aradom formation and Rhyolitic volcanic centres.

**Relief: -** The Relief structure of the district consists of high flat rolling plateau, undulating low land area dominated by small hills and low laying plain Area. The altitude of the district is **1320-2936** meters above the sea level. The lowest place is found in **Culul Darba** area **1320m** while the highest place is located in **Mine Gora**  **2936m**..

**Drainage: -**Due to its location, the district has different gorges’ and river systems. There are no permanent rivers in the district. The major seasonal streams found in the district are Gololcha, Culul, Darba, Mine, Kawe, Sinkille, kala, Babbo, Warke. Generally, the district has high potential for both traditional and modern irrigation system, which can be used to increase agricultural productivity if they are utilized efficiently.

**Climatic condition** Due to its altitudinal location, the climatic condition of the district is dominantly moderately warm which is between **200m-2936m**. This type of climate consists about **75%** of the total area of the district. The remaining ones are moderately cool and cold) which account for 25 % of the total area of the district. Hence, is categorized under moderately **warm agro**-ecological zone. The mean annual rainfall is ranging between 200**-1600**mm and the average rainy days are more than 70 days in the year. The rainfall pattern is bi-modal, which is short rainy season (**Belg from March** to **May)** and summer or long rainy season (**Maher from June** to **August**).

### 1.3. Soil, Vegetation and Wild life

**Soils:** The major types of soil in the district are: **clay** (**7%), sandy** (**57 %),silt** (**17 %)** and **loam** (**19 %)** covered the area of the districts.

**Vegetation;** In the district vegetation is covered by different species indigenous natural forest and small bush and shrubs.

**Table 1.1.major vegetations and their coverage in the district year 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Major types of natural vegetation** | **Area coverage**  **(In heck.)** | **Coverage (in %)** |
| 1 | Forests | 1824 | 2.02 |
| 2 | Woodlands | 3021 | 1.6 |
| 3 | Reveries | 0 | 0 |
| 4 | Shrubs | 25140 | 14 |

**Source: Gololcha District Agricultural Development Office**

**Wild life:-** The major wild animals found in the district are **Hyena, Tiger, pigs, Monkey, Apes, Echidna, Rabbit, Wild dukula and** etc. There are no reserved areas for wild life conservation in the district.

# Chapter Two

## **2. Population Characteristics**

### 2.1. Population Size

According to the estimation made from 1999 census, the population of the district was increased from **172,176** to **201,157** between the years 1999 to 2012.From the total population of the district in the year 2012 **is 213,036** respectively. This indicates that more than 97% of the population of the district is living in rural area depending on agriculture.

In the year 2012 the total populations of the district was increased from **162,197 to 201157** of which the rural and urban respectively during the indicated years .

**Table: 2.1 Population distribution by urban, rural and sex for the district year 2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Rural** | | | **Urban** | | | **Total** | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 103362 | 102756 | 206118 | 5683 | 7236 | 12919 | 107328 | 111709 | 219037 |
| 2012 | 106,042 | 56155 | **162197** | 23635 | 15325 | **38960** | 108,632 | 104,404 | **213,036** |

Source: projected based on 1999 CSA data

**2.2. Age and Sex Structure Population**

According to 1999 CSA Based population and housing census report indicates, the young age population (4-14) is 55,398 productive age population (15-64) is 108,326 and old age population (65+) is,183 accounts of the total population of the year 2012 is 213,036 respectively . Based on area of residence, young age population (0-14) is 72305 productive age population (15-64) is 3117 and 52,292 account for urban and Rural area respectively.

**Table: 2.2. Population size by wider age group Classification of the year 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Rural | | | | Urban | | |
| Age | Male | Female | Total | Male | Female | Total |
| (4-6) | 13,400 | 12,716 | 26,116 | 251 | 246 | 497 |
| (7-10) | 15,196 | 14,515 | 29,711 | 337 | 314 | 651 |
| (11-14) | 12,417 | 11,988 | 24,405 | 335 | 296 | 631 |
| (7-14) | 27,613 | 26,503 | 54,116 | 672 | 610 | 1,282 |
| (15-16) | 5,426 | 5,286 | 10,712 | 161 | 138 | 299 |
| (17-18) | 4,937 | 4,861 | 9,798 | 155 | 132 | 287 |
| (15-64) | 52,917 | 52,292 | 105,209 | 1,744 | 1,373 | 3,117 |
| **Tot pop** | **117,664** | **113,354** | **231,018** | **3,052** | **2,648** | **5,700** |

Source: Based on 199 CSA population & Housing census report

2.3. Population density and Rural Settlement:

Population density indicates population recourse relationship for social services, economic and land recourses. Regarding population land resource ratio/relation, the district had a crude density of district 1730.10 people per km2 in the year 2012. The crude density of the district increased to 117 people per km2 in the year 2012. Regarding the settlement pattern of the district the rural parts area of the district characterized by scattered type of settlement.

**2.4. School Age Population:**

School age population is one of the best indicators for planning and budget preparation of education facilities, health and other facilities. Moreover, to measure the education facility with the help of students to classroom ratio, students-teachers ratio, students’ text-book ratio, and others school age population is crucial.

# 

# Chapter Three

## 3. Economic Condition

### 3.1.1. Crop Production

## Bimodal pattern of rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg. However, Meher is the largest season in terms of both of cultivated land and crop production. For instance, in the year 2011/2012 it accounts for 95.04% of total cultivated land and 90.4. % of production obtained.

## The major annual crops grown in the district are cereals, Pulses and fruit and vegetables. From cereal crops Teff and Maize are the most widely grown while from pulses horse beans, field peas, haricot beans are the most widely grown. In addition, the district is known in producing some cash crops like (tomato, onion, fruits, spices, root crops and different types of vegetables and the like).

.

In the meher season of 2011 and 2012 there were 66135.2 hectares and 10209 hectares of land were cultivated and 188105.5 quintals and 216320.75 quintals of production were obtained respectively. This gives an average productivity of 95.04 and 90.4 quintal per hectare during the year under consideration.

By crop type, from cereal crops, sorgum with 11.8 followed by maize with 10.2 quintal per hectare followed by wheat with 6.5 and barley with 6.2 quintals per hectare is the most productive while from pulses Haricot beans with 7.5 quintals per hectare horse beans with zero quintals per hectare followed by Field pea zero quintals per hectares during the production year of 2012.

Likewise, during Belg season crops, land covered by different types of crop was also increased from 2852 hectares to 3010 hectare of land between the year 2011 and 2012 in the district. During the same years, the productions obtained were also increased from 70,025 to 83,145 quintals. In year 2011 and 2012 272.5 hectares and 139729 hectares of land cultivated and 12841 and 14143 quintal of production were obtained. However, the average productivity of land was decreased from 15.37 to 11.5 and 11.5.42 quintals per hectares during the year under consideration.

**Table: 3.1. Area cultivated and production obtained for private peasant holdings by seasons**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2010/2011** | | | **2011/20012** | | | **2012/2013** | | |
| **Area(Hect)** | **Prod (Qunt)** | **Productivity/hect** | **Area(Hect)** | **Prod (Qunt)** | **Productivity/hect** | **Area(Hect)** | **Prod (Qunt)** | **Productivity/hect** |
| **Cereals** | **18538.3** | **112299** | **38.11** | **21033** | **309671.9** | **65.9** | **13960** | **154124** | **79..2** |
| Wheat | 510 | 30542 | **6.12** | 190 | 1900 | **23** | 55 | 1375 | 25 |
| Teff | 6496 | 22231 | **3.42** | 3354 | 33226 | **10.9** | 5000 | 85552 | 17.11 |
| Barley | 447.3 | 2685 | **6** | 150 | 1600 | **0** | 30 | 660 | 22 |
| Maize | 6494 | 52418 | **8.07** | 900 | 42300 | **32** | 4712 | 31466 | 6.67 |
| Oats | 264 | 1980 | **7.5** | 0 | 0 | **0** | 0 | 0 | 0 |
| Sorghum | 3827 | 26803 | **7** | 4169 | 142222 | **0** | 4163 | 35071 | 8.42 |
| **Pulses** | **216.5** | **852.75** | **19.65** | **381** | **6153** | **10** | **27** | **315** | **32.57** |
| Horse beans | 79 | 328 | **4.15** | 0 | 0 | **0** | 0 | 0 | 0 |
| Field peas | 42 | 168 | **4** | 0 | 0 | **0** | 0 | 0 | 0 |
| Lentils | 44.5 | 133.5 | **3** | 0 | 0 | **0** | 10 | 120 | 12 |
| Check pea | 12.5 | 50 | **4** | 149 | 1490 | **10** | 10 | 170 | 17 |
| Haricot beans | 38.5 | 173.25 | **4.5** | 107 | 1070 | **10** | 7 | 25 | 3.57 |
| **Oilseed** | **12.5** | **25** | **2** | **746.2** | **10376.4** | **6.19** | **2854** | **169729** | 174.30 |
| Sesame | 12.5 | 25 | **2** | 50 | 450 | **4.85** | 30 | 300 | 10 |
| Ground nut | 0 | 0 | **0** | 421 | 6378 | **12.3** | 700 | 10,065 | 14.00 |
| Others | **174** | **3315** | **63** | **0** | **10205.4** | **0.00** | **0** | **0** | 0 |
| Fruits | 56 | 1960 | **35** | 0 | 0 | **0.00** | 1005 | 77,852 | 77.46 |
| Vegetable | 53 | 1060 | **20** | 0 | 0 | **0.00** | 1119 | 81,512 | 72.84 |
| Beverage | 15 | 45 | **3** | 0 | 0 | **0.00** | 0 | 0 | 0 |
| Rootcrops | 0 | 0 | **0** | 0 | 0 | **0.00** | 0 | 0 | 0 |
| Spices | 50 | 250 | **5** | 0 | 0 | **0.00** | 0 | 0 | 0 |
| **Grand Total** | **18941.3** | **116491.8** | **122.76** | **22160.2** | **326201.3** | **88.23** | **16841** | **324168** | **206.87** |
| **Cereals** | **383.54** | **2235.04** | **13.53** | **1372** | **47296** | **38** | **4545** | **92188** | **62** |
| oats | 14.5 | 58.4 | **4.03** | 515 | 4740 | **9.2** | 30 | 150 | **5** |
| Barley | 15.04 | 52.64 | **3.5** | 0 | 0 | **18.00** | 60 | 1200 | **20** |
| Maize | 354 | 2124 | **6** | 1511 | 65285 | **17.00** | 3429 | 75,438 | **22** |
| Ground nut | 0 | 0 | **0** | 0 | 0 | **20.00** | 1026 | 15400 | **15** |
| **Pulses** | **0** | **0** | **0** | **0** | **0** | **0.00** | **16048** | **226462** | **122.67** |
| Field peas | 0 | 0 | 0 | 0 | 0 | **0.00** | 0 | 0 | **0** |
| coffe |  |  |  |  |  |  | 15,056 | 112,150 | **7.44** |
| vetable |  |  |  |  |  |  | 992 | 114,312 | **115 ..23** |
| **Oilseed** | **0** | **0** | **0** | **0** | **0** | **0.00** | **900** | **8100** | **9** |
| **Grand Total** | **383.54** | **2235.04** | **13.53** | **1372** | **47296** | **120.04** | **21,493** | **326,750** | **193.67** |

Source: - Gololcha District Agricultural Development Office

**Irrigation:** There are 6757 hectares of potential irrigable lands in the district. Between the year 2011 and 2012, the land cultivated by traditional irrigation was increased from 6748 hectares (93.2%) of land to 1382 hectares of land. From this irrigation around 2753 and 2997 farmers were benefited respectively.

### 3.1.2. Livestock, poultry and Beekeeping

**Livestock**: the district is famous in livestock resources. Cattles, sheep, goats, horses, mules,cameis and donkeys are the major livestock population found in the district. Between the year 2008, 2009, 2010, 2011 and 2012 the livestock populations were 498538, 567349, 588048, 363904 and 364678 respectively.

The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table: 3.2. Distribution of Livestock and poultry (20008-2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of livestock** | **Number of livestock during the year** | | | |
| **2011** | **%** | **2012** | **%** |
| **Livestock population** | **363904** |  | **364678** |  |
| Cattle | 235,952 |  | 236,073 | 4.5 |
| Sheep | 10,100 |  | 10,221 | 2.2 |
| Goat | 101,471 |  | 133,180 | 22.15 |
| Donkey | 12,289 |  | 16,129 | 2.7 |
| Horses | 735 |  | 857 | 0.15 |
| Mules | 3212 |  | 3324 | 0.7 |
| Camel | 387 |  | 443 | 0.07 |

Source: Gololcha District Animal health and marketing agency

Poultry production: - is one of the important sources of family income and food in the district. Accordingly, between the year 2011 and 2012, the number of poultry populations was increased from 85,761 to 86,542. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

### 3.1.3. Bee Keeping and Fishery

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family which is practiced by many farmers in the district. However, we could not say anything about the number of bee hives and the production obtained since there is no reliable data. However, Using of herbicides and insecticides are the main problems in bee farming.

**Fishery:** fishing activity is as simple as that of poultry production and other livestock rearing even in their garden by harvesting rain water. However, there is no fishing activity in the district since there is no large water body like lakes, pond and river and due to the farmer’s inability to practice fishing activities using water harvesting.

### 3.1.4. Agriculture Input and Infrastructure

**Agricultural Service Cooperatives:** there were 23 Peasant Associations (PAS) in the district with 17043.male and 2021 female) member farmers in the year 20012 respectively. During the same years, the number of Agricultural Service cooperative was increased from 12 where as the number of member farmers was increased from female to female with 7 and 20 member farmers respectively. Regarding their capital, they have Ethiopian birr 1,566,723 in the year 2012.

In addition, these cooperatives have also had 9 grain mills having a capacity of 1,200,000 quintals. The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, agricultural mechanizations services, etc. for local peasants.

On the other hand, there are also cooperatives organize by district cooperative promotion office on different activities, there were one milk and milk product producers and mineral and mineral product producers with 0 member farmers during the year 2012 .However, the number of and mineral and mineral product producers was increase to three with their member also increased to 36 during the year 2012

**Table: 3.3. Number of Cooperatives on different type of Activities in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Cooperatives** |  | **Number of member farmers** | | |
| **No** | **Male** | **Female** | **Total** |
| **2008** | | | | |
| Milk and milk Product producer | 0 | 0 | **0** | 0 |
| Mineral and mineral product producers | 0 | 0 | **0** | 0 |
| General service cooperatives | 20 | 558 | 90 | 648 |
| Waldaa bu’uura | | | | |
| Qusannaa fi liqii | 13 | 593 | 24 | 617 |
| Fayyadamtoota | 4 | 255 | 60 | 315 |
| Buna | 13 | 593 | 24 | 617 |
| **7** | | | | |
| Milk and milk Product producer | NA | NA | **NA** | NA |
| Mineral and mineral product producers | NA | NA | **NA** | NA |
| General service cooperatives | NA | NA | NA | NA |
| **Total** | **0** | **0** | **0** | **0** |
| **2010** | | | | |
| Milk and milk Product producer |  |  |  |  |
| General service cooperatives |  |  |  |  |
| Qusannaa fi liqii | 2 | 31 | 10 | 41 |
| Fayyadamtoota | 3 | 389 | 169 | 558 |
| Buna | 1 | 55 | 25 | 80 |
| **Total** | **6** | **475** | **204** | **679** |
| **2011** | | | | |
| Milk and milk Product producer |  |  |  |  |
| Mineral and mineral product producers |  |  |  |  |
| General service cooperatives | 3 | 71 | 8 | 79 |
| Qusannaa fi liqii | 2 | 323 | 166 | 489 |
| Fayyadamtoota | 2 | 101 | 28 | 129 |
| Buna | 0 | 0 | 0 | 0 |
| Waldaa bu’uuraa | 0 | 0 | 0 | 0 |
| **Total** | **7** | **495** | **202** | **697** |
| **2012** | | | | |
| Milk and milk Product producer | 0 | 0 | **0** | 0 |
| Mineral and mineral product producers | 0 | 0 | **0** | 0 |
| General service cooperatives | 20 | 558 | 90 | 648 |
| Waldaa bu’uura | 50 | 3127 | 934 | 4061 |
| Qusannaa fi liqii | 13 | 593 | 24 | 617 |
| Fayyadamtoota | 4 | 255 | 60 | 315 |
| Buna | 13 | 593 | 24 | 617 |
|  |  |  |  |  |
| **Total** | **100** | **5126** | **1132** | **6258** |

Source:-Gololcha district cooperative office

**Agricultural input utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase in demand for food and industrial raw materials. Accordingly, between the years 2011 to 2012 production year the amount of chemical fertilizers (Urea and Dap) distributed to the farmers was increased from 1004 quintal to 16094 quintals while the amount of improved seed distributed to the farmers was increased from 1822.5 quintal to 1841. In the year 2011 and 2012 6034 quintals of fertilizers (DAP & UREA) and 3008.5 quintals of fertilizers (DAP & UREA are respectively.

In the year 2012 8120 quintals of fertilizer (DAP, UREA) and 2853 respectively. Likewise the number of pesticides and herbicides distributed to the farmers in the same years were 1971, and 842 respectively. The above data was the data collected from Farmers’ Service Cooperatives only.

**Table: 3.4. Amounts of agricultural inputs distribute to farmers by type of year**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of input** | **2010/2011** | **2011/2012** | **2012/2013** |
| **Fertilizers** |  |  |  |
| **DAP (qt.)** | **8120** | **243** | **64** |
| **NPS ,NPSB(qt)** | **2000** | **191** | **6906** |
| **Urea (qt.)** | **2853** | **4353** | **7655.5** |
| **Improved Seeds (qt)** |  |  |  |
| **Wheat** | **0** | **20** | **0** |
| **Maize** | **363.375** | **135** | **123.1** |
| **Herbicides** |  |  |  |
| **Herbicides (lit.)** |  |  | **841** |
| **Pesticides** |  |  |  |
| **Liquid(lt)** | **1130** | **500** | **580** |
| **Powder(kg)** | **200** | **450** | **44** |
| **Tablet(Doze)** | **68** | **80** | **100** |

# Source: Gololcha district Agricultural Development Office.

**Development Agents and Farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year 2008, 2009, 2010, 2011 and 2012 the number of farmer training centers (FTCs) and development agents was 34, 22, 22,22 and 22 while the number of Developmental Agent was 90 66,67, 68 and 80 respectively. However, the number of farmers benefited from these farmers training centers were increased from 18731 to 19061 during the year 2011 and 2012 under consideration. So as to increase agricultural production and productivity, three development agents are assigned in each PA with profession of plant science, Animal science and Environmental protection so that they can help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection

**Table 3.5: Number of Development Agents and FTC (2008- 2012).**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 22 | 22 |
| Number of Development Agents | 66 | 80 |
| Number of beneficiaries | 24,586 | 26,625 |

## **Source**: Gololcha District Agricultural Development Office

**Live Health Infrastructure**: - Availability of Animal health infrastructure is very important to improve Animal productivity and control Animal diseases. Between the year 2008 2009, 2010, 2011 and 2012 the number of health personnel was increased from 25 to 27 and eight health facilities was one (C-Type) and 7 (d-type ) (26) animal health assistance and 1 .

**Table: 3.6. Animal health personnel and Health facilities**

|  |  |  |
| --- | --- | --- |
| Service for live stock | **2011** | **2012** |
| Veterinary Personnel |  |  |
| Veterinary doctors | 1 | 1 |
| Animal health Assistants | 28 | 26 |
| Animal Health infrastructure |  |  |
| Number of clinics type C | 1 | 1 |
| Number of clinics type D | 7 | 7 |

Source: **Gololcha District Animal Health and Marketing Office**

**Agricultural Calendar:** It is well known that the farmers of the district are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Gololcha district is shown in table below.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Maher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district.

**Table: 3.7. Agricultural Calendar of the district year 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Maher Season** | **Belg Season** |
| 1 | Land preparation | June—july15 | March15 –April15 |
| 2 | Planting (Sowing) | July15-August15 | Apriy15—April 30 end |
| 3 | Weeding | July30th–August 15th | May15-june30 |
| 4 | Harvesting | December15—December30 | Jul15y – end of August |

**Source: Gololcha district Agricultural Development Office.**

### 3.1.5. Methods of Soil Conservation and Maintaining Soil Fertility

## **Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, fallowing and using crop residue while the modern one is the using of chemical fertilizer and compost (organic fertilizers).

## **Methods for Soil Conservation:** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforestation are modern way of soil conservation in the district

3.1.6. Constraints of Agricultural and Livestock Production

Households Affected By Drought: According to the data obtained from the district’s agriculture and rural development office due to rainfall variability and dalliance and let coming in Belg and Summer rainfall, since the year 2012 more than 16,491 households and 74,509 children were affected by drought respectively. To overcome the effect of drought the district agriculture office in collaboration with district and zonal disaster prevention and preparedness office provide relief of grain, oil 1125000, and balance diet for affected households. Accordingly, 36,528.60, 24,352.4, 5898 and 5736 quintals of wheat, maize beans and famix were distributed to the farmers during the year 2012. In addition, 1125000 liters of oil were also distributed to the affected families during the year 2012. For details see the table below.

**Table 3.8.Amounts of relief distributed to drought and natural hazard affected people**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Type of relief | Unit | Amounts of relief distributed in year. | | No.people affected | | No.people supported | |
| **2011** | **2012** | **2011** | **2012** | **2011** | **2012** |
| 1 | Maize | quintal |  | 24,352.4 | 86725 | 98,000 | 52532 | 91,000 |
| 2 | Wheat | quintal |  | 36,528.6 |  |  |  |  |
| 3 | Beans | quintals |  | 5898 |  |  |  |  |
| 4 | Famix | quintals |  | 5736 |  |  |  |  |
| 5 | Oil | lit |  | 1125000 |  |  |  |  |

**Source; - Gololcha District Agricultural Development Office**

**Crop Pests and disease:** The major crops pests in the district are Aphids, Rust, and Smut. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases:** is one of the constraints that affect the livestock production in the district. The major animal disease are Black leg, Hemorrhagic Septicemia, Anthrax, External and internal parasites, etc.

So as to overcome the problem, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. Accordingly, between the year 2008 and 2012 the number of animal vaccinated and get treatment was increased from 57,860 and 85,500 to 63,755 and 104,970. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.9. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** |  |  |
| Blackleg | 34300 | 27,360 |
| Hemorrhagic Septicemia | 34750 | 36,395 |
| Anthrax | 0 | 0 |
| Others | 0 | 0 |
| **Treatment** |  |  |
| External Parasites | 42122 | 77,480 |
| Internal Parasites | 32639 | 27,597 |

Source: Gololcha District Animal health and marketing agency

### 3.2. Mineral Recourses and Industries;

**Mining:** Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from Arsi Zone office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as **lime stone and sand stone** for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rock quarrying and pottery making mining activities by local communities in the district.

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in Gololcha district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned.

#### Table: Number of small-scale industries of the district by type

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Type of industry | **2011** | | | **2012** | | |
| Number | Employee | Capital (Birr | Number | Employee | Capital (Birr) |
| Edible oil |  |  |  | 0 | 0 | 0 |
| Metal and woods |  |  |  | 0 | 0 | 0 |
| Others |  |  |  | 0 | 0 | 0 |
| **Total** |  |  |  |  |  |  |

**Source:- Gololcha trade and industry office**

### 3.3. Trade and Tourism;

**Trade:** Since the district is known by tradable cash crops like coffee, root crops, etc **t**rading is one of the major activities that the livelihoods of most urban households relay on. However, we could not say anything about the number of trader in the district.

Regarding tradable items and cash crops production activities, the district is known in the production of **Coffee,** chat, different types of spices, sugar cane, fruit and vegetables, etc are produced in the districts. In addition, the district is known by exportable items like hide and skin. These indicates that the district is known by trading of inspected skin and hides, inspected coffee, chat, fruit and vegetables to the central market. However, we could not say anything about the amount of trading items sent to the central market due to the absence of reliable data in the district.

**Tourism and its Amenities**

Due to lack of promotion and standardized infrastructure like standard Hotels, Roads and other social infrastructures, Tourism is not yet developed in the Arsi Zone in general and Gololcha district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by district culture and tourism office. These are Arba-Gugu Forest (Natural and manmade), Gololcha cave, S Natural bridge of ‘chininna’ and etc. are the main tourist attraction sites of the district. All of them are under developed.

**Table: 3.10. Tourist attraction sites in the district year 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Name of attraction site** | **Type** | **Distance in km from** | | |
| Wereda capital(chancho) | Zonal capital(Asella) | Federal capital(Finfinne) |
| 1 | Cinina Natural site | Natural | 25 | 160 | 2872 |
| 3 | Hora Chancho | **‘’** | 2 | 196 | **307** |
| 4 | Goda Baro cave | ‘’ | 70 | 261 | **355** |
| 6 | Mount Adare | **‘’** | 17 | 182 | 294 |
| 7 | Gara Dalacha mountain | **‘’** | 28 | 211 | 320 |
| 10 | Siidaa dande | **‘’** | 47 | 232 | 354 |
| 11 | Holqa saalaa | **‘’** | 25 | 200 | 322 |
| 12 | Holqa ciniinaa | **‘’** | 21 | 196 | 318 |

**Source:** Gololcha culture and tourism office**.**

### 3.4. Finance and Financial Institutions

**Financial Institution:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the transformation the economy of the district. The district has three financial institution (Ethiopian commercial bank, oromia international bank and cooperative bank of oromia ).

**Annual Budget allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount, which accounts for more than of the total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low.

Between the year 2011 and 2012 the total budget allocated for the district was increased from 106,131,905 to122,124,855Ethiopian birr showing an increment by 15992950 birr which indicates an increasing trend in the budget allocated for the district.

**Table 3.11: Annual budget allocated for the District year 2012**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 106,131,905 | 16.1 |
| 2012 | 122,124,855 | 15.9 |

Source: Gololcha district finance and economic Development office.

**Table: 3.12. Expenditure of Branch Office of Finance Bureau for the year 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of Expenditure | Salary | Operating Expenditure | Capital | Total | Source of Finance |
| General Service | 50448370 | 7,025,297 | 2,550,414 | 17,405,006 | Gov’t |
| Economic service | 10,227,941 | 2,894,421 | 4,967,539 | 19,772,453 | Gov’t |
| Social service | 39,081,075 | 3,695,195 | 20,000 | 47,834,015 | Gov’t |
| **Total** | **99,666,927** | **14,790,748** | **7,537,953** | **122,124,855** |  |

Source:-Gololcha finance and Economic development office

**Revenue;** the total revenue collected in the district was increased from 14,104,512.47 to 20,581,113.48 birr between the year 2008 and 2012. The main sources of revenue in the district are Direct tax and non-tax revenue.

**Table: 3.13. Total in land revenue collected in the district by type of revenue source**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **%** | **Indirect revenue** | **%** | **Non-Tax revenue** | **%** | **Total** |
| 2011 | 7,899,578.18 | 133.8 | 2,279,985.34 | 99.8 | 1,973,366 | 136 | 12,152,929.52 |
| 2012 | 12,591,940.35 | 89 | 416,509.12 | 95 | 1,096,063 | 7.7 | 20,581,113.48 |

Chapter Four

## 4. Social Service and Basic Infrastructure Condition

### 4.1. Education

**Kindergarten**: According to the data obtained from Statistical Abstract of the district, there were one non- public kindergarten schools since the year 2011 to 2012 while the number of children enrolled to this school was increased from 148 to 210 between the year 2011 and 2012. This school provides education with six (four female) and four teachers (male 1, Female, 3) during the year 2012 respectively. However, in the year 2011 and 2012 there were only one non-government. One of the main problems related with kindergarten school is lack of clear management system.

**Primary Schools:** between the years 2011 and 2012 the number of government primary school were 51 and 54 while the number of students enrolled to school was increased from 36,756 to 37,037 Likewise the number of teachers was also increased from 657 to 693 respectively.The numbers of classrooms were increased from 467 to 540 in the year 2012.

**Senior Secondary education (9-12) -** In the district there is five Senior Secondary (9-12) school located in , Mine,jinga Dibu, and Chancho, gutama hawas and bonya kombehigh school. The number of students enrolled to these schools was increased from 2,542 to 4,869 between the year 2011 and 2012. Likewise, during the same year, the number of classroom was also increased from 33 to 93 between the year 2011 and 2012 while the number of teachers was increased 87 to 113 during the year 2011 and 2012. On average the Student to teacher and student to classroom ratio 38: 1 and 49: 1 in the year 2012 was decreased to 30:1 and 51:1 respectively in the 2012

**TVET: -** There was one governmental technical and vocational education school in the district.

**Education Quality:** The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio and student-text book ratio. Accordingly, from total primary school teachers who teach at this level, the number of teacher who holds degree was increased from 22 in the year 2012 . This indicates there was high increment in the degree teachers. So as we see from the given information, Education office of the district would be expected to do more to improve the quality of education. To this end, only depending on the above parameters are not enough to measure educational quality of a district. Hence we have to look into other factors mainly continuous professional development program, teachers’ commitment to teach and students’ commitment to receive what teachers say

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office ,the number of diploma Teachers were decreased from 36 to 15 while the number of degree teachers was increased from 548 in primary school (1-8) in the year 2012. (9-12) during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education

**Table .4.2:- Number of Teachers by level of education and School (2011-2012).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Education level** | **2008** | | | **2009** | | | **2010** | | | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Kindergarten school** | | | | | | | | | | | | | | | |
| **TTI** | **0** | **0** | **0** | 2 | 4 | **6** | 2 | 2 | **4** | 0 | 0 | 0 | 1 | 3 | 4 |
| **No of teachers in Primary (1-8)** | | | | | | | | | | | | | | | |
| TTI | 366 | 55 | 421 | 293 | 48 | 341 | 300 | 54 | 354 | 32 | 4 | 36 | 13 | 2 | 15 |
| Dip | 58 | 16 | 74 | 153 | 25 | 178 | 146 | 19 | 165 | 0 | 0 | 0 | 397 | 151 | 548 |
| Total | **424** | **71** | **495** | **446** | **73** | **519** | **446** | **73** | **519** | **32** | **4** | **36** | **410** | **153** | **563** |
| **S. Secondary School (9-12)** | | | | | | | | | | | | | | | |
| Diploma | 33 | 3 | 36 | 32 | 4 | 38 | 26 | 4 | 30 | 0 | 2 | 2 | 0 | 0 | 0 |
| BA/BSc | 16 | 0 | 16 | 10 | 1 | 21 | 22 | 2 | 24 | 94 | 17 | 111 | 71 | 11 | 82 |
| Total | **49** | **3** | **52** | **42** | **5** | **59** | **48** | **6** | **54** | **94** | **19** | **113** | **71** | **11** | **82** |
|  | | | | | | | | | | | | | | | |

**Source:** Gololcha District Education Office

## **4.2. Health**

**Health Institution:** Between the year 2011 and 2012, the number of Government health facilities were 28 while the number of private health facilities were increased from 8 to 11. On the other hand, the ratio of population to health center was decreased from 1:32110 in the year 2012. The ratio of population to health post was decreased 1:6422 in the year 2012. The above data indicates that even though there is improvement in the potential primary health coverage still it is far below the WHO standard.

**Health Personnel:**  Between the 2011 and 2012 the number of health personnel working in the government health institution was increased from 90 to 129 while the number of professionals in private health facilities was decreased from six to four. From the health personnel, nurse and health extension workers accounts for 39.2% and 52.61% respectively while the other accounts for only 13.17%. The Ratio of population to health personnel is 1:32110 for health officer, 1:3875 for nurses, 1:44957 for technicians and 1:3406 for extension workers during the year 2012. This ratio indicates that there is a need for additional health professionals like doctor, health officer and technicians so as to improve health service delivery. For more information see the table below.

**Table: 4.3. Number of health Institution and Personnel by Types of Ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** |  |  |  |  |
| Health Center | 5 | 0 | 5 | 0 |
| Clinic | 3 | 3 | 0 | 10 |
| Health Post | 35 | 0 | 35 | 0 |
| Rural Drug Vender | 0 | 1 | 0 | 1 |
| **Health Profession** | **134** | **3** | **129** | **4** |
| Health Officer | 11 | 0 | 5 | 0 |
| Nurse | 35 | 0 | 55 | 28 |
| Health Assistance | 0 | 3 | 0 | 0 |
| Laboratory Technician | 9 | 0 | 8 | 1 |
| Pharmacy Technician | 9 | 0 | 7 | 1 |
| Sanitarian | 2 | 0 | 4 | 0 |
| Health Extension Workers | 68 | 0 | 66 | 0 |

Source: Gololcha District Health Office

**Ten top diseases**: According to the 2012 data obtained from Gololcha district health Office, the highest prevalent disease in the district is dyspepsia (14.68%) followed by IP (**20%)** and pneumonia (14.08%) respectively in the year 2012. See table below.

**Table: 4.4. Ten top diseases existed in the district in the year 2011 and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **2011** | | | **2012** | | |
| **Type of Diseases** | **No.of population** | **%** | **Type of Diseases** | **No.of population** | **%** |
| 1 | Diamela | 1426 |  | Dyspepsia | 1681 | 14.68 |
| 2 | Helmentisis | 822 |  | pneumonia | 1613 | 14.08 |
| 3 | Malaria | 619 |  | Acute upper Resparatory infection | 1296 | 11.32 |
| 4 | AURTI | 798 |  | Diarrhea/non bloody | 1286 | 11.23 |
| 5 | Typhoid fever | 784 |  | Acute febrile/ AFI/ | 1241 | 10.84 |
| 6 | Dielariewith dehydration | 607 |  | Urinarty tract infection | 879 | 7.68 |
| 7 | Traume | 622 |  | Traume | 968 | 8.45 |
| 8 | Eye infection | 577 |  | Thyphoid fever | 848 | 7.4 |
| 9 | Pnewarnia | 785 |  | Helminthiasis | 821 | 7.17 |
| 10 | Dypepsia | 556 |  | Infection of skin and subcuneous tissue | 819 | 7.15 |

**Source:** Gololcha District Health Office

**Harmful Traditional Practices:** Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in Gololcha district. Among these, raping, Buta, Dhala**,** Gebare, etc can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district.

## **4.3. Women and Children Socio-economic Issue**

* + 1. **Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 10156 and 13406 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 6370 and 6780 in the year 2011 and 2012. Though such improvement was observed, still there were 0 and 0 women attended delivery traditional at their home in the year 2011 and 2012 due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 7591 to 8253 between the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was 10871 and 11213 during the year under consideration.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Gololcha district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 41123 in the year 2011 to 43768in the year 2012. As a result of this, according to the data obtained from Demographic health Survey of the year 2016 indicated the contraceptive prevalence rate of the district was estimated at 45%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was only 54 in the year 2012. Moreover, the number of women who are member of woreda cabinet was 5 and 7 during the year under consideration.

**Table: 4.5.- Women’s socio economic indicators in the district year 2008**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **measurement** | **2011** | **2012** |
| 1 | **Access to save delivery service** | Number |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 9879 | 13588 |
|  | Women's used PNC /Postnatal care/services | Number | 12105 | 7922 |
|  | Women’s assisted delivery | Number | 6370 | 6780 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 6370 | 6780 |
|  | Deliveries attended by HEWs | Number | 0 | 0 |
|  | In their home traditionally | Number | 0 | 0 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 7591 | 8253 |
|  | NPW TT2 | Number | 10871 | 4300 |
| 3 | **Family planning condition** |  |  | **42943** |
|  | Modern methods | Number | 41123 | 42943 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council | number | 0 | 0 |
|  | Member of woreda council | number | 54 | 54 |
|  | Member of woreda cabinet | number | 9 | 11 |

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion.

On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc

### 4.3.2. Children issue

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 16,143 in the year 2011 to 7979 in the year 2012. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 4115 and 6698 in the year 2011 and 2012 which accounts for and from total children who get vaccination. In the district the EPI coverage was in the year 2012.

**Table: 4.6. Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 5077 | 9112 |
| Measles | 5836 | 7602 |
| DPT | 6581 | 7754 |
| Polio | 5925 | 7754 |
| **Total** | **23,419** | **32,222** |

Source: Gololcha district health office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 40 and 71 children to be orphan in the year 2012.These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 0 in the year 2012 which was increased to 19 in the year 2012.This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also 400 children with different types of disability in the district who are in most cases not benefited from social services and the economy to in the district. Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Asphyxia-ABA-NR, Sepsis, Preterm, Tetanus and infection of skin.

**Table: 4.7. Children socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **measurement** | **2011** | **2012** |
| **1** | **Number of Orphan and Vulnerable children** |  | **0** |  |
| 2 | Full immunization | Number | 5836 | 6698 |
| **3** | **Child disease and causes of death** | **Number** |  |  |
|  | Malaria prone area | Number of kebele | 18 | 18 |
|  | Children affected by Malaria | Number | 193 | 219 |
|  | Children treated for malaria | Number | 193 | 219 |
|  | Children died due to malaria | Number | 0 | 0 |
|  | ITN Coverage | % | 100 | 27126 |

Source: District Health Office

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 38,786 in the year 2012 of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities. However, of the total school in the district, only 6.79% of school was access to potable water supply facilities.

**Table: 4.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | Health post | |
| 2009 | 2010 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 5 | 5 | 35 | 35 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 5 | 5 |  |  |
| 3 | Number of health institution access to water supply | 5 | 5 |  |  |
| 4 | Number of health institution access to toilet facilities | 5 | 5 | 28 | 28 |
| 5 | Number of Health institution access to dry waste disposal facilities | 5 | 5 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 0 | 5 | 5 | 0 |

Source: - District Health Office

**Table: 4.9. School access to hygiene and sanitation year 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | Secondary school | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of school in district | 5 | 75 | 5 | 5 |
| 2 | Number of school access to water supply | 2 | 11 | 2 | 2 |
| 3 | Number of school having toilet | 4 | 16 | 4 | 4 |

Source: - District Education Office

In the year 2011and 2012, the number of women get counseling for HIV/AIDS 1450 and 8748 and all of them was tested for HIV/AIDS out of which only 21 and 33 living with HIV/AIDS. During the same year, there was 6 and 5 women gets treatment as patient. Only 0 women were died due to HIV/AIDS in the year 2012. This data indicated that, currently the trends of diseases like HIV were in decreasing trends because of awareness creation through community conversation program.

## **4.4. Sport:**

The district has different types of sport activities like football and volley ball however; it has no well-organized and standardized sport facilities.

**Sport:** The district has different types of sport activities like Football, Volley ball, Athletics and Tennis. By the year 2012, there were 400 football team, 259 volley ball team and 0 Tec undo, Athletics 4, and 0 tennis clubs with the total of 659 sportsmen. However; there were no well-organized and standardized sport facilities like stadium, youth center, gymnasium, etc.

**Table: 4.10. Sport Clubs and members in the district Year 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of team** | **Member** | **Number of team** | **Member** |
| Foot-ball | 40 | 800 | 400 | 13 |
| Volleyball | 72 | 648 | 259 | 19 |
| Tecundo | - | 300 | - | - |
| Athletics |  | 2 | 4 | 1 |
| Tennis |  | - | - | - |
| Scout |  | - | - | - |
| Others |  | - | - | - |

Source: Gololcha districts youth and sport office

## **4.5. Basic Infrastructure Condition**

**Roads:** Gololcha district is found **285** km away from zonal capital town, Asella and **307** km from Regional Capital city Addis Ababa.It has **156** km length of gravel road (all weather),**217**km of dry weather road by the year 2012. This gives a road density (for all weather roads) of 0.090km per km2 and **0.125**km per km2 for all weather road and dry weather roads while road density per 1000 people of 0.79km per 1000 people and 1.10km per 1000 people for all weather road and dry weather road.

**Telecommunication:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with Wirelesstype of telecommunication. On the other hand, most rural areas of the district were not supplied with any type of telephone services. Moreover, some parts of the district have mobile service coverage since 2004.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has no types of postal services.

**Water supply:** The potable water coverage of the district is at its low stage as compared with other part of the zone. Based on the data obtained from the district’s Water, Mineral and Energy Resources development Office, of the total rural population of the district, the number of population supplied with potable water supply was increased from 83,280 (32.4%) to 103,221 (36.74%) between the year 2011 and 2012. As far as the number of water supply scheme is concerned, their number was increased from to 101 between the year 2011 and 2012. By types of scheme, the number of hand dug well, spring development scheme was increased from 6 and 31 between the year 2011 and 2012.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung; farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Chancho, haro Jinga Dibu and Kella towns of the district have supplied with electric power. However, all parts of the rural areas have no electric services.

However, in rural and urban centers, traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dung’s. On the other hand, firewood is the major energy source in rural area followed by crop residue, animal dung and kerosene.

**Table: 4.11.Sources of domestic energy supply**.

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban (M)** | **Rura l(B)** |
| 1 | Charcoal | 3 | 2 |
| 2 | Fire wood | 2 | 1 |
| 3 | Animal Dung | 6 | 6 |
| 4 | Crop Residue | 5 | 5 |
| 5 | Kerosene | 4 | 3 |
| 6 | Electricity | 3 | 3 |

**Source-: Gololcha district mineral and energy Office**

**Unemployment Condition of the district**

One of the indicators of development of the country in general and the district in particular is the level of unemployment condition and the chance of job created. Accordingly, the workers and social affairs Agency was registered 2158 unemployed personnel during the year 2012 out of which only 1666 peoples get job.

**Table: 4.12.Number of Unemployed Persons Registered, Vacancy and Employed in the year 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Types of Activities** | **Number** | | |
| **Male** | **Female** | **Total** |
| Registered |  |  |  |
| Illiterates | 547 | 201 | 748 |
| 6-Jan | 478 | 236 | 714 |
| 8-Jul | 239 | 118 | 357 |
| 12-Sep | 210 | 107 | 317 |
| **Vocational + Technical** | 17 | 5 | 22 |
| Non-Graduates | 0 | 0 | 0 |
| Graduates | 17 | 5 | 22 |
| Total | 1508 | 672 | 2158 |
| **Vacancy** |  |  |  |
| Illiterates | 547 | 201 | 748 |
| 1-12 | 1347 | 676 | 2023 |
| Vocational + Technical | 17 | 5 | 22 |
| Non-Graduates | 0 | 0 | 0 |
| Graduates | 17 | 5 | 22 |
| Total | 1911 | 882 | 2793 |
| **Employed** |  |  | 0 |
| Illiterates | 127 | 107 | 234 |
| 6-Jan | 478 | 236 | 714 |
| 8-Jul | 239 | 118 | 357 |
| 12-Sep | 210 | 107 | 317 |
| Vocational + Technical | 17 | 5 | 22 |
| Non-Graduates | 0 | 0 | 0 |
| Graduates | 17 | 5 | 22 |
| Total | 1088 | 578 | 1666 |

**Source:-Gololcha socil affairs office.**

# 

# Chapter Five

## 5. Development Activities

### 5.1. Ongoing Development Projects

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The Annual budget of the district is divided into recurrent and capital budgets. The Capital budget is directly used for the construction of different types of development projects. It is expected that total budget used for the development project are increasing from time to time so as to fulfill the development gaps in district. Accordingly, the ongoing development projects during the year under consideration are:

* **Social sector Development projects:** since 2012, in the district ,5 health centers, 35 health post and 4 primary schools and three secondary school, water supply scheme (spring development) was constructed by Seft net program, fund from UNICEF and community participation and by local government out of which most of them projects were completed and serves the local community..
* **Economic Sector Development Projects:** since the year 2012, farmers training centers, traditional irrigation sites, rural road that connect three rural kebeles, Animal health clinics, development agent houses and other offices were constructed by Sefty net, corridor development program, local government grant and community participation. However, during the year 2012 there was 22 FTC , 17 DA house, 12, Vet clinic and 101 spring developments were under construction by government budget in this sector.

**Major Problems of ongoing Development Projects**: Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents & mobilization of Construction is the major problem during the construction.

# CHAPTER SIX

## 6. PROBLEMS AND POTENTIALITIES

## 6.1. Major Problems

* **Environmental problem**: Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting are the major environmental problems of the district.
* **Economic Problem**: Shortage of farm land High prevalence of crop diseases & pests, Shortage of Agricultural inputs & lack of capacity to buy, lack of Financial Institutions (Bank Saving and Credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.
* **Social service problem**: rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high drop out rate, low Potable Water coverage, low electric power supply

# 6.2. Potentialities

**Land resource:-**The district has a large size of land resources that can be used for different types of commercial crops production and live stock rearing. Since the district is less densely population there is a large size of free land resources.

**Tourist attraction site:-**The topography of the district is very attractive naturally. More over there are many tourist attraction sites in the district from this natural bridge, different types wild Animal, mountains, caves, etc are mentioned as an example.

**Forest resources:-**The district has a large size of government protected forest and community forests. Since the district is known in coffee production most parts of the district is covered by both natural and manmade forests. These natural forests resources can be used for saw mile activities.

**Type of Investment opportunities:-**The district has a wide type of investments opportunities. Since the district has a large size of land recourses and suitable climate condition it has great advantages for investors to produces different types of commercial crops like coffee, fruits, chat, spices etc. More over it has a great advantage for live stock production especially goat production. It has also many rivers that can be used for both traditional and modern irrigation system.

**Minerals and energy resources:-**Even though visible study was not conducted in the district it has expected that the district has many types of minerals and energy resources. From these gemstone, sandstones, solar energy and others are mentioned as an example

**CHAPTER SEVEN**

## **7. Conclusion and Recommendations**

## **7.1. Conclusion**

Gololcha district is one of the districts’ found in Arsi Zone which has 23 peasant associations and 3 urban administrative units having total areas of 1730.1 km2.It has a total population of 201,908 by the year 2012 of which more than 97% are living in rural Areas engaged on agricultural activities.

The district experiences three climate types. The dominant climatic type is moderately warm. The mean annual rain fall of the district ranges between 200- 1200mm. It has high potential for irrigation since many rivers are flowing in the district. Bi-modal types of rain fall condition causes the district to produce twice a year.

The district is known by the production of different types of crops. The average production per hectare was improved even though the area cultivated was decreased. The district is known by the production of cereals, pulses, oilseeds and different cash crops like coffee, chat, spices etc. Maher season is the major production season in the district both in terms of both area cultivation and production obtained.

Regarding production and productivity the districts Agriculture office motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizers and herbicides and pesticides to produce intensively using extension package on small land as well as how to protect the environment.

Agricultural inputs are distributed by agricultural service cooperatives under cooperative promotion office. However, the amount of chemical fertilizers, pesticides and other agricultural technologies used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

Despite of the fact that animal rearing is one of the backbones of the livelihood of the farmers in the district, livestock rearing and production is known to be traditional one that causes the farmers benefit less than expected amount. Moreover, shortage of forage for food, drought and shortage of medicine for treatment causes the animals to be affected by disease. The district animal health department has been providing different type of animal health service and treatments to improve the productivity and quality of live stock found in the district.

In the district a lot has been done to achieve access to primary school coverage by constructing primary and secondary schools and promoting satellite schools in areas where there is no school. Moreover, to improve the quality of education the district also construct additional classroom and recruit professional teachers so as to improve the student to teacher ratio and student to classroom ratio. However, deterioration in quality of education and drop out is a series problem in the district.

So as to improve primary health coverage in the district, the number of health facilities was increasing in the district. This leads to improvement in population to health facilities in the district however still below the recommended standard set by who standard. On the other hand, the number of health personnel with different profession was increased between the years under consideration which in turn improve the population to health professions for different profession even though it reaches on sufficient number.

Regarding infrastructure development, the district’s potable water coverage is very low even which is very far below the zonal average. Moreover, there is a great disparity between the rural areas and urban areas of the district. Regarding the water supply schemes there were increment in spring development and distribution schemes.

On the other hand, the district have ample of land suitable for production of different types of crops like fruits, coffee, spices, green paper, sugarcane, etc both using rain fed agriculture and using irrigation(both modern and traditional) since the district is endowed with potentially rivers and streams suitable for irrigation.

## **7.2. Recommendations**

To overcome the problems and make sustain the development the concerned government bodies’, non-government, communities and others should perform the following activities,

* Infrastructure development like road, energy supply and transportation net work facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* The district has potentially irrigable land and water bodies suitable for irrigation that is used for the production of different cash crops. So, the regional government or the local government has to build modern irrigation in the district so as to benefit the country in general and the surrounding community in particular.
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements are important.
* In the district there are high potential of livestock population but the farmers use traditional way of rearing and benefit less than the expected output from this sector. Moreover, the animals’ health facilities are very small in number. So farmers should be expected to motivate to adopt modern way of animal rearing and construction of additional animals’ health clinics and employing additional animals’ health professions to improve the quality as well as the quantity of the livestock population. Moreover, high quality breed has to be distributed to the farmers,
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is greater than the standard. Hence, additional teacher has to be employed and additional classroom has to be constructed. Moreover, the educational level of the teachers has to be improved,
* The health coverage of the district is showing improvement but below WHO standard. Hence, So as to improve the quality of health services delivery and to increase the health coverage additional health facilities should have to be constructed by the concerned bodies,
* In the district, especially for primary schools, student to teacher ratio, student to classroom ratio, the educational level of teachers, etc below the recommended level. Hence, the district education office and other concerned bodies have to construct additional classroom, recruit qualified teachers and improve the education level of the teachers,
* The potential potable water coverage of the district was very low. Hence, additional water supply schemes should have to be constructed
* On the other hand, the best way of decreasing unemployment rate and acquiring skilled man power is through technical and vocational school training for student. To do so the concerned government bodies or other stakeholders would have to strengthen the capacity of the TVET school in the locality,
* Since the district has cultivable land and potential for cash crop production, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on there farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF GUNA DISTRICT 2011 AND 2012 E.C**

# 1. INTRODUCTION

1.1 Back Ground

**Guna** is one district of Arsi Zone. It was established as new district in 1998 from Merti district. It has 16 rural peasant and three (3) Negelle, Dima and Abba Jema urban administrative unit. Abajema town is the administrative center of the district. It is found at **228 km** far from Finfine and **204 km** from zonal capital, Asella town.

### 1.3 Source of information

The data used to organize this document is collected from the district and worda sector departments, **1999**census result report and other related document available in the office.

Lack of accuracy and required data, lack of attention and timely response from the concerned bodies are some of the major problem faced in organizing of the document. Even if the document has these limitations, it is very useful to show the physical and Socio-economic condition of the district. Unavailability of organized and reliable data is the major constraint during the study.

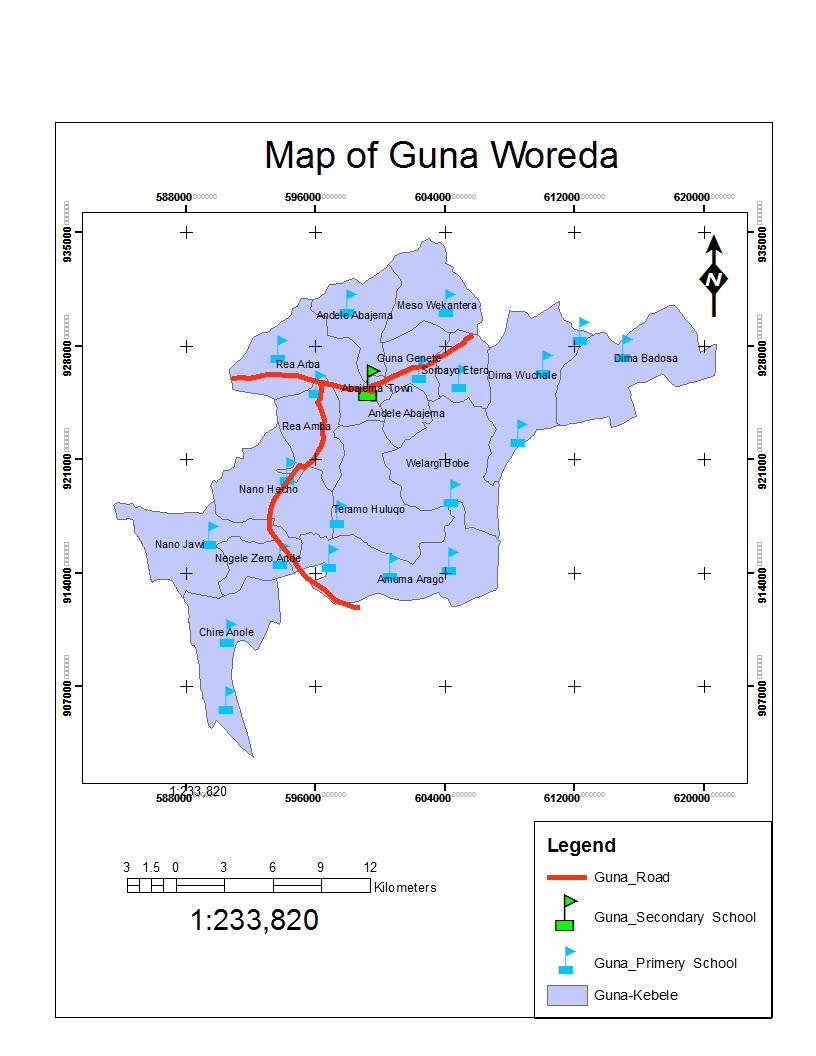
Different organizations can use different calendar year. Consequently, in this document, only Ethiopian Calendar (E.C) is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as Pegume, which has 5 days for three consecutive years and 6 days on the fourth year.

This profile has four chapters. The first chapter deals with introduction. The second chapter focused on physical features like location, relief, drainage, land use, soil, vegetation and wild life., The third chapter focused onSocio-Economic Conditions population, Agriculture,

Mining and Industry Infrastructure and social facilities and Distribution, The Fourth chapter concern with problems, potentialities, Existing Situation, social, environmental and economic condition.

## 

## **Map of the District**

****

# 2. Physical Setting

### 2.1 Location

## **Guna** district is one of the 27 administrative units of Arsi Zone. Astronomically the district is located between 7o53’17”N-8o09’17”N latitude and 39o41’59”E- 40o01’01”E longitude. It is located in the eastern part of the Zone. It shares a boundary line with Chole district in south and south east, Gololcha district in the east and north east, Aseco district in North and North east, Merti district in the North and North West and Sude district in south west direction.

## **Area**-The district is located in the eastern part of Arsi Zone with having total area of **499.30 Km2**.

### 2.2 Geology;-

## The present land form of the district was formed due to tectonic force acting up on the internal part of the earth during Cenozoic era of quaternary period at different epoch. Its northern, western, south western, eastern and most central part of the district is covered by Nazeret series. The southern tip and south western tip of the district is covered by TarmaberMegezez formation while it’s some central and eastern part is covered by Alajae formation.2.3 Relief, Drainage And Climate

## **Relief;-**The relief of Guna district is characterized by undulating high plateau dissected by small stream are flowing from these plateau toward the rift valley. Its altitude ranges from approximately**1849** to**3500** Meters above sea level.

## **Drainage;-**The major permanent rivers are Nano Abajemma, Kosobankola, Melkamiya, Arbakel’a, SorbayeNano, Dima and Guna River. Due to high network formed by river systems the district has a potential for both traditional and modern irrigation system which can increase agricultural production if they utilized efficiently.

**Season:-** Major rainy seasons in Guna District are Maher season and belg season (September, October, march, April, June, July, August,) is the time which the farmers prepare the land, planting and sowing.

**Climate;-**Due to altitudinal location, the climatic condition of the district is dominantly cool which covers about 84% of the total area of the district. It has a temperature of 10oC- 15oC. The remaining are moderately cool and cold cover 13% and 3% of the total area of the district having temperature of 15oC-20oC and less than 10oC respectively. The mean annual rain fall ranges between 1000 mm to 1200 mm with an average rainy day of 180 days in the year. The rainfall pattern is bimodal, which are short rainy season (Belg season is from March to May) and summer long rainy season (Maher season from June to September).

Soil;-The major soil types are Clay (10 %), Sandy (2%), Silt loam (20 %), loam soil (40 %), Swap soil (13%) and Clay loam (15%). Their fertility status is good. However, rapid erosion due to high rate of deforestation is one of the major problems of the district.

2.4 Vegetation and wild life

Vegetation:-Concerning vegetation Afro Alpine and sub Afro-Alpine, coniferous forest, Grass land and bush and shrubs are the major vegetation type in the district. There is government protected forest in the district. Some of the protected forest area is Arbagugu forest (5009hectare), Gembeso (Sorb ektaro) forest, Darishe forest and Re’e Amba forest are found in the district.

**Wild life** ;-In the district there are different types of wild animals like Monkey, Apes, Columbus monkey, kerkero, Bush-buck, Agazen and Leopard are the major one. However there are no natural parks for those wild Animals.

**Chapter Three**

# 3. Socio-Economic Conditions

### 3.1 Population:-

According to estimation made from 1999 population and Housing Census, Guna district’s population was increased from 106,085 (98,396 female)to 106,940(146,080 female)population in, 2011 and 2012 respectively of which female population accounted for 49.8% (which is 49.8% for Rural and 51.9% for urban). From the total population, only 8.25% are living in urban areas. This indicates that more than 91.75% of the population of the district is living in rural area depending on agriculture.

The overall sex ratio of the district is 101 males per 100 females (urban101 males per 100 females and rural 101 males per 100 females). An average number of households size was 5 persons per household and there is no data available about population by age categories.

**Table: 3.1. Population Size by Place of Residence and Sex**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Rural** | | | **Urban** | | | **Total** | | |
| **Year** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **2011** | 45,516 | 45,778 | **92,294** | 6951 | 6840 | **13791** | 53467 | 52618 | **106,085** |
| **2012** | 46,891 | 46,147 | **93,038** | 7007 | 6895 | **13902** | 53898 | 53042 | **106,940** |

### 3.2. Agriculture

**Farmers Associations**

According to our distirict there is no association.

Service Cooperatives by their Members, sex and family size

1. Table: 4.4. Number of Agricultural Service Cooperatives in the year 2012

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** | **No** | **Number of members** | | | **Capital** | | |
| **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Gunaa Ganatee multipurpose cooperatives | 1 | 287 | 110 | 397 | 550659 | 340 | 550999 |
| Guna multipurpose cooperatives | 2 | 0 | 0 | 0 | 402279 | 537632 | 939911 |
| Re’ee multipurpose cooperatives | 3 | 0 | 0 | 0 | 154939 | 65656 | 220595 |
| Negelle multipurpose cooperatives | 4 | 528 | 135 | 663 | 1284589 | 69756 | 1354345 |
| Jawwi multipurpose cooperatives | 5 | 370 | 110 | 480 | 421598 | 20882 | 442480 |
| Hecho multipurpose cooperatives | 6 | 513 | 200 | 713 | 940855 | 88992 | 1029847 |
| AmumaaArago multipurpose cooperatives | 7 | 335 | 90 | 425 | 71032 | 101415 | 172447 |
| Ciree Anolee multipurpose cooperatives | 8 | 569 | 96 | 665 | 74042 | 84911 | 158953 |
| TaramoHuluqo multipurpose cooperatives | 9 | 700 | 231 | 931 | 542549 | 22821 | 565370 |
| SamoBixanaa multipurpose cooperatives | 10 | 328 | 104 | 432 | 68364 | 22118 | 90482 |
| Re`eeambamultipurpose cooperatives | 11 | 397 | 230 | 627 | 274325 | 47630 | 321955 |
| Walargiimultipurpose cooperatives | 12 | 567 | 132 | 699 | 115404 | 73430 | 188834 |
| A/A/jamaa multipurpose cooperatives | 13 | 483 | 88 | 571 | 42370 | 46851 | 89221 |
| Ra`eArba multipurpose cooperatives | 14 | 552 | 193 | 745 | 283020 | 3299 | 286319 |
| DimawucaleMul.Pur.cop. | 15 | 544 | 251 | 795 | 1084715 | 104261 | 1188976 |
| DimabadosaMul.Pur.cop | 16 | 145 | 7 | 152 |  |  |  |
| MesoWakentiraMul.Pur.cop | 17 | 470 | 222 | 692 | 198985 | 253 | 199238 |
| Sorba`eertaroMul.Pur.cop | 18 | 223 | 126 | 349 | 65879 | 424 | 66303 |
| **Total** |  | 7011 | 2325 | 9336 | 6575604 | 1290671 | 7866275 |

Major types of services delivered by the cooperatives for the members,

Agricultural Service Cooperatives: there were no general agricultural Service cooperatives in district if These cooperatives present in district they may provide different service to member farmers and the surrounding communities like distribution of agricultural inputs, credit services, grain marketing services; grain store rent services and etc. which create job opportunity for people.

Moreover, there were also 18 multipurpose cooperatives with 9336 member farmers out 7011 were male member and 2325 were female members. These cooperatives have a total capital of 7866275 birr out of 6575604 were operational and the remaining 1290671 were fixed capital. In the year 2011and 2012 due to excuses of rain fall and best air condition there is no Peoples affected by drought.

Land Resources

**Land Use**;-Land use indicates the classification of land of an area under different type of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest, Vegetation, merchant area, protected area, infrastructure and fallow land are decreasing while cultivated and residential lands are increasing from time to time. for example cultivable land are increased from 20540 to 28315 in 2012 from this 6520hect land under annual crops and 13290 are land under perennial crops,4775 are forest land, grazing land are 2446 and others are2862 hectares.

**Crop Production**

## Bimodal type of the rainfall gives a wide opportunity for the district to produce the crops and use the same land twice a year (for Maher and Belg). However, Maher is the main growing season in terms of both cultivated land and production obtained. For instance, in the year 2011/2012 **6290** hectares of land were cultivated and **98,135** quintals of production obtained.The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops Barley, Wheat and maize are the most widely grown crops in the district. In addition, it is known by production of cash crops like tomato and onion.

In the Maher season the total land cultivated was increased from **6290** to **6520** hectares while the production obtained was increased from **98,135** quintals to**186,233** quintals between the years2011/2012 .This gives an average productivity to be increased from **16** quintals per hectare to **29** quintals for all types crop. By crop type, with maize 29 quintal/hectare is the most productive followed by barely with 24 andMisinga23 respectively. On the other hand, Haricot beans are the least productive crop with13 quintal/hectare during the year 2012.

Similarly during Belg season, the major crops produced are barley, wheat and oat. The total land cultivated by different types of crops was decreased from **14,250** to**13,290** hectares while the rain can`t rained by time or change of air condition as a result production obtained was decreased from 529,695to **160,249** quintals between the years2010/2011and 2011/2012 production season. For all types of crops however, the productivity per hectare was decreased from37 quintal to12.06 quintals per hectares during the indicated years. By crop type, barely with35quintal per hectare and by wheat with 26 quintal per hectare and are the most productive crops during the year 2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Years & Seasons** | **Maher Season 2011** | | | **Belg Season 2011** | | | **Maher Seasonb 2012** | | | **Belg Season 2012** | | |
| **Area Cult.** | **Prod.(qt)** | **Prod.vit** | **Area Cult.** | **Prod.(qt** | **Prod.vity/** | **Area Cult.** | **Prod.(qt)** | **Prod.vity/h** | **Area Cult.** | **Prod.(qt)** | **Prod.vity/h** |
| **Cereals** |  |  |  |  |  |  |  |  |  |  |  |  |
| Wheat | 1,163 | 24,495 | 22 | 5,039 | 188,282 | 37 | 1,163 | 23,260 | 20 | 5,039 | 131,014 | 26 |
| Teff | 109 | 763 | 7 | 11 | 176 | 16 | 109 | 1,744 | 16 | 30 | 480 | 16 |
| Barley | 1,600 | 33,982 | 21 | 9,047 | 338,177 | 37 | 1,600 | 38,667 | 24 | 7,261 | 225,091 | 31 |
| Maize | 828 | 1,876 | 23 |  |  |  | 1,095 | 31,390 | 29 |  |  |  |
| Misingaa | 357 | 4,038 | 11 |  |  |  | 320 | 73,400 | 23 |  |  |  |
| Oats | 38 | 228 | 6 | 153 | 3,060 | 20 | 38 | 654 | 18 |  |  |  |
| Sorghum | - | - | - | - | - | - | - |  |  |  |  |  |
| **Pulses** |  |  |  |  |  |  |  |  |  |  |  |  |
| Horse beans | 1,037 | 22,006 | 20 |  |  |  | 1,037 | 18,666 | 18 |  |  |  |
| F/ peas | 238 | 2,476 | 11 |  |  |  | 238 | 3,332 | 14 |  |  |  |
| **Oilseeds** |  |  |  |  |  |  | 904 | 7,232 | 8 |  |  |  |
| Linseed | 904 | 8122 | 9 |  |  |  | 904 | 13,560 | 15 |  |  |  |
| **Total** | **6,290** | **98,135** | 16 | **14,250** | **529,695** | **37** | **6,520** | **186,233** | 29 | **13,290** | **160,249** | **12** |

Amounts and types of fertilizers, improved seeds, pesticides and herbicides distributed to farmers & number of farmers utilizing by types and by sex.

**Agricultural Input utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, the amount of chemical fertilizers utilization of farmers was decreased from **25746** quintals to **17300** quintals between the year **2011** and **2012** but the amount of improved seed distributed to the farmers was increased from **110** quintals to 421quintals between the year **2011** and **2012.**

*Table: 4.5. Agricultural inputs distributed to Farmers (2011-2012)*

|  |  |  |
| --- | --- | --- |
|  | **2011** | **2012** |
| **Type of input** | **Amount(qt.)** | **Amount(qt.)** |
| **Fertilizers** | **25746** | **17300** |
| DAP (qt.) and NPS | 20611 | 16800 |
| Urea (qt.) | 5135 | 500 |
| **Improved Seeds (qt.)** |  |  |
| Wheat | 100 | 400 |
| Maize | 10 | 21 |
| **Herbicides (lit.)** |  |  |

Source: - Guna District Cooperatives Office

**Methods of maintaining soil fertility (traditional and modern)**

There are two ways of maintaining soil fertility in the district. These are the traditional and modern methods. The traditional method includes using of animal dung, crop rotation burning soil in small scale(burning),fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost(organic fertilizers).

**Methods of soil conservation (traditional and modern)**

**Are** Contour plugging, strip cultivation, trash line, diversion ditch on cultivated land are a traditional method while check dam construction, Terrace construction, cut off drain, mixing cultivation and a forestation are modern way of soil conservation in the district.

**Agricultural calendar (land preparation, planting (sowing), weeding, and harvesting) by Maher and Belg Seasons.**

**Agricultural Calendar:** it is well known that the farmers of the district are not busy throughout the year since agricultural activities are seasonal. As a result, during some seasons of the year they are too busy while during some seasons of the year they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related factors. Anyhow, the effect of these factors on production needs further investigation.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Guna district is shown in table below.

**Table: 4.7. Agricultural Calendar of the District**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Maher Season** | **Belg Season** |
| 1 | Land preparation | Mach-June | October-February |
| 2 | Planting (Sowing) | June-August | April –March |
| 3 | Weeding | July- September | March-May |
| 4 | Harvesting | November-January | July-August |

Source: - Guna District Agriculture and Rural Development Office.

**Average number of farm oxen per household**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | number of house holds by oxen holding size | | | | | | |
| No oxen | 0 ox | 1 ox | 2 oxen | 3 oxen | 4 oxen | 5 oxen | >5 oxen |
| No of farmers |  | 2760 | 2365 | 1340 | 300 | 210 | 6975 |
| % |  | 19.78 | 16.95 | 9.6 | 2.15 | 1.5 | 50 |

**Average farmland holding size per household in hectare and percentages of farmers land holding 0.5, 1.0, 1.5, 2.0, 2.5, 3.0 & above hectares.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | number of house holds by farm land holding size | | | | | |
| No oxen | <1 hect | 1-2 hect | 2.01-3 hect | 3.01-4 hect | 4.01-5 hect | >5 hect |
| No of farmers | 2054 | 3697 | 3081 | 821 | 618 | 575 |
| % | 22.66 | 40.86 | 33.99 | 9.07 | 6.8 | 6.35 |

**Crop Pests and disease:** Sorghum Chaffer, stock borer, Aphids, Barely shoot fly, army Worm, termites, and birds are the major crop pest, while Rust, Coffee berry disease, fungus and Root Rot are the major crop production diseases found in the district. Weeds and rain fall variation (increase ordecrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems

**Irrigation :** In 2011 the total area cultivated by traditional systems was 248 hectares while it was 185 hectares in 2012. The district has 200 hectares of potential irrigable land. In the year 2012 about 100% of land were cultivated by traditional irrigation system of which 80 was occupied by annual crops. Different type of crops like sugar cane fruits mango and food crops were produced. The numbers of farmers served from these activities were increased from 972 in 2011 to 1191 in the year 2012

**NGOs:-** In our district there is one nongovernmental organization (yatim children care center) which support orphan children by giving many for food and learning materials.

**Development Agents and Farmers Training Centers*:*** They are agricultural infrastructure used to boost agriculture production and productivity. DA offices and residential houses were started in 1986 while farmers training centers construction was started in the year 1996. Accordingly, the number of farmers training center was increased to sixteen while the number of development agents were31 and 32 between the year in both year (2011 and 2012) respectively. The above data indicates that 100% of rural kebeles of the district had Farmer Training Centers during the year 2012.Development agents were assigned with the objectives to provide extension services and technical assistances to the farmers on system of crop production and animal management, natural resource conservation, child care and family planning. the crops produced in the district is not sufficient for the population to feed.

C**onstraints of Agriculture**

There are different Agricultural constraints in our districts. From these constraint most of them are Drought, shortage of food, Livestock and Poultry Diseases, Crop Pests and disease.

**Livestock, Poultry and Beekeeping**

**Livestock**

**In** the district livestock rearing is one of the economic activities practiced by most farmers between the year 2011 and 2012, the total number of livestock population in the district was increased from 202052 to **264113** from the total livestock population, the share of Cattle, goats and sheep accounts for more than80% during the year 2011 and 2012. Even though the number of livestock population was increased from time to time, the farmers of the district were not benefited from it due to traditional way of rearing and poor quality of animals is kept by the farmers.

**Number of cattle, sheep, goats, mules, horses, asses &camels**

Table: 4.2. Livestock and poultry population

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type Livestock** | 2011 | **%** | **2012** | **%** |
| **1** | **Livestock (total)** | **202052** | **100** | **264113** | **100** |
|  | Cattle | 82612 | 40.89 | 95433 | 36.13 |
|  | Sheep | 67818 | 33.56 | 110123 | 41.7 |
|  | Goats | 13159 | 6.51 | 12059 | 4.57 |
|  | Donkey | 13508 | 6.69 | 17334 | 6.56 |
|  | Horses | 17991 | 8.90 | 20240 | 7.66 |
|  | Mules | 6964 | 3.45 | 8924 | 3.38 |
| **2** | **Poultry** | **90452** | **100** | **92332** | **100** |

Source: Guna Agriculture and Rural Development Office

**Major Livestock diseases (by types of livestock)**

**Livestock and Poultry Diseases:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastoralists, New castle, External and internal parasites are the major livestock and poultry disease in the district. In addition high prevalence of diseases, traditional method of rearing, inadequate feed supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district. The major types of animal feeds in the district are grass and crop residues, which are limited in nutritional values. Deforestation, shortage of moisture and Herbicides are the major problem in bee farming. To overcome these animal diseases, the district livestock development and marketing agency provides treatment and vaccination for different types of diseases. The total number of animals provided with different types of vaccination was increased from201523in 2011 to232901 in 2012. In addition, the number of animals get treatment was increased from 225172 to 263552 between the year 2011 and 2012.

**Availability of animal health institutions and veterinary services by type**

**Table: 4.3. Animal Health Personnel and Services of Guna district**

|  |  |  |
| --- | --- | --- |
| **Health facility/ personnel** | **2011** | **2012** |
| **Veterinary Personnel** | **21** | **29** |
| DVM | 3 | 7 |
| Animal Health Assistance | 18 | 22 |
| **Health Infrastructure** | **3** | **3** |
| B-Type clinics | 1 | 1 |
| D-Type clinics | 2 | 2 |

**Source:** Guna district Agriculture and Rural Development Office

**Poultry:-** production is another source of family income and food. In the district, the number of poultry population was increased from 90452 in the year 2011 to 92332 in the year 2012. However, the prevalence of disease and traditional method of rearing is the major constraints of decreasing the quantity and quality of poultry population in the district.

**Beekeeping**

Bee-keeping is another source of cash income and food for farmer family. Rapid deforestation rate of vegetation and lack of enough moisture due to shortage of rain fall, using herbicides and insecticides are the main problems in bee farming. However, there were **250** modern hives, **1200** intermediate hives and **5370** traditional Bee hives in the year 2012 in the district.

**Mining and Industry**

**Mining:** Like other parts of zone in general and the district in particular, Mineral and Energy resource Development indicates that the district has high potential of sandstone for construction purpose and solar Energy, Biogas for alternative energy resource. However, these resources were not yet used except insignificant rock quarrying and pottery making mining activities by local communities in the district.

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in Guna district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. Accordingly, in the year 2012 there was in the year 2012 there was 27 metal and wood firm which create job opportunity for 43 people and which owner ship is cooperation

**Small-scale industries by type of ownership**

As our district is at infant stage , there no medium and large scale manufacturing industries but there are about 96 small scale industries with 158 productive workers, 123 male and35 female.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| District | type of registered small-scale industries | Number of industries by type of ownership | | | | |
| private | cooperation | total | their workers | capital |
| Guna | Wood and metal industries | 27 | 0 | 27 | 43 |  |
| hotel and hair house | 58 | 11 | 69 | 115 |  |

**Infrastructure and social facilities**

**Transport and Communication**

**Roads:** the district has 63km gravel road (all weather road) and 162 km of dry weather road.

**Telecommunication:** one of the fast and effective ways of transmitting of both business and administrative activities. Hence, 16 rural kebeles of the district mobile telephone service in all rural kebeles and all government sectors supplied with office phone but no more quality of network accuses.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. The district has government type of postal services in Abajema town.

**Water and Energy Supply**

**Water supply:** Potable water coverage of the district is at its low stage. According to data obtained from Guna water resource office of the total population 106085 of the district, only 39305, 43% of rural were supplied by potable water, were as 11680,53% of urban were supplied by potable water, and as district only 50985, 48% were supplied by potable water supply in the year 2012. For urban and rural area the first most important source of water spring, well, tap water, pond and river respectively as its importance,

**Energy Supply:-** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. From Guna district Abajemma, Negelle and Re’ee towns were supplied with hydroelectricity power since 2000 E.C. However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase production. It also has high contribution in accelerating the deforestation rate of the district. In urban area, Fire wood’s the most important energy source followed by electricity, Charcoal, kerosene, crop residues and animal dung’s. in this district only two towns have hydro electric supply. On the other hand, fire wood is the major energy source in rural area followed by animal dung and Crop Residue Regarding fuel filling station, Guna District has no any type of fuel filling station.

**Table: 5.5 Sources of domestic energy supply for Guna district.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 3 | 4 |
| 2 | Fire wood | 1 | 1 |
| 3 | Animal Dung | 6 | 2 |
| 4 | Electricity | 2 | 5 |
| 5 | crop residue | 5 | 3 |
| 6 | Kerosene | 4 | 6 |

**3.4.1 Education**

**Kindergarten**: In the year of 2012 there was one non government Kindergarten school in the district. It is newly started in this year. The number of students enrolled to this school 70 out of this students 40 male and 30 female, even though they can not completed their education in this year as a result of covid-19 and also this school is not enough for this district.

**Primary Schools (1-8):** between the year 2011 and 2012, the number of government school was 29, the number of students enrolled to these schools was decreased from 17060(7602 female) to 18255 (8623female) with in female students. On the other hand, there was no non-governmental school in the district since 2012 other than Kindergarten. During the same year, the number of teachers was increased from 549(197 females) to 565(198 females) teachers while the numbers of class-rooms was increase 361to 416 during the same years. The student participation rate, gross participation rate (GPR) and net enrollment participation (NER) is the best indicator of student participation. However, we could not say anything since there is no reliable data at district level.

**Senior Secondary education (9-12) -** In the district there are three Senior Secondary (9-12) school. The number of students enrolled to this school was increased from 2864(610) females) in the year 2011to 2902 (1182 female) students in the year 2012. During the year under consideration the participation of female students was increased from 610 to 1182) from the total population. During the same year, the number of teachers teaching at this level was increased from 102(10females) to 129(13female). There was also one preparatory school in the district since the year2004.

**Technical and Vocational education**: There was one governmental technical and vocational school in the district.

**Number of schools and students by levels (primary first cycle (1-4), primary second cycle (5-8) and senior secondary (9-10), Preparatory (11-12), Technical/vocational, College and University) by ownership (Gov’t, private, NGOs etc.),**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of school** | **2011** | | | | | | **2012** | | | | |
| **No of school** | **Male** | | | **Female** | **Total** | **No of school** | **Male** | | **Female** | **Total** |
| **Non governmental** | | | | | | | | | | | |
| **Kindergarten(0 class)** | **-** | | **-** | **-** | | **-** | **1** | | **40** | **30** | **70** |
| **Government** | | | | | | | | | | | |
| Primary/1-4/first cycle | 1 | 88 | | 151 | | **239** | 1 | 5661 | | 5325 | **10986** |
| Primary/5-8/second cycle | - | - | | - | | **-** | - | - | | - | **7269** |
| Primary/1-8/ | 25 | 9492 | | 7568 | | **17060** | 28 | 9632 | | 8623 | **18255** |
| Senior secondary (9-10) | 3 | 1343 | | 587 | | **1930** | 3 | 1720 | | 1182 | **2902** |
| Secondary (11-12) | 1 | 147 | | 63 | | **210** |  |  | |  |  |
| Technical/vocational | 1 | 44 | | 82 | | **126** | 1 | 4 | | 23 | **27** |

1. **Sourc**e: Guna district education Office

**Total number of enrolled, dropped out and detained students by levels of schools, sex and types of ownership,**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of school** | **2011** | | | | | | **2012** | | | | | |
| **Enrolled students** | | **dropped out students** | | **detained students** | | **Enrolled students** | | **dropped out students** | | **detained students** | |
| **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** |
| Primary/1-4/first cycle | 92 | 153 | 4 | **2** | 88 | 151 | 5661 | 5325 | 0 | **0** | 5661 | 5325 |
| Primary/5-8/second cycle |  |  |  |  | - | - |  |  |  |  | - | - |
| Primary/1-8/second cycle | 9510 | 7602 | 18 | **34** | 9492 | 7568 | 9632 | 8623 | 0 | **0** | 9632 | 8623 |
| Senior secondary (9-10) | 1350 | 610 | 7 | **23** | 1343 | 587 | 1720 | 1182 | 0 | **0** | 1381 | 970 |
| Secondary (11-12) | 150 | 69 | 3 | **6** | 147 | 63 | 339 | 212 | 0 | **0** | 339 | 212 |

`

**Number of Teacher Training Centers (college),**

In our district there is no Teacher Training Centers (college), Agricultural training center, literacy classes or centers and Nursing School , still 2012

**Number of students sat for National Examination (EGSCE) and promoted for preparatory by sex and ownership,**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of school** | **2011** | | | |
| **No of school** | **Male** | **Female** | **Total** |
| Senior secondary sat for National  Examination |  | **518** | **291** | **809** |
| promoted for preparatory |  | 215 | 151 | 366 |

**Number of students sat university entrance and promoted for degrees by sex and ownership**,

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of school Governmental** | **2011** | | | | **2012** | | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
| Senior secondary sat for university entrance | **1** | **46** | **19** | **67** | **-** | **-** | **-** | **-** |
| promoted for degrees | 1 | 25 | 9 | 34 | - | - | - |  |

**Number of adult education centers and participants by sex,**

There are 16 adult education centers in this districts. The number of students participated are 1733(155 females and 1578 males).

**Number of preparatory and technical schools including number of teachers by level of education and sex**,

There are one preparatory and technical schools .the number of teachers preparatory 13(1 female in B.A/B.sc)and 12 male

(7B.A/B.sc and 5 M.A/M.Sc) and the number of teachers technical schools 8 males their level of education are diploma.

**Number of teachers by levels of schools (1-4, 5-8, 9-10, vocational, preparatory) by sex, level of education and types of schools ownership.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2011 | | | | | | | | | | | | 2012 | | | | | | | | | | |
|  | certificate | | diploma | | degree | | M.Sc | | total | | total | certificate | | diploma | | degree | | M.Sc | | total | | total |
|  | m | F | m | f | m | f | m | f | m | f |  | m | f | M | F | m | f | m | f | m | f |  |
| 1-4 | 45 | 36 | 157 | 88 | 33 | 8 | 0 | 0 | 235 | 132 | 367 | 67 | 41 | 168 | 68 | 5 | 20 | 0 | 0 | 240 | 129 | 369 |
| 5-8 | 3 | 0 | 78 | 52 | 36 | 13 | 0 | 0 | 117 | 65 | 182 | 3 | 0 | 78 | 52 | 38 | 17 | 8 | 0 | 127 | 69 | 196 |
| 9-10 | 0 | 0 | 2 | 4 | 77 | 5 | 0 | 0 | 79 | 9 | 88 | 0 | 0 | 4 | 0 | 98 | 12 | 14 | 1 | 116 | 13 | 129 |
| 11-12 | 0 | 0 | 1 | 0 | 6 | 7 | 6 | 0 | 13 | 1 | 14 |  |  |  |  |  |  |  |  |  |  |  |

3.4.2. Health

**Health Institution:-**the number of health facilities was (three health center and 16 health post) to 19 (three health center and 16 health post) between the year 2011 and 2012. Likewise, the number of private clinics was 9 and 1 drugs shop during the years. it indicates low health coverage in the district as compared with WHO standard 25,000and 5,000 for Health center and health posts respectively.

**Health Personnel:** so as to improve the health service delivery in the district having qualified and sufficient health personnel is important accordingly, the number of health professionals working. in the government

A health facility was decreased from 79 to 80 during the year under consideration. By types of profession, there were 6 Health officer, 34 nurses, 2 laboratory technicians, 4 Pharmacy Technician and 3sanitarian in the year 2010. In addition, there were 1 health officer,1 health assistance and 8 nurses in non-governmental health institutions during the same years in 2010.Moreover, two health extensions workers were assigned for each peasant associations since 2000 so as to improve primary health coverage. Hence, the district with the help of health extension workers provides different type of health extension services like family planning, awareness creation on environmental health, personal hygiene and sanitation, toilet construction and refuse disposal to the house hold in all kebeles. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members.

**Table: 5.1.Number of health Institution and Personnel by ownership (2011-2012).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** |  | **8** | **19** | **9** |
| Health Center | 3 | 0 | 3 | 0 |
| Clinic | 0 | 9 | 0 | 10 |
| Health Post | 16 | 0 | 16 | 0 |
| **Health Profession** |  |  |  |  |
| Health Officer | 6 | 0 | 5 | 0 |
| Health Assistance | 0 | 1 | 0 | 2 |
| Nurse | 20 | 10 | 19 | 10 |
| Community health extension | 29 | 0 | 28 | 0 |
| Laboratory technician | 2 | 0 | 2 | 0 |
| Pharmacy Technician | 4 | 0 | 4 | 0 |
| Sanitarian | 3 | 0 | 3 | 0 |

**Source:** - Guna district Health Office

In addition, the district health office provides different type of maternal-child health service to improve the health service of the district. Health coverage of the district 75%,

The available data shows that maternal-child health service provision of the district is showing a remarkable improvement from time to time. The following table indicates the major vaccination type given to the children.

**The first ten top diseases in the district,**

**Table: 5.3 Top ten Diseases existed in the district in the year 2011 and 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2011** | | **2012** | | |
| **Type of Diseases** | **No. of population** | **%** | **Type of Diseases** | **No. of population** | **%** |
| Pneumonia | 3865 | 4.8 | Pneumonia | 3213 | 3.85 |
| Typhoid fever | 2117 | 2.64 | AFI | 650 | .8 |
| Acute febrile illness | 1002 | 1.25 | Trauma | 115 | .14 |
| Epidemic typhus | 944 | 1.18 | AURI | 774 | .93 |
| Upper respiration infect | 896 | 1.12 | Diarrhea | 1612 | 1.93 |
| Trauma, injury, fracture | 1052 | 1.3 | Typhoid | 1976 | 2.4 |
| Urinary infection | 416 | .5 | Dyspepsia | 994 | 1.19 |
| Helmenthiasis | 512 | .64 | Helminthiasis | 443 | .53 |
| Dental and gum | 179 | .22 | Inflection of skin | 182 | .22 |
|  |  |  | Diarrhea with blood | 338 | .4 |

**Source**: - Guna district Health Office

**Children and Women Socio Economic Indicators**

**Women Issue Indicators**

Women participation is back bone of economy, political and social of one country, so taking attention for them are very important , in our country many factors causes for maternal mortality rate are giving birth before 18 age and traditionally taking duty of gender disparity activity like collecting wood, fetching water, preparing food, washing clothes and etc.

Maternal mortality rate are caused by unsafe abortion, infection, anemia, hemorrhage, eclamsia. its ratio in our district is 0.012 and 0.0082 in 2011and 2012 respectively , so to save their health in our district number of women used Modern family planning methods are20667(80%),ANC /antenatal care/2669(72%) and 2890(75%) and PNC /postnatal 1843(48%)and2375 (64%) in 2011and 2012 respectively, access to save delivery for non-complicated delivery 1843(48% )and 1604(43%) in 2011and 2012 respectively and total fertility rate 4.8 (2.8 in urban and 6.8 in rural ) the number of giving birth before 18 age 2% and used traditional family planning method -and Assisted delivery in their home traditionally especially in rural area and 1369(76%) women have been tested for HIV/AIDS, there is no maternal mortality attributable to AIDS and 90% of Health facilities access to improved water supply. In our district around 22% of women are elected in cabinet and political bodies.

**Children Issues Indicators**

**Infant mortality rate**

Infant mortality rate is the death of a child/ un infant before his or her first birth day. it is an important marker of the overall health of society and the number of infant deaths for every1000 live births.

The top causes of mortality are pneumonia, diarrhea, sepsis, asphaxia, Birth defects, preterm birth and low birth weight, maternal pregnancy complication, sudden infant death syndrome, injuries and neo-natal mortality rate 0.144 and 0.114 in 2011 and 2012 respectively. The Coverage of EPI are all most 98% vaccinated. The number of Orphan children are256 (129 female and 127 male) , vulnerable are 347(212female), disabled 310(117female) children and there is data not available by age classification. Number of kindergarten, primary school, secondary school, etc. those have improved water supply 60% and sanitation facilities are 98% in these district.

**Social Security**

**Number of registered unemployed persons by sex and level of education, and employed persons by types of occupation, sex and level of education,.**

In the year 2011 the number of unemployed persons registered were 1710 of which 1041 male and 669 were females. This was increase to 2450 of which 1139 male and 1311 were females in the 2012.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | level of education | | | | | | | | | | | | | |
|  | Unlearned | | 1-8 | | 9-12 | | certificate | | diploma | | Degree | | Above degree | |
| male | female | Male | female | male | female | male | female | male | female | male | female | male | female |
| 2011 | 51 | 18 | 406 | 318 | 407 | 199 | 90 | 73 | 79 | 58 | 8 | 8 | 0 | 0 |
| 2012 | 20 | 103 | 674 | 634 | 146 | 95 | 145 | 111 | 44 | 70 | 37 | 0 | 0 | 0 |

**Number of criminals recorded by types and civil cases lodged, decided, and pending in the zone/district.**

During 2011 and 2012, there were 1400 and 1292criminal and civil lodged in the court respectively. From total number of criminal and civil cases 1332and 68 cases were decided and pending case respectively in the year 2011 were as 1332and 60 cases are decided cases and pending cases during the year 2012 respectively. For details see the table below

**Table:5.6.. Number of criminal and civil Cases lodged in all Courts (supreme, high courts, Woreda courts) in the year20011/2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Cases** | **Number of Cases lodged** | | | | | |
| **2011** | | | **2012** | | |
| **Criminal** | **Civil** | **Criminal and Civil** | **Criminal** | **Civil** | **Criminal and Civil** |
| Number of cases lodged during the year | 306 | 1094 | 1400 | 290 | 1002 | 1292 |
| Decided cases | 302 | 1030 | 1332 | 282 | 950 | 1332 |
| Pending cases | 4 | 68 | 68 | 8 | 52 | 60 |

**Finance**

**Total revenue collected in the district**

**Revenue:** revenue collected in the district is the source of budget for the region in general and the district in particular. Accordingly, so as increased the share revenue budget in the district annual budget of the district, the district in land revenue office collect revenue from different sources. Between the year 2011 and 2012 the total revenue were collected was increased from **14,225,790.89** to **16,322,581.95** birr showing an increment by 4.2%However, expansion of illegal traders, lack of transport services, lack of awareness to pay taxes and lack of interest to pay the tax are the major problem in collecting revenue. The major sources revenue is direct tax, indirect tax and non-tax revenue.

**Table: 4.13.Total Revenue collected and expenditure**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Revenue Collected** | **2011** | **%** | **2012** | **%** |
| **14225790.89** | **107.81** | **16322581.95** | **112.01** |
| Direct tax | 12032142.56 | 111.17 | 13953861.69 | 113.16 |
| Indirect tax | 998628.28 | 94.81 | 1168301.11 | 116.22 |
| Non-tax revenue | 1195020.05 | 107.81 | 1200419.15 | 97.06 |

Source: Guna District Revenue Office

**Total Expenditure of the district,**

Total budget of the district are 99769279 and112733893 and the total expenditure of the district 9367811543 and107760671.58 in 2011 and 2012 respectively and there are two government and three private banks.

**Trade, Tourism and Sports**

**Types of cash crops and exportable items**: there are different type of cash crops and exportable items produced in the district like hides and skins, oilseeds, onion and chat. For instance, during the year 2012/15036 skin and hides was sent to the central market by local traders.

**Tourism**

**Tourism:-**Due to lack of promotion and tourist amenities like standard Hotels, restaurants bars, beds, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Guna district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by zone tourism office. These are churches and traditional mosques like Ganete and others are found in this district.

**Sport**

The district has different types of sport activities like football, Volley ball, and athletics. The number of sports team was decreased from 62 to 5 and also the number of sports members was decreased from 623 to 306 between the year 2011 and 2012 for all team as a result of covid-19, it has no well Organized and standardized sport facilities like stadium, youth center, etc. in the district.

**Table: 5.4. Number of sport teams/Clubs and sportsmen in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **No of club/team** | **Member** | **No of club/team** | **Member** |
| Foot ball | 40 | 420 | 1 | 100 |
| Volley Ball | 20 | 180 | 1 | 80 |
| Athletics | 1 | 20 | 1 | 20 |
| Paralympic | 1 | 3 | 1 | 106 |
| **Total** | 62 | **623** | 5 | **306** |

**Source**: Guna District Youth and Sport Office

**Development Activities**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided into salary, recurrent budget and capital budget. The capital budgets are directly used for the construction of different types of development projects.

On-going Development Activities

**Social Sector Development Projects:** in the social sector of the district there were different types of projects constructed by budget obtained from different sources. From these projects there were 16 health posts, three health centers, and other offices were constructed by government, Community in the district.

**Economic Sector Development projects:** in the same budget year in the district have16 farmers training centers (FTC), small irrigation schemes and construction of potable water ,road construction and other by local government ,NGO and community participation doing.

Problems of ongoing Development projects

The major problems of ongoing development projects are Poor construction quality, inaccessibility of the site, lack of capacity by contractor, project design quality, and dalliance in decision of bid documents and mobilization of Construction are the major problems

1. **PROBLEMS AND POTENTIALITIES** 
   1. **Problems**

**Environmental conditions**: Soil degradation due to over cultivation, overgrazing unbalance between number of livestock, rapid deforestation rate, low stage of soil, water conservation practice, climatic change are the major environmental problems in the district.

**Economic Condition:** High prevalence of crop diseases and pests, high prevalence of animal diseases, shortage of animals feeds, variation of rain falls, acute shortage of grazing land which leads to over utilization of the same land for a long period of time, rapid population growth and large family size, land fragmentation and population pressure, low crop productivity due to high price of Agricultural inputs and lack of capacity to buy, inadequate distribution of Financial institutions , low investment activities and development of small-scale industries.

**Social Conditions:** shortage of qualified teachers especially for the second cycle primary schools, overcrowding of the teaching classes, participation rate of girls in education especially in rural areas, high dropout rate, in adequate / low health service coverage, lack of or in adequate trained man power, low potable water coverage, under developed transportation facilities and others.

Drought- *:* **in the year 2011 and 2012 due to sufficient of rain fall there is no human and live stock affected by drought.**

* 1. **Potentialities**

The district has high natural resources potential like fertile cultivable land, manmade and natural forest, wild animals and historical cultural heritage like mosque and Church that attracts human attention and skilled and unskilled man power. Moreover, due to its favorable climatic condition the district has potential for agricultural production like honey, apple, Chat, coffee, crop production, livestock production and flower production in wider area of the district. In addition to these to meet high demand for food security the district has many rivers that suitable for both modern and traditional irrigation potential and minerals like construction stones, selected materials and scoria.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF HONOKOLO WABE DISTRICT 2011 AND 2012 E.C**

**Introduction**

HonkoloWabe is one of the 27 districts of Arsi Zone .It was stablished as a new district in 1998 E.C. from Lemu and Bilbilo district. The name HonkoloWabe was drived from two known physical features, Honkolo Mountain and Wabe River which is found b/n the boarder of Arsi and Bale Zone.

The district has been divided into nine rural peasants Association and two urban administrative Kebeles.Siltana town is the administrative center of the district it is found at 266km away from Finfine and 92 km from capital city of Arsi Zone Asella.

The Objective of preparing this profile is to assess the natural resource base and Socio-economic situation of the HonkoloWabe district that reflect the existing situation,development problems and the available opportunities for it’s the data used to organize; this document is collected from the district and Zonal level sectoral departments 1999 census result report and other related documents available in the office. All years are described according to Ethiopian calendar.

This document is compiled from data collected from the district and zonal sectoral departments 1999 population and housing census report for Oromia region and other related document available in our office. Luck of accuracy and required data,lack of attention and timely response from the concerned bodies are some of the major problem faced in the process of organizing of a document .More over lack of accurate ,well organized and consistence data in different sectors are the major limitations .Even if it has this limitations ,the document is very useful to show the physical and socio-economic condition of the district. Different organizations can use different calendar year .Consequently in the document only Ethiopian calendar (E.C.) is used .In Ethiopian year there are 12 months of 30 days each with an addition of a short period often referd to pagume which has five days for three consecutive years and six days on the fourth year.

**CHAPER ONE**

**1. Physical Setting**

**1.1. Location and Area**

HonkoloWabe district is one of the administrative unit of Arsi Zone. Astronomically the district is located between 6⁰54′42″N-7⁰15′00″N latitude and 39⁰17′17″E-39⁰37′09″E longitude It is located in the eastern part of the zone having the total area 0f 320 km2 (1.5% of the total area of the Arsizone ) It shares the boundary line in north and north east with Shirka distirict in the west with LemunaBilbilo district ,in south and south-east with west Arsi zone and in the east with Bale zone.

**1.2. Geology, Relief, Drainage, Season, Climate and Soils**

**1.2.1. Geology**

Concerning its geological formation the present land form of the district was created during Cenozoic era of quaternary period by extensive fracturing and subsequent faulting and volcanism .There were out pouring of lava as a result of faulting which forms Arsi and Bale basalt along its eastern extreme part of the districts. The south- eastern and eastern peripheries of the district are covered by Adama series and the remaining part of it is covered by lower part of Chilalo formation during quaternary period of Cenozoic ear.

**1.2.2. Relief**

The relief of HonkoloWabe district is characterized by mountain range in which Honkolo Mountain is found and undulating high plateu with an altitude ranges from 3850 m at the top of Honkolo mountain to 1389m in Machitu Goto Kebele in the wabe river gorge. The lowest and the highest place of the district are found in Machitugoto and HonkoloWabe massif respectively. Its elevation reduces from North to east and south east up to wabe river gorge Honkolo (3850m) is the major mountain peak in the district.

**1.2.3. Drainage**

All parts of the district are found within wabe river drainage basin. Except Wabe River, there is no permanent river flows in the district. However, there are some seasonal streams like Guracho, Kersa. Teji that flows to Wabe River. Some streams can be utilized for modern and traditional irrigation system.

**1.2.4. Season**

The major known season in Honkolowabe district is the (Maher, Dray, Belge and summer) from this four season Belg season and summer season are the rainy season. Belg season includes March to April mounths, And Summer season includes from June to October mounths.

**1.2.5. Climate**

Due to its altitudinal location the climatic condition of the district is dominantly cool with a temperature of 10⁰c-15⁰c the remaining are moderately cool and cold with an average temperature of 15⁰c-20⁰c and less than 10⁰c respectively. The annual rainfall of the district ranges from 800mm to 1200 mm and the rain fall pattern is bimodal, which are short rainy season (Belg season from March to April and summer season from June to October)

**1.2.6. Soils**

The major soil types are Mollic Gelysols (17%), Chromic Luvisols (15%), Orthicluvisols (8%) and Pellicvertisols (60%), whichis suitable for agriculture.

Rapid soil erosion due to high rate of deforestation is one of the major problem that deteriorate soil fertility of the district.

**1.3. Vegetation and Wildlife**

**1.3.1. Vegetation**

Vegetation type the district is shrub, bush ,wood land and forest covered about 3653 hectares of the total area of the district of which only 16% are natural forest while about 0.35 are manmade forest.

**1.3.2. Wildlife**

The major wild life animals of the district are hyena, Fox, black and white Columbus monkey, Bush Duck, Golden Jackal and other are living in different parts of the district.

**CHAPTER TWO**

**2. Population**

According to estimation made from 1999 population and housing census report for Oromia Region the total population of the district was increased from 82046 in 2011 to 84378 in the year 2012.From the total population of the district the female population accounts for 49.99% by area of resident the proportion of female population was 43.02 % for rural and 6.97% for Urban areas which indicates slight difference in female population.

The over sex ratio of the district is 100.01males per 99.9 females (Urban 97.85 males per 102.2 females and rural males per 100.4 females).

**Table 2.1.Population size by place of residence and sex(2011\_2012)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | **Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 35512 | 35365 | 70877 | 5525 | 5644 | 11169 | 41037 | 41009 | 82046 |
| 2012 | 36447 | 36297 | 72744 | 5754 | 5880 | 11634 | 42201 | 42177 | 84378 |

**CHAPTER THREE**

**3. Socio-Economic Conditions**

**3.1. Agricultural Service**

Honkolowabe district has 9 peasant Associations since its establishment as a district**.** In the year 2012 there were 11general service cooperatives with 6114(5602 male and 908 female members) which is 14.9% of the member is female. Having a total capital of 9,601,560 in the year 2012.From the total capital only 1,086,617 (11.3%) were used for fixed cost while the remaining 8,514,943(88.7%) were used for operational cost. The service cooperatives provid member farmers and the surrounding committees with agricultural inputs, credit services grain marketing services, grain store rent services, etc.

On the other hand there were 2 consumers having 186 members and 12 saving and credit) cooperatives have 186 members and 6351members and total working capital of 671,209 and 5,030,232 birr in the year 2012.

**Table. Agricultural service cooperatives, members and their Total capital**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Name of cooperatives** | **No.of cooperatives** | **In the year 2011** | | | | | | **In the year 2012** | | | | | |
| Number of Members | | | Capital | | | Number of Members | | | Capital | | |
| M | F | T | fixed | operational | Total | Male | Femal | Total | Fixed | operational | Total |
| 1 | General service | 11 | 4977 | 801 | 5778 | 6294907.9 | 3837059.6 | 1661639.32 | 5206 | 908 | 6114 | 1086617 | 8514943 | 9601560 |
|  | Consumer | 2 | 151 | 36 | 187 | 145898.4 | 493776 | 471641 | 150 | 36 | 186 | 16072 | 655137 | 671209 |
|  | Saving & credit | 12 | 245 | 625 | 870 | 15206.45 | 3257871.56 | 351968 | 345 | 6006 | 6351 | 123153 | 4907079 | 5030232 |

**3.1.1. Land Use**

Land use indicates the classification of the land of an area under different types of land use. Types of land use are not static, but changes from time to time depending on socio-economic change. For instance, under the present situation, grazing land, natural forest land and fallow lands are expected to decrease from time to time while cultivated, manmade forest and residential lands are increasing. Accordingly from the total area of the district the cultivated lands (the lands covered by annual and perennial crops) represented about 14563hektars in 2011 while it was 17607 in 2012.

**Table .Status of land use and land cover**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Types of land** | **Status of land use/land cover in km2** | |
| **2011** | **2012** |
| 1 | Cultivated land | 145.63 | 176.07 |
| 2 | Land covered with forest | 1.75 | 1.503 |
| 3 | Grazing land | 38.049 | 37.802 |
| 4 | Others | 85.423 | 60.793 |

**3.1.2. Crop Production**

Private peasant bimodal type of rain fall gives a wide opportunity for the district to produce the crops and use the same land twice the year (for Mehar and Belg). However, Maher is the main growing season accounts for more than 86.8% of the total land cultivated. The major annual crops grown in the district are cereals, pulses and Oil seeds. From cereal crops barley, Teff, wheat and maize are the most widely grown in the district. In Mehar season of 2011 13968hektars of the land was cultivated which was increased to 13460 hectares in 2012 .However the total production obtained was increased from 602639 quintals in 2011 to 518643kuntals2012.By crop type, cereals crops with 44 quintals per hectares followed by pulses with 19 and are the most productive while Oil seed crops with 15kuntals per hectare are the least productive in 2012. In size of area cultivated and production obtained wheat and barley are the most important crops in the district. Similarly during the Belg season of 2011 2368 hectares and in the year 2012 1077hektars of land was cultivated from which 49701kuntals and 40288kuntals of production obtained and gives productivity of 21 quintals in the year 2011 and 37 quintals in the year 2012 per hectare.

**Table 3.1.Area under cultivation and production of major crops for peasant by season**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| T/L | Crop Type | **2011** | | | | **2012** | | | |
| Maher season | | Belg season | | Maher season | | Belg season | |
| Area cult. | Prod(kun.) | Area cult. | Prod.(kun.) | Area cult. | Prod.(kun.) | Area cult. | Prod.(kun.) |
| **1** | **Creals** | **13,502** | **593770** | **1138** | **41389** | **12712** | **505607** | **1077** | **40288** |
|  | Wheat | 5628 | 337680 | 105 | 2100 | 5589 | 257632 | 131 | 2620 |
|  | Teff | 1127 | 22540 | 53 | 689 | 1207 | 21286 | 11 | 143 |
|  | Barley | 4854 | 145620 | 220 | 4400 | 4902 | 179890 | 175 | 3325 |
|  | Maize | 793 | 38430 | 760 | 34200 | 705 | 34206 | 760 | 34200 |
|  | Sorghum | 1100 | 49500 | - | - | 309 | 12593 | - | - |
|  | Oats/Aja |  |  |  |  | - | - | - | - |
|  | Rice |  |  |  |  | - | - | - | - |
| **2** | **Pulses** | **459** | **8763** | **1230** | **8312** | **548** | **9182** |  |  |
|  | FabaBeans | 336 | 6720 | 0 | 0 | 400 | 7000 | - | - |
|  | Field Peas | 0 | - | 0 |  |  |  | - | - |
|  | Haricot beas | 31 | 527 | 20 | 320 | 28 | 562 | - | - |
|  | Chick-peas | 0 | 0 | 0 | 0 | 0 | 0 | - | - |
|  | Lentils | 25 | 350 | 570 | 6840 | 45 | 400 | - | - |
|  | Peas | 47 | 846 | 640 | 11520 | 50 | 820 | - | - |
|  | fenugreek | 20 | 320 | 0 |  | 25 | 400 | - | - |
| **3** | **Oil Seeds** | **7** | **106** | **0** |  | **200** | **3854** |  |  |
|  | Neug | 2 | 26 | 0 |  | - | - | - | - |
|  | Linseed | 5 | 80 | 0 |  | 200 | 3854 | - | - |
|  | Safflower | 0 | 0 | 0 |  | - | - | - | - |

Source: computed from data obtained from Agricultural office.

**3.1.3. Fertilizers and Improved Seeds Utilization**

Fertilizers, improved seeds, herbicides and insecticides are vereyessenuction and productivity and meet rapid increase of demand for food and industrial raw materials. However, the amount of distributed is varies from year to year due to price escalation, delay in delivery time and other reason 18,229 quintals of chemical fertilizers are distributed in the year 2011,and 21327.5 quintals of chemical fertilizers are distributed to the farmers in the year 2012.The distribution of improved seed in the year 2011 was increased from2830 quintals to 7616 quintals in year 2012.This indicates that farmers adoption of modern agricultural input deteriorate which has a significant impact on increasing agricultural production and productivity in the district. So as to protect damage and improve production the farmers in the district uses herbicides and pesticides. To this end the number of herbicide used by the farmers of the district was the same2303liters in the year 2011 to 3053 liters in the 2012.Moreover, both liquid and powder pesticides were used in area where pests affect crop production.

**Table 3.6.Agricultural inputs distributed to Farmers**

|  |  |  |  |
| --- | --- | --- | --- |
| No. | **Types of inputs** | **Amount in quintals** | |
| **2011** | **2012** |
| **1** | **Fertilizers** | **18,229** | **21,327.5** |
|  | NPS | 15574 | 687.5 |
|  | NPSB | - | 16663 |
|  | NPSzn | - | - |
|  | UREA | 2655 | 3977 |
| **2** | **Improved Seeds (qun.)** | **2,830** | **7,616** |
|  | Teff | - | - |
|  | Wheat | 970 | 1186 |
|  | Barley | 1200 | 6400 |
|  | Maize | 60 | 30 |
|  | Sorghum | - | - |
|  | Vegetables seed | 600 |  |
| 3 | Herbicides and insecticides | 2,303 | 3,053 |
|  | Herbicides (lit.) | 1807 | 1807 |
|  | Pesticides (lit.) | 496 | 496 |
|  | Liquid (lit.) | - | 750 |
|  | Powder (lit.) | - |  |

Source: district cooperative promon office

**3.1.4. Development Agents and Farmers Training Centers**

The most important agricultural infrastructures that play an important role in improving agricultural production and productivity. The number of farmer training centers was 9 b/n the year 2011 and 2012 while the number of development agents was decreased from 28 to 27 b/n the indicated years, in other words, the number of development agents was decreased by 1%.According to the standard each kebele is expected to have three development agents with the profession of plant science, animal science and environmental protection. This development agents help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection. The number of farmers served by DAs is increasing from year to year.

**Table: Number of Development Agents, FTCs and Beneficiaries**

|  |  |  |
| --- | --- | --- |
| **Development Agent and FTC** | **Service Year** | |
| **2011** | **2012** |
| Development Agent | 28 | 27 |
| FTC | 9 | 9 |

**Source; Agricultural office**

**3.1.5. Farmland Holding Size In The District**

The average farmland holding sizes per house hold of the district was 2.01 to 3hactars in the year 2011 and 2012.The average percentage of farmers land holding were 3653 in the year 2011 and 2012.

**3.1.6. Methods for maintaining Soil Fertility**

There are two ways of soil fertility maintaining methods in the district. These are the traditional and the modern methods. the traditional methods includes using an animal dung and crop residue, crop rotation and following while the modern one is the using of artificial fertilizer.

**3.1.7. Methods Used For Soil Conservation**

Contour ploughing strip cultivation, trash line diversion ditch on cultivated land are a traditional method while check dam construction, terrace construction, cut of drain, mixing cultivation and afforestation are modern way of soil conservation. To this end 8900 km and 835 km terracing,10196 m3and 7594m3check dam,6250 m3 and 832 m3 cut of drain,930 km and 3000 km water way ,810 and 3200 number of micro-basin and 4500 hectare and 1500 hectares area closure was done by community participation in the year between 2011-2012.

**Table:Numberand types of soil conservation in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Types of soil conservation** | **Number of soil conservation done** | |
| **2011** | **2012** |
| 1 | Cut of drain | 6250 m3 | 832m3 |
| 2 | Terracing | 8900 km | 835 km |
| 3 | Check dam | 10196 m3 | 7594 m3 |
| 4 | Water way | 930 km | 3000 km |
| 5 | Micro-basin | 810 | 3200 |

Source: HonkoloWabe district agricultural and rural development office

**3.1.8. Agricultural Calendar**

The district farmers are not busy throughout the year since agricultural activities are seasonal. As a result during some seasons of the year they are to busy while during some seasons of the year they are an idle. Even during busy season some farmers do not fully engage in farm activities due to some socio-cultural related factors, any how the effect of this factors on production needs further investigation.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on agro-climatic zone and types of crops cultivated. In some districts they started later. Agricultural calendar of HonkoloWabe district is shown in table below.

**Table 3.8.Agricultural Calender of The District**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Types of activities** | **Season** | |
| **Mehar** | **Belg** |
| 1 | Land preparation | April to June | February to Murch |
| 2 | Planting (sowing) | June to August | Murch to Aprile |
| 3 | Weeding | July to September | May to June |
| 4 | Harvesting | November to January | July to August |

Source:HonkoloWabe district agricultural and rural development office

**3.1.9. Irrigation**

The total irrigated land was 1200 hectare in 2011 which was decreased to 576 hectare. In 2012 different types of cash crops like Onion, banana, sugarcane**,** fruits and food crops were produced by irrigation. From this irrigation about more than 2394 farmers are participated.

**3.2. Livestock, Poultry and Beekeeping**

**3.2.1. Livestock**

The number of livestock of the district was increases from 164438 to **208,685** between the year 2011 and 2012.

**3.2.2. Poultry**

Poultry production is one of the important sources of family income and food in the district. Consequently, the number of poultry population of the district was increased from 42500 to 50050 between the year 2011 and 2012, however, higher prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: Livestock and poultry population**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Types of livestock** | **Year** | |
| **2011** | **2012** |
| **1** | **Livestock** | **164,468** | **208,685** |
|  | Cattle | 94120 | 98674 |
|  | Goats | 17540 | 30436 |
|  | Sheep | 25896 | 44640 |
|  | Horses | 9320 | 19125 |
|  | Mules | 4912 | 2960 |
|  | Donkeys | 12650 | 12850 |
|  | Camels | 0 | - |
| **2** | **Poultry** | **42,500** | **50050** |

**3.2.3. Animal Health Infrastructure**

An availability of animal health infrastructure and animal health personnel are very essential to control the prevalence of animal diseases. However the district has only 1-C type and 2-D type clinics and 4 veterinary personnel Doctors, 10 health assistant and 2 health technician (BVSc) between 2011 and 2012.This indicates that the health service delivery in the district is very low.

|  |  |  |  |
| --- | --- | --- | --- |
| No. |  | **Year** | |
| **2011** | **2012** |
| 1 | Veterinary personnel | 16 | 16 |
|  | DVM | 4 | 4 |
|  | BVSc | 2 | 2 |
|  | Animal Health Assistant | 10 | 10 |
| 2 | Health Infrastructure(Cilinic) | 3 | 3 |
|  | C-type | 1 | 1 |
|  | D-type | 2 | 2 |

**3.2.4. Major livestock Diseases**

The major livestock diseases that decreases their production in the district is Black leg, Anthrax, African horse sickness, Lamp skin, New Castel, external and internal parasites are the major livestock and poultry diseases in the district. In addition high prevalence of diseases, traditional method of rearing, inadequate feed supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district. The major types of animal feeds in the district are refuge and crop residues, which are limited in nutritional values. Deforestation, shortage of moisture and herbicides are the major problem in bee farming.

The district’s animal health department has provided different types of animal vaccination and types of treatment, which contributes to increase the productivity and quality of livestock production. For detail see the table below.

**Table 3.4.number of Animals got health Services By Types of service given**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Types of service** | **Service year** | |
| **2011** | **2012** |
| **1** | **Vaccination** | **50,650** | **226,925** |
|  | Blackleg | 27250 | 29245 |
|  | Anthrax | 23400 | 15535 |
|  | Others | - | 182145 |
| **2** | **Treatment** | **136,903** | **84,812** |
|  | Internal parasite | 121168 | 48180 |
|  | External parasite | 12253 | 33452 |
|  | Operation | 3485 | 3180 |

Source:HonkoloWabe Animal Health and Market Agency

**3.2.5. Bee-keeping Activities**

Bee-keeping is another source of cash income and food for farmer family. Rapid deforestation rate and lack of enough moisture due to shortage of rain fall. Using herbicides and insecticides are the main problem of bee farming. To indicate the amount of bee-keeping activities see the next table.

**Table: Types Of Beehives And honey Production In The District.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Types of beehives** | **Number of hives** | **Honey production in Kg** | **Number of participant** | | |
| **Male** | **Femal** | **Total** |
| **2011** |  |  |  |  |  |  |
|  | Traditional | 2915 | 20405 | 255 | 49 | 304 |
|  | Transitional | 1260 | 18900 | 288 | 45 | 333 |
|  | Modern | 455 | 13650 | 137 | 24 | 161 |
| **2012** |  |  |  |  |  |  |
|  | Traditional | 3966 | 27762 | 277 | 119 | 396 |
|  | Transitional | 1855 | 20405 | 306 | 65 | 371 |
|  | Modern | 547 | 13675 | 145 | 35 | 180 |

Source: Animal Health Office

**3.3. Mining and Industry**

**3.3.1. Mining**

As Arsi zone office of mineral and Energy Development, the district has high potential of sand stone for construction and solar energy, wind energy and Biogas for alternative energy resource. However, there are insignificant rock quarrying and pottery making mining activities by local communities in the district.

**3.3.2. Industry**

Similar to other parts of the zone industrial development is at its infant stage in the district. The number is very small and is dominated by small-scale industries At the same way they had small capital and able to generate job opportunities for small number of employees, Almost all of them are furniture making and privately owned. In the year 2012 there were 11 wood and steel furniture and construction materials working permanently licensed small scale industries with 83000 birr capital.

**Table: Types of Small Scale Industries, Number of Employment and their Capital.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Type of Industries (2011 and 2012)** | **Number of SS.Industries** | **Number of Employee** | **Capital** |
|  | **2011** |  |  |  |
| 1 | Wood and metal working | 12 | 18 | 173000 |
|  | **2012** |  |  |  |
| 2 | Wood and Metal working | 11 | 30 | 83000 |

Source. Enterprise and Industry Development Office

**UNIT FOUR**

**4. Infrastructure and Social Facilities**

**4.1. Transport, Communication and Post Office**

**4.1.1. Transport**

HonkoloWabe district is found about 92 km away from Zonal Capital town Asella and 267 km from regional capital town Finfine. The district has no Asphalt road, 98.65km of all-weather gravel road and123.84 dray weather road in 2012 year.

**Table: length of roads by road type**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Length of Roads in km.** | | | |
| **Asphalt** | **All Weather Road** | **Cobblestone** | **Dray Weather Road** |
| **2011** | - | 38.4 | - | 114.6 |
| **2012** | - | 98.65 | - | 123.84 |

**4.1.2. Communication**

One of the effective ways of transmitting of both businesses, social and administrative information is through means of communication. For this the telephone is play the greatest role. But the district has no automatic telecommunication service rather there is a wireless telephone service in all parts of the rural peasant association and some government offices of urban areas. In addition, most of the district has Mobil service network.

**4.1.3. Post Office**

Postal service is one of the means of communication that plays a significant role in transmitting information and message; especially in rural areas where other means of communication is under developed. The district has agent type of postal services in the capital town of the district Siltana.

**4.2. Water and Energy Supply**

**4.2.1. Water Supply**

Potable water coverage of the district is very low. According to data obtained from HonkoloWabe Water and energy office. Of the total population of the district about (47.21%) were supplied with potable water. Which is 48.37% for the rural and 40% for the urban areas, in the year 2012.Regarding potable water schemes, there were 7 hand-dug well fitted with hand pump, 15 motorized spring and 28 springs on spot are functional.

**Table: number of water schemes, and number of population supplied with water**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Population supplied water and water schemes** | **Year** | |
| **2011** | **2012** |
| 1 | Total population Supplied with potable water | 37811(54%) | 43976(52.8%) |
| 1.1 | Rural | 33346(47.63%) | 39311(47.21%) |
| 1.2 | Urban | 4465(41%) | 4665(40%) |
| 2 | Functional Water schemes | 13 | 50 |
| 2.1 | Hand dug well fitted with hand pump | 11 | 7 |
| 2.2 | Motorized Spring | 1 | 15 |
| 2.3 | Spring on spot | 1 | 28 |

Source;H/Wabe Water and energy supply office

**4.2.2. Energy Supply**

Energy sources can be traditional or modern. The traditional source of energy are charcoal, animal dung, farm residue, and fire wood; while the modern energy sources are electricity, biogas and solar energy. In the district there is only two towns are supplied with electricity (Siltana and Machitu). However, in rural and other urban centers traditional source of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of using animal dung and crop residues as natural fertilizer to increase production.it also has high contribution in accelerating the deforestation rate in the district. In urban area charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dungs. On the other hand fire wood is the major energy source in rural area followed by crop residue.

HonkoloWabe district has no any fuel filling station.

**4.3. Education**

**4.3.1. Kindergarten**

According to the data obtained from statistical abstract of the district, there was one kindergarten school in the district. Since 2012 the number of children for which this school provide pre-primary school provide education was increased from 343 (99.4%) to 348(51% female) between the year 2011 and 2012; while the number of teachers was 7 in 2011 and 4 in the year 2012.

**4.3.2. Primary Schools**

Between the year 2011 to 2012 the number of primary schools in the district was 25 while the students enrolled to this schools were increased from 17565(47.6 % females) to 16618(48.1% females).During the same year the number of teachers at this level was increased from 375 to 398(41% female) ,while the number of class room increased from 320 to 322,however,the student to teachers ratio was increased from 46.84 to 41.75,while student to class room ratio were also increased from 54.9 to 51.61 .

**4.3.3. Secondary school (9-12)**

There was two secondary schools in the district. The students enrolled to this schools is increased from 1316(44.38 % females) to 1442(43.8% females) In the year 2011 to 2012 the number of teachers increased from 63 to 66 and the number of class rooms is the same 26 in the year 2011 and 2012 .

**Table: Number of Kindergarten and Primary School, Secondary schools &student enrollment**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Kinds of schools | **School Year** | | | | | | | |
| **2011** | | | | **2012** | | | |
| Number of school | Students enrollment | | | Number of school | Students enrollment | | |
| Male | Female | Total | Male | Female | Total |
| 1 | Government |  |  |  |  |  |  |  |  |
|  | Primary School (1-8) | 24 | 9202 | 8363 | 17565 | 25 | 8619 | 7999 | 16618 |
|  | Secondary school(9-12) | 2 | 732 | 584 | 1316 | 2 | 810 | 632 | 1442 |
| 2 | None Government |  |  |  |  |  |  |  |  |
|  | Kindergarten | 1 | 172 | 171 | 343 | 1 | 173 | 175 | 348 |
|  | 1-4 | 1 | 46 | 47 | 93 | 1 | 41 | 43 | 84 |

Source: HonkoloWabe Education Office.

**4.3.4. Education Quality**

The quality of education can be measured from educational qualification of teachers, ratio of students-teacher, ratio of student-section, ratio of student-text book etc. To improve the quality of education student-teacher ratio, student-class ratio and others are very essential, so as we see from the given information education office of the district expected to do more to improve the quality of education by increasing the needed variables of education quality.

**4.3.5. Teachers Development Program**

This is the main program that ministry of education has been used as a strategy to improve the quality of education by giving on job training for teachers for upgrade learning and teaching process. Accordingly, HonkoloWabe district education office uses this program to improve quality education as one method. Between the year 2011 and 2012, the number of teachers trained teachers professional training was increased from 438 (28.3% females) to 464(53.67% females).

Table: Number of Teachers by level of education and school (2011-2012)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of school | **Number of teachers by the level of Education** | | | | | | | | | | | |
| Certificate | | | Diploma | | | BA/BSc | | | MA/MSc | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **2011** |  |  |  |  |  |  |  |  |  |  |  |  |
| 1-4 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-8 | 2 | 9 | 11 | 158 | 103 | 261 | 41 | 17 | 58 | 0 | 0 | 0 |
| 9-12 | 0 | 0 | 0 | 2 | 7 | 9 | 53 | 10 | 63 | 5 | 0 | 5 |
| **2012** |  |  |  |  |  |  |  |  |  |  |  |  |
| 1-4 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-8 | 9 | 6 | 15 | 138 | 192 | 330 | 14 | 37 | 51 | 0 | 0 | 0 |
| 9-12 | 0 | 0 | 0 | 4 | 3 | 7 | 45 | 11 | 56 | 3 | 0 | 3 |

Source: Education office

**4.4. Health**

**4.4.1. Health Institutions**

The number of government health centers is 3 and the number of Health post was 9 in the year 2011 and 2012.This gives the ratio of population to health center and health post to be increased from 27348:1 and 9116:1respectivily to 28126:1 and 9375:1in the year 2012.This indicates the health coverage of the district it needs more health institutions when we compare with WHO standard (2500 and 5000 respectively).

**4.4.2. Health Personnel**

To improve health service delivery availability of qualified health personnel in health facilities is important, Accordingly, the number of health professional working in health facilities was48 between in the year 2012 .By type of profession, there were 5 health officer,25 nurses,2 pharmacists,12 health extensions and 4 Lab-Technitians.in the year 2012.For more information see the next table;

**Table:Number of health institution and personnel owned by Government.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Health Institution** | | | **Health Personnel** | | | | | | |
| Health Centers | Clinic | Health post | Health Officer | Nurse | Health Assistance | Pharmacists | Sanitarians | Lab-Technitians | Health Extension |
| 2011 | 3 | 0 | 9 | 6 | 36 | 0 | 3 | 2 | 2 | 15 |
| 2012 | 3 | 0 | 9 | 5 | 25 | 0 | 2 | 0 | 4 | 12 |

Source: HonkoloWabe District Health Office

**Table: Number of Health Institution And Personnel of Non-Government.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Health Institution** | | **Health personnel** | | | | | |
| Clinic | Drug Shop | Health Officer | Nurse | Health Assistance | pharmacists | Sanitarians | Lab-Technitians |
| 2011 | 7 | 2 | 1 | 10 | 0 | 2 | 0 | 1 |
| 2012 | 7 | 3 | 1 | 12 | 0 | 2 | 0 | 1 |

Source: HonkoloWabe District Health Office

**4.4.3. Disease Prevalence Including HIV/AIDS**

Since people have not been habituated visiting or testing their blood in the health institutions we may not get the actual HIV patients of the district. More over the number of HIV positive in the year 2011 was increased from 24(11 male and 13 females) to 30(12 males and 18 females) in the year 2012.

**4.4.4. Top Ten Diseases**

According to the data obtained from the district health Office, the highest prevalent disease in the district was Helmatics, URTI, serve Febril Disetry, Diarrhea, Trauma, Dyspepsia, Pneumonia, Tonsils, UTI and Allergic are the top ten diseases in the district in the year 2012.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **2011** | | **2012** | |
| **Types of diseases** | **Number** | **Types of diseases** | **Number** |
| 1 | URTI | 1659 | Helmatics | 1751 |
| 2 | Helments | 1060 | URTI | 895 |
| 3 | Sever Acute Feberile D/S | 970 | Serve FebrilDisn | 835 |
| 4 | Diarrhea | 700 | Diarrha | 562 |
| 5 | Dypsepsia | 420 | Trauma | 575 |
| 6 | Pneumonia | 390 | Dyspepsia | 493 |
| 7 | Traouma | 312 | Pneumonia | 412 |
| 8 | UTI | 301 | Tonsilis | 363 |
| 9 | Scabies | 270 | UTI | 339 |
| 10 | Tonsilites | 253 | Allergic | 240 |

**4.5. Children and Women Socio Economic Indicators**

**4.5.1. Women Issue Indicators**

As the country health policy in general, the Zone and specially the district has been pre-prevalence diseases control policy; with this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection; personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers house hold and farmers family members. This helps them to increase the health extension services in the district. To this end at list one health extension was assigned for each peasant associations. Accordingly, as the data obtained from district health office indicated, the delivery given from pregnant women was being improved due to massive awareness creation among the communities. As a result the number of women gets antenatal and postnatal service was increased from 2518 and 793 in the year 2011 to 2540 and 901 in the year 2012.On the other hand, the number of women gets delivery service in the health institution by health professional was increased from 551 in the year 2011 to 2866 in the year 2012.Though such improvement was observed; still there were 0 women attended delivery traditional at their home due to economic problem ,luck of access road and lack availability of health facilities at nearby. In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PW-TT2+ Vaccination was 2116 in the year 2011 and 2276 in the year 2012, while the number of mother get NPW-TT2 Vaccination was increased from 666 in the year 2011 to 1969 in the year 2012.

Like any other developing countries; the population growth rate of Ethiopia in general and the district in particular is the highest as compared with developed countries due to some cultural value that the community have for children, lack of awareness to use family planning service, early marriage, rape etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end the district health office provides awareness creation service so that, women in reproductive age can be used different contraceptive methods were 2 in the year 2012.As a result of this, according to the data obtained from district healthy office indicated the contraceptive rate of the district was 69 % in the year 2012.

Women’s are the actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside home. For instance, they take time on activities like food preparation, childcare, homecare, fetching of water, fuel collection, farming harvesting and rearing of cattle. This indicates the work load and working time of women is heavy as compared with men. However participation on over all decision making and resource utilization is dominated by men. Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates, the number of women who are wereda cabinet was 9 and 7 during the year under consideration.

**4.5.2. Children Issues Indicators**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 9173 in the year 2011 to 10174 in the year 2012.Though the above figure indicates the number of children that gets different vaccination. The number of children who gets full vaccination was only 1771 in the year 2011 and 2488 in the year 2012.

**Table: Number of Children Vaccinated By Type of Vaccination**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **Type Of Children Vaccination** | | | | | | | | | |
| **BCG** | | **Measles** | | **DPT1/PENTA1** | | **DPT3/PENTA3** | | **Fully Vaccinated Children** | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| **2011** | 1212 | 1095 | 996 | 878 | 1325 | 1273 | 1100 | 1294 | 850 | 921 |
| **2012** | 1319 | 1299 | 1148 | 1130 | 1358 | 1336 | 1302 | 1282 | 1130 | 1358 |

Source: Honkolowabe District Health Office.

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 71 and 86 children to be orphan in the year 2011 and 2012.In addition to this, there were also 8 and 9 children with different types of disability in the district in the year under consideration who are in the most cases not benefited from social services and the economy to in the district. From the total orphan and vulnerable children and disabled children, 40.8% and 43 % are female respectively in the year 2012.were also 31 and 78 malnourished children in the district in 2011 and 2012.

Despite of the fact that the district health office provides vaccination and treatment, still there were different type of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are pneumonia, diaries, malnutrition, Tetanus and infection of skin.

**Table: Children Socio-economic Indicators in the District.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Orphan and Vulnerable children** | | | **Disabled children** | | | **Full Immunization** | **Malnourished children** | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 42 | 29 | 71 | 6 | 2 | 8 | 1771 | 17 | 14 | 31 |
| 2012 | 49 | 37 | 86 | 4 | 5 | 9 | 2488 | 40 | 38 | 78 |

**4.6. Hygiene and Sanitation Issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health policy, the district health office provides awareness creation training for the community by health extension workers. The toilet coverage of the district was increased from 14883 in the year 2011 to 15008which is 87% in the year 2012.As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the health institutions. As the data obtained from the district health office indicated, the health center in the district was access to full improved sanitation facilities while all health post are access to toilet and dry waste disposal facilities.

**Table: Number Of Accessed of improved Water Supply And Sanitation Facilities**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | No. of Schools Accessed to improved water supply | | | No. of Schools Accessed to improve Sanitation Facilities (Toilet) | | |
| Kindergarten | Primary | Secondary | Kindergarten | Primary | Secondary |
| **2011** | 1 | 11 | 2 | 1 | 4 | 2 |
| **2012** | 1 | 11 | 2 | 1 | 6 | 2 |

Source: HonkoloWabe District education Office.

**4.7. Social Security**

The number of registered and unemployed persons in the HonkoloWabe District was 784 (20.5 % females) in the year 2011 and 1811(female 33.5 %) in the year 2012.

**Table: Number of Registered and Unemployed Persons in the District by occupation**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Level of education | **2011** | | | | | | **2012** | | | | | |
| **Rural** | | | **Urban** | | | **Rural** | | | **Urban** | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Illiterate | 67 | 12 | 79 | 7 | 5 | 12 | 91 | 93 | 184 | 44 | 41 | 85 |
| Grade 1-8 | 365 | 66 | 431 | 110 | 30 | 140 | 737 | 259 | 996 | 126 | 97 | 223 |
| Grade 9-12 | 32 | 12 | 44 | 17 | 3 | 20 | 92 | 31 | 123 | 47 | 34 | 81 |
| Certificate | 4 | 8 | 12 | 2 | 4 | 6 | 17 | 7 | 24 | 15 | 12 | 27 |
| Diploma | 5 | 13 | 18 | 5 | 8 | 13 | 9 | 6 | 15 | 10 | 9 | 19 |
| Degree | 6 | 0 | 6 | 3 | 0 | 3 | 11 | 6 | 17 | 8 | 9 | 17 |
| MA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **479** | **111** | **590** | **144** | **50** | **194** | **957** | **402** | **1359** | **250** | **202** | **452** |

Source: HonkoloWabe court office

The number of registered and employed persons in the district was 140 (40% females) in the year 2011 and 1632(38.8 % females) in the year 2012.by sex and level of education, and employed persons by types of occupation, sex and level of education,

**Table: Number of Registered and Employed Persons in the District by occupation.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Level of education | **2011** | | | | | | **2012** | | | | | |
| **Rural** | | | **Urban** | | | **Rural** | | | **Urban** | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Illiterate | 2 | 1 | 3 | 1 | 2 | 3 | 67 | 60 | 127 | 58 | 35 | 93 |
| Grade 1-8 | 17 | 15 | 32 | 29 | 15 | 44 | 388 | 348 | 736 | 372 | 151 | 523 |
| Grade 9-12 | 13 | 4 | 17 | 2 | 1 | 3 | 56 | 30 | 86 | 32 | 3 | 35 |
| Certificate | 3 | 5 | 8 | 3 | 4 | 7 | 4 | 3 | 7 | 7 | 2 | 9 |
| Diploma | 4 | 7 | 11 | 6 | 2 | 8 | 4 | 2 | 6 | 4 | 0 | 4 |
| Degree | 4 | 0 | 4 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 |
| MA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **43** | **32** | **75** | **41** | **24** | **65** | **525** | **443** | **968** | **473** | **191** | **664** |

The number of criminal recorded in the district was 233 in the year 2011 and 193 in the year 2012.And the number of persons recorded as offenders were 233 and 193 in the year 2011 and 2012.

**Table Number of Crimes Recorded and Number of Persons Recorded As offenders**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Number Of Recorded Crimes** | **Number of offenders** | | |
| **Male** | **Female** | **Total** |
| **2011** | **233** | **227** | **6** | **233** |
| **2012** | **193** | **187** | **6** | **193** |

There is also criminal and civil Cases lodged in the district. The criminal Cases and civil cases lodged in the district was shown in the table below.

**Table: Number of Criminals and Civil Cases Lodged**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Types Of Cases** | | | | | |
| **Criminal Cases** | | | **Civil Cases** | | |
| Lodged | Decided | Pending | Lodged | Decided | Pending |
| 2011 | 233 | 230 | 3 | 1024 | 966 | 58 |
| 2012 | 193 | 188 | 5 | 715 | 651 | 64 |

**4.8. Finance**

**4.8.1. Revenue Collection and Expenditure**

Annual budget requirement of the district is mainly covered from two sources; regional government block grant and district Inland Revenue. However, regional government contribution accounts larger amount which constitutes for more than 79.15% in the year 2011 and 76.76 % in the year 2012 of total annual budget of the districts. Accordingly, between the year 2011 and 2012 the annual budget allocated for the district was increased from 88583366 to 97008330 The annual budget allocated for the district increased from year to year in accordance with an increase in need to satisfy man power and built social and economic development projects.

**Table: Annual Budget Allocated For the District**

|  |  |  |
| --- | --- | --- |
| **Type of budget** | **Year** | |
| **2011** | **2012** |
| Annual Budget Allocated | 88583366 | 97008330 |

**4.8.2. Revenue**

Regarding revenue generation, the district plays a significant role in increasing the share of revenue in the district budget by collecting revenue from different sources. The main sources of revenue collected in the district are Direct tax, indirect tax, and non-tax items as district in land revenue office cumulative annual report of both years indicated. Accordingly, the total revenue collected from different source was increased from 12734896.47 birr to 13890341.29 birr between the year 2011 and 2012.However,climatic change, expansion of illegal traders, lack of transport services, lack of awareness to pay taxes and lack of interest to pay the tax are the major problems in collecting revenue.

**Table Revenue Collected In The District**.

|  |  |  |
| --- | --- | --- |
| No. | **Revenue Collected** | |
| **2011** | **2012** |
| 1 | 12734896.47 | 13890341.29 |

**4.8.3. Expenditure**

The total expenditure of the district is 83730882.62 birr in the year 2011 and 94388172.82birr in the year 2012.This is categorized in to recurrent and capital expenditure. The Total recurrent expenditure of the district was 72459320.90 birr and total capital expenditure is 11271561.72 birr in the year 2011; and the total recurrent expenditure of the district was 84332474.18 birr and the total capital expenditure was 10055698.64 in the year 2012.

**Table: The Total Expenditure by Major Classification Of The District**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Expenditure of Budget year** | | | | | |
| **2011** | | | **2012** | | |
| Recurrent | Capital | Total | Recurrent | Capital | Total |
| 1 | 72459320.90 | 11271561.72 | **83730882.62** | 84332474.18 | 10055698.64 | **94388172.82** |

**4.9.3. Financial Institution**

The availability of various financial institutions like Banks and Insurance, Saving and credit Association play a significant role in the performance of the district economy. Even though, the reality look like this the district has one governmental and two non-governmental banks and 7 saving and credit association in the district. These were Commercial Bank of Ethiopia, Cooperative Bank of Oromia and Awash Bank. Both are located at Siltana town in the year 2012.

**Table: Rural Saving and Credit Cooperatives**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Type Of  Cooperative | **2011** | | | | **2012** | | | |
| Number of Cooperatives | Members | | | Number of Cooperatives | Members | | |
| Male | Female | Total | Male | Female | Total |
| 1 | Saving and  Credit | 12 | 245 | 625 | 870 | 12 | 345 | 6006 | 6351 |

**4.9. Trade, Tourism and Sports**

**4.9.1. Trade**

In the district the number of permanently licensed traders was 1231 to 1343 between the years 2011 and 2012 respectively who engaged on trading of different trade items in the district and sent to the central market. Most of them engaged on trading of crops service, fruit and vegetable and different cash crops.

Type of cash crops and exportable items produced

The district has a high potential of different types of cash crops and exportable items like oil seeds,(Neug, Linseeds, Rape seeds, Sugarcane, and different types of vegetables; like carrot, etc.) moreover the district has high potential of sheep rearing, it is known by trading of hides and skins to the central market.

**4.9.2. Tourism**

While HonkoloWabe’s diverse physical and cultural resources provide excellent opportunities for the development of tourism, Such challenges as poor image aboard, poor marketing and lack of promotion, lack of well-developed tourist related infrastructure (road, transportation system, network facility and services, lack of knowledge about tourism and low level of human capacity are the main problem of tourism economy in the district. There for tourism sector in the district was need more activities in the next time.

**4.9.3. Sport**

There are different types of sport activities in the district; Football, Volleyball and athletics are the major types of sport activities in HonkoloWabe district. However, there is no any type of stadium and other sport facilities in the district. But youth and sport office of the district has the following sport Teams.

**Table: Sport Team and Members In The District**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Types of Team** | **2011** | | **2012** | |
| **Number of club** | **Members** | **Number of clubs** | **Members** |
| 1 | Foot Ball | 1 | 28 | 1 | 21 |
| 2 | Volley ball | 3 | 27 | 0 | 0 |
| 3 | Athletics | 1 | 60 | 1 | 11 |
| 4 | Wushu /gymnastic | 1 | 4 | 1 | 70 |

**CHAPTER FIVE**

**5. Development Activities**

**5.1. On-Going Development Activities**

The on-going major development activities in the district are carried out by government, non-government organizations and community participations. The annual budget of the district is divided in to recurrent budget and capital budget. The capital budgets are directly used for the construction of different types of development projects. It is expected that of the total budget of the districts is 13.24 % in the year 2011 and 10.62 % is used for development projects.in the year 2012.Moreover, from excess revenues allowed for the district (which is about 4.8 % in the year 2011 and 10.7 % in the year 2012 some amount must be used for development projects. In addition, Regional government some project that are constructed by non-governmental organization in the district to meet MDG and GTP also to mix their counter in development.

**5.1.1. Governmental On-going Development Projects**

**5.1.1.1 Social Services and Infrastructures Development Projects**

Different on-going projects of social service to meet the need of local community and improve the living conditions of the districts society. To this end there were different on-going social service and infrastructure development projects like; TVET Teaching class, Health extension residential house projects are being constructed in the year 2012 by government budget and community participation.

**5.1.1.2 Economic Development Project**

The construction of economic development projects; Some of these are construction of irrigation cannels, Animal health office construction, expansion of water, construction of road (sinsine Bade Kelu road) are constructed budget allocated from the district and public participation .

**5.1.1.3 Problems**

Lack of contractor, low quality of project constructed due to the use of low quality materials, inconsistent of supervisions were some major problems of projects in the districts.

**CHAPTER SIX**

**6. Problems and Potentialities**

**6.1. Major Problems**

**6.1.1. Environmental Problems**;

Soil degradation due to over cultivation, over grazing and rapid deforestation rate, low stage of soil and water conservation practices are the major environmental problems in the district.

**6.1.2. Economic Problems**

High prevalence of crop diseases and pests, animal diseases, shortage of animal feeds, variation of rain falls, acute shortage of grazing land which is over utilization of the same land for the long period of time, rapid population growth and large family size, land fragmentation due to population pressure, high price of agricultural inputs and lack of capacity to buy, lack of financial institutions like bank and insurance, the absence of investment activities and development of small-scale industries.

**6.1.3. Social problems**

There are many social problems in the district these are; shortage of qualified teachers, low participation rate of girls in education, especially in rural areas, high dropout rate, in adequate/low health coverage, lack of or in adequate trained man power, low potable water coverage, and others.

**6.2. Potentialities**

The total area of the district 320 km2 cultivable land accounts for 62.7 % from this 87.7 % is used for cultivation of different crops. Of the total area of the district 0.5% is covered by forest and 11.8 % grassland area. Therefore, these resources can be used for different activities. Regarding ,investment opportunities in the lowland area of the districts, especially around Mechitu Worked has a potential for producing exportable items like sugar cane, Mango, papaya, Lemmon, Orange, Chat, Cotton, Tomato and the like. There are also skilled and unskilled labor resources.

**CHAPTER SEVEN**

**7. Conclusion and Recommendation**

**7.1. Conclusions**

HonkoloWabe district is newly established in the 1998 E.C. fiscal year, it has 11 administrative units of which two are urban administrative unites having a total area of 320square kilometers according to the data obtained from projected population census report of the year 2011-2012 the district has 82046(males 41037 and females 41009) in the year 2011 and 84378 (males 42201 and females 42177) in the year 2012E.C.

The district has comparative advantage potential of production of different verities of crops twice a year during maher and belg season, maher is the largest season both in production and area cultivated. The major crops in the district ranges from cereals crops like malt barley to cash crops like sugar cane, different spices and vegetables like carrot; moreover, the district is known by livestock rearing especially sheep. However it was founded that most farmers are not busy throughout the year. Even during busy season, most farmers do not fully engage in farm activities due to some socio-cultural related factors. Any how the effect of socio-economic factors on living standard of the community of the district needs further investigation.

The district has low standard of social and economic development. It has only two secondary schools, 25 primary schools, three health centers, six non-government clinics, nine health posts that served the surrounding community. In addition to this there is one non-government (private) owned kindergarten school.

Regarding to economic services there were animal health clinic, farmers training centers that help agricultural development activities. Moreover, the trend at which rural road being constructed was promising in the district. However the available economic sector infrastructures were far below recommended standard. The district has no enough skilled human resources in all government sectors. These all problems are leading to decrease the effectiveness of both social and economic sectors. On the other hand it was identified that the district has high potential of land resources and labor resources to attract potential investors in order to accelerate the socio-economic development of the district community.

**7.2. Recommendation**

* To improve both social and economic services of the district stockholders like governmental and non-governmental organization should participate with their financial, skill and other materials.
* The administration of the district should take an action to deploy professional employment in all sectors with the given budget.
* The district has fertile soil to produce different types of crops but due to lack of provision of input (fertilizer, improved seeds, herbicides and insecticides) on time and an able to use organic fertilizers. The expected agricultural production is insignificant; hence, to meet the demand for it the concerned bodies provide agricultural input on time and encouraging farmers to use organic fertilizers.
* To meet the objectives of agricultural extension program the farmers training centers were constructed in all peasant associations .However, they cannot fully operate its activities.
* The health coverage of the district is good and compared to WHO standard. However the number and types of qualified health personnel working in health facilities was limited. So to meet the minimum standard the district health office should recruit additional health facilities in the coming years.
* So as to improve health service delivery and improve production of livestock availability of health infrastructure and provision of enough fodder is unquestionable. Hence the district should be pay attention to improve health service coverage by construction of additional health facilities, introduction of good quality breed and additional fodder among farmers.
* The water supply of the district was at 48.37% .Hence additional water schemes have to be constructed so as to increase the potable water supply coverage.
* Basic socio-economic infrastructure like road and communication facilities should be developed so as to attract investors.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF HITOSA DISTRICT 2011 AND 2012 E.C**

**Chapter One**

1. **Introduction**

Hetosa is one of the 27 districts of Arsi Zone. The historical name of the districts is derived from the names of Oromo clan called Hetosa living in the area. The district has 27 administrative units of which 23 are peasant Associations while the remaining four are urban administrative units. Eteya town is the capital town of the district. It is located 150km from Regional Capital city Finfinne and 25 km from Zonal capital Asella town to south direction found on Asella-Adama main road.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Hetosa district that reflects the existing situation development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

The data used to recognize this document is collected from the district and Zone level sectorial departments, 1999 census result report and related documents available in our office. Problem faced during conducting this research is lack of data, time to conduct the studies, involuntary of some sectors and individuals to relevance data.

The paper has four parts. The first part is introdactary part and the second part deals with physical features like location, relief, drainage, soil, vegetation and wild life. The third part focused on socio-economic aspects such as population, economic activities and soil infrastructures. The final part highlights the existing problems and potentialities in Hetosa district.

**Chapter Two**

**2. Physical Setting**

**2.1. Location**

Hetosa district is one of the administrative units of Arsi Zone. Astronomically, it is located between 7036’40’’N and 7057’27’’N Latitude and 39021’12’’E and 39038’45’’E Longitude. Relatively the district shares a boundary line with East Shewa zone, Dodota district in the north, north east and south west, Lode Hetosa district in the east and south east,Digeluna-Tijo district in the south, Tiyo district in the south and south west and Zuway Dugda district in the west.

**2.2. Area**

The total area of Hetosa district is 714 Km2 which accounts for 3.39% of the total area of Arsi Zone.

**2.3 Geology of the district**

The present surface rock distribution and land features of the district was the result of the past geologic history and tectonic movement in the upper mantle lithospheric portion of the horn of Africa. Regarding the surface rock distribution, all the present surface rock was formed during Cenozoic era of Quaternary period. Alkaline Olivine basalt formation covers the most western, north western and northern parts of the district extensively except few areas in the north western part covered by Rhyolitic Volcanic centers. Likewise, Dino formation covers the central part extensively from south west to north east. On the other hand, Nazareth Series and lower part Chilalo formation covers extensively from the southern part to eastern peripheries. In addition, the Upper Chilalo formation covers the whole south eastern part of the district.

**2.4 Relief, Drainage and Climate**

**2.4.1. Relief: -**The relief structure of the district consists of rugged mountain ranges which is the parts of Chilalo-Galema massif, high flat plateau on the high land and flat low laying plain areas in the rift valley. The altitude of the district ranges between **4079** m in Sibu Abadir area and 1736m in the rift valley.

**2.4.2. Drainage: -**Due to its location, the district has high network of river systems. The major permanent rivers of the district are Bonaya, Wareka and Gonde. On the other hand, the major seasonal stream is the district is Boru and Guna. Generally, the district has a potential for both traditional and modern irrigation system if the available water bodies are fully utilized.

**2.4.3. Season:** The rainfall pattern is bi-modal, which are short rainy season (Belg from March to May) and summer or long rainy season (Maher from June to September).

**2.4.4. Climate:** Due to its altitudinal location, the climatic condition of the district is dominantly moderately cool which have a temperature of 150C-200C.This type of climate consists about 72% of the total area of the district. The remaining ones are cool and cold with a temperature of 100C-150C and less than 100C respectively. The mean annual rainfall of the district ranges between 800 -1400mm and the average rainy days of more than 150 days in the year.

**2.5 Soil.**

The major types of soil in the district are Clay (30%), Sandy (18.6%), Loamy (51.14%) covered the area of the districts. The loamy type soil is more suitable for agriculture

**2.6. Vegetation and Wild life**

**2.6.1. Vegetation: -**The vegetation types like Afro alpine and sub Afro alpine, Brush and Shrub lands and grass lands are the main vegetation type in the district. There is government protected/public (at Anole and sibu) forestin the district.

**2.6.2.Wild Life:-** the major wild animals found in the district Red fox, Columbus monkey,ape, Wild goat, Rabbit, Leopard, hyena etc. are mentioned as an example.There are no reserved areas for wild life conservation in the districts.

**Chapter-Three**

**3. Socio-Economic conditions**

**3.1. Population**

According to the estimation made from 1999 census report, the total population of the district was increased from 175,134 to 180,218 in the year 2011 and 2012 in the consecutive year. From the total population of the district, only 16.898% are living in urban areas and the remaining 83.102% are living in rural area in the year 2012 depending on agricultural.

This indicates that more than 83.102% of the population of the district is living in rural area depending on agriculture. Out of the total population, the female population accounted for 41.119 %( 41.98% for rural and 8.625% for urban areas) during in the year 2012 E.C.An overall sex ratio of the district was 101 male per 100 female (100 male per 100 female in urban and 101 per 100 female in rural).

**Table: 3.1 Population distribution by urban, rural and sex for the district. (2011-2012 E.C)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | **Rural + Urban** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 73,149 | 71,645 | 144,794 | 14,854 | 15,486 | 30,339 | 88,003 | 87,131 | 175,134 |
| 2012 | 75,076 | 73,533 | 148,608 | 15,475 | 16,134 | 31,609 | 90,551 | 89,667 | 180,218 |

Source: projected based on 1999 CSA report.

**3.1.1. Population size by urban and rural**

The age structure of a population is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district

According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 47.17% young age population, productive age population 49.% and old age population 3.83% of the total population respectively in the year 1999. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 39.40%, 40.93% and 3.19% for rural areas and 7.77%, 8.08% and 0.63% for urban area respectively in the year 2012. The dependency ratio of the district is 104 % (111% for Rural and 71% for urban) which indicates 111 people are dependent on 100 economically active populations in the year 2012

**Table 3.2.Population size by wider age group classification based on 1999 census**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year Sex  Age group | 2011 | | | | | 2012 | | | | |
| **Male** | **Female** | | **Total** | | **Male** | **Female** | | **Total** | |
| No | No | % | No | % | No | No | % | No | % |
| Rural | 64,232 | 62,912 | 41.42 | 127,144 | 83.72 | 65,924 | 64,569 | 41.33 | 130,493 | 83.52 |
| 0-14 | 30,298 | 29,675 | 19.54 | 59,973 | 39.49 | 31,096 | 30,457 | 19.49 | 61,553 | 39.40 |
| 15-64 | 32287 | 33165 | 20.30 | 65452 | 41.02 | |  |  | | --- | --- | | 33142 | 34040 | | |  |  | | --- | --- | | 33142 | 34040 | | 20.25 | |  | | --- | | 67182 | | 40.93 |
| 65+ | 2,460 | 2,410 | 1.58 | 4,870 | 3.21 | 2,525 | 2,473 | 1.58 | 4,998 | 3.19 |
| Urban | 12,101 | 12,615 | 8.30 | 24,716 | 16.28 | 12,607 | 13,143 | 8.41 | 25,750 | 16.48 |
| 0-14 | 5708 | 5,951 | 3.92 | 11,659 | 7.68 | 5,947 | 6,199 | 3.97 | 12,146 | 7.77 |
| 15-64 | 7595 | 7922 | 4.06 | 15517 | 7.98 | 7918 | 8253 | 4.12 | 16171 | 8.08 |
| 65+ | 463 | 483 | 0.32 | 946 | 0.62 | 483 | 503 | 0.32 | 986 | 0.63 |
| Total Rural+Urban | 76,333 | 75,527 | 49.72 | 151,860 | 100 | 78,531 | 77,712 | 49.74 | 156,243 | 100 |
| 0-14 | 36,006 | 35,626 | 23.46 | 71,632 | 47.17 | 37,043 | 36,657 | 23.46 | 73,699 | 47.17 |
| 15-64 | 37,404 | 37,008 | 24.36 | 74,412 | 49 | 38,480 | 38,079 | 24.37 | 76,559 | 49 |
| 65+ | 2,923 | 2,893 | 1.9 | 5,816 | 3.83 | 3,008 | 2,976 | 1.9 | 5,984 | 3.83 |

Source: 1999 CSA population & Housing census report

**3.1.2. Average family size by urban and rural**

The family size shows which the fertility rate is high and low by residence (rural and urban)

According to data obtained in the year 2011 and 2012 each family size is 7 and 6 in rural and urban respectively

**3.1.3. School age Population**

School age population is important for planning educational facilities like school, class room, teachers, text book and other teaching materials. In addition, it is also important for planning how money students to be enrolled to the school every years.

Accordingly, as shown in the table below the number of school age population of the district was increasing from 66622 to 70469 students between the years 2010 to 2012.From these students 49.45% was female. By the year 2012 these groups of population account 41.56 % of the total population of the districts.

As far as different school age population was concerned the number of kindergarten, as the age classification (<7) in the urban and rural the total male and female 14138 and 14512.In the other the primary as the age classification (7-14) the number of school age population 32021 and 32864 and secondary school population (15-18) 13028 and 13373 in the year of 2011 and 2012 in respectively. This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for development for other social services like health facilities, youth center, etc.

**Table 3.3 classification of school age population based on 1999 census**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2010** | | | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Rural** | | | | | | | | | |
| <7 | 7075 | 6701 | 13776 | 7261 | 6877 | 14138 | 7453 | 7059 | 14512 |
| 7\_14 | 15869 | 15328 | 31197 | 16290 | 15731 | 32021 | 16,717 | 16147 | 32864 |
| 15\_18 | 6383 | 6311 | 12694 | 6551 | 6477 | 13028 | 6725 | 6648 | 13373 |
| Total | **29,327** | **28,340** | **57,667** | **30,102** | **29,085** | **59,187** | **30,895** | **29,854** | **60,749** |
| **Urban** | | | | | | | | | |
| <7 | 1051 | 1062 | 2113 | 1095 | 1106 | 2201 | 1141 | 1153 | 2294 |
| 7\_14 | 2953 | 3108 | 6061 | 3078 | 3238 | 6316 | 3207 | 3373 | 6580 |
| 15\_18 | 1398 | 1496 | 2894 | 1456 | 1558 | 3014 | 1517 | 1623 | 3140 |
| Total | **4351** | **4604** | **8955** | **4534** | **4796** | **9330** | **4724** | **4996** | **9720** |
| **Rural + Urban** | | | | | | | | | |
| <7 | 8126 | 7763 | 15889 | 8356 | 7983 | 16339 | 8594 | 8212 | 16806 |
| 7\_14 | 18822 | 18436 | 37258 | 19368 | 18969 | 38337 | 19924 | 19520 | 39444 |
| 15\_18 | 7781 | 7807 | 15588 | 8007 | 8035 | 16042 | 8242 | 8271 | 16513 |
| Total | **33678** | **32944** | **66622** | **34636** | **33,881** | **68517** | **35619** | **34850** | **70469** |

Source: Finance & Economic cooperation of Arsi Zone office

**3.1.4. Population Density and Rural settlement**

Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the district crude density was increased from 213 people per km2 to 219 people per km2 between the year 2011 and 2012. Concerning the settlement pattern of the district, the rural part of the district is characterized by grouped type of settlement.

**3.2. Agriculture**

**3.2.1. Farmers Association:-**There are 23 peasants associations (PA) in the district with 17,226 and 17,692 member farmers in the year 2011and 2012 E.C respectively.

**3.2.2. Service cooperatives by their members,**

During the same years, there were 79 and 76 general Agricultural primary cooperative with 14,894 and 18,161 members. Regarding their capital, they have Ethiopian birr 25,604,722.18 of operational and 2,452,033.41 is a fixed capital and 18,286,910.28 of operational and 18,846,818.31 is a fixed capital this indicates 8.74 and 50.75% is fixed and 91.26 and 49.25% is an operational capital in the year 2007 and 2008 E.C respectively. The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, agricultural mechanization services, purchasing of product from farmers and Consumers cooperatives are sells food materials to farmers and other people.

On the other hand, there were also 13 and 9 number of farmer cooperatives purchased farmers product like grain purchased amount of 14,547 quintal and 12,097 quintal with total price of 12,973,924 and 3,832,640 in the year 2011 and 2012 E.C respectively.

. **Table: 3.4.1 Number cooperatives, members and their capital (year2011)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Activity/Cooperatives | **2011** | | | | | | |
| No cooperative | **Number of members** | | | **Capital** | | |
| Male | Female | Total | Operational | Fixed | Total |
| **Primary cooperative** |  |  |  |  |  |  |  |
| Multi-purpose | 37 | 11822 | 2498 | 14284 | 22,789,622 | 5,123,696.5 | 24,195,623 |
| Irrigation |  |  |  |  |  |  |  |
| Consumers | 7 | 154 | 155 | 309 | 6,803,001 | 26958.9 | 6,631,515 |
| Saving and Credit | 34 | 1814 | 2028 | 3842 | 15,999,753 | 216936 | 654855 |
| **Total** | **78** | **13790** | **4621** | **18435** | **30,030,543** | **5,343,327.9** | **31,481,993** |

**Table: 3.4.2 Number cooperatives, members and their capital (year2012)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Activity/Cooperatives | **2012** | | | | | | |
| No cooperatve | **Number of members** | | | **Capital** | | |
| Male | Female | Total | Operational | Fixed | Total |
| **Primary cooperative** |  |  |  |  |  |  |  |
| Multi-purpose | 29 | 1976 | 1820 | 3796 | 35,822,195 | 4,062,383 | 39,884,577 |
| Forest Development | 1 | 310 | 135 | 445 | 35,600 | 400 | 36,000 |
| Irrigation |  |  |  |  |  |  |  |
| Dairy | 3 | 127 | 41 | 168 | 7,608,277 | 67,407.23 | 77,675,684.23 |
| Consumers | 6 | 163 | 155 | 318 | 715,002 | 289,860 | 1,004,862 |
| Saving and Credit | 32 | 1976 | 1820 | 3796 | 35,822,195 | 4,062,383 | 39,884,577 |
| **Total** | **71** | **4552** | **3,971** | **8523** | **80,003,269** | **8,482,433.23** | **158,485,700.23** |

Source: -Hetosa district cooperative office

**3.2.3. Total household and members settled in the district from other districts**

There were no household and members settled in the district from other zone or district in the year 2011 and 2012

**3.2.4. Peoples affected by droughts**

According to the data obtained from the Disaster prevention and preparedness office population affected by drought the total population of 13,580 and 27,047 in the year of 2011 and 2012 respectively. At the same time the affected population provide aids 509,260kg food, 10,400 kg supplementary food and 6,746 liter oil in the year of 2011 and

2,175,605kg of food, 50,000 kg supplementary food and 51,145 liter oil in the year of 2012

**Table3.5. population affected by drought and population supported in the year 2011 and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| year | Population affected by drought | | | Aid/support given | | |
| Male | Female | Total | Food (kg) | Oil (lit) | Supplementary Food(kg) |
| 2011 |  |  | 13,580 | 509,260 | 6,746 | 10,400 |
| 2012 |  |  | 27,047 | 2,175,605 | 51,145 | 50,000 |

**3.2.5. Land Resources by Use**

**3.2.5.1. Land under crops**:-

Land use indicates the classification of the land area under different types of uses. The type of land use changes from time to time depending on socio-economic change. For instance, the grazing land, Natural forest and fallow lands are decreasing from time to time while cultivated, man-made forest and residential lands are increasing. The total land 714 km2 utilization of the land was for cultivation 38.40%, which accounts 274.15 km2.

**3.2.5.2. Pastureland (Grazing land):-**

The grass land area was 11.65% from the total area of the district which accounts 83.21 km2.

**3.2.5.3. Forest:-**The forest area of the district is increasing from time to time; it is 5.66% from the total area of the district which accounts 40.44 km2.

**3.2.5.4. Other Lands:-**The others lands which did not classified by different type of use are 44.29 % from the total area of the district which accounts 316.2 km2

**Table 3.6 Land classified by use**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Type of land by use** | | | | | | | | | |
| Cultivated land | | Grass land | | Forest | | Others | | Total | |
| 2011 and 2012 | Km2 | % | Km2 | % | Km2 | % | Km2 | % | Km2 | % |
| 274.15 | 38.40 | 83.21 | 11.65 | 40.44 | 5.66 | 316.2 | 44.29 | 714 | 100 |

**3.2.6. Crop Production**

**3.2.6.1. Area (in hec) and production (in Qt) of major crops for private peasant holdings by seasons**

Bimodal pattern of the rain rainfall gives a wide opportunity for the district to produce different types of crops and use the same land twice a year. That is for season Meher and Belg. However, Meher is the largest season in terms of both of cultivated land area and crop production. For instance, during the year 2011 and 2012 it accounts for 95.98% and 96.35% of total cultivated land and 93.78% and 99.63% of the total production obtained respectively.

The major annual crops grown in the district are cereals, pluses and Oil seeds. From cereal crops Barley, Teff, wheat and Maize are the most widely grown ones. In addition, it is known in producing some cash crops like tomato, onion, carrot, sugar cane, etc.

In the Meher season of 2010/2011 and 2011/20012, about 26,382 and 869,677 hectares of land were cultivated from which 27,212.85and 1,107,298.5quintals of production was obtained in the year respectively. These give an average productivity of 36.85 and 30.65 quintals per hectares respectively. By crop type in the year 2011/2012 wheat with production of 38.24 and quintal per hectare, followed by barley and Faba maiz with 33 and 10 quintal per hectare are the most productive cereal crops while sorghum with 4.65 quintal per hectare is the least productive cereal crop. Both in terms of area production and production obtained wheat and barley are the most important crops produced grown in the district.

Likewise, during the same years 2011 and 2012, about 288**3** and 3540 hectares of cultivated land was covered by Belg season crops from which 72,144and 95,605quintals of production was obtained. These give an average productivity of 80.62 and 20.48 quintals per hectares respectively. By crop type, Root crops and barley with a production 135 and 26 quintals per hectare, followed by peas with 11 quintal per hectare in Belg season in the year of 2011 and 2012.

**TABLE: - 3.7. Area cultivated and production obtained for private peasant holdings during summer and Belg season**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop Type | **2010/2011** | | | | **2011/ 2012** | | | |
| **Meher season** | | **Belg season** | | **Meher season** | | **Belg season** | |
|
| Area(Hect) | Prod(Qt) | Area(Hect) | Prod(Qt) | Area(Hect) | Prod(Qt) | Area(Hect) | Prod(Qt) |
| Cereals | **21873.5** | **879,718** | **2868** | **71,904** | **21,899** | **777,961** | **3532** | **95493** |
| Wheat | 15,723.75 | 619,461 | 0 | 0 | 15858 | 586689 | 0 | 0 |
| Teff | 725 | 10875 | 0 | 0 | 752 | 12032 | 0 | 0 |
| Barley | 4819.75 | 203,811 | 2868 | 71,904 | 4927 | 164632 | 3532 | 95493 |
| Maize | 542 | 43,778 | 0 | 0 | 344 | 14104 | 0 | 0 |
| Sorghum | 63 | 1793 | 0 | 0 | 18 | 504 | 0 | 0 |
| Pulses | **4094** | **101,559** | **15** | **240** | **4367** | **90,502** | **8** | **112** |
| Faba beans | 2953 | 71049 | 0 | 0 | 3162 | 69564 | 0 | 0 |
| Haricot beans | 50 | 900 | 0 | 0 | 131 | 1574 | 0 | 0 |
| Lentils | 24 | 394 | 0 | 0 | 22 | 396 | 0 | 0 |
| Peas | 1067 | 29216 | 15 | 240 | 1052 | 18968 | 0 | 0 |
| Grass peas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Field peas | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 112 |
| **Oil seeds** | **146.5** | **2652** | **0.00** | **0.00** | **116** | **1214** | **0** | **0** |
| Linseed | 104.5 | 1493 | 0 | 0 | 93 | 844 | 0 | 0 |
| Rape seed | 42 | 1159 | 0 | 0 | 23 | 370 | 0 | 0 |
| **Cash crops** | **722.625** | **77229.5** | **0** | **0** | **0** | **0** | **0** | **0** |
| Root crops | 376.25 | 46140 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vegetables | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Grand Total** | **27,212.85** | **1,107,298.5** | **2883** | **72,144** | **26,382** | **869,677** | **3540** | **95,605** |

**3.2.6.2. Area (in hec) and production (in Qt) of state farms:-**Hetosa districts have one state farm which is called Gonde-Eteya basic seed farm. The state farm cultivated the total cultivated land of **418.88** and **345.82**hecter and obtained production was **8645.73** and **7,372.98** in the year of 2011 and 2012 respectively

**Table3.8. Area Cultivated and production of major and minor crop by state farm**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of crop** | **Year** | | | |
| **2010/2011** | | **2011/2012** | |
| **Area (hecter)** | **Production(Quntals)** | **Area (hecter)** | **Production(Quntals)** |
| **Cereals** | **309.06** | **7,664.89** | **291.96** | **7001.62** |
| Wheat | 205.7 | 6,180.43 | 210.07 | 5,868.60 |
| Teff | 62.59 | 768.54 | 56.3 | 555.78 |
| Barley | 29.77 | 470.42 | 25.59 | 577.24 |
| Maize | 11 | 245.5 | 0 | 0 |
| Sorghum | 0 | 0 | 0 | 0 |
| **Pulses** | **59.26** | **388.84** | **40.61** | **275.64** |
| Faba beans | 20.8 | 269 | 18.45 | 159.04 |
| Chick-peas | 10.87 | 11.93 | 8 | 21.13 |
| Lentils | 11.84 | 8.91 | 5.16 | 34.34 |
| Vetch | 0 | 0 | 0 | 0 |
| Peas | 15.75 | 99 | 9 | 61.13 |
| Fenugr | 0 | 0 | 0 | 0 |
| **Oilseeds** | **50.53** | **592** | **13.25** | **95.72** |
| Linseed | 10.07 | 50 | 13.25 | 95.72 |
| Rape seed | 40.46 | 542 | 0 | 0 |
| **Grand Total** | **418.88** | **8645.73** | **345.82** | **7,372.98** |

Source: Gonde-Eteya state farm

**3.2.6.3. Amounts and types of fertilizer, improved seeds, pesticides and herbicides distributed to farmers and number of farmers utilizing by types**

**Agricultural Input Utilization: -** Fertilizers, improved seeds, herbicides and insecticides are very essentials agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw material. As shown in the table below, the amount of fertilizer and improved seed distributed to the farmers fluctuates from year to year due to farmers obtain these inputs from different source when available and due to lack of inputs and delay in distribution time. In the year 2011 and 2012 of the production year the amount of fertilizer distributed to the farmers was 47573.5 and 5161.5 quintals while the amount of improved seed distributed was also 5656.28 and 4191.35 quintals. However, the amount of fertilized and improved seed distributed to the farmer was increased from 47573.5 to 5161.5 and improved seed distributed to the farmer was decreased from 5656.28 to 4191.35 quintals in the year 2011/2012 due to the above mentioned reason.

On the other hand, the amount to herbicide and pesticide distributed to the farmers was decreased from 26025 to 27037.50 in the year 2011/2012. For detail see the table below.

**Table: - 3.9. Amounts of agricultural inputs distribute to farmers by type of input by year**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Types of Inputs | 2011 | | 2012 | |
| Amount(kun) | No of far.Ut. | Amount(kun) | No of far.Ut. |
| **Fertilizers** | **47573.5** | **17692** | **51761.5** | **17692** |
| DAP | 37960 |  | 41141.5 |  |
| UREA | 9613.5 |  | 10620 |  |
| **Improved Seed** | **5656.28** |  | **4191.35** |  |
| Wheat | 4973 | 6631 | 4089.5 | 5453 |
| Barley | 674.12 | 1078 | 52 | 84 |
| Maize | 0 |  | 17.75 | 284 |
| Teff | 0 | 7 | 0 | 47 |
| Vegetables seeds |  |  | 0 |  |
| Others | 8.16 | 10 | 32.1 | 37 |
| **Herbicides and pesticide** | **26025** |  | **27037.5** |  |
| Herbicides(lit) | 12795 | 15923 | 10779.5 | 14153 |
| Pesticides(lit) | 3260 | 6520 | 1800 | 3600 |
| Liquid(lit) | 0 |  | 0 |  |
| Others | 9970 | 13269 | 14458 | 15923 |

Source: Hetosa District Agriculture Office

Note:- The number of farmers utilized data cannot obtained.

**3.2.6.4. Methods of maintaining soil fertility (traditional and modern)**

There are two ways of maintaining soil fertility in the Zone general and in the district particularly. These are Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale, fallowing and using crop residue while the modern one is the using of chemical fertilizer and organic fertilizer (compost).

**3.2.6.5. Methods for soil conservation (traditional and modern**)

Contour plugging and strip cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforest are modern way of soil conservation in the district

**3.2.6.6. Agricultural calendar**

It is well known that farmers of the district are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone types of crops cultivated some districts these are started earlier while in other districts they started later agricultural calendar of Hetosa district is shown in table below.

The time of performing agricultural activities such as land preparation, planting weeding and Climatic Zone and types of crops cultivated in district.

**Table: 3.10. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of activities | Meher Season | Belg season |
| 1 | Land preparation | 15 Mar-30 June | Feb. 20- Apr 15 |
| 2 | Planting(sowing) | June 10-20 July | Mar 1- Apr 15 |
| 3 | Weeding | 25jul-Sep.5 | 5 May-20 June |
| 4 | Harvesting | 15 Oct. –Dec 15 | 30 June-Aug 20 |

Source: - Hetosa district Agricultural and Natural resource Office.

**3.2.6.7. Average number of farm oxen per household and percentage of farmers**

According to the data obtained from the Hetosa Animal Health office, in the district average number of farm oxen per household are 1 ox have 515 and 1210 households,2 oxen 5988 and 6199 households,3 oxen have 3611and 3,857 households,4 oxen have 4,460 and 3,912 households,5 oxen have 860 and 962,>5 oxen have 345 and 305 households in the year 2011 and 2012 respectively.

**Table3.11. Average number size per household in the year of 2011 and 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | | | |
| **2011** | | **2012** | |
| Average number of oxen per household | Number of household | Average number of oxen per household | Number of household |
| 1ox | 515 | 1ox | 1,210 |
| 2 oxen | 5,988 | 2 oxen | 6,194 |
| 3 oxen | 3,611 | 3 oxen | 3,857 |
| 4 oxen | 4,460 | 4 oxen | 3,912 |
| 5 oxen | 860 | 5 oxen | 962 |
| >5 oxen | 345 | >5 oxen | 305 |

Source the district animal health and marketing development agency

**3.2.6.8. Average farm land holding size per household in hectar and percentages of farmers land holding**

According to the data obtained from the district office of agriculture in the district average number of farm land holding per households <1ha have 1850 and 1888 households in the year 2011 and 2012 respectively and 1-2 hec. Have 11,839 households, 2-3 hec. have 2,860 households, 3-4 hec. have 577 and 4-5 hec. have 30 households in the same in the year 2011 and 2012

**Table 3.12 Land holding sizes per households in hectare in the year of 2011 and 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | | | |
| **2011** | | **2012** | |
| Average land holding sizes per household | Number of household | Average land holding sizes per household | Number of household |
| < 1hec | 1850 | < 1hec | 1888 |
| 1-2 hec | 11,839 | 1-2 hec | 11,839 |
| 2-3 hec | 2,860 | 2-3 hec | 2,860 |
| 3-4 hec | 577 | 3-4 hec | 577 |
| 4 -5 hec | 30 | 4 -5 hec | 30 |
| >5 hec | 0 | >5 hec | 0 |

Source the Agricultural and development office of the district

**3.2.6.9. Major Crop pests**

The major crop pests in the district are (may be aphids) which the major disease are (may be rust, smuts and others, weeds and rain fall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvesting time.

To overcome these problems the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rainfall water harvesting and river diversion system etc.

**3.2.6.10. Irrigation**

Though the district has sample land suitable for irrigation, still the land under irrigation was limited. In the year 2011 and 2012; 145 and 274 hectares of land were cultivated by traditional modern and pump irrigation from which 26,106 and 46,433 quintal was obtained. However, the area under traditional irrigation was increased from 126 to 171 hectare, modern irrigation was increased 0 to 63 hectares and pump irrigation was increased 14 to 32 hectares, the production obtained was increased from 23,376 to 28,271,0 to 11,970 and 2,730 to 6192 quintals in the year 2011 and 2012 respectively. This indicates the productivity of 186.47 and 174.56 per hectare in the year 2011 and 2012 respectively.

**Table: 3.13. Amount of production obtained from traditional irrigation system**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **year** | **Types of irrigation** | **Area(hect)** | **Production (qunt)** | **Productivity** | **No of farmers engaged** |
| 2011 | Traditional | 129 | 23,376 | 185.52 |  |
| Modern | 0 | 0 | 0 |  |
| Pump | 16 | 2,730 | 195 |  |
| **Total** | **145** | **26,106** | **186.47** | **270** |
| 2012 | Traditional | 175 | 28,271 | 165.33 |  |
| Modern | 66 | 11,970 | 190 |  |
| Pump | 333 | 6,192 | 193.5 |  |
| **Total** | **274** | **46,433** | **174.56** | **483** |

Source: District Agriculture Office

**3.2.6.11. NGOS found in the district and their functions**

* NGOS are helps Government policy in many activities such as economic, social and etc. Accordingly, NGOS’ in Hetosa district were found in the year 2011 and 2012 was Good Neighbors Ethiopia ), SOS, , Meserete Kiristos Church, & Mulu Wengel church, Association for sustainable development Alternative(ASDA) Oromia Grass roots Development initiative and Oromia development Association Hetosa Branch on different activity such as social development project for disadvantaged children, strengthening the delivery of SRH services through private provider networks in oromia, care and support for orphan and vulnerable children, Hetosa community development, construction of Training center, capacity building for cooperative, community based children and families support program, securing Access and retention into good quality transformative education for girls facing early marriage, risky migration, domestic labor and street involvement, sustainable development for small farmers, international food relief partnership for provision of nutritional support vulnerable population, water shed based integrated food and security, innovation for agricultural productivity and on expansion potable water pipe in different administrative unit in the district
* **For more information see the table below**

**Table3.14.NGOS’Working in Hetosa district in the year 2011 and 2012**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No of NGO** | **Name of Charities / NGO's** | **Project title** | **Type of NGO** | **Year** | **Name of district** | **Distiribution by sectors** | **Budget** | | | **Direct Beneficeries** | | |
| **Direct Cost** | **Admin. Cost** | **Total**  **Budge** | **M** | **F** | **T** |
| 4 | Goodneigh Bors Ethiopia | Hetosa Community Development | Inter | Jan 2018-Decem 2022 | Hetosa (Jengo Killisa,Gonde,DeyaDebessoo,Hate,Eteya Shorima,Boru Chilalo,Uladawe,Guri and Shaki) | Intigrated | 15,835,864.96 | 36,950,351 | 52,786,215.96 | 814 | 796 | 1610 |
| 5 | SOS | Sustianable Livelihood Development for improved child care | Local | Jan.2018-Dec.2021 | Tulu Moye,Eteya Areas | Intigrated | 16,020,277 | 5,485,943 | 21,506,220 | 800 | 700 | 1500 |
| 6 | Meseret Kiristos Church | Children Development project | Local | Jan 2019-Dec 2023 | Education | Intigrated | 11,483,980.5 | 1,988,192.25 | 13,472,172.75 | 148 | 103 | 251 |
| 7 | Mulu wangle | Sustainable Development for small Farmers | Inter | Apr 2020 June 2020 | Eteya 01 | Intigrated | 7,314,930 | 1,290,870 | 8,605,800 | 132 | 107 | 239 |

**3.2.6.12. Number of development agents in the district**

They are one of the most important factor that increase agricultural production and productivity because of the farmers training centers (FTC) constructed and giving training to the farmers. During the same years, the number of Development agents was increase from 42 to 42 between the year 2011 and 2012,there are three in each PA with profession of plant science, Animal Science and Environmental protection. These Development Agents help the farmers in all aspects of agricultural practices in all aspects of agricultural practices such as in crop production, animal husbandry management and environmental.

**Table: 3.15. Number of Development Agents and FTC**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of farmers Training Centers (FTC) | 23 | 23 |
| Number of Development Agents | 42 | 42 |
| Number of beneficiaries | - | 131 |

Source:-Hetosa District Agriculture Office

**3.2.6.13. The crops produced in the district sufficient for the population feed**

The crops produced in the district enough for the population feed in the district but in some weather changes like shortage of rain, erosion and wind some time, there is insufficient crops production for the population feed in the district.

**3.2.6.14. Major constraints of Agriculture in the district**

* High prevalence of crop diseases and pests.
* The amount of chemical fertilizers used per hecter of land was low because of high price of agricultural inputs.
* Using the same crop long period of time at the same land, it shows lack of using agricultural methods of crop rotation.
* Shortage of grazing land which leads to over utilization of the same land for along period of time

**3.2.7. Livestock and poultry and Bee keeping**

**3.2.7.1. Livestock**

**3.2.7.1.1. Number of Livestock:-** Hetosa district is famous in livestock resources, cattle sheep, goats, Horses mules and donkey are the major livestock population found in the district. Between the year 2011 and 2012 the livestock population was decreased from 311,313 to 309,772 showing a decline, the total animal population of the district Cattle, sheep and goats account for about 50.42 and 50.97%, 22.34 and 23.06% and 16.03 and 16.18 in the year 2011 and 2012 respectively which accounts for more than 88% of the livestock population in the district.

However, high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table: 3.16. Distribution of Livestock (2011-2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO | Type of animal population | 2011 | % of the total | 2012 | % of the total |
| **1** | **Livestock** | **311,313** | **100** | **309,772** | **100** |
|  | Cattle | 156,953 | 50.42 | 168,536 | 50.97 |
|  | Sheep | 69,556 | 22.34 | 94,138 | 23.06 |
|  | Goat | 49,891 | 16.03 | 59,851 | 16.18 |
|  | Donkey | 30,523 | 9.80 | 25,614 | 8.51 |
|  | Horses | 3,853 | 1.24 | 5,742 | 1.17 |
|  | Mules | 537 | 0.17 | 189 | 0.11 |
|  | Camel | 0 | 0 | 0 | 0 |

Source: Hetosa District Animal Development,care and market Office

**3.2.7.1.2. Major Livestock diseases**

Blackleg, Lumpy skin, pasteurolosis, Fasciolosis, Trips and Salmonellae new castle chronic Respiratory disease and External and Internal parasites, lymphatic diseases, Anthrax, septicemia and sheep and Goat pox are the major livestock diseases in district.

To overcome these diseases, the district animal health department has been providing different type of animal health services and treatment to improve the productivity and quality of livestock found in the district

**3.2.7.1.3. Availability of veterinary services by type**

Providing different type of animal health services and treatment to improve the productivity and quality of livestock found in the district

The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.17. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **year** | |
| **2012** | **2011** |
|  | **Number of Animals** | |
| **Vaccination** | **296,940** | **341,446** |
| Blackleg | 14,470 | 23,288 |
| Anthrax | 67,366 | 69,815 |
| Others | 215,104 | 248,343 |
| **Treatment** | **137,445** | **253,156** |

Source: -Hetosa District Animal Development, Care and Market Agency

As Indicated on the above table the number of animal vaccinated for different disease; increased from 296,940 to 341,446 and animal treated for different disease increased from 137,445 to 253,156 in the year 2011 and 2012 respectively. This indicates how farther number of animals gets health service increase from year to year.

**3.2.7.1.4. Availability of animal health institution by type**

Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Accordingly, the districts animal health protection and marketing agency provide health services by one B-type clinic, one C-type clinic and three D-type clinic have the district during the year 2011and 2012.To provide health service so as to improve the health coverage of the district.

**Table 3.18.Animal health institution**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Types of health institution | | | |
| B | C | D | Total |
| 2011 | 1 | 1 | 2 | 4 |
| 2012 | 1 | 1 | 3 | 5 |

**3.2.7.1.5 Number of veterinary personnel**

Regarding the health personnel, there were 8 animal health assistances and one Veterinary Doctors (DVM) during the year of 2011 and one Veterinary Doctors (DVM)Six (4)BVS and 8 animal health assistances in the year 2012 . This gives the ratio of animal health personnel 311,313:1and 309,772:1 for veterinary doctor, 0:1 and 51,628:1for BVS and 23,947:1and 23,828:1 for health Assistance in the year 2011 and 2012 respectively. For more information see table below.

**Table: 3.19. Number of Hetosa district Animal Health personnel (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| **Animal health personnel** | **26** | **28** |
| DVM | 2 | 4 |
| BVS(B of Veterinary science) | 12 | 11 |
| Animal Health Assistance | 8 | 8 |
| Animal health Technician | 0 | 0 |
| Health infrastructure | 4 | 5 |

Source: Hetosa District Animal development, Health and marketing Agency

**3.2.7.2. Poultry**

Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population in the district was the same number 85,250 & 101,216 in the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table 3.20.Number of Poultry in the year 2011 and 2012**

|  |  |
| --- | --- |
| **Year** | **Number of poultry** |
| 2011 | 85,250 |
| 2012 | 101,216 |

Source: Hetosa District Animal development, Health and marketing Agency

**3.2.7.3. Bee Keeping**

Bee- keeping farming is another source of cash income for farmer household. There was 3086 traditional, 1755 transitional bee hives and 385 modern bee hives in the district by the year 2011 and 2136 traditional, 934 transitional 369 modern bee hives in the year 2012. The expected number of beneficiaries was 654 traditional, 375 transitional and for modern 145 in the year 2011 and 735 traditional, 306 transitional and 170 modern beneficiaries are accounted in the year 2012.The production obtained 21600 and 14952 kg from traditional, 26000 and 16000 kg from transitional and 12000 and 9000 kg from modern bee hives in the year 2011 and 2012 respectively However, using of herbicides and insecticides in cultivated land was the main problems in bee farming.

**Table: -3.21. Honey production and benefited farmers in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **Types of bee hives** | | **Year** | |
| **2011** | **2012** |
| **Traditional** | Number of bee hives | 3086 | 2136 |
| Production in kg | 21600 | 14952 |
| Productivity | 7 | 7 |
| Beneficiary Farmers | 654 | 735 |
| **Transitional** | Number of bee hives | 1755 | 934 |
| Production in kg | 26000 | 16000 |
| Productivity | 14.81 | 17.13 |
| Beneficiary Farmers | 375 | 306 |
| **Modern** | Number of bee hives | 385 | 369 |
| Production in kg | 12000 | 9000 |
| Productivity | 31.16 | 24.39 |
| Beneficiary Farmers | 145 | 170 |

Source: - Hetosa District Animal development, Health and marketing Agency

**3.2.7.4. Factors affecting livestock rearing, poultry and beekeeping in the district**

* Shortage of grazing land livestock rearing.
* Shortage of Vaccine coverage for all diseases of the district.

**3.3. Mining and Industry**

**3.3.1. Major types of minerals known and available in the district**

Like other parts of country in general and the zone in particular the mineral resources potential of the district is not investigated and known. However, some data obtained from office of mineral and energy resource development indicates that, the district has a high potential of some mineral resources such as rock for construction purpose, scoria, solar energy, wind energy and Biogas for alternative energy resource. Yet the district does not start to utilize these mineral resources. However, there is insignificant rock quarrying pottery making mining activities by local communities in the district. According to the data obtained from office of Water mineral and energy amount and value of mining and quarrying material produced in the year 2011 and 2012 construction stone production 34,750 m3 and in the same year sand 4,648 m3.

**3.3.2. Number and type of registered small and medium scale Industries by type of ownership** Similar to other parts of the zone, industrial development is at its medium stage in Hetosa district. There were 6 Blocket producers, 62 Wood works and 27 metal work small scale industries in the year 2012. They were generating job opportunities for 99 employers. There were 2 (flour factory) medium scale industries in the district and it is generated job opportunity for 52 peoples in the year 2012. All of them are privately owned. There are also 1 new public medium scale industry (flour factory) establishments in the district in the year 2012.

**Table 3.22 Number and Type of small and medium scale Industries by type of owner ship and number of workers engaged.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year 2012 | | | | | | | |
| No | Type of industry | Owner ships | | | Number of workers engaged | | |
| private | public | Total | M | F | T |
| **1** | **Small scale industries** | **34** | **0** | **34** | **95** | **4** | **99** |
| 1.1 | Bolecket Fuctary | 2 | 0 | 2 | 6 | 1 | 7 |
| 1.2 | Wood work | 21 | 0 | 21 | 62 | 3 | 65 |
| 1.3 | Metal work | 11 | 0 | 11 | 27 | 0 | 27 |
| **2** | **Medium scale industries** | **2** | **1** | **3** | **43** | **9** | **52** |
| 2.1 | Flour factory | 2 | 1 | 3 | 43 | 9 | 52 |
|  | | | | | | | |
|  |  |  |  |  |  |  |  |

**3.4. Infrastructure and social facilities**

**3.4.1. Transport and communication**

**3.4.1.1. Transport**

As data obtained from Hetosa Rural road office the district has length of 181.981 km gravel road, all weather road 205.181 km, 220 km dry weather road and 23.2 km of Asphalt road in the year 2011 and 225.54 km gravel road, all weather road 211.491 km, 220 km dry weather road and 23.2 km of Asphalt road in the year 2012. This gives a road density (for all weather roads) 0.27 and 0.35 km per km 2 and 1.25 and 1.59 km per 1000 people for all weather road and 0.032 km per km2 and 0.15 per 1000 people for asphalt road in the year 2011 and 2012 respectively.

**Table3.23 Length of road by types and there densities.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Typs of Roads** | Length of Roads in (km) | Road density by area of District | Road density by district population |
| 2011 | Asphalt Road | 23.2 | 0.032 | 0.15 |
| Gravel road | 181.891 | 0.23 | 1.1 |
| All weather Road | 205.181 | 0.27 | 1.25 |
| Dry weather Road | 220 |  |  |
| 2012 | Asphalt Road | 23.2 | 0.032 | 0.15 |
| Gravel road | 181.891 | 0.32 | 1.44 |
| All weather Road | 211.491 | 0.35 | 1.59 |
| Dry weather Road | 220 |  |  |

**3.4.1.2. Communication**:

**3.4.1.2.1. Telephone services**:-One of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. One urban areas of the district has supplied with Digital type of telecommunication. On the other hand, 23 peasant associations of the district has supplied with wireless type of telephone services. Moreover, all rural areas and urban areas of the district were supplied with mobile telephone services.

**3.4.1.2.2. Post Office:** Postal service is one of the means of communication that plays significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. According, the district has two agent type of postal service in Eteya town and Boru Jawi town.

**3.4.2. Water and Energy supply.**

**3.4.2.1. Source of drinking water and Percentage and total population supplied with potable water:-** Potable water coverage of the district is relatively good as compared with other district of the zone. According to data obtained from Hetosa Water Resource Office, of the total rural population of the district 81,079 (54%) was supplied with potable water in the year 2011. During the same year, about 26,050 (92.6%) of urban population was supplied with potable water in the year 2011.From the year 2012 the new standard water coverage was designed rural and urban population supplied with potable water. According to data obtained from Hetosa Water Resource office, the total rural population of the district 89,837 (59.5%) and the total urban population of the district 27,250 (93%) was supplied with potable water in the year 2012.

Regarding potable water schemes, there were sprig developments in the year 2011 and 2012 .In the year 2012 the potable water coverage of the total population of the district was 117,087(64%) were supplied with potable water.

**Table 3.24.Total rural and urban population supplied with potable in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **year** | Total rural population | Total rural population supplied with potable water | **%** supplied with potable water | Total Urban Population | Total urban population supplied with potable water | % supplied with potable water |
| 2011 | 144,794 | 81,079 | 54 | 30,339 | 26,050 | 92.6 |
| 2012 | 148,608 | 89,837 | 59.5 | 31,609 | 27,250 | 93 |

**3.4.2.2. Source of domestic energy supply:-** Energy sources will get by traditions and modern methods in the district. The traditional sources of energy are Charcoal, animal dug, farm residue and fire wood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Urban areas of the district have supplied with electric power. On the other hand, some parts of rural areas have electric service. These are Boru Lenca,Boru chilalo, Hate handode, OdaJila, Shaki Sherera, Boneia Edo, Guch Habe Badosa, Gonde Finchema Sero Anketo Jengo kilisa, Dabeya Adare and Daya Dabbaso.

In rural and urban centers traditional source of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop resides in natural fertilizers to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is most important energy source followed by fire wood, electricity, and crop residues and animal dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene.

**3.4.2.3. Number of towns having electric supply:-**There are two towns Etaya and Boru Jawi in the district which have supplied hydroelectric power.

**3.4.2.4. Fuel stations:-**The district has one fuel station by name yetebaberut, it have a type of fuel Benzene, Kerosene and Gasoline are equal 300,000 liter have capacity

**3.4.3. Education**

**3.4.3.1. Kindergarten**: According to the data obtained from the district Education office, there were five kindergarten schools with 1537 children attend education in the year 2011 while the number of kindergarten the same 6 in the year 2012 but dcreased the number of student to 1654.These kindergarten was privately owned. As shown in the table below the number of kindergarten school, student enrolled and numbers of teachers provide educations vary/fluctuate from year to year due to weak follow up by government education office and poor management of school.

**3.4.3.2. Number of schools by levels**

**Primary Schools (1-8)**: - Between the year 2011 and 2012, the number of government primary school was increased from 41 to 41 the number of students enrolled to these school was increased from 32,854 to 32,351 because of change the awareness of the society about education. However the participation of female student was decreased from 47.95%to 47.79% during the indicated years.

On the other hand, the number of private primary school was in the below table shows the same number (5) in the above year, while the number of student enrolled in non-government school was 1647 and 1948.

During the same year, the number of teachers with which the district provides education 486 to 530 while the number of classroom was increased from 512 to 521. These results in improvement of student to classroom ratio 1:60 to 1:65, while student to teacher’s ratio was 63:1 and 64:1, in government schools, and 43 and 37 classroom and 58 and 194 teachers provides education, while student to teacher’s and classroom ratio was 26:1 and (\*8:1)and 1:34 and 1:39 in non-government schools between the year 2011 and 2012.

**Senior secondary Education** (9-10)**:-** In the district the number of secondary school (9-10) which have three in the year 2011 and one school was add in 2012.These are Eteya secondary and preparatory school, Boru Jawi, Gonde and Sibu secondary school in the district, while the number of students enrolled to these schools was increased from 3280 to 4062 between the year 2011 and 2012. However, the proportion of female student was slightly increased from 1299 to 1720 during the indicated years.

**Preparatory Education (11-12)**:- There was one preparatory school in the district while the number of student enrolled to this school was decreased from 414 in the year 2011 to 0 in the year 2012. During the indicated year, the number of teacher’s with which the school (11-12) provide education 27 teachers the number of classroom was 1 and 0 in the year of 2011 and 2012.

**TVET:** since 2002 there was one Technical Vocational education training center that provides training for student by different field of study.

**Table: 3.25. Number of Kindergarten and primary school (1-8) with Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Types(level) of school** | **2011** | | | | **2012** | | | |
| No of school | male | female | Total | No of school | Male | female | Total |
|
| **Government** | | | | | | | | |
| primary(1-8) | 41 | 17309 | 15545 | 32854 | 41 | 16794 | 15557 | 32351 |
| Secondary(9-10) | 4 | 1981 | 1299 | 3,280 | 4 | 2341 | 1720 | 4062 |
| Preparatory(11-12) | 1 | 290 | 124 | 414 | 0 | 0 | 0 | 0 |
| **Non-government** | | | | | | | | |
| Kindergarten school | 6 | 801 | 736 | 1537 | 6 | 843 | 811 | 1654 |
| primary(1-8) | 5 | 876 | 771 | 1647 | 5 | 1023 | 925 | 1948 |

Source Hetosa district Education office

**3.4.3.3. Total number of enrolled, dropped out and detained students by levels**

As shown in the table below, of the total student enrolled to primary and secondary school was increased 32,854 to 32,351 and 3694 to 4062, the drop out of student was decreased from 1066 to 1179 and 1332 to 423,the detained student was increase from 7 to 58 and 33 to 63 in primary and secondary school in the year between 2011 and 2012 respectively. This figure indicates the dropout rate of student in primary and secondary school was decline in the specified year because of working social mobilization. Such high rate of student dropout from school is due to economic problem (uniform, education material fee), unwillingness of some parent not to send their child to school, migration to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc. are mentioned as example. However, the detained students were growing as indicated year.

**Table 3.26.student performance of Enrollment, promoted and Drop out condition by level of school**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **lak** | **Description of activities** | **Year** | | | |
| **2011** | | **2012** | |
| **Primary school(1-8)** | **Secondary school(9-12)** | **Primary school(1-8)** | **Secondary school(9-12)** |
| **1** | **Students enrollment** | **32,854** | **3694** | **32351** | **4062** |
|  | Male | 17,309 | 2,271 | 16794 | 2342 |
|  | Female | 15,545 | 1423 | 15557 | 1720 |
| **2** | **Student drop out** | **1066** | **1332** | **1179** | **423** |
| **3** | **Student Detained** | **7** | **33** | **58** | **63** |
|  |  |  |  |  |  |

**Source:-District Educational office**

**3.4.3.4. Number of students sat for national examination**

According to data obtained from the district educational office the total number of grade 10 students sat national examination 271 and 135 passed in rural and students sat 848 and passed 575 in urban in the year of 2011

**Table 3.27.Number of students sat for national examination (EGSCE) in the year 2011 and 2012**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Rural | | | | | | Urban | | | | | |
| Sat for | | | Passed | | | Sat for | | | Passed | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2011 | 182 | 89 | 271 | 103 | 32 | 135 | 480 | 368 | 848 | 530 | 45 | 575 |
| 2012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**3.4.3.5. Number of students sat university entrance and promoted for degrees**

According to the table below shows the total number of preparatory students sat University entrance examination was 205 and passed 92 in the year 2011 and students sat for entrance examination was 170 and passed 0 in the year of 2012

**Table 3.28.Number of students sat for University entrance in the year of 2011 and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Number of students | | | | | |
| Sat for | | | Passed | | |
| Male | Female | Total | Male | Female | Total |
| 2011 | 127 | 78 | 205 | 47 | 45 | 92 |
| 2012 | 111 | 59 | 170 | 0 | 0 | 0 |

Source:-The district education office

**3.4.3.6. Number of teachers by levels of schools**

The quality of education can be judged from educational qualification of teacher’s, student-teacher ratio, student-class ratio, student-text book ratio etc. Accordingly,

From total primary school teachers, those who fulfill the minimum qualification requirement (diploma level) to teach grade 1-8 (96%) from the total teachers teaching this level. Actually, only depending on the above ratios are not enough to measure educational quality of district. Hence we have to look into other factors to measure educational quality of a district. Hence we have to look into other factors mainly teacher Development Program (IDP), Continuous professional development program, and teachers’ dedication (commitment) to teach and students’ commitment to receive what teachers say.

To improve the quality of education student to teacher ratio, student to class room ratio and others are very essential, so as we see from the given information education office of district expected to do more to improve the quality of education by increasing the needed variables of education quality.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above for secondary school) the number of TTI teachers was 48 and 51 and the number of diploma teachers was 456 and 460 in the year of 2011 and 2012. The number of degree (BA/BSC) teachers was 283 and 288 in the year 2011 and 2012 respectively. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below

**Table: 3.29 Number of Teachers by level of education and School**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of school** | **Type of teachers educational level** | **2011** | | | **2012** | | |
| Male | Female | Total | Male | Female | Total |
| **Government Primary school (1-8)** | TTI | 10 | 26 | 36 | 11 | 26 | 37 |
| Dip | 223 | 203 | 426 | 225 | 204 | 429 |
| BA/BSC | 120 | 20 | 140 | 123 | 21 | 144 |
| **Total** | **353** | **249** | **602** | **359** | **251** | **610** |
| **Government Secondary school (9-12)** | Diploma | 2 | 1 | 3 | 1 | 1 | 2 |
| B A/BSC | 122 | 21 | 143 | 123 | 21 | 144 |
| T**otal** | **124** | **22** | **146** | **124** | **22** | **146** |
| **Non-Government Primary School(1-8)** | TTI | 5 | 7 | 20 | 12 | 6 | 14 |
| Dip | 16 | 11 | 11 | 27 | 17 | 29 |
| BA | 4 | 6 | 10 | 10 | 5 | 12 |
| **Total** | **25** | **24** | **41** | **49** | **27** | **55** |

Source: Hetosa District Education Office

**Note**: There were 44 and 40 teachers grade 12 and below in primary school in government schools in 2011 and 2012 respectively, and 17 and 7 teachers in non-government schools

**3.4.4. Health**

**3.4.4.1. Health Institution**

**3.4.4.1.1. Number of health centers, clinics health posts, rural drug vendors etc. by ownership**

There are 4 government health centers and 27 health post in 26 kebels many private medium and lower and private drug vender in the district. Moreover, the number of private health clinics was increased from time to time. The ratio of population to health center and health post was 39,060:1and 5787:1 in the year of 2012. It indicates low health coverage of the district compared with WHO standard of one health center for 25,000 peoples and one health post for 5000 peoples.

**Table: 3.30. Number of health Institution by ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Health Institution** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** | **30** | **20** | **31** | **25** |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 18 | 0 | 18 |
| Health post | 26 | 0 | 27 | 0 |
| Rural Drug Vender and Farmas | 0 | 2 | 0 | 7 |

Source: Hetosa district Health Office

**3.4.4.2. Number of hospitals’ and other health institutions’ beds by types of ownership**

There was no hospital have beds in the district but in one private medium clinic there was three beds and no beds in government health centers in the year 2011 and 2012.

**3.4.4.3. Health personnel**

Between the year 2011 and 2012, the number of health personnel was increased in the government and non-government health facility. The below table shows in the government the number of personnel rises from 125 to 131 and in the non-government health personnel rises from 31 to 40.As far as the type of profession is concerned the district provides health services by 13 Health officers, 44 Nurse, 5 laboratory technicians, 4 Sanitarian, 1 health assistance and 55 Health extension workers in government health facility in the year 2012. This gives 12,018:1, 3551:1 and 2840:1 ratio of population to health officer, nurses and extension workers respectively which is very far below the recommended ratios. For more information refer to the table below.

**Table 3.31.Health personnel by ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Profession** |  |  |  |  |
| Doctor | 0 | 1 | 0 | 1 |
| Health officer | 11 | 5 | 13 | 3 |
| Nurse | 54 | 15 | 44 | 28 |
| Health Assistance | 1 | 2 | 1 | 0 |
| Laboratory Technician | 5 | 2 | 6 | 2 |
| Pharmacy technician | 9 | 6 | 8 | 5 |
| X-ray technician | 0 |  | 0 | 1 |
| Sanitarian | 3 | 0 | 4 | 0 |
| Health Extension worker | 52 | 0 | 55 | 0 |

Source:-Hetosa district Health office

**3.4.4.4.The first ten top diseases in the district**

According to the data obtained from Hetosa district health office, the highest prevalent disease in the district was acute febrile illness with 22.09% followed pneumonia with (18.58%) and upper respiratory infection (13.43%) in the year 2011. The least prevalence diseases in the district were Helminthic which accounts for 5% of the population treated. However, the highest prevalent disease was pneumonia with 21.13% followed by acute febrile illness (AFI) with 20.12% and acute upper respiratory infection with 13.43% in the year 2012. This indicates the highest prevalent disease vary from year to year.

**Table: 3.32. Ten top diseases existed in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S. No | 2011 | | | 2012 | | |
| Type of disease | No of population treated | % | Type of disease | No of population treated | % |
| 1 | Acute febrile illness | 3669 | 22.09 | Pneumonia | 5337 | 21.13 |
| 2 | Pneumonia | 3087 | 18.58 | Acute febrle illness(AFI) | 5084 | 20.12 |
| 3 | Acute upper respiratory infection | 2231 | 13.43 | Acute upper respiratory infection | 3392 | 13.43 |
| 4 | Typhoid fever | 1636 | 9.85 | Diarrhea | 2538 | 10.05 |
| 5 | Diarrhea | 1591 | 9.58 | Typhoid fever | 2188 | 8.66 |
| 6 | Acute bronchitis | 1133 | 6.82 | Helmothosis | 2014 | 7.97 |
| 7 | Dyspensia | 910 | 5.48 | Urinary tract infection | 1368 | 5.41 |
| 8 | Urinary track infection | 812 | 4.89 | Trauma | 1205 | 4.77 |
| 9 | Trauma | 778 | 4.68 | Acute bronchitis | 1132 | 4.48 |
| 10 | Helminthia | 764 | 4.6 | Dyspensia | 1005 | 3.98 |
| **Total** | | **16,611** | **100** | **Total** | **25,263** | **100** |

Source: Hetosa District Health Office

**3.4.4.5. Health coverage of the district**

Health coverage shows the full-fill of health facilities that is one health center is 25,000 people use as standard and one health post 5000 people use as standard.

From this explanation we can calculate health coverage of hetosa district in the year 2012.

Thus, Health coverage % =No. of Health center\*25,000

No. Of population in the district

**= 4\*25,000**

**156243**

**= 64%**Health coverage % =No. of Health post\*5,000

N0.population in the district

**= 27\*5,000**

**156243**

**= 86.40%**

As we see from the calculation the health coverage of the district was 64% with health center and 86.40% with health post in the year 2012.This indicates low health coverage as compared with standard with health center followed by health posts.

**3.4.4.6. Prevalence of HIV/AIDS**:-According to table the data obtained from district of health office the transmission of HIV/AIDS shows decreases from time to time because of highly worked prevalence’s HIV/AIDS. Since in the year of 2011 and 2012 the number of people treated HIV/AIDS decrease from 11689 to 7636, number of people died due to HIV/AIDS was 0, number of pregnant women tested HIV/AIDS increase from 3018 to 4392 and number pregnant women HIV +ve increase from 7 to 19 and the number of treatment center no change between two years

That why, there are so many measure taken to reduce transmission of HIV/AIDS ,taken measurements of prevalence of like increasing the supply of condoms, giving awareness creation of HIV/AIDS to the society, increasing number of counseling centers and reducing mother to child transmission of HIV/AIDS

**Table :-3.33.HIV/AIDS and sexually transmitted condition in the district**

|  |  |  |
| --- | --- | --- |
|  | year | |
| 2011 | 2012 |
| Number of people treated for HIV/AIDS | 11689 | 7636 |
| Number of people died due to HIV/AIDS | 0 | 0 |
| Number of treatment centers | 4 | 4 |
| Number of pregnant women tested HIV/AIDS | 3018 | 4392 |
| Number of pregnant women HIV +ve | 7 | 19 |
| Sexual transmitted infection(STI) | 414 | 286 |

Source; Hetosa district health office

**3.4.4.7. Health problems of the district**

**3.4.4.7.1. Causes of poor Sanitation:-**

However, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and underutilization of health services also play great role for the existence of different diseases

**3.4.4.7.2. Harmful Traditional practices:** Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in the district. Among these, raping, butta, Dhaala, female circumcision, Gebera, etc. can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices like Debo, Ikub, Idir, jarsuma, etc that should be appreciated and are being used by the people of the district.

**3 4.5 Children and Women Socio Economic Indicators**

**3 4.5.1. Women Issue Indicators**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal was 4613 and 5114 while the women get postnatal service was 4069 and 5566, on the other hand, the number women gets delivery services was 2538 and 3923 in the year 2011 and 2012.In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 3409 to 4678 between the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was increased from 1790 to 3091 during the year under consideration. The following table indicates the major vaccination type given to the mothers.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 20271 in the year 2011 to 32620 in the year 2012.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing.

**Table: - 3.34. Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2012 |
| 1 | **Access to save delivery service** | Number |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 4613 | 5114 |
|  | Women's used PNC /Postnatal care/services | Number | 4069 | 5566 |
|  | Women’s assisted delivery | Number | 2538 | 3923 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number |  |  |
|  | Deliveries attended by HEWs | Number |  |  |
|  | In their home traditionally | Number |  |  |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 3409 | 4678 |
|  | NPW TT2 | Number | 1790 | 3091 |
| 3 | **Family planning condition** |  |  |  |
|  | Modern methods | Number | 20271 | 32620 |

Source:- District health office

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, Septicemia, obstructed labor, pregnancy induced hypertension and abortion.

On the other hand, different harmful traditional practice among some group of population in the district; affect many women. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**3.4.5.2. Children issue indicators**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was decreased from 15260 in the year 2011 to 23100 in the year 2012. Though the below figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 2787 and 4313 in the year 2011 and 2012 which accounts for 18.26% and 18.67% from total children who get vaccination. The female children who got vaccination were more than the male children which accounts 52.99% and 51% in the year 2011 and 2012 respectively.

**Table: 3.35. Number of children vaccinated by year and type of vaccination**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Vaccination** | **Year** | | | | | |
| **2011** | | | **2012** | | |
| M | F | T | M | F | T |
| BCG | 1,394 | 1571 | **2965** | 2373 | 2469 | **4842** |
| Measles | 1350 | 1523 | **2873** | 2164 | 2252 | **4416** |
| DPT1/PENTA1/ | 1567 | 1766 | **3333** | 2334 | 2429 | **4763** |
| DPT3/PENTA3/ | 1552 | 1750 | **3302** | 2335 | 2431 | **4766** |
| Fully vaccinated | 1310 | 1477 | **2787** | 2113 | 2200 | **4313** |
| **Total** | **7173** | **8087** | **15260** | **11,319** | **11,781** | **23,100** |

Source: Hetosa District Health Office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 48 street children and 4052 children to be orphan and Vulnerable in the year 2012. From these street and orphans and vulnerable children and other low income family children, only 155 children get support by charity and civil organization. This does not mean all of them get holistic support (food, education, health and psycho-social)..

**Table: - 3.36. Children socio economic indicators in the district**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **measurement** | **2011** | | | **2012** | | |
| **M** | **F** | **T** | **M** | **F** | **T** |
| 1 | Number of Orphan and Vulnerable children | Number |  |  |  | 1355 | 2715 | **4052** |
| 2 | Number of street children | Number |  |  |  | 42 | 6 | **48** |
| 3 | Number of Orphan and Vulnerable children get support | Number |  |  |  | 56 | 110 | **155** |

Source: District social Office

**Note**: - in the year 2011 the data not available

**3.4.6. Social Security**

**3.4.5.1. Number of registered unemployed persons by sex and level of education**

According to the data obtained from the district office of social affairs the total number of unemployed person registered 3258 and 1233 in the year of 2011 and 2012,at the same year the number of employed workers registered 1342 and 627by permanent and temporary works in the district

**Table:-3.37.Number of registerd unemployed persons by sex and level of education**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | |
| Illiterate | | Grade 1-8 | | Grade 9-12 | | Certificate | | Diploma | | Degree | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 2011 | 88 | 80 | 137 | 52 | 999 | 410 | 81 | 20 | 290 | 101 | 53 | 13 |
| Registered employed | | Registered employed | | Registered employed | | Registered employed | | Registered employed | | Registered employed | |
| Illiterate | | Grade 1-8 | | Grade 9-12 | | Certificate | | Diploma | | Degree | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 16 | 0 | 177 | 82 | 162 | 52 | 11 | 10 | 55 | 13 | 0 | 0 |
| 2012 | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | | Unemployed registered | |
| Illiterate | | Grade 1-8 | | Grade 9-12 | | Certificate | | Diploma | | Degree | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 157 | 47 | 765 | 205 | 115 | 186 | 335 | 77 | 159 | 33 | 79 | 9 |
| Registered employed | | Registered employed | | Registered employed | | Registered employed | | Registered employed | | Registered employed | |
| Illiterate | | Grade 1-8 | | Grade 9-12 | | Certificate | | Diploma | | Degree | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 115 | 44 | 225 | 185 | 333 | 159 | 99 | 67 | 142 | 15 | 7 | 0 |

**3.4.6.2. Number of criminal recorded by types**

According to the data obtained from district Justice Office in the district criminal case, lodged 196, decided 191, and pending case 5 in the year of 2011.In the year of 2012 criminal case, lodged 166, decided 156 and Pending Case 10 there was no civil cases lodged, decided and pending at this year in the districts.

**Table 3.38**.**Number of criminal recoreded by types**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | **Criminals case** | | | **Civil Cases** | | | **Total** | | |
| Lodged | Decided | Pending | Lodged | Decided | Pending | Lodged | Decided | Pending |
| 2011 | 196 | 191 | 5 | 0 | 0 | 0 | 196 | 191 | 5 |
| 2012 | 166 | 156 | 10 | 0 | 0 | 0 | 166 | 156 | 10 |

Source district of Justice office

**3.4.7. Finance**

**3.4.7.1. Total Revenue collected in the District:-**is one of the basic things of social, economic development of one country. The revenue collected in the district important for different social and economic aspects of development like for road, water and different infrastructure construction, also increased the share of Inland Revenue in the total budget allocated for the district. Between the 2011 and 2012 the revenue collected was increased from Birr 33,886,304.62to 41,274,557.90birr which indicate an increment by 7,388,253.28 birr. However the revenue collected in the year 2012 was not achieve the budget which was collected by office of Revenue. The main sources of revenues in the district are Direct tax a Non-direct tax as yearly report indicates.

**Table:- 3.39. Total revenue collected in the district.**

|  |  |  |
| --- | --- | --- |
| **Year** | **Revenue collected** | **Growth Rate (%)** |
| 2011 | 33,886,304.62 | 107.10% |
| 2012 | 41,274,557.90 | 135.84% |

Source: Hetosa district Revenue Office

**3.4.7.2. Annual Budget allocation**: Annual budget requirement of district is covered mainly from two sources. Regional government grant and district Inland Revenue. Regional government contribution shares the largest amount which account for more than 28% of the total Annual budget allocated for the district. This indicates how far the current in land revenue share of the annual budget allocation for the district is low. The annual budget allocated for the district was increased from 130,531,563to 145,017,825between the year 2011 and 2012 according to the data obtained from Finance and economic development office. The budget allocated for the district showing an increase trend from year to year. The annual budget allocated for the district was increased by 9.98% in the year 2012 from the budget allocated in the year 2011.

**Table: -3.40. Annual budget allocated for the district**

|  |  |  |
| --- | --- | --- |
| Year | Annual Budget Allocation | Growth Rate (%) |
| 2011 | 130,531,563 | 14.96 |
| 2012 | 145,017,825 | 9.98 |

Source: -Hetosa district finance and Economic development office.

**3.4.7.3. Financial Institutions**

The availability of various financial institutions like banks and insurance, rural credits and saving Association plays a significant role in the transformation plan of the district. The district has three non- governmental financial institutions WASASA, OCSCO (Oromia credit and saving institution) and Metemamen Credit and Saving Micro Enterprises and Two banks are Government Six banks are private. These are Oromia cooperative bank, Oromia International bank, Dashen International Bank, Awash International Bank, Abisinia Bank & NIB International Bank and the rest one is Ethiopia Commercial banks which is found in Eteya, and boru Jawi town the government banks in the district.

**3.4.8. Trade, Tourism and Sports**

**3.4.8.1. Trade**:-The District is also known by trading activities with many traders engaged on different trading activities. Hetosa District was 335 and 425 permanently New licensed traders with capital birr 5301269 and 6404788 in the year 2011 and 2012. Accounting for about 93.57% licenses renewed of the total licensed traders in 2012. Moreover, there were 1455 and 1410 trades applied for license renewed during the year 2011 and 2012 respectively. These traders engage on the selling of linseeds, rape seeds and different commodities at their localities and also sent to the central market. In addition, the district is known by exportable items like hide and skin.

**Table: 3.41. Type and number of linseed traders**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Type | 2011 | | 2012 | |
| No. | Capital | No. | Capital |
| 1 | Licensed | 0 | 0 | 0 | 0 |
| 2 | new Licensed issued | 335 | 53101269 | 425 | 6404788 |
| 3 | Licenses renewed | 1455 | 1527778 | 1410 | 3639896 |
| 4 | Licenses returned | 138 | 23460 | 115 | 20670 |

**Source; Hetosa Trade office**

**3.4.8.1.1. Cash Crops and Exportable items production**

There are different types of cash crops and exportable items like pulses, skins and hides produced in the district. Moreover, the district has high potential of crops like linseed, rapeseed and skins product in the district.

**Table: 3.42. Inspected skins and hides sent to the Central market**

|  |  |  |
| --- | --- | --- |
| **Types of skins and hides** | **2011** | **2012** |
| Hides | 688 | 7,633 |
| Skins | 21,036 | 20,488 |

**Source: - Hetosa Market Office**

**3.4.8.2. Tourism**

**3.4.8.2.1.Tourism and its Amenities:-** Due to lack of promotional and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Hetosa district in particular . Similarly, meaningful survey and study are not conducted to assess tourism attraction sites potential of the area. However, there are some main centers like Anole martyr’s monuiment, natural forest, cave, etc. which were identified by culture and tourism attraction of the districts. All of them are under developed.

**3.4.8.3. Sport**

The district has different types of sport activities like football, volley ball, Tecundo, gymnastic, Athletics. Regarding the number of sports club and sports men there were 1 and 1 football club and 25 and 24 members, 2 athletics club with have 24 members, 1 tennis club with 30 members and 1 volley ball’s club with 18 members during the year 2011 and 2012 and registered 4 tecundo club with 30 members, 1 Ushu club with 50 members and 1 peralomypic club with 8 members in the year 2012. However, the district has no any well organized and standardized sport facilities like Gymnasium, youth center, etc.

**Table:- 3.44. Sport clubs and members in the district (local Keble clubs)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Types of clubs/ | 2011 | | 2012 | |
| No. of club | Memberes | No. of club | Memberes |
| Foot ball | 1 | 25 | 1 | 24 |
| Volley ball | 1 | 18 | 2 | 24 |
| Athletics | 1 | 30 | 1 | 30 |
| Tennis | 1 | 30 | 1 | 30 |
| Tecundo | 4 | 180 | 4 | 180 |
| Ushu | 1 | 50 | 1 | 50 |
| Peralomypic | 1 | 8 | 1 | 9 |

Sources; Hetosa district youth and sport office

**3.4.9. DEVELOPMENT ACTIVITIES**

**3.4.9.1. On Going Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the years under consideration are the following.

The major ongoing project of the district office construction of Supreme Court by government and community participation, construction of Eteya stadium by municipality of Eteya town, community participation and government budget, construction of grain store by municipality of Boru Jawi town, different sites of water expansion and spring development by government, non-government and community participation and largely is road construction in different sites by URAPP, government and community participation of the ongoing projects of the district.

The role of private investment in economic development as compared to public investment in economic development has been investigated, it has been argued that the marginal productivity is much higher and thus plays a more important role in the growth process than doe’s public investment. Since the flow of private investment of Hetosa district was, plays (contribute) some role to the economic development of the district.

**3.4.9.3. Problems of ongoing Development Projects**

The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction is the major problem during the construction.

**4. PROBLEMS AND POTENTIALTIES**

**4.1. Problems**

**4.1.1. Economic Problem**: Shortage of farm land, High prevalence of crop diseases & pests. Lack of capacity to buy agricultural inputs, lack of Financial Institutions(saving and Credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.

**4.1.2. Social conditions problem**: rapid population growth and large family size which land fragmentation, unemployment, low productivity, underutilization of Health institution and education facilities, under developed transportation and communication facilities, high prevalence of harm full traditional practices HIV/AIDS prevalence, high dropout rate, low potable water coverage, low electric power supply.

**4.1.3.Environmental problems:** soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting decreasing the number of wild animals.

**4.1.4. Drought**: in some areas of the district affected by drought at the year of 2011 and 2012 but the consequences of drought no a person and livestock died off

**4.2. Potentialities**

The district has cultivable land potential that suitable for the production of cereals. Particularly wheat that yields more than 40 quintals per hectares under full extension package and pulses on flat plain plateau areas using mechanized farming system extensive agriculture, animal rearing, production of food complex and service like hotel investments etc.

On the other hand, the district has tourism attraction site potential like Anole martyr’s monuiment, natural forests and steam places that attract tourist when it is developed.

**4.3. Existing Situation of the district**

Hetosa district is found in Arsi zone which has 23 peasant association and three urban administrative units having total areas of 714 km2 (3.39% of area of the Zone). The district gets its present name from one of the Oromo tribe called “Hetosa” residing in the area. The district has a total population of 160,757 (49.74% female) from which more than 83% are living in rural area.

The district has three climate types. The dominant climatic type is cool. The mean annual rain fall of the district ranges between 1000-1400mm.It has permanent rivers like Bonaya, Woraka and Gonde. Bi-model type of rain fall condition causes the district to produce twice a year. In terms of both area cultivation and production obtained Maher is the largest season. The district is known by the production of both perennial and annual crops. The major types of crops growing in the district are cereals. From cereal crops wheat and barley are the most widely produced types of crops. In terms of area cultivated and production obtained, wheat with 38 quintals followed by barley 33 quintal per hectares is the most productive while lentils with 5.5 quintals per hectare is the least productive of pulses. In addition, the district is known by the production cash crops like vegetables (Tomato, round, cabbage, onion, potatoes, carrot etc.)

Regarding production and productivity the districts Agricultural and natural resource office motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents(plant science, Animal science and Environmental science) are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizers, herbicides and pesticides to produce intensively as well as how to protect the environment. Agricultural inputs are distributed by agricultural service cooperatives and other cooperatives to the farmers. However, the amount of chemical fertilizers used per hectare of land is too low because of high price of agricultural inputs. Moreover, the farmers of the district are not busy throughout the year.

Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation. The district is also known by the livestock rearing and bee keeping. From livestock population cattle, sheep and goats account for more 71% of the total livestock population in the year 2012.This indicates the district has a potential for the production of exportable item like skin and hides.

Infrastructure development like Road, Energy supply and postal services are developed.

Moreover, the water supply was good. But since from the year 2012 new standard water coverage set. According to the new standard the total population of the district, 42%

(For urban 92% and for rural 32%) get potable water supply in the year 2012.

Regarding social service sectors development, the district has five kindergarten schools and 46, primary school (1-8) for which five non-governmental the other remains 41 are government school, five secondary school (9-12) that provide education to more than 7,342 students.

The district provide health services within four health center,27 health posts and 15 private clinics. However, the health coverage of the district 64% that was low

Stage as compared with WHO standard. On the other hand, the number of health personnel was increasing which in turn improve the ratio of population to health in the district

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, energy supply and transportation, network facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural and natural resource office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover, modern inputs have to be supply in sufficient amount and with fair price on time to the farmers and teach farmers the use of compost.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers(FTC), farmer service cooperative and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.
* So as to improve Livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, Additional health facilities have to be constructed and provide health services.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted and infrastructure should have to be developed.

**PHYSICAL AND SOCIO ECONOMIC PROFILE OF JEJU DISTRICT 2011 AND 2012 E.C**

**INTRODUCTION**

Jeju is one of the 27 districts of Arsi Zone. The historical name of the district is derived from Oromic word jaje or Aja’iba which means admiring or appreciating in Oromic language. The district has 29 administrative units of which 26 are Rural Peasant Associations while 3 of them are urban administrative. Arboye town is the capital city of the district. It is located at 186 km from Regional Capital City, Finfinne and 125 km from Zonal capital, Asella. The objective of preparing this profile is to create scientifically organized physical and socio economic data of Jeju district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, research’s and the like.

Different organizations can use different calendar year. Consequently, in this document, only Ethiopian calendar (E.C) is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document are collected from the district and Zonal level sectors, 1999 census result report and other related documents available in our office. The Problem faced while organizing this profile is lack of well-organized and reliable data in sectors, sectoral department in general and our office in particular.

This paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

**CHAPTER ONE**

**1. PHYSICAL SETTING**

**1.1. Location and Area**

Jeju is one of the administrative units of Arsi-zone. Astronomically, it is located between 7053’59’’N to 8017’17’’N Latitude and 39029’30’’E to 39042’54’’E Longitude. Relatively, the District share a boundary line with Merti district in the east north east and South East, Sude district in the south and south east, Sire district in the south west, west and north west, east Shewa Zone in the north and north west direction having a total areas of 765.7 km2 which accounts for 0.036% of the total area of the Zone.

**1.2. Geology Relief, Drainage and Climate**

**Geology:-**The present surface rock distribution, land configuration and other features are the result of past geologic history. The North western, the hole western, central, eastern south eastern and some of the southern part which accounts for more than 85% of the total surface area of the district was covered by Nazeret series. The northern, north central and the north eastern part of the district was covered by Dino formation while the most southern part and south western was covered by lower part Chilalo formation. All of these surface rocks were formed during quaternary period of Cenozoic era.

**Relief and Drainage:-**The relief structure of the district ranges from undulating high and flat plateau on the high land to flat low laying plain area in the rift valley. The altitude of the district is1000 – 2600meters above sea level**.** Due to its location the district has high net work of river systems. The major permanent rivers of the district are Homba,Warenso, Awash, Cha-Cha and Xune. On the other hand, the major seasonal streams are Azayibia, Washaba, Gana Bontu, Utamo, Kombolcha and Gunguma. Generally, the district has high potential for both Traditional and modern Irrigation system in its lowland area which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate:**-Due to its altitudinal location, the climatic condition of the district is dominantly moderately cool which is between 200C- 250C. This type of climate consists about 28 % of the total area of the district. The remaining ones are cold, moderately warm, cool account for 22 %, 21 % and 18 % respectively. Hence, the dominant type of climatic condition of the district is moderately cool agro – ecological zone. The mean annual rain fall is 800 – 1200 mm and the average rainy days are about 112 days within a year. The rain fall pattern is bi – modal, which are short rainy season (Belg from February to April) and summer or long rainy season (Meher from June to September**).**

Regarding Geological Formation of the District have no permanent climate and rainfall condition. For this reason the rain fall is from [April to October]

1.3. **Soil, Vegetation and wild life**

**Land Use:-**land use indicates the classification of the land of an areaunder different types of socio economic uses. Types of land use changes from time to time depending on socio economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing.

Accordingly, from total area of the district the cultivated lands (the lands covered by annual and perennial crops) represented about 29117 hectares (100%) in the year 2006. The vegetation covered land (forest, woodland, bush and shrub) accounted for about 3% and 5% in 2005 and 2006 respectively. The cultivated land accounted for the largest area (43.5%) in 2004. The residential land areas covered about 5.3% during the indicated year.

**Soil:-**The major types of soil in the district are clansoil, sandyloamsoils,bron soils , and sonsoils . In addition, mixedsoils and saltsoils are found in few areas of the District. The fertility status of these soils is medium to good suitable for different agricultural activities.

**Vegetation:-** Regarding vegetation cover, The North Central part and Some Western part of the district was covered by natural forest like wanze, tikr inchat,koso ,zigibe ,odda , etc on its high land and along the banks of major rivers of the district. In addition, the low land in the rift valley is dominated by different species of Acacia Tree. There is also community protected forest in the district.

**Wild Life:-** The major wild animals found in the district are common wild animals like Hyena, Fox , Leopard , pig and endemic wild animals like Columbus monkey , Mountain Nyala,Rabbit ,Crow, bush back,Lion ,Eagles and different species of birds, etc

**CHAPTER TWO**

2. **Population**

**2.1. Population Size**

According to data obtained from CSA census reports of 1999, the total population of the district was increased from 124,093 to 149550 between the year 1999 and 2006. From the total population of the district, only 94.2% are living in urban areas, while more than 5.8% in rural areas in the year 2006. Of the total population, females accounted for 49.1 % (which is 5.7% urban and 94.3% for rural).

In the year 2007 and 2008 the total populations of the district were 153439 and 157429 respectively. From the total population of the district, only 5.88% are living in urban areas, while more than 94.12% in rural areas in the year 2008. Of the total population, females accounted for 49.12% (which is 28.29% urban and 46.3% for rural).

**Table 2.1.Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Rural | | | Urban | | | Total | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2008 | 75282 | 72885 | 148167 | 4808 | 4454 | 9262 | 80090 | 77339 | 157429 |
| 2009 | 77239 | 74780 | 152019 | 4933 | 4570 | 9503 | 82172 | 79350 | 161522 |
| 2010 | 77702 | 76724 | 155972 | 5061 | 4689 | 9750 | 84309 | 81413 | 165722 |
| 2011 | 78264 | 78366 | 156630 | 5247 | 4907 | 10154 | 83511 | 83273 | 166784 |
| 2012 | 78942 | 80322 | 159264 | 5493 | 5209 | 10702 | 84435 | 85531 | 169966 |

Source: - Projected based on 1999 CSA Report

**2.2. Age –Sex Distribution**

Of the total population of the district, young age (0-14) accounts for 48.47 % (rural 46.42 % and urban 2.04 %) while old age (65+) consist for 2.73% (rural 2.55% and urban0.18 %). By place of residence, the productive age of population accounts for 45.64% for rural areas while On the other hand, the economically active population (age 15-64) account for 48.81%, which is 45.64% for rural and 3.16% for urban.The dependency ratio of the district is 51.19 %[ 95.66% rural and 4.34%for urban]which indicate 63529 people are dependent on 60564 economically active population

**Table: 2.2. Population size by wider age group Classification of the year 1999**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year/Sex** | **Male** | **Female** | | **Total** |
| **No** | **%** | **No** |
| **Rural** | 59664 | 57748 | 49.18 | 117412 |
| 0-14 | 292241 | 28366 | 49.24 | 57607 |
| 15-64 | 28495 | 28143 | 49.69 | 56638 |
| 65+ | 1928 | 1239 | 39.12 | 3167 |
| **Urban** | 3469 | 3212 | 48.08 | 6681 |
| 0-14 | 1248 | 1288 | 50.79 | 2536 |
| 15-64 | 2119 | 1807 | 46.03 | 3926 |
| 65+ | 102 | 117 | 53.42 | 219 |
| **Total Rural + Urban** | 63133 | 60960 | 49.12 | 124093 |
| 0-14 | 30489 | 29654 | 49.31 | 60143 |
| 15-64 | 30614 | 29950 | 49.45 | 60564 |
| 65+ | 2030 | 1256 | 40.05 | 3386 |
| Source: 1999 CSA population and Housing census report | | | | |

An overall sex ratio of the district was 63133 male per 60960 female ( 3469 male per 3212 female in urban and 59664 male per 57748 female in rural) an average numbers of house hold size was 60564 for the district.

## **2.3** **Population Density and Rural Settlement**

## Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, a crude density of district was increased from 162 persons per km2 to 176, 180, and 185 persons per km2 between the year 1999, 2008, 2009 and 2010. This ratio indicates the district is one the densely populated Zonal district. Concerning the settlement pattern of the district, the rural parts are characterized by sectored type of settlement.

## **2.4. School Age population**

School age population is one of the best parameters used to plan education facilities, health and other facilities. Moreover, is crucial to assess the level of accessibility to education facilities by calculating student-class ratio, student-teachers ratio, student-text book ratio, and other school age population is crucial. As indicated in table below, the total number of school age population of the district was increased from 38801 to 43194 showing an increment by 10.17% between 2007 and 2010. This in turn indicates an increase of demand for the additional budget to construct additional school and class room, to employ additional teachers and supply additional text books. With school level, kindergarten school age population was increased from 12707 to 14144 while primary school age population was increased from 27758 in 2006 to 30899 in 2010 similarly, secondary level education school age population was increased from 10452 in 2006 to 12295 in 2010.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: 2.3 Projected School Age Population of Arsi Zone** | | | | | | | | | | | | |
| **Age group** | **2009** | | | **2010** | | | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Rural** | | | | | | | | | | | | |
| 4\_6 | 6946 | 6762 | 14064 | 7127 | 6938 | 14430 | 7358 | 7156 | 14514 | 7620 | 7442 | 15062 |
| 7\_14 | 1535 | 14571 | 29921 | 1575 | 14950 | 30699 | 1637 | 15352 | 16989 | 1731 | 15856 | 17587 |
| 15\_18 | 6128 | 5771 | 11900 | 6287 | 5921 | 12209 | 6459 | 6089 | 12548 | 6655 | 6278 | 12933 |
| Total | 28424 | 27105 | 55529 | 29163 | 27810 | 56973 | 8096 | 21441 | 29537 | 16006 | 29576 | 45582 |
| **Urban** | | | | | | | | | | | | |
| 4\_6 | 413 | 391 | 803 | 424 | 401 | 824 | 444 | 4417 | 4861 | 476 | 447 | 923 |
| (7-14) | 929 | 853 | 1781 | 953 | 875 | 1827 | 991 | 911 | 1902 | 1043 | 959 | 2002 |
| 15\_18 | 376 | 340 | 715 | 386 | 349 | 734 | 404 | 749 | 1153 | 432 | 773 | 1205 |
| Total | **1781** | **1584** | **3299** | **1763** | **1625** | **3385** | 1839 | 6077 | 7916 | 1951 | 2179 | 4130 |
| **Rural & Urban** | | | | | | | | | | | | |
| 4\_6 | 7359 | 7153 | 14867 | 1551 | 7339 | 15254 | 7802 | 11573 | 19375 | 8096 | 7889 | 54735 |
| (7-14) | 2464 | 15424 | 31704 | 2528 | 15825 | 32526 | 2628 | 16263 | 18891 | 2774 | 16815 | 57371 |
| 15\_18 | 6504 | 6111 | 12615 | 6673 | 6270 | 12943 | 6863 | 6838 | 13701 | 7087 | 7051 | 41540 |
| Total | **30205** | **28689** | **58828** | **30926** | **29435** | **60358** | 17293 | 34674 | 51967 | 17957 | 31755 | 153646 |

Source: Arsi Zone Education Offic

**CHAPTER THREE**

**3. Economic condition**

**3.1. Crop production and Livestock Raring**

**3.1.1. Crop Production**

Bimodal pattern of the rain fall give a wide opportunity for the district to produce different types of crops and use the same land twice a year that is for Meher and Belg seasons. However, Meher is the largest season in terms of both cultivated land and crop production. For instance, in the year 2011/2012 it accounts for 99% of total cultivated land and 99\_% of production obtained.

The major annual crops grown in the district are cereals, pulses and oil seeds. From cereal crops barely, Teff, Wheat and Maize are the most widely grown ones. In addition the District is known in producing some cash crops like Tomato, Onion, oil seeds, Haricot beans, Horse beans, Field peas and linseed the like ).

In the Meher season between the year 2009/2010and 2011/2012, the total 29,117 hectares cultivated while in the year 2010/2012—29,117 hectares land was cultivated. Likewise, the production obtained was 28 and 6804428 quintals of during the indicated years. However, the average productivity per hectare was increased from 24 quintal to 28 quintals. By crop type, maize, with 26 wheat with 24 quintals and barley with 20 quintals are the most productive crops while rapeseed with 28 quintals per hectare is the least productive in the production season of 2010/2011 Likewise, maize 26, wheat 24 and barely 18 are the most productive crops while neug 5 quintals per hectors is the least productive in the production of 2011/2012. In size of area cultivation and production Wheat and Barley are the most important crops produced in the district.

Likewise during the same years, the total area cultivated was increased from 29,000 to 29,117 hectares of cultivated land were covered by Belg season while the production obtained was increased 18 to 22 quintals of production was obtained. These give an average productivity to be decreased /increased from 18 to 22 quintals per hectare in the year 2010/2011 and 2011/2012 respectively

**Table: 3.1- Area cultivated and production obtained for private peasant holdings by seasons (2008/2009– 2011/2012**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop type | 2010/2011 | | | | 2011/2012 | | | |
| Meher season | | Belg season | | Meher season | | Belg season | |
| Area cult (Hac) | Prod(Qunt) | Area cult (Hac) | Prod(Qunt) | Area cult (Hac) | Prod(Qunt) | Area cult (Hac) | Prod(Qunt) |
| Cereals | 7852 | 125632 | 728 | 145620 | 10620 | 191160 | 7386 | 162492 |
| Wheat | 7852 | 125632 | 728 | 145620 | 10620 | 191160 | 7386 | 162492 |
| Teff | 93 | 1023 | 80 | 800 | 1566 | 17226 | 96 | 1056 |
| Barley | 1009 | 11099 | 10320 | 144480 | 720 | 8640 | 10422 | 166752 |
| Maize and Sorghum | 1395 | 36270 | 0 | 0 | 2580 | 67080 | 0 | 0 |
| Oats | 125 | 1125 | 270 | 2970 | 134 | 1206 | 276 | 3312 |
| Pulses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Horses Beans | 643 | 5706 | 0 | 0 | 613 | 6743 | 0 | 0 |
| Field peas | 46 | 480 | 61 | 610 | 31 | 279 | 68 | 748 |
| Lentils | 141 | 987 | 0 | 0 | 160 | 1440 | 0 | 0 |
| Haricot beans | 489 | 4401 | 0 | 0 | 550 | 6600 | 0 | 0 |
| Oilseed |  |  |  |  |  |  |  |  |
| Linseed | - | - | - | - | - | - | - | - |
| Rapeseed | - | - | - | - | - | - | - | - |
| Neug | - | - | - | - | - | - | - | - |
| Grand Total | 19645 | 312355 | 12187 | 440100 | 27594 | 491534 | 25634 | 496852 |

**Irrigation –** In the Jeju district there are more than 7235 hectares of lands potential for irrigation. In the year 2011, 367 hectares of land were cultivated by traditional irrigation system of which is occupied by Annual crops and served for about 1021 farmers. On the other hand, in the year 2011 the traditional Irrigation land was increased to 367 hectares and 72068 quintals of production was obtained. Under modern irrigation system 5971 hectares were covered and 1335586 quintals of production obtained. During the indicated years 6125 farmers were benefited.In the year 2010 and 2011 there were 367and 5971 hectares of lands were cultivated by traditional irrigation system of which is occupied by annual crops and served for about 1021 and 6125 farmers. State farm: - there was one agro-industry state farm that engages on the production of different fruit and vegetables used as a row material for agro processing industry.

**Table: 3.2. 1 Land under modern irrigation and production Obtained in the district (2008-2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Types of crop | 2010 | | 2011 | | 2012 | |
| Area (hect) | Prod.qunt | Area (hect) | Prod.qunt | Area (hect) | Prod.qunt |
| Maize | 1067 | 42820 | 103 | 3764 | 800 | 1020 |
| Haricotbean | 33 | 726 | 24 | 384 | 50 | 1030 |
| Onion | 4124 | 1015710 | 5425 | 1437625 | 4670 | 1354 |
| Cabage | 30 | 7400 | 34 | 8080 | 33 | 2537 |
| Beetroot | 6 | 1120 | 14 | 2600 | 18 | 1056 |
| Pepper | 6 | 144 | 28 | 344 | 15 | 618 |
| Tomato | 77 | 22065 | 23 | 6440 | 310 | 7684 |
| Onion seed | 14 | 140 | 14 | 280 | 36 | 792 |
| Tef |  |  |  |  |  |  |
| Sugar cane |  |  |  |  |  |  |
| Potato |  |  |  |  |  |  |
| Seasem |  |  |  |  |  |  |
| Garlic |  |  |  |  |  |  |
| Wheat |  |  |  |  |  |  |
| Peper corn | 1 | 24 |  |  |  |  |
| Total | 5358 | 1090149 | 5665 | 1459517 | 5932 | 16091 |

**Source: Jeju District irrigation and developemnet Office**

**Table: 3.2 .2 Land under traditional irrigation in the district (2006-2010)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Types of crop | 2010 | | 2011 | | | 2012 |
| Area (hect) | Prod  qunt | Area (hect) | Prod  qunt | Area (hect) | Prod  qunt |
| Maize | 76 | 2892 | 129 | 1440 | 450 | 15959 |
| Haricotbean | 6 | 128 | 15 | 208 | 13 | 251 |
| Onion | 222.5 | 58240 | 24118 | 604740 | 2116 | 275178 |
| cabage | 24 | 6020 | 21 | 80920 | 26 | 1084 |
| Carrot | 9 | 1145 | 11 | 1600 | 6 | 450 |
| Beetroot | 18 | 3400 | 11 | 2000 | 6 | 457 |
| Pepper | 3 | 74 | 18 | 396 | 4 | 176 |
| Tomato | 9 | 2580 | 17 | 6040 | 18 | 4095 |
| Onion seed | 6 | 60 | 18 | 180 | 18 | 396 |
| Tef |  |  |  |  |  |  |
| Sugar beet |  |  |  |  |  |  |
| 44Potato | 0.5 | 140 |  |  |  |  |
| Wheat |  |  |  |  |  |  |
| Sugar cane |  |  |  |  |  |  |
| Raba bean |  |  |  |  |  |  |
| Cheak pea |  |  |  |  |  |  |
| Total | 374 | 74679 | 24358 | 697524 | 2657 | 298046 |

**Source: Jeju District irrigation and developemnet Office**

**Table: 3.2 .3 Land under pumping irrigation in the district (2009-2010)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Types of crop | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | |  |
| Area (Hect) | Prod  qunt | Area (hect) | Prod  qunt | Area (hect) | Prod  qunt | Area (hect) | Prod  qunt | Area (hect) | Prod  qunt |  | |
| Maize | 328.5 | 13117 | 522 | 19212 | 315 | 12812 | 42820 | 129 | 1440 | 450 | 15959 | |
| Haricotbean | 12 | 188 | 14 | 246 | 7 | 198 | 726 | 15 | 208 | 13 | 251 | |
| Onion | 2291.5 | 615508 | 1752 | 503140 | 2152 | 578520 | 1015710 | 24118 | 604740 | 2116 | 275178 | |
| cabage | 40 | 9220 | 24 | 5560 | 19 | 6000 | 7400 | 21 | 80920 | 26 | 1084 | |
| Beetroot | 9 | 1390 | 4 | 740 | 4 | 760 | 1120 | 11 | 2000 | 6 | 457 | |
| Pepper | 5 | 132 | 3 | 64 | 3 | 74 | 144 | 18 | 396 | 4 | 176 | |
| Tomato | 23 | 5445 | - | - | 17 | 6060 | 22065 | 17 | 6040 | 18 | 4095 | |
| Onion seed | 25 | 238 | 10 | 450 | 15 | 150 | 140 | 18 | 180 | 18 | 396 | |
| Tef | 5.5 | 66 | - | -- |  |  |  |  |  |  |  | |
| Sugar cane |  |  |  |  |  |  |  |  |  |  |  | |
| Potato | 0 | 0 | - | - |  |  |  |  |  |  |  | |
| Wheat | 6.5 | 260 | - | - |  |  |  |  |  |  |  | |
| Peper corn | 2 | 31 | - | - | 1 | 24 |  |  |  |  |  | |
| Papaya | 1.5 | 375 | 1 | 18 |  |  |  |  |  |  |  | |
| Total | 2570 | 646060 | 2385 | 540440 | 2533 | 604598 | 1090125 | 24347 | 695924 | 2651 | 297596 | |
|  |  |  |  |  |  |  |  |  |  |  |  | |

Source: Jeju District irrigation and developemnet Office

**Table: 3.2. Traditional, pumping and Modern Irrigation in the district (2008/2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Traditional Irrigation (Total in Hect) | Amount(in quintal) | Modern Irrigation ( Total in Hectare) | Amount ( in quintal) | Pumping Irrigation (totalin hect) | Amount (in quintal) |
| 2008 | 475 | 65518 | 4547 | 930998 | 2750 | 646060 |
| 2009 | 395 | 82524 | 4984 | 1159424 | 2385 | 540440 |
| 2010 | 375 | 74719 | 5358 | 1090149 | 2533 | 604598 |
| 2011 | 367 | 72068 | 5971 | 1335586 | 2650 | 631740 |
| 2012 | 367 | 63756 | 7133 | 1497892 | 2377 | 552998 |
| Total | 1979 | 358585 | 27993 | 6014049 | 12695 | 2975836 |

Source: Jeju District irrigation and developemnet Offic

**3.1.2. Livestock and Poultry**

**Livestock -** Jeju district is famous in livestock recourses. Accordingly, the livestock population was increased from 40673 to 141802 between the year 2006 and 2008. From the livestock population found in the district, Cattle, sheep and Goat account for more than 141802, 105376, and 47956 of the total livestock population respectively in the year 2008.

In the year 2009 and 2010 the total number livestock population was increased from 320935 to 386627 Cattle, sheep and Goat account for more than 160218, 141593, and 47956 of the total livestock population respectively in the year 2010.

The high prevalence of diseases, Traditional method of rearing, Shortage of feeds and the like are the major constraints in the livestock production in the district. The major types of animal feeds in the district are hay, legumes, grass, forage and Crop residues, which are limited in nutritional values.

**Poultry: -** Poultry production is one of the important sources of family income and food in the district. Accordingly, the number of poultry population was increased from 79258 to 124788 between the year 2006 and 2010. Due to the prevalence of disease and low productivity due to traditional method of rearing is the major constraint

**Table 3.3 Distribution of Livestock and Poultry (2008 – 2012)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of livestock | 2008 | % | 2009 | % | 2010 | % | 2011 | % | 2012 | % |
| Live Stock (total ) | 447457 |  | 320,835 | 100 | 386627 |  |  |  |  |  |
| Cattle | 141802 | 34.1 | 144640 | 45.08 | 160218 | 41.44 | 160,555 | 41.07 | 163767 | 41.7 |
| Sheep | 105376 | 25.3 | 107485 | 33.5 | 141593 | 36.62 | 142963 | 36.57 | 145822 | 36.57 |
| Goat |  |  |  |  | 47956 | 12.4 | 48291 | 12.35 | 49256 | 12.35 |
| Donkey | 34434 | 8.2 | 34818 | 10.85 | 23350 | 6.04 | 25470 | 6.51 | 25979 | 6.51 |
| Horses | 19683 | 4.7 | 20077 | 3.34 | 10862 | 2.8 | 10987 | 2.81 | 11207 | 2.81 |
| Mules | 10513 | 2.5 | 1631 | 0.51 | 1778 | 0.5 | 1803 | .46 | 1839 | 0.5 |
| Camels | 1599 | .38 | 1492 | 0.47 | 870 | 0.2 | 875 | 0.22 | 893 | 0.22 |
| Poultry | 134050 | 24.4 | 134050 | 41.78 | 124788 | 32.3 | 103850 | 26.7 | 105927 | 26.6 |

### 3.1.3. Bee Keeping and Fishery

**Bee keeping Activities: -** Bee -keeping farming is another source of cash income for farmer family. In the year 2012, there was 4303 traditional 446modern and 383 transitional bee hives out of which 383 farmers were benefited. However, Using of herbicides and insecticides are the main problems in bee farming. Table: 3.4.Number of Bee hives and their Beneficiaries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type/Activity** | **Number of box (in district )** | | **Beneficiaries Number** | |
| **2011** | **2012** | **2011** | **2012** |
| **1** | **Traditional bee hives** | **4303** | **4303** | **4381** | **4381** |
| **2** | **Modern bee hives** | **446** | **446** | **665** | **665** |
| **3** | **Transitional bee hives** | **383** | **383** | **484** | **484** |

Source: - Jeju district agricultural and Rural development office.

**Fishery: -** Fishing activity is as simple as that of polluter production and other livestock rearing, however, there is no fishing activity in the district since there is no large water body like lakes, pond and river.

### 3.1.4. Agricultural Inputs and Infrastructure

**Agricultural service cooperatives:** There were 26 peasant associations (PAS) in the district with 25388 and 5923 member farmers in the year 2009 and 2010 respectively. During the same years, there were 34 agricultural service cooperative with 2717 and 2928 member farmers respectively. Regarding their capital, they have Ethiopian birr, 2361392803.66 of which 95.45% operational and 4.55 % capital in the year 2010.

In the year 2011 and 2012 there were 26 peasant associations (PAS) in the district with 19632 and 20783 member farmers respectively. During the same years, there were 34 agricultural services cooperative with 14,809 and 16,196 member farmers respectively. Regarding their capital, they have Ethiopian birr 35830157.4 of which 33468332 operational and 93 % capital in the year 2012. During this year, they had grain mills and grain stores which created an employment opportunities for about \_\_\_ people. The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, agricultural mechanization services, etc for local peasants.

On the other hand, there were 26 rural and 4 urban saving and Credit cooperatives who engage on different agricultural activities and service rendering activities in the district. These cooperatives all together have 2587 member farmers and 7378046capitals out of which 7059739(95.68%) are operational.

**Table: 3.5.Number and types cooperatives, their capital and members 2009 and 2010.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of activity | No of cooperative | | Number of members | | | | | | Capital | | | | | |
| M | F | T | M | F | T | Operational | Fixed | Total | Operational | Fixed | Total |
| 2011 | 2012 | 2011 | | | 2012 | | | 2011 | | | 2012 | | |
| Mineral and mineral product producers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Irrigation participant cooperative | 11 | 11 | 1,256 | 530 | 1,786 | 1,250 | 530 | 1,780 | 3,183,799 | 738,781 | 3,922,580 | 7,087,663 | 790,037 | 7,877,700 |
| General service cooperatives | 34 | 33 | 12,488 | 2,321 | 14,809 | 13,463 | 2,733 | 16,196 | 15,986,712 | 1,074,382 | 17,061,094 | 18,602,487 | 1,200,032 | 19,802,519 |
| Consumer Co-operative | 5 | 3 | 302 | 90 | 392 | 131 | 65 | 196 | 1,007,649 | 36,929 | 1,044,578 | 715,227 | 53,200 | 768,426 |
| Electric Cooperative | 1 | 1 | 21 | 3 | 24 | 21 | 3 | 24 | 3,215 | 250 | 3,465 | 3,215 | 250 | 3,465 |
| Rural Saving and Credit Cooperative | 30 | 30 | 1,301 | 1,320 | 2,621 | 1,299 | 1,288 | 2,587 | 4,851,019 | 234,629 | 5,085,648 | 7,059,739 | 318,307 | 7,378,046 |
| Total | 81 | 78 | 15,368 | 4,264 | 19,632 | 16,164 | 4,619 | 20,783 | 25,032,394 | 2,084,971 | 27,117,365 | 33,468,332 | 2,361,826 | 35,830,157 |

Source: - Jeju District cooperative promotion office

**Fertilizers and Improved seeds Utilization: -** Fertilizers, Improve seeds, herbicides and Insect sides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increases of demand for food and industrial raw materials. Accordingly, the amount of fertilizer distributed to the farmers was 2800 quintals in the year 2010/2011, In the year 2011/2012 it decreased/increased to 500 quintals as the data obtained from district cooperative promotion office indicates.

On the other hand, the amount of improved seed of different types was decreased from \_\_\_\_ quintal to \_\_\_\_quintals between the year 2010/2011 and 2011/20112.These figures, however, may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

**Table: 3.6. Amount of agricultural inputs distribute to farmers by type (2007/2008– 2011/2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of input | 2007/2008 | 2008/2009 | 2009/2010 | 2010/2011 | 2011/2012 |
| Amount (qt) | Amount (qt) | Amount (qt) | Amount (qt) | Amount (qt) |
| Fertilizers |  |  |  |  |  |
| DAP(qt) | 1088.5 | - | - |  |  |
| Urea (QT) | 3546 | 3262 | 5535 | 10868.5 | 8869 |
| NPS | 16525 | 21715.5 | 2272.5 | 2950 | - |
| NPSB |  |  | 20278.5 | 28816.5 | 29793.5 |
| Improved seed (qt) | 16525 | - |  | 42635 | 38653.5 |
| Wheat |  | 1465 | 235 |  |  |
| Herbicides | 1668.5 |  |  |  |  |
| Herbicides (liter ) |  | - |  | 579.4 | 860 |
| Pesticides | 1064 | 2594 | 448 | - | - |
| Liquid (liter ) | 47 | - |  | - | - |

Source: - Jeju District cooperative promotion office

**Development Agents and Farmers Training Centers**: - They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year 2009 and 2012, the farmers training centers (FTC) was increased from 26 to 26 while the number of development agents was increased from \_\_\_ to \_\_\_Three development agents were assigned in each PA with profession of plant science, animal science and environmental protection. These development agents help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protectio

**Table: 3.7. Number of Development agents and FTC (2009- 2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Description** |  | **2009** |  | **2010** |  |  | **2011** | **2012** |
| Number of Farmers training centers |  | 25 |  |  |  |  | 25 | 25 |
| Number of Development agents |  | 100 |  |  |  |  | 37 | 35 |
| Number of Beneficiaries |  | 21439 |  |  |  |  | 21439 | 21439 |

Source: - District Agricultural Development office

**Livestock Health Infrastructure**: - Availability of animal health infrastructure is very important to improve animal productivity and control animal disease. Accordingly, the number of health facilities was increased from 2 clinics and 6 health post in the year 2010 to 2 clinics and 6 health posts in the year 2012. During the same year, however, the number of health professional was only increased by one which needs improvement. The ration of animal population to health facilities was--for clinics and \_\_\_:\_\_\_ for health post while the ratio of animal population to health profession was \_\_\_:\_\_\_ for animal health assistance in the year 2012.

**Table: 3.6. Distribution of Jeju district Animal Health Infrastructure (2008 – 2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Description** | **2008** | **2009** | **2010** | **2011** | **2012** |
| Veterinary personnel |  |  | 3 | 18 | 19 |
| Veterinarian (DVM) | 2 | 2 |  | 3 | 4 |
| Meat inspector | 0 | 0 | 0 | 0 | 0 |
| Health Infrastructure | 8 | 8 | 0 | 0 | 0 |
| Clinic (A,B,C,D- Type ) | C=2  D=6 | C=2 | C=2  D=6 | C=2  D=6 | C=2  D=6 |
| Health posts | 6 | 6 | 6 | 6 | 6 |

Source: - District Agricultural Development office

**Agricultural Calendar**:-It is a well known that the farmers of the District are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during same seasons they are an ideal. Even during busy season some farmers do not fully engage in farm activity due to some socio cultural relative ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with seasons depending on Agro – climatic zone and types of crop cultivate.

In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Jeju district is shown in the table below.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Meher and Belg) the type of Agro – climatic zone and types of crops cultivated in the district.

**Table: 3.7.Agricultural Calendar of the District.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg** |
| 1 | Land preparation | February \_\_June | January \_\_\_February |
| 2 | Planting (Sowing ) | March \_\_\_August | February\_\_\_April |
| 3 | Weeding | July \_\_\_September | February \_\_\_ May |
| 4 | Harvesting | October \_\_\_December | June \_\_\_\_August |

Source: - District Agricultural Development office

### 3.1.5. Methods of Soil Conservation and Maintaining Soil Fertility

**Methods for maintaining soil fertility: -** There are two ways of maintaining soil fertility in the Zone particularly in the district. These are the traditional and modern methods, the traditional method includes using of Animal Dung, Crop Rotations, burning soil in small scale, fallowing and using crop residue while the modern one is the using of Artificial Fertilizer and Compost (organic fertilizers).

**Methods for soil conservation**: - Counter laughing and Cultivation is traditional way while Cut of drain, Check Dum Construction, trace construction, mixing cultivation and afforestation are modern way of soil conservation in the district.

### 3.1.6. Constraints of Agricultural and Livestock Production

**Crop pests and disease**: - The major crop pests in the district are Aphids while the major diseases are rust, smutand others. Weeds and Rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time. To overcome these problems, the farmers are advised to use diseases resistant variety of seeds, hand weeding rather than herbicides, Irrigation through using rain fall water harvesting and river diversion systems,etc **Livestock and poultry Disease**: - Black leg Hemorrhagic Septicemia, Anthrax, external and internal are the major livestock and poultry disease in our district.

Accordingly, to overcome the prevailing disease, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and the quality of livestock found in the district. In the year, 2008, 2009, 2010 .2011, and 2012 there was, \_\_, \_\_\_, \_\_\_, \_\_\_ and \_\_\_ population of livestock were got vaccination in the district respectively. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.8. Number of Animals got Health Services by type and type of service given**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of service | 2008 | 2009 | 2010 | 2011 | 2012 |
| **Vaccination** | 113800 | 157800 | 131,300 | 100452 | 207950 |
| Blackleg | 36400 | 30,000 | 31,000 | 24000 | 16700 |
| Hemorrhagic Septicemia | 60800 | 81000 | 55,600 | 51,452 | 28,650 |
| Anthrax | 16600 | 46800 | 44,700 | 25000 | 12300 |
| **Treatment** | 274089 | 95420 | 287978 | 220476 | 251533 |
| External parasites | 98891 | 27198 | 111260 | 91872 | 117153 |
| Internal parasites | 171814 | 63251 | 171480 | 126955 | 132191 |
| Castrations | 3384 | 4971 | 5238 | 1649 | 2189 |

Source:**-**Jeju District Agricultural and Rural Development Office.

**3.2. Mineral Resources and Industry**

**Mining:-**Like other parts of country in general and the zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of mineral resource development indicates that, the district has a high potential of some mineral recourses such as, Limestone, sandstone,Clay Soil for construction purpose, solar energy for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rocks quarrying, potteries making mining activities by local communities in the district.

**Industry: -** Similar to other parts of the zone, industrial development is at its infant stage in Jeju district. Their number is very small and it is dominated by small - scale industries and privately owned. At the same time they had small capital and able to generate job opportunities for small number of employees. There are also no medium scale industrial establishments in the district. As shown in the table below, the number of small scale industries was decreased from \_\_\_\_ to \_\_\_\_ but while their capital was increased from **\_\_\_\_\_** to \_\_\_ birr

**Table: 3.9. Number of small – scale industries of the district by Type**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type of industry | 2010 | | | 2011 | | | 2012 | | |
| Number | Employee | Capital (Birr) | Number | Employee | Capital (Birr) | Number | Employee | Capital (Birr) |
| Metal and woods | 4 | 12 | 100,000 | 1 | 2 | 35000 | 1 | 3 | 43000 |
| Barber chair | 2 | 6 | 10,000 | 3 | 10 | 90,000 | 2 | 7 | 100000 |
| Construction | 4 | 25 | 200,000 | 4 | 19 | 170000 | 3 | 23 | 150000 |
| Different Service | 21 | 355 | 150,000 | 38 | 142 | 38000 | 42 | 140 | 42000 |
| Total | 31 | 398 | 460,000 | 46 | 173 | 333000 | 48 | 173 | 335000 |

Source: - IMX office

**3.3. Trade Activities and Tourism**

**Trade**: - During the year under consideration, the number of licensed trader and those renewed their license was increased from 1617 and 1027 to 1207 and 1047 in **2011** and **2012** respectively, while the number of traders who get new license and applied for license was increased from 298 and 298 to 193 and 193- respectively. This indicates the district have trade potential since a lot of agricultural tradable items are produced in the district.

Regarding tradable items and cash crops production activities, they engaged on the sale of license Linseeds wheat, Barely, Beans, pea, Meat, Teff, Sorghum, etc. in local market and sending to the central markets. In addition, the district is known by exportable items like hide and Skin.

**Table: - 3.10. Type and number of linseed traders and number of Hides and Skin sent to the central market from district.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Licensed Traders** | **2009** | **2010** | **2011** | **2012** |
| 1 | Licensed | 1160 | 1319 | 1617 | 1207 |
| 2 | Applied for license | 294 | 1024 | 298 | 193 |
| 3 | License given (New ) | 0 | 201 | 298 | 193 |
| 4 | Licenses renewed | 1149 | 1024 | 1027 | 1047 |

Source: - Trade, Industry and Transport Office.

**Cash crops and Exportable items production**

There are different type of cash crops and exportable items produced in the district. Moreover, there are a high potential of cash crops like, Fruit, Oil Seeds, Coffee, Chat, hides and Skins produced in the district.

**Tourism and its Amenities**: - Due to lack of promotion and tourism amenities like Standard Hotels, Roads and other Social infrastructure, tourism economy is not yet developed in the Arsi Zone in general and Jeju district in particular. Similarly, meaning full survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by cultur tourism office. These are, Cave, Mountain, Church, and Bridge are the main tourist attraction sites of the district. All of them are under developed.

**Table: 3.11. Tourism Attraction Site of the district**

|  |  |  |
| --- | --- | --- |
| **No** | **Area (Foundation site )** | **Name of Tourism** |
| 1 | Angodeche kebele | Bahara uluum cave man made |
| 2 | Egu cheke | Lenda Mosques(lenda historical sites) |
| 3 | Tere Amigna kebele | Jeben Mountain |
| 4 | Tere Amigna kebele | Natural Brigde |
| 5 | Gure kebele | Muda Mada cave man made |
| 6 | In wenjalo kebele | Checha water spring |

Source: District Tourism Promotion Office

## 

## **3.4. Finance and Financial Instructions**

**Financial Institution**: -

The availability of various financial institutions like Banks and Insurance, rural credit and saving Associations play a significant role in the transformation the economy of the district. However, the district has only three credit and saving association that provide credit and saving services to the rural population.

**Annual Budget Allocation: -** Annual budget requirement of districts is covered mainly from two sources: Regional government grants and Districts Inland Revenue.

Regional government contribution shares the largest amount total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low. Moreover, more than -------% of over plan revenue collected by the district in the previous year was allocated for the district as additional budget with the aim of utilizing the budget for infrastructure development.

The total budget allocated for district was increased from -------in the 2007 to ---------in the year 2012 which was increased by -----% during the indicated year. According to the data obtained from Finance and Economic Development Office, the budget allocated for the district showing an increasing trend from year to year.

**Table: 3.13. Annual Budget Allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2007 | 65,431,794 | 50.5 |
| 2008 | 76,875,192 | 17.5 |
| 2009 | 92,377,704 | 20.2 |
| 2010 | 99,402,461 | 7.6 |
| 2011 | 118,990,059 | 19.7 |
| 2012 | 131,493,727 | 10.5 |
|  |  |  |

Source: -Jeju Finance and Development office

**Revenue: -** Between the year 2007 and 2012, the district collected total revenue of Ethiopian Birr 20,597,185.28 and 30,842,320 respectively, indicates 10,245,134.72 Birr increment. The main source of revenue in the district are direct revenue, indirect revenue item as in land revenue office of the district cumulative annual report of both year shows.

**Table: 3.14. Total Inland Revenue collected in the district by type of revenue source.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non- tax revenue** | **Total** |
| 2008 | 28,356,033.85 | 1,294,841.7 | 737,425.64 | 30,388,301.19 |
| 2009 | 17,807,914.21 | 1,872,642 | 950,345.12 | 20,630,901.33 |
| 2010 | 26,574,763.21 | 7,632,040.21 | 773,158.03 | 28,111,125.25 |
| 2011 | 28,840,332 | 1,776,470 | - | 30,499,883 |
| 2012 | 30,499,883 | 342,437 | - | 30,842320 |
| Ida’ama | 132,078,926.27 | 12,918,430.91 | 2,460,928.79 | 140,472,530.77 |

Source: - Jeju Revenue Office.

**CHAPTER FOUR**

**4. Social Services And Infrastructure Condition**

## 4.1. Education

Kindergarten: - In the district between the year 2009 and 2012, the number of kindergarten school were increased from 8 to 8 while the number of children enrolled was increased from 575 to 910 This indicates more attention is not given for this level. On the other hand, one of the main problems related with kindergarten school is lack of clear management system.

Primary Schools (1-8) – So as to achieve universal primary school coverage, the district education office increased the number of school was increased from 46 to 47 between the year 2009 and 2012 while the number of student enrolled to these schools was increased from 31968 (47% females) to 29966 (47.8% females) students respectively. During the same year, the number of teachers were increased from 533(32% females) to 583(32.2% females) teachers while the number of classroom were increased from 516 to 5223 Student to teacher ratio was on average improved from 60 to 51 while student to classroom ratio was improved from to between the years 2009 and 2012 which is better than the standard set by Oromia education bureau.

Senior secondary Education (9 – 12) - In the district there is 6 senior secondary (9- 12) school located in, 6 while the students enrolled to these schools was increased from 2045 (41.3% females) in the year 2008 to 2873(43.3% female) students in the year 2012. Likewise, between the year 2008 and 2012, the number of teachers who teaches at this level was increases from 117 to 117 while the number of classroom was increased from 49 to 49 class-rooms. Student to teacher ratio was improved from 25 to 25 while the student to class room ratio was improved from 59 to 59 between the year 2008 and 2012 years.

Regarding student participation rate, growth participation rate (GPR) and net enrollment participation rate (NER) of senior secondary school (9 -12) was \_\_\_%,12.8% ,(12.3% female) in the year 2008 and 2012.

**TVET:** - There were one governmental technical and vocational education school in the district.

Number Of TVET College, Type of Department and Number of Students enrolled

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Government | | | | | | | |
| 2011 | | | | | 2012 | | |
| No of TVET | Types of Department | Male | Female | Total | Male | Female | Total |
| 1 | Welding | 5 | 5 | 10 | 0 | 0 | 0 |
| 2 | Furniture | 5 | 3 | 8 | 0 | 0 | 0 |
| 3 | ICT | 20 | 30 | 50 | 18 | 32 | 50 |
| 4 | Road making | 4 | 2 | 6 | 3 | 2 | 5 |
| 5 | Electronic mentees | 7 | 4 | 11 | 8 | 3 | 11 |
| 6 | accountig | 12 | 18 | 30 | 18 | 8 | 26 |
|  | Total |  |  |  |  |  |  |

Table: 4.1. Number of kindergarten school and primary school (1-8) with student enrolled

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Government | | | | | | | | Non government | | | | |
| Primary (1-8) | | | | Secondary (9-12) | | | | | Kindergarten | | | |
| No of school | Male | Female | Total | No of school | Male | Female | Total | | No of school | Male | Female | Total |
| 2008 | 46 | 16186 | 14706 | 30892 | 6 | 1156 | 829 | 1985 | | 5 | 156 | 153 | 309 |
| 2009 | 46 | 16814 | 15154 | 31968 | 6 | 1192 | 881 | 2073 | | 8 | 314 | 261 | 575 |
| 2010 | 47 | 16712 | 15120 | 31832 | 6 | 1302 | 940 | 2242 | | 9 | 352 | 315 | 667 |
| 2011 | 47 | 16609 | 14720 | 31329 | 6 | 1357 | 937 | 2294 | | 8 | 425 | 344 | 769 |
| 2012 | 47 | 15631 | 14335 | 29966 | 5 | 1627 | 1246 | 2873 | | 8 | 491 | 419 | 910 |

**Source: District Education Office**

**Educational Quality:** - The quality of education can be judged from educational qualification of teachers, Students-teacher ratio, Student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma level) to teach grade 5-8 are 353(66%) from the total teachers teaching this level in the year 2010. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence, we have to look into other factors mainly teachers development program (TDP), Continues professional development program, the teachers effectiveness to each and a student’s commitment to receive what teacher say.

To improve the quality of education student to teacher ratio, student to class room ratio and others are very essential, so as we see from the given information education office of district expected to do more so as to improve the quality of education by increasing the needed variables of education quality.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above for secondary school) the number of TTI teachers was decreased from 64 to 14 in primary school (1-8) between the year 2006 to 2010. Likewise, the number of diploma teachers was also decrease from 7 to 8 teachers in preparatory schools (9-12) during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below.

Table: 4.2. Number of Teachers by level of education and School in Government (2008 – 2012)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | No of Teachers | | | | | | | | | | | | | | |
| 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| No of teachers in primary ( 1 – 8) | 350 | 150 | 500 | 362 | 154 | 516 | 363 | 170 | 533 | 374 | 180 | 554 | 395 | 188 | 583 |
| Grade 12 and below | 19 | 19 | 38 | 48 | 30 | 78 | 37 | 28 | 65 | 33 | 23 | 56 | 22 | 18 | 40 |
| TTI | 9 | 5 | 14 | 9 | 5 | 14 | 8 | 6 | 14 | 12 | 15 | 27 | 14 | 16 | 30 |
| Diploma | 266 | 112 | 378 | 218 | 103 | 321 | 237 | 116 | 353 | 244 | 125 | 369 | 268 | 133 | 401 |
| Digrii | 56 | 14 | 60 | 87 | 16 | 103 | 81 | 20 | 101 | 85 | 17 | 102 | 91 | 21 | 112 |
| Secondary School | 76 | 11 | 87 | 84 | 14 | 98 | 91 | 13 | 104 | 101 | 16 | 117 | 101 | 16 | 117 |
| Diploma | 2 | 1 | 3 | 5 | 3 | 8 | 4 | 4 | 8 | 3 | 3 | 6 | 3 | 4 | 7 |
| BA/BSC/MA/MSC | 74 | 10 | 84 | 79 | 11 | 90 | 87 | 9 | 96 | 98 | 13 | 111 | 98 | 12 | 110 |

**Source: - Jeju district Education Office**

Table: 4. Student performance and Drop out condition by level of school

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | Description of activities | 2011 | | 2012 | |
| Primary school | Secondary school | Primary school | Secondary school |
| 1 | Student enrollment | 31329 | 2294 | 29966 | 2873 |
|  | Male | 16609 | 1357 | 15631 | 1627 |
|  | Female | 14720 | 937 | 14335 | 1246 |
| 2 | Promoted students | 26465 | 1973 | 28508 | 2562 |
|  | Male | 16385 | 1133 | 14696 | 1403 |
|  | Female | 14623 | 840 | 13812 | 1159 |
| 3 | Student drop out | 4864 | 321 | 1458 | 3119 |
|  | Male | 2745 | 224 | 935 | 224 |
|  | Female | 2119 | 97 | 523 | 187 |

As shown in the above table, of the total student enrolled to primary school, 84 and 95% were promoted to the next grade level in the year 2011 and 2012 respectively. Likewise, during the same year,86% and 89% of secondary school were promoted to the next grade level. This indicates that, there is a gradual improvement of quality of education in the district. On the other hand, the participation of female student was greater than that of counterpart male student while their achievement rate was decreased from \_\_% in the year 2011 to\_% in primary school in the year 2012.

As remedy to student participation and student performance, drop out of student was decreased from 4864 and 1458 in the year 2011 and increased from 31329 and 29966 in the year 2012 in primary and secondary school respectively. This figure indicates that, the dropout rate of the district was 15% and 4.8% in primary and secondary school in the year 2011 while it was increased to 13% and 10% in the year 2012. Such high rate of student dropout from school is due to economic problem(uniform, educational material, fees), unwillingness of some parent not to send their child to school, migration to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc are mentioned as an example

## 4.2. Health

**Health Institution**:-The number of government health facilities was increased from 30(4 health center, \_\_ clinics and 26 health post) in the year 2008 to 30(4 Government Health centers, 26 health post and \_\_\_ rural drug vender) during the year 2012. In addition, the non-governmental clinics were increased from 18 to 22 between the year 2008 and 2012. These gives the ratio of population to health center, clinic, and health post to be \_\_:1 \_\_:1 and \_\_:1 respectively in the year 2012 which indicate how far health coverage of the district is low as compared with WHO standards ( 2500, 1500 , and 5000 respectively).

**Health Personnel**: - in line with the expansion of health facilities, the district health office also recruit additional health personnel. The number of health personnel was increased from 124 to 15 health personnel in government Health from 2009 and 2012. By types of profession, the number of nurses and technicians was increased from 42 to 44 and 10 to 10 while the number of health extension workers was increased from 40 to 45 during the indicated years. The number of health officer was increased from 13 to 15 between the years 2009 to 2012. The ratio of population to health professional was \_\_:\_\_ for health officer, \_\_\_:\_\_ for nurses , \_\_-:\_\_ for technicians and \_\_-:\_\_ for health extension workers in the year 2012.

**Table: 4.5. Number of Health Institution and Personnel by ownership (2009 - 2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Institution/Health | 2009 | | 2010 | | 2011 | | 2012 | |
| Gov | Non-Gov | Gov | Non-Gov | Gov | Non-Gov | Gov | Non-Gov |
| Health Institution | 30 | 22 | 30 | 22 |  |  |  |  |
| Health Center | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 |
| Clinic | 0 | 22 | 0 | 22 | 0 | 22 | 0 | 22 |
| Health Post | 26 | 0 | 26 | 0 | 26 | 0 | 26 | 0 |
| Rural Drug Vender | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Health Profession | 123 | 34 | 124 | 38 | 151 | 66 | 151 | 66 |
| Health officer | 13 | 2 | 12 | 3 | 13 | 3 | 15 | 2 |
| Nurse | 45 | 37 | 43 | 30 | 42 | 29 | 44 | 30 |
| Health Assistance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0Laboratory Technicians | 8 | 0 | 8 | 0 | 10 | 0 | 10 | 0 |
| Pharmacy Technicians | 6 | 5 | 6 | 5 | 8 | 5 | 8 | 5 |
| Sanitarians | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Health extension Worker | 0 | 0 | 49 | 0 | 45 | 0 | 45 | 0 |

**Diseases prevalence including HIV/AIDS: -** In 2002and 2003 there were two VCT (Voluntary counseling Testing) centers in which 29304 peoples were tested from which 53 HIV of them are carrier and 12 are AIDS patients in the district. Likewise in 2004 and 2005 since there were 3 VCT (Voluntary Counseling testing) centers in which 25340 people were tasted from which 45 HIV of them are carrier and 10 AIDS patients in the district. However, in the year 2005 and 2006 there were three (Voluntary counseling Testing) centers and there were 41 peoples who live with HIV and 9 AIDS patients from 19066 peoples tested. This indicates that the prevalence of disease is decreasing rate. Hence, awareness creation has to be done through community conservation.

**Causes of Morbidity:** According to the data obtained from statistical abstract of the district, the highest prevalent diseases in the district are Malaria with 28% followed by Pneumonias with 17% and Intestinal parasite with 15% in the year 2002. On the other hand, AURTI with 14.3 % followed by AFI, 19.39 % and Malaria with 2 % are the highest prevalent diseases in the district respectively in the year 2009.

Moreover, inadequate Potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health services also play a great role for the existence of different diseases.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: 4.6. Ten Top Diseases existed in the District between the year 2006 and 2009.** | | | | | | | | | | | | |  |
| **No** | **2009** | | | **2010** | | | **2011** | | | **2012** | | | |
| **Type of Diseases** | **No .of Population** | **%** | **Type of Diseases** | **No of Population.** | **%** | **Type of Diseases** | **No of Population** | **%** | **Type of Diseases** | **No of Population** | **%** | |
|
| 1 | AFI | 3623 | 19 | Acut .Febr.Illness | 3913 | 20 | AFI | 4210 | 21 | Acut .Febr.Illness | 4428 | 29 | |
| 2 | URTI | 3492 | 18 | Pneumonia | 2840 | 17 | URTI | 2622 | 16 | Pneumonia | 2810 | 18 | |
| 3 | Pneumonia | 2584 | 13 | Upp.respi .tra.infe | 2613 | 12 | Pneumonia | 2682 | 12 | Upp.respi .tra.infe | 2713 | 17 | |
| 4 | Dyspesia | 1839 | 9 | Parasitic.disease | 1202 | 6.4 | Dyspesia | 1428 | 7 | Parasitic.disease | 1530 | 10 | |
| 5 | Typhoid | 1448 | 7.5 | Thypoid fever | 1941 | 8.3 | Typhoid | 2118 | 8 | Thypoid fever | 2234 | 14 | |
| 6 | Skin Infection | 1390 | 7.2 | Dyspepsia | 2016 | 11 | Skin Infection | 1450 | 8 | Dyspepsia | 1642 | 10 | |
| 7 | UTI | 1367 | 7.1 | Urinary tract infection | 921 | 6.2 | UTI | 1520 | 12 | Urinary tract infection | 1713 | 4 | |
| 8 | Heimenthiasis | 1626 | 6.4 | Skin infection | 416 | 4.8 | Heimenthiasis | 516 | 5 | Skin infection | 1617 | 4 | |
| 9 | Diarrhea. | 1117 | 5.8 | Diarrhea | 1712 | 8.6 | Diarrhea. | 1812 | 8 | Diarrhea | 1710 | 11 | |
| 10 | trauma | 1025 | 5.3 | Maskulo skeletan disease | 312 | 3.2 | trauma | 510 | 4 | Maskulo skeletan disease | 515 | 3 | |
| Source: - District Health Office | | | | | | | | | |  |  |  | |

**Harmful Traditional Practices: -** Like in the zone as a whole, there are many Harmful traditional practices that are being widely practiced in Jeju District. Among these, rapping, abduction and female circumcision, etc can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being use by the people of the District.

## 4.3. Women and Children Socio-economic Issue

* + 1. **Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was **7442** and **4443** in the year 2009 while their number was decreased to 7121 and 2288 in the year 2010. On the other hand, the number of women gets delivery services in the health institution by health professional was 3831 and 2285 in the year 2009 and 2010 while those who attended delivery service by health extension works was 811 and 650 in the same year. Though such improvement was observed, still there were 111 and 95 women attended delivery traditional at their home in the year 2009 and 2010 due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination decreased from 4601 to 4230 between the year 2009 and 2010 while the number of mother get NPWTT2 vaccination was increased from 11240 to 6240 during the year under consideration. As indicated above the health service provision was improved from time to time.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Jeju district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased/decreased/constant from 28403 in the year 2009 to 29441in the year 2010. As a result of this, according to the data obtained from Demographic health Survey of the year 2014 indicated the contraceptive prevalence rate of the district was estimated at 87 %.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was 42 in the year 2009 which was increased /decreased to the year 2010. Moreover, the number of women who are member of woreda cabinet was 14 and 12 during the year under consideration.

**Table: 4.7. Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2012 |
| 1 | **Access to save delivery service** | Number | 4287 | 5211 |
|  | Women's used ANC/Antenatal care/services | Number |  |  |
|  | Women's used PNC /Postnatal care/services | Number | 4450 | 5346 |
|  | Women’s assisted delivery | Number | 2328 | 2722 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 2328 | 2722 |
|  | Deliveries attended by HEWs | Number | 46 | 53 |
|  | In their home traditionally | Number | 0 | 0 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 4033 | 4458 |
|  | NPW TT2 | Number |  |  |
| 3 | **Family planning condition** |  |  |  |
|  | Modern methods | Number | 20860 | 24183 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council | number |  |  |
|  | Member of woreda council | number |  |  |
|  | Member of woreda cabinet | number |  |  |

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. In the year 2011, more than 120 women was affected by the above related problems and disease while their number was increased to 236 in the year 2012. That is why the maternal mortality of the nation to be as high as 420/100,000 women as the data obtained from 2014 demographic health survey indicated.

On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc. By these and other, more than 32 and 48 women was affected in the year 2011 and 2012 respectively.

* + 1. **Children issue** 
       1. **Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from **20235** in the year 2011 to **19260** in the year 2012 while their number was decreased/increased to 975 in the year 2012. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 4519 and4582 in the year 2011 and 2012 which accounts for 101 % and 103 % from total children who get vaccination. In the district the EPI coverage was increased from 103 % in the year 2010 to 104 % in the year 20

**Table: 4.8.Number of children vaccinated by year and type of vaccination.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of Vaccination** | **2008** | **2009** | **2010** | **2011** | **2012** |
| BCG | 4791 | 4885 | 4851 | 4952 | 4966 |
| Measles | 4505 | 4704 | 4519 | 4514 | 4582 |
| DPT | 4466 | 4692 | 4876 | 4763 | 4896 |
| Polio | 4466 | 4692 | 4816 | 4810 | 4816 |
| **Total** | **20235** | **20981** | **19062** | **19039** | **19260** |

Source: - Jeju district health office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 1100 and 1015 children to be orphan in the year 2011 and 2012 respectively. These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 1100 in the year 2012 which was increased to 1015 in the year 2012.This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also 1340 children with different types of disability in the district who are in most cases not benefited from social services and the economy to in the district. From the total orphan and vulnerable children and disabled children, 47 % and 41 % are female.

Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Malaria, Pneumonia, Sepsis, Preterm, Tetanus and infection of skin. In the district, more than 6161 and 4658 children were affected by one or more than one of the above mentioned diseases.

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was -2811 and 27676 in the year 2011 and 2012 from which only 97.8% and 97% of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities. However, of the total school in the district, only 29.4% of school was access to potable water supply facilities.

**Table: 4.9. Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | Health Centre | | Health post | |
| 2011 | 2011 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 4 | 4 | 29 | 29 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 4 | 4 | 29 | 29 |
| 3 | Number of health institution access to water supply | 4 | 4 | 12 | 12 |
| 4 | Number of health institution access to toilet facilities | 4 | 4 | 23 | 23 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 4 | 10 | 10 |
| 6 | Number of Health institution access to liquid waste disposal facilities | 4 | 4 | 7 | 7 |

Source: - District Health Office

**Table: 4.10. School access to hygiene and sanitation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | | Secondary school | | |
| 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| 1 | Number of school in district | 47 | 47 | 47 | 46 | 46 | 5 |
| 2 | Number of school access to water supply | 16 | 16 | 17 | 5 | 4 | 4 |
| 3 | Number of school having toilet | 44 | 44 | 44 | 5 | 5 | 5 |

Source: - District Education Office

## 4. Sport

The district has different type of sport activities like, Athletics, Football and Volley ball. Accordingly, the number of volley ball and football teams were increased from 58 and 1 to 1 and 1 between the years 2010 and 2012 while the number of athletics teams was decreased fro 1 to 1 during the indicated years.

On the other hand, the number of sportsmen volley ball, athletics and football was increased from 696 , 112,10 and 1276 in the year 2010 to 492 ,115,5 and 1826 in the year 2012 respectively. However; the district has no well – organized standardized sport of facilities like stadium gymnasium etc.

**Table: 4.11. Sport clubs and members in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2010** | | **2011** | | **2012** | |
| Number of Club | Member | Number of Club | Member | Number of Club | Member |
| Volley ball | 58 | 696 | 37 | 364 | 41 | 492 |
| Tecundo | 1 | 112 | 2 | 97 | 1 | 115 |
| Athletics | 1 | 10 | 1 | 2 | 1 | 5 |
| Football | 58 | 1276 | 68 | 1185 | 83 | 1826 |

Source: - Jeju district youth and sport office

## 4.5. Basic Infrastructure Condition153439

**Roads**:-Jeju district has 183.3 km length of gravel roads (all weather),137.2 km of dry weather road and 1 km of Asphalt road in 3 small rural towns. This gives a road density (for all weather roads) 165 km per km2 and 300 km per 1000 of people for all weather roads where as 197 km per km2 and 30km/per 100 of people for dry weather road.

**Telecommunication**: - One of the fast and the effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban area of the district has supplied with Digital type of telecommunication. On the other hand, most rural area of the district has supplied with wireless type of telephone service. The entire peasant Association i.e. 26 have a wireless type of telephone) and currently mobile telephone service is being constructed in Arboye town that benefited the urban and surrounding rural areas.

**Post office:** - Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has one agent types of postal services in Arboye town

**Water supply**: - Potable water coverage of the district is at its low stage. According to data obtained from Jeju water mineral and energy resource office indicated, of total rural population of the district (46103%) [35.903% for rural and(35.22%) for urban area] are access to potable water supply in the year 2004. This percentage has been increased to (49728)(38.723%)for rural and (35.22)% for urban area] during the year 2005. During the year 2006 on the other hand, of the total population of the district about (61812)% were supplied with potable water of which (48.132)% for rural and (35.22%) for urban. Regarding potable water schemes, there were (105) water supply schemes in 2007 E.C. In addition there were(13) Bore -Hole Water in rural parts of the district.

**Energy Supply**: - Energy sources can be Traditional or Modern. The traditional sources of energy are, Charcoal, Animal Dung, Farm Residue and fire wood, while the modern energy sources are electricity, biogas fossil fuel and solar energy. All towns of Jeju district have supplied with 24 hours hydroelectric power. In addition, most parts of the rural areas have also got 24 hydroelectric services (Except 20 rural kebeles).

However, in most rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has a high contribution in accelerating the deforestation rate of the district. In urban area, Charcoal is the most important energy source followed by, fire wood, electricity, crop Residues and Animal Dung’s. On the other hand, fire wood is the major energy sources in rural areas followed by Crop residues, animal Dung and Kerosene. Regarding fuel filling station there is no any fuel filling station in the district.

**Table: 4.12. Sources of domestic energy supply.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Sources of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 3 |
| 2 | Fire wood | 1 | 2 |
| 3 | Animal Dung | 3 | 1 |
| 4 | Crop Residue | 4 | 4 |
| 5 | Kerosene | 6 | 5 |
| 6 | Electricity | 5 | 6 |

Source: - District agricultural Development office

**CHAPTER FIVE**

**5. DEVELOPMENT ACTIVITIES**

**5.1. On Going Development Projects**

The ongoing development activities in the district are carried out by Government, non Government organizations and community participations. The annual budget of the district is divided into recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gabs in the district. Accordingly, the ongoing development projects during the years under considerations are the following.

**Social Sector Development Projects:** in the social sector of the district there were different types of projects constructed by budget obtained from different sources. From these projects 1 TVET College, 26 health center, 4 health posts, 8 animal health post were being constructed by the government, community and others contribution of budget since 2010 . Moreover, a big irrigation project was being under construction by regional government,

**Economic Sector Development projects:** during the same year in the district there were 25 farmers training centers (FTC), 2 offices, 2 deep well, 0 hand dug well and road were under construction by local government and community participation budget.

## 5.2. Problems of ongoing Development projects

The major problems of ongoing development projects are Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction, lack of reformed IMX in district and weak community participation are the major problems during the construction.

**Private Investment: -** the availability of investment activities in the district creates opportunity for the development of infrastructure in the district and also creates job opportunity for unemployment. In the district there were 26 rural investors and 19 urban investors with a capital of more than 189,342,372

birr who engaged on different agricultural and service producing activity. These investments create job opportunity for more than 1298 workers.

**Table: 5.1.Type of Investment Activities in the district**

|  |  |  |
| --- | --- | --- |
| **No** | **Type of Investment** | **Site** |
| 1 | Flower cutting | Alaga dore |
| 2 | Agro holticulture | Acamo |
| 3 | Agri trading and industry | A /Doree |
| 4 | Vegetable and fruit production | Soke,A/Dore,Acamo,Huruta Doree |

Source: - Jeju Investment Office

**5.2 Problems of ongoing Development Projects**:- The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction is the major problem during the construction.

**CHAPTER SIX**

**6. PROBLEMS AND POTENTIALITIES**

**6.1. Major Problems**

* **Environmental Problem:-**Soil Degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and lack of conformability of soil and water conservation practice. On the other hand, variability of rain fall which results in top crop production failure, uncontrolled hunting.
* **Economic Problem**: - Shortage of farm land, High prevalence of crop diseases and pastes, Shortage of Agricultural inputs and low capacity to buy, shortage of Agricultural institutions (Bank saving and credit Association and well organized rural credit services), shortage of grazing land which leads to over utilization of the same land for along a period of time, low investment activities and industrial development.
* **Social Service Problem: -** Rapid population growth and large family size land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, under developed transportation and communication facilities, high prevalence of harmful traditional practices, HIV/AIDS prevalence, high dropout rate, low potable water coverage, low electric power supply mostly in rural areas are the major social problems in the district.

**6.2. Potentialities**

The district has cultivable land potential suitable for the production of cereals, pulses, oil seeds, fruits, vegetables, sugar cane, cotton, etc particularly on potentially irrigable land areas like Tibila areas. In addition the district has a potential for livestock production, tourist attraction sites.

**CHAPTER SEVEN**

**7. CONCLUSION AND RECOMMENDATIONS**

**7.1. Conclusion**

Jeju district is found in the north-eastern part Arsi Zone which has 26 peasant associations and three urban administrative units having total areas of 765.7km2. The historical name of the district is derived from Oromic word Jeju which means mean “ajai’iba” which means amazing or surprising. Of the total population of the district more than 94% are living in rural Areas engaged in agricultural activities. The district has different climatic condition ranging from moderately cool to moderately warm climatic condition. Such variation in climatic condition causes the district to experience moderate rainfall condition suitable for production of crops during rainy season especially on its high land areas.

The district has a potential for production of both perennial and annual crops. Meher is the largest production season both in area cultivation and production obtained. The major types of annual crops growing in the district are cereals, pulses and oil seeds. The total area cultivated was decreasing while the average productivity per hectare was increasing during the year under consideration. Regarding production and productivity the district agricultural and rural development motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizer, herbicides and pesticides. Hence, the amount of agricultural input distributed to the farmers was showing an increment. However, due to dalliance in time of provision and shortage of supply by district cooperative office causes the farm to use other channels.

On the other hand, suitable topographic condition of the district causes the district to have high potential for both modern and traditional irrigation. This reality brings most low land areas of the district found in the Awash River basing are being under irrigation. Using modern irrigation different cash crops like fruit, sugar cane, vegetables, chat, cotton, etc were cultivated by the farmers and government state farm called Merti agro-industry. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

The district has a potential for livestock rearing and poultry keeping. However, despite of the fact that the number of livestock population was increasing, the benefit that the farmers of the district is less due to traditional method of rearing and inadequate animal feeds. Moreover, even though bee keeping and fishery activities are one of the sources of additional income and food respectively for the farmers, the farmers of the district were not engage on these sectors of economy. Hence, they would have to be participating on these economic activities by using their maximum effort and available resources and opportunities in their localities. On the other hand,

Infrastructure developments like Road, Energy supply and Postal Service are under developed but, Telephone services (Mobile type of telecommunication is being under construction) The district has a road density of (for all weather roads) 0.14 km per km2 and 0.93 km per 1000 of people for all weather roads where as 0.16 km per km2 and 0.94 per 1000 of people for dry weather road.

So as to achieve universal primary education coverage, the district provides education in 45 primary schools in each rural kebeles for more than 20682 students. The number of female student was slightly increased from 41.94% in the year 1999 to 47.36% in the year 2007. Likewise the district has also three secondary school (9-10) and one preparatory schools. A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. Not only this but also the number of health professionals working in the health facilities were increasing. However, still the health coverage of the district was low as compared with WHO standard and other districts. Likewise, as one can be seen from the ratio of population to health personnel, there was a need for additional health personnel in the district to ensure quality health service delivery. For instance, the ratio of population to health officer, health extension workers were 44,831:1 for health officer, 5173:1 for nurses, 19,213:1 for technicians and 2634:1 for health extension workers respectively in the year 2007.

The district has a high potential of cultivable land that is suitable for the production of cereals, pulses and oil seed crops and endowed with mineral resource, energy resource etc. In addition the district has a potential for the production of cash like chat, fruit, cotton, vegetables, sugar cane, spices on potentially irrigable low land areas

**7.2. Recommendation**

To overcome the existing social and economic problems prevailing in the district the regional government, Local Government, Non-Governmental Organization as well as the surrounding community has to perform the following activities.

* Infrastructure development like road, water supply, energy supply and communication facilities are needed. So the concerned body has to develop these facilities.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural and rural development office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover; modern inputs have to be supply in sufficient amount and on time to farmers.
* The district has Potentially Irrigable Land that is used for the production of different cash crops. So, the regional government or the local government has to build modern irrigation in the district so as to benefit the country in general and the surrounding community in particular.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* So as to improve Livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, as compared with increasing livestock population, additional health facilities have to be constructed and the required health profession would be recruited for health facilities.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted.
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is very good. Instead the district education office have to focus on other factors like continuous teacher development (CDP), improving the educational level of teacher, etc.
* The health coverage of the district is at its low stage. To overcome these problems additional health facilities have to be constructed and additional health personnel has to be employed.
* Since the district has cultivable land and cash crop production potential, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.

PHYSICAL AND SOCIO-ECONOMIC PROFILE OF LIMONA BILBILO DISTRICT 2011AND 2012 E.C

**CHAPTER ONE**

**1. Introduction**

**Back Ground of** Lemu-Bilbilo is one of the 27 districts of Arsi zone. The name of Lemu-Bilbilo district was derived from two different words known as “Lemu” and “Bilbilo”. The word Lemu came from one of the Oromo sub-clans Lemu that is the first settler of the area. On the other hand, the word Bilbilo is the name of place where the Oromo sub-clan Lemu first dominantly settled. Formerly, Lemu and Bilbilo as the district included the current Inkolo Wabe district and Bekoji town Administrative units. However, Bekoji town (in 1997) and Inkolo Wabe district (in 1999) were established as indepe ndent administrative units.

Currently, Lemu-Bilbilo district has divided into 32 kebeles of which 25 are Peasant Associations while 7 are urban administrative kebeles. Bekoji town is the capital city of the district. It is located at 231 km from Regional Capital City Finfinne and 56 km from zonal capital Asela Town.

The objective of preparing this profile is to assess the natural resource base and socio-economic situation of the Lemu and Bilbilo district that reflect the existing situation, development problems and the available opportunities for its development. The data used to organize this document is collected from the district and zonal level sectoral departments, 1999 census result report and other related documents available in the office.

Different organizations can use different calendar year. Consequently, in this document, **only Ethiopian Calendar (E.C)** is used. In Ethiopia year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

Concerning problem faced lack of accurate and reliable data; untimely response from the concerned bodies due to low attention for data is some of the major problems faced during collection and organization of the document. Moreover, a regular boundary change among the districts and peasant associations also has become obstacle to obtain the required data and complete the document on time.

The paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, land use, soil, vegetation and wild life. The second chapter focused on population size and Distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and the seventh chapter deals with Social Service and Infrastructure Condition, Development Activities, Problems and Potentialities, and Conclusions and Recommendations respectively.

**CHAPTER TWO**

**2. Physical Setting and Location and Area**

**Location;-** Lemu-Bilbilo is one of the administrative units of Arsi Zone. Astronomically, it is located between 6051’55’’N-70 37’35’’N Latitude and 39009’45’’E-390 24’26’’E Longitude. It shares boundary line with Inkolo Wabe district in the east and south east, Shirka district in the East, Munesa district in the west direction, Digelun Tijo district in the North and north east and West Arsi Zone in the south direction (Fig.1). Having the total area of 1196.6 Km2, it shares 5.6 %of the total area of Arsi Zone.

**2.1 Geology, Relief, Drainage and Climate**

**Geology:** The present landform of the district is the result of the past geological events. Most of its southern, south eastern, north eastern, western and north western border of the district is covered by lower part of Chilalo formation. Its western central part, western border that the district share boundary line with Munessa district is covered by upper part of Chilalo formation while its most northern part is covered by Nazeret series. All these formation are during Cenozoic era of quaternary period.

**Relief and Drainage:** The altitude of the district is 2500-4245 meters above the sea level. The lowest place of the district is found in Lagena Kula Jabi area (2500m) while the highest place is located in Kaka massif (4245m). Due to its location, the district has high network river systems. The major permanent rivers of the district are Warega, Sirba, Dima, Ketar, Guracho, Angera, Camari, Qacama Guda and Qacama Tika. On the other hand, the major seasonal streams are Boru, Gora, Sadoye, Fulsha and Ferso. Generally, the district has high potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate:** Due to its altitudinal location, the climatic condition of the district is dominantly cool with temperature of between 100C-150C. This type of climate condition covers about 82% of the total area of the district. The remaining ones are cool/cold with the temperature less than 10oC cover for 18%. Hence, the dominant type of climatic condition of the district is Dega agro-ecological zone. The mean annual rainfall is 1000-1200mm and the average rainy days are about 160 days in a year. The rainfall pattern is bi-modal, which are short rainy season (Belg from February to April) and summer or long rainy season (Meher from June to September).

**2.3. Land use, Soil, Vegetation and Wild life**

**Land use and Cover**: Land use indicates the classification of the land of an area under different types of land uses. Types of land use are not static, but changes from time to time depending on socio-economic change. For instance, grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing. In the year 2011 when we see land resources by use in hectors under crops/annual and perennial crops are 59,254, Pasture land /Grazing land are 16781, Forest (natural forest, woodland, shrub land, and man-made forests) are 7999 hectare, degraded area /barren land are 99 and arable land are 65,911 hectors.

**Soil:** The major types of soil of the district are: clay (20%), sandy (3%), silt (69%) and loam (8%) covered the area of the district.

**Vegetation:** The vegetation including Afro alpine and sub Afro alpine account for 17,521 hectares, Coniferous forest 1,267.1 hectares, are the main vegetation type in the district. There are also government protected forests in the district like Chilalo Galema forest, Chalelaka forest, Damota forest, Bekoji and Lemu forest. All are manmade forest resources of the district. There are also about 7515 hectares of community forest in the district.

**Wild animals:** The major wild animals are Mountain Nyala, Red Fox, Minilik Bush Buck, Columbus Monkey, Monkey and Apes. There is no wild life reserve area in the district.

**CHAPTER THREE**

**3.** **SOCIO ECONOMIC CONDITIONS**

**3.1 Population Size and Growth**

According to the 1999 census results, in the year 2012 Lemu Bilbilo district had 230729 populations. From the total population of the district by sex, Male 114001 and Female 116729  are living both in rural and urban areas. From the total population of the district, only 4 % is living in urban areas while more than 96% was living in rural areas in the indicated year. Of the total population, females accounted for 50% (Which is 51% for urban and50.5% for rural).

**Table: 2.1. Population Distribution by Urban, Rural and Sex for Lemu Bilbilo District**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area | **Rural** | | | **Urban** | | | **Total** | | |
| Male | Female | **Total** | Male | Female | **Total** | **Male** | **Female** | **Total** |
| 2011 | 106,522 | 108,955 | **215477** | 4,485 | 4,707 | **9,192** | **111,007** | **113,662** | **224,669** |
| 2012 | 109,328 | 111,825 | **221153** | 4,673 | 4,904 | **9576** | **114,001** | **116,729** | **230729** |

Source: Projected based on 1999 CSA, Report.

**Age and Sex Distribution;-**According to 1999 census report in the year 2012 from the total population young age population (0-14) are accounts 50 % and old age population (65+) are accounts 3 %. From the total population in the district economically active populations (age 15-64) are accounts 46%. The dependency ratio of the district is 116 % (113% for Rural and 61% for urban) which indicates 116 people are dependent on 100 economically active populations.

**Table: 2.2. Population Size of Rural and Urban by Wider Age Group Classification (2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year/Sex** | **Male** | | **Female** | | **Total** |
| Number | % | Number | % | Number |
| **Rural** | **109,328** | **49** | **111,826** | **51** | **221,153** |
| 0-14 | 56,738 | 50 | 56,238 | 50 | 112,976 |
| 15-64 | 48,411 | 48 | 52,479 | 52 | 100,889 |
| 65+ | 4,179 | 57 | 3,109 | 43 | 7,288 |
| **Urban** | **4,673** | 49 | **4,904** | 51 | **9,576** |
| 0-14 | 1,494 | 47 | 1,696 | 53 | **3,189** |
| 15-64 | 3,040 | 50 | 3,033 | 50 | 6,073 |
| 65+ | 139 | 44 | 175 | 56 | 314 |
| ***Total*** | **114,001** |  | **116,730** |  | **230,729** |
| **0-14** | **58,232** |  | **57,934** |  | **116,165** |
| **15-64** | **51,451** |  | **55,512** |  | **106,962** |
| **65+** | **4,318** |  | **3,284** |  | **7,602** |

Source: projected based on 1999 population and Housing census.

**Population Density and Rural settlement;-** indicate the relationship between population and resources (social service, economic and land resources). Regarding population land resource ratio, Lemu-Bilbilo district had a crude density of 0.005 Person/km2 in 0.2 and 0.010 persons per km2 . Concerning the settlement pattern of the district; the rural parts are characterized by cluster type of settlement.

**School Age population;-**  are very important indicator to decide the number of schools and class rooms to be constructed and number of teachers and other school facilities needed in the future. In population where fertility is high, the school age population and the demand for education and education facilities are accordingly high.

Accordingly, the number of school age population of the district was increasing from **94558** students to **97113** (49.8% female) students between the years 2011 to 2012. These groups of population account for **97** % of the total population of the districts which is almost near to learned of the total population of the district.

As far as different school age population was concerned the age of 4-6, 7-14 and 15-18 was increased from 23536, 23536 and 19928 to 24170(49.5% female) , 11968 (49.5% female) .and 10305 (50.3% female%) respectively between the years 2011 to 2012.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth center, etc.

**3.2. Crop Production**

Bimodal pattern of rain rainfall gives a wide opportunity for the district to produce different types the crops and use the same land twice a year that is for Meher and Belg***.*** However, Meher is the largest season in terms both cultivated land and volume of crop production. For instance, in the year 2011/2012, it accounted for 79% of total cultivated land and 99.3% of production obtained.

The major annual crops grown in the district are cereals, pulses and oil seeds. Barley, Wheat and Teff From cereal crops and horse beans and field peas from pulses are the most widely grown types of crops. Likewise, linseeds and rape seeds are the most widely grown types of oilseeds in the district. In addition, the district is known in producing some cash crops like root crops, vegetables, tomato and onion etc. both during rainy season and off season.

In the Meher season, the total cultivated land was decreased from 57054 to 18036 hectares while the production obtained was increased from 1,950,378 quintals to 1538873.5 quintals between the year 2011 and 2012. These give an average productivity per hectares for all crops to be increased from 22.8 quintals to 89.3 quintals during the year under consideration.

By crop type, from cereal crops, maize with 45 and 48.4 quintal per hectare followed by wheat with 7.09 and 377.3 quintals and Barley with 39.7 and 39.3 quintals per hectare is the most productive while horse beans with 24.3 and 30.8 quintals per hectare and peas with 21.8 and 27.23 from pulses and oil seeds with 16.5 and 18.7 quintals per hectares. from oilseeds are the most productive crops. Lentil with 16.5 and 18.7 quintals per hectare is the least productive in 2011 and 2012 respectively. In size of area cultivation and production wheat and barley is the most product.

Likewise, in Belg season, 976 hectares of land cultivated in the year 2011 this figure increased to 18485 hectares while the production obtained was also increased from 24487quintals to 183837 quintals during the year under the above consideration. By crop type, wheat and barley was the most widely grown types of crops from cereals while Peas and horse beans are the most widely grown crops from pulses. Likewise, these give an average productivity to be decreased from of 26.5 quintals per hectares to 21.6 quintals per hectares in the production year under consideration.

**Table: 3.1. Area Cultivated and Production obtained for Private Peasant Holdings by Seasons (2011\_2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2011 Meher** | | **2012 Meher** | | **2011Belg** | | **2012 Belg** | |
| **Area(hect)** | **Prod(Qunt)** | **Area(hect** | **Prod(Qunt** | **Area(hect)** | **Prod(Qunt)** | **Area(hect)** | **Prod(Qunt** |
| **Cereals** | **48,910.50** | **1,751,563.00** | **11,208.50** | **1,381,562.00** | **976.00** | **24,487.00** | **18,169.00** | **178,566.00** |
| Wheat | 25519.5 | 926769 | 2830 | 1067800 | 87.5 | 2275 | 7387 | 91169 |
| Teff | 2400 | 51600 | 1179.5 | 20051.5 | 0 | 0 | 84 | 1014 |
| Barley | 20094 | 733459 | 5951 | 233922.5 | 888.5 | 22212 | 10422 | 84961 |
| Maize | 774 | 36353 | 1220 | 59144 | 0 | 0 | 0 | 0 |
| Oats | 123 | 3382 | 28 | 644 | 0 | 0 | 276 | 1422 |
| **Pulses** | **3837.5** | **116353** | **4954.5** | **122283.5** | **0** | **0** | **316.00** | **5,271.00** |
| Horse beans | 2711 | 86241 | 2908.5 | 89757.5 | 0 | 0 | 40 | 560 |
| Peas | 1036.5 | 28582 | 1953 | 31374 | 0 | 0 | 264 | 4573 |
| Lentils | 90 | 1530 | 93 | 1152 | 0 | 0 | 12 | 138 |
| **Oilseeds** | **4306** | **82462** | **1873** | **35028** | 0 | 0 | **0** | **0** |
| Linseed | 3883 | 71887 | 1873 | 35028 | 0 | 0 | 0 | 0 |
| Ground nuts | 423 | 10575 | 0 | 0 | **0** | **0** | 0 | 0 |
| **Grand Total** | **57054** | **1,950378** | **18036** | **1538873.5** | **976** | **24487** | **18485** | **183837** |

Source: Lemu Bilbilo district Agriculture

**Irrigation;-**Major crops were produced by using different types of irrigation on 1,971 Hectares of land

and generate Output 352800 quintals in 2011 E.C. In general in 2012 E.C productivity of crops of per hectare using traditional method of cultivation is on average around 184 quintals and modern irrigation 19.2 per Quintals in the district. While average productivity per hectare generated by using pump and Hand well system is 173.8 and 188.25 quintals respectively and There were also 51 cooperatives.in all types of irrigation mechanisms about 6109 (M=4565, F=1544) farmers were engaged.

**Table A. Shows irrigation type, cultivated land, productivity and farmers participate in 2011 and 2012 E.C.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Irrigation system** | **2011 E.C** | | **2012 E.C** | |
| **Area( Hectares)** | **Production (Quintals)** | **Area (Hectares)** | **Production (Quintals)** |
| Traditional | 1200 | 206400 | 1105 | 203,355 |
| Modern | 552 | 110400 | 546 | 119,715 |
| pump | 200 | 33000 | 198 | 34,413 |
| Hund well | 4 | 600 | 4 | 753 |
| Lake | 15 | 2400 | 12 | 1991 |
| ***Total*** | ***1,971*** | ***352,800*** | ***1,865*** | ***360,227*** |

Source: District Irrigation Development Authority office

Besides, for the purpose of the above production and productivity farmers were utilized various agricultural inputs such as different fertilizers (0 kg DAP and 168 Kg Urea), improved seeds (15662.92 quintals) and NPS (909 kg).

**Livestock, Poultry, Bee-keeping and Fishery**

**Livestock:** Lemu and Bilbilo district is famous in livestock resources. Cattle, sheep, goats, horses, mules and Donkeys are the major livestock population found in the district. From the total livestock population found in the district, cattle, sheep and goats account for about 33.9% and 38.2% and 4.2 3.7% during the year 2012 while in the year 2011 it was-35.2%, 36.6% and 3.9 %. From these the number of the livestock such as cattle is also the number of goats and sheep are decrese..The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Poultry:**Poultry production is one of the important sources of family income and food in the district. Accordingly, in the year 2011 there were 85966 poultry populations in the district but in the year 2012 the numbers of poultry were decreased to 81100 showing as decrement by 5.6 %. .

**Table: 3.2. Distribution of Livestock and Poultry (2011 -2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | **2011** | | **2012** | |
| **number** | **%** | **number** | % |
| 1 | Live Stock (total) | 819519 | **100** | 776618 | **100** |
| 2 | Cattle | 288259 | 35.2 | 263450 | 33.9 |
| 3 | Sheep | 300,140 | 36.6 | 297110 | 38.2 |
| 4 | Goat | 32,450 | 3.9 | 29110 | 3.7 |
| 5 | Donkey | 46,670 | 5.69 | 43693 | 5.6 |
| 6 | Horses | 60,634 | 7.4 | 58574 | 7.5 |
| 7 | Mules | 5,400 | 0.65 | 3581 | 0.46 |
| 8 | **poultry** | **85966** | **10.5** | **81100** | **10.44** |

Source: Lemu Bilbilo District Agriculture and Rural Development Office

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family. So as to benefit from this sector of economy, the farmer of the district uses modern and traditional bee hives for producing honey. Accordingly, the number of traditional bee hives was increased from 6645 to 7645 between the year 2011 and 2012 and the number of modern bee hives was increased from 1269 to 2269 in the above years .The total number of Modern beehives including Transitional beehives .In the case of, Using of herbicides and insecticides are the main problems in bee farming. Accordingly to the year 2012 the weather of dry season the traditional and modern bee hives increasing.

**Table: 3.3. Number of Traditional and Modern Bee-Keeping Hives**

|  |  |  |
| --- | --- | --- |
| **Year** | **Number of Bee hives** | |
| **Traditional** | **Modern** |
| 2011 | 6645 | 1269 |
| 2012 | 7645 | 2269 |

Source: Lemu Bilbilo district agriculture and Rural Development office

**Fishery:**Sincethe district has no large water bodies like rivers, lakes and ponds that have potential for fishery production; there is no fishery activity in the district.

**Agricultural inputs and Infrastructures**

**Agricultural Service Cooperatives:** There were 26 general agricultural service cooperatives with 10,185 member farmers in the year 2011. These cooperatives have a capital of 6,442,254 Ethiopian birr of which 40.3 % is fixed. The cooperatives are also engaged on delivering different services such as agricultural input on credit basis for local peasants. On the other hand, there were 134 cooperatives who engaged on different agricultural activities. These cooperatives have 32,781 members and 56,164,506.00birr capitals.

**Table: 3.4. Number of Cooperatives and Their Capital in the year 2011/2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/ Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Primary co-operative | 80 | 16,997 | 4,385 | 21,582 | 9,817,697 | 21,485,583 | 31,303,,280 |
| General  service cooperatives | 26 | 9,034 | 1,151 | 10,185 | 3,847,328 | 2,594,926 | 6,442,254 |
| Milk and milk Product producer | 5 | 329 | 77 | 406 | 1,287,433 | 1,003,251 | 2,290,684 |
| Consumers | 8 | 480 | 134 | 614 | 1,300,600 | 1,200,000 | 2,500,600 |
| Saving and credit | 28 | 5682 | 2856 | 8540 | 1,453,672 | 15,400,000 | 16,853,672 |
| Improved seed | 13 | 1472 | 1067 | 1639 | 1,928,664 | 1,287,606 | 3,216,270 |
| **Total** | **160** | **33,994** | **9,670** | **42,966** | **19,635,394** | **42,971,366** | **62,606,760** |

Source: Lemu Bilbilo Cooperative Office

On the other hand there were 78 Primary cooperatives with 4,969,712 member farmers in the year 2012. These cooperatives have a capital of 46,119,378 Ethiopian birr of which 91.7 % is fixed. The cooperatives are also engaged on delivering different services such as agricultural input on credit basis for local peasants.

**Table: 3.4. Number of Cooperatives and Their Capital in the year 2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/ Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Union |  |  |  |  |  |  |  |
| Primary co-operative | 78 | 13107 | 2129 | 15236 | 4969712 | 41149666 | 46,119,378 |
| General  service cooperatives | 40 | 10401 | 1263 | 11664 | 3,181,420 | 35,376,791 | 38,558,211 |
| Consumers | 7 | 421 | 118 | 539 | 246,218 | 1,949,333 | 2,195,551 |
| Saving and credit | 21 | 1845 | 661 | 2506 | 253,914 | 2,825,555 | 3,079,469 |
| Dairy | 10 | 440 | 87 | 527 | 1,288,160 | 997,987, | 2,286,147 |
| **Total** | **156** | **26,214** | **4,258** | **30,472** | **9,939,424** | **82,299,332** | **92,238,756** |

Source: Lemu Bilbilo Cooperative Office

**Fertilizer and Improved Seeds utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural technologies to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, between the year 2011 and 2012, the amount of chemical fertilizer was increased from 57,956 quintals to 65,100 quintals while the amount of different improved seeds also increased from 13,850 quintals to ­­­­­­­­­­­­­­ 15,170 quintals. However, the amount of herbicides was increased from 22,932 to 35,578 liters during the indicated years. The amount of improved seeds distributed to the farmers was due to some of the farmers get through other channel and from model farmers informally. Moreover, these figures may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

**Table: 3.5. Amounts of Agricultural Inputs Distribute to Farmers by type (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2011** | **2012** |
| Amount(qt.) | Amount(qt.) |
| Fertilizers | **57,956** | **65,100** |
| DAP (qt.) | 456 | 0 |
| Urea (qt.) | 7300 | 8100 |
| NPSB | 49500 | 57000 |
| NPSZn | 700 | 0 |
| **Improved Seeds(qt.)** | **13,850** | **15,170** |
| Wheat | 8690 | 8800 |
| Barley | 5120 | 6120 |
| Maize | 40 | 250 |
| Horticultural Seeds |  |  |
| **Herbicides** | **28,821** | **48,792** |
| Herbicides (lit.) | 22,932 | 35,578 |
| Pesticides | 5,139 | 10,070 |
| Liquid(lit) | 750 | 3,144 |

Sou**rce:** Lemu Bilbilo district Agriculture and Rural Development Office**.**

**Development Agents and Farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Accordingly, the number of farmers training centers (FTCs) was 25 between the year 2011 and 2012. On the other hand, the number of development agents which was 47 in the year 2011 .There was also 47 in the year 2012. They can help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection. Hence, additional development agents and farmers training center would be needed in the district.

**Table: 3.6. Number of Development Agents and FTC (2011-2012).**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 25 | 25 |
| Number of Development Agents | 47 | 47 |
| Number of beneficiaries | 22,417 | 22,417 |

Source: Lemu Bilbilo District Agricultural Office

**Agricultural Calendar:**It is well known thatthe farmers of the Zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farming activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Lemu and Bilbilo district is shown in table below.

**Table: 3.7. Agricultural Calendar**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | February-June | January-March |
| 2 | Planting (Sowing) | June –July | March-April |
| 3 | Vegetative stage | July-August | April-May |
| 4 | Growing stage | August-September | April-May |
| 5 | Flowering Stage | September-October | May-June |
| 6 | Seed setting | October- November | June-July |
| 7 | Harvesting | December-January | July-August |
| 8 | Threshing | January-February | August-September |

Source: Lemu Bilbilo district Agriculture and Rural Development Office.

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Accordingly, there were one B-type clinics since 2011 while the number of health post was eight between the year 2011 and 2012.

On the other hand, so as to provide quality health service, the number of health personnel working in the

health facilities was increased from 22 to 26 between the year 2011 and 2012.

**Table: 3.8. Distribution of Lemu Bilbilo district Animal Health Infrastructure (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Veterinary Personnel | **31** | **32** |
| Veterinarian | **5** | **6** |
| Animal Health Assistance | 22 | 26 |
| Animal health Technician | 4 | 0 |
| **Health Infrastructure** | **9** | **9** |
| Clinic (B-Type) | 1 | 1 |
| Health Posts | 8 | 8 |

Source: Lemu Bilbilo District Agriculture and Rural Development Office.

**Method of Maintaining Soil Fertility and soil Conservation**

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale (burning), fallowing and using crop residuewhile the modern one is the using of artificial fertilizer and compost (organic fertilizers).

**Methods for Soil Conservation:** Contour plough and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforest ion are modern way of soil conservation in the district.

**Agricultural Constraints**

**Drought:** In the district there was no any households affected by drought.

**Crop Pests and disease:** The major crops pests in the district are Aphids while the major diseases are rust and smut. Weeds and rain fall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and postharvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases:** Black-leg,Anthrax, Fasciolosis ,Trips, Salmonellae, New castle, Chronic Respiratory diseases and External and internal parasites, Black leg diseases and Anthrax are the major livestock and poultry disease in the district. Accordingly, between 2011 and 2012 the total number of animals provided with different types of vaccination was increased from 51,144 to 312,116 however, the number of animal get treatment was also increased from 148,954 to 425,750 during the year under consideration.

**Table: 3.9. Number of Animals got Health Services by Type of Service Given in 2011 & 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Typeof service** | **2011** |  | **2012** |  |
| **Vaccination** | **51,144** |  | **312,116** |  |
| Blackleg | 11170 |  | 48,550 |  |
| Hemorrhagic Septicemia | 0 |  | 0 |  |
| Anthrax | 45,790 |  | 47,300 |  |
| others | 184 |  | 216,266 |  |
| **Treatment** | **148,954** |  | **425,794** |  |
| External Parasites | 51,480 |  | 172,750 |  |
| Internal Parasites | 89918 |  | 215,230 |  |
| operation | 7556 |  | 1,229 |  |
| trypanosomiasis | 0 |  | 36,585 |  |

Source: Lemu Bilbilo district livestock & Poultry

**3.3 Education**

**Kindergarten**:According to the data obtained from Statistical Abstract of the district. In 2011 and 2012 there was no Kindergarten school.

**Primary Schools:**Between the year 2011 and 2012, the number of government primary school were 61 while the number of students enrolled to these schools were increase from 42,888(49.4% female) to 42,040(49.8% female) according to this the students number became decreased from the year 2011 to 2012. During the same year, the number of teachers teaches at this level was increased from 847 (43.2% females) to 873 (44.6% females) teachers while the number of class-rooms were 873. The student to teacher’s ratio was improved 1:51 and 1:48,while student to class-room ratio was improved from 1:49 and 1:48 In the same of the above years..

**Secondary education (9-12) -** in the districtthe number Senior Secondary (9-12) school were six. The number of students enrolled to these schools was 1898 (47.4 % females) to 2039 (46.7% females) students between the year 2011and 2012. During the indicated year, the number of teachers were 98 and 107while the number of class-rooms were 35. .These gives student to teacher ratio was 1:19 while student to class-room ratio was 1:54 and 1:58 between the year 2011 and 2012. There was one preparatory school in the year 2011-2012 in the district. The number of students as shown in the table below.

**TVET:** There were no any governmental or non-governmental technical and vocational education schools in the district.

**Table: 4.1. Number of Kindergarten, Primary School (1-8) and Secondary School with Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Years** | **Primary school(1-8)** | | | | **Secondary School(9-12)** | | | |
| **Number of school** | **Male** | **Female** | **Total** | **Number of school** | **Male** | **Female** | **total** |
| 2012 | 61 | 21,077 | 20,963 | 42,040 | 6 | 1,085 | 954 | 2,039 |
| 2011 | 61 | 21,666 | 21,222 | 42,888 | 6 | 998 | 900 | 1898 |

Source: Lemu Bilbilo District Education Office

**Education Quality:**The quality of education can be measured from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma level) to teach primary level are 632 (51.7) % females) and BA/BSC 207(19.3% females) from the total teachers teaching this level in the year 2012. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence we have to look into other factors mainly Teacher Development program (TDP). Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above for secondary school), the number of Grade 12 teachers was decreased from 25 to11 in primary school (1-8). Such an improvement of the professional level of teachers plays a significant role in improving the quality of education. So as we seen from the given information Education office of the district expected to do more to improve the quality of education by increasing the needed variables of education quality.

**Table: 4.2. Number of Teachers by Level of Education and School (2011-2012)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of School** | **2011** | | | | **2012** | | |  |  | | |  | | | |
|  | **Male** | **female** | | **Total** | **Male** | **female** | **Total** |  | |  | | |  | | | |
| **Primary School(1-8)** | | | | | | | |  | | | | | | |
| Grade 12&below | 15 | 10 | 25 | | 3 | 8 | 11 |
| TTI | 10 | 12 | 22 | | 8 | 15 | 23 |  | | |  | | |
| Diploma | 320 | 304 | 624 | | 305 | 327 | 632 |
| BA/BSC | 136 | 40 | 176 | | 167 | 40 | 207 |  | | | | | | |
| **Total** | **481** | **366** | **847** | | **483** | **390** | **873** |
| **Secondary School(9-12)** | | | | | | | |  | | | | | | |
| BA/BSC | 68 | 15 | 83 | | 72 | 19 | 91 |  | | |  | | | | | | |
| M.A | 12 | 3 | 15 | | **13** | **3** | **16** |  | | | | | | |
| **Total** | **80** | **18** | **98** | | **85** | **22** | **107** |

**3.4. Health**

**Health Institution:** The number of government health facilities was increased from 34(27 health post ,7 health center )to 35(Seven health center,27 health post and one clinic) between the year 2011 and 2012. During the same years the number of private health facilities was increased from 23 to 28. The ratio of population to government health was 29,949:1 for health center, and 8,063:1 for health post. This indicates that the health coverage of the district is low as compared with WHO standards (25, 000:1 for health center, 5000:1 for health post) in the year 2010.

**Health Personnel:**so as to improve the quality of health service having the required health professional is very important. In view of this, the district health office increase the number of health professional working in the health facilities from 145 to 171 between the year 2011and 2012.By type of profession, there were 11 health officers, 70 nurses, 9 lap technicians, 9 pharmacy technicians,6 Sanitarian and 66 health extension workers during the year 2012. These gives the ratio of health personnel was 20,964:1 for health officer, 4,991:1 for nurses, 23,293:1 for lap. Technicians and 4,110:1 for health extension worker and 17,470:1 for pharmacy. for more information see the table below.

**Table: 4.3. Number of Health Institution and Health Profession by owner ship (2011 \_ 2012).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| Gov | Non-Gov | Gov. | Non-Gov. |
| **Health Institution** |  |  |  |  |
| Health Center | 7 | 0 | 7 | 0 |
| Clinic | 1 | 28 | 1 | 28 |
| Health Post | 27 | 0 | 27 | 0 |
| Rural Drug Vender | 1 | 1 | 7 | 1 |
| **Health Profession** |  |  |  |  |
| Health officer | 11 | 2 | 11 | 2 |
| Nurse | 56 | 32 | 70 | 32 |
| Health Assistance | 0 | 2 | 0 | 0 |
| Pharmacy technician | 11 | 6 | 9 | 8 |
| Lab. technician | 8 | 0 | 9 | 2 |
| Sanitarian | 3 | 0 | 6 | 0 |
| Health Extension Workers | 56 | 0 | 66 | 0 |

Source: Lemu Bilbilo District Health Office

In the year 2011 and 2012, the number of women gets counseling for HIV/AIDS 19,214 and 21,158 and all of them were tested for HIV/AIDS out of which only 63 and 200 living with HIV/AIDS. During the same year, there was two and five women gets treatment as patient. This data indicated that, currently the trends of diseases like HIV were in decreasing trends because of awareness creation through community conversation program. In the year 2012 number of people treated for HIV /AIDs 73 and number of pregnant tested for HIV 13,000.

**Causes of Morbidity**: According to the data obtained from district health office, the highest prevalent disease was pneumonia with18%with AFI with 17 % followed by ART with10 % and Trauma with 9% from the total population treated in the year 2011/12. For detail see table below.

**Table: 4.4. Major Causes of Morbidity and Mortality in the District in the year 2011 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **2011** | | |
| Types of Diseases | Patient treated | % |
| 1 | pneumonia | 479 | 18 |
| 2 | Acute Febrile illness(AFI ) | 440 | 17 |
| 3 | Respiratory tract infection(RTI) | 208 | 8 |
| 4 | Trauma | 236 | 9 |
| 5 | Diarrhea/noon blood/ | 193 | 7 |
| 6 | Typhoid fever | 134 | 5 |
| 7 | Unary tract infection | 208 | 8 |
| 8 | Upper respiratory | 263 | 10 |
| 9 | helminthes | 130 | 5 |
| 10 | dyspepsia | 304 | 11 |
| **Total** |  | **2595** |  |

**Source**: Lemu Bilbilo District Health Office

**Harmful Traditional Practices:**Like the Zone as a whole, there are many harmful traditional practices that are being widely practiced in district. Among these, raping, abduction*,* female circumcision and early marriage can be mentioned as an example. But currently due to an effort made by government and local elders and community the rate of practice has been decreased. On the other hand, there are also many useful traditional practices like Ikub, Idir, Debo, Jarsuma, etc that should be appreciated and also the family of the Farmer if there have no plaguing farm they made unity and work together and lend money from the Government are being used by the people of the district.

**Women and Children Socio-economic Issue**

**Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.-

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 7341 and 4188 in the year 2011 while their number was decreased to 4188 and 2955 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 3795 and 2146 in the year 2011 and 2012. while those who attended delivery service by health extension works was 51,687 in the year 2011 and 13,647 in the year 2012 .Though such improvement was observed, still there were many women attended delivery traditional at their home due to economic problem, lack of access road and lack availability of health facilities at nearby.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Lemu Bilbilo district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 6421 to 6422 between the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was 12674 and 12674 during the year, under Family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s

are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was 36 in the year 2011 and 2012. Moreover, the number of women who are member of woreda cabinet was 12 during the year.

**Table: 4.5 Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | **2011** | **2012** |
| 1 | **Access to save delivery service** |  |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 4669 | 1401 |
|  | Women's used PNC /Postnatal care/services | Number | 1807 | 793 |
|  | Women’s assisted delivery | Number | 2556 | 495 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 3795 | 2146 |
|  | Deliveries attended by HEWs | Number | 36363 | 3703 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 6,421 | 6,422 |
|  | NPW TT2 | Number | 12,674 | 12,674 |
| **3** | **Women elected at different level** |  |  |  |
|  | Member of regional council | number | 2 | 2 |
|  | Member of woreda council | number | 36 | 36 |
|  | Member of woreda cabinet | number | 12 | 12 |

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Diarrhea, Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. In the year 2011, That is why the maternal mortality of the nation to be as high as 682/100,000 women as the data obtained from 2011 demographic health survey indicated.

On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 34,024 in the year 2011 to 34,024 in the year 2012. Though the above figure indicates the numbers of children get different vaccination, the number of children who get full vaccination 6,206 and 6,206 in the year 2011 and 2012 which accounts for 18.2% from total children who get vaccination.

**Table: 4.6. Number of Children Vaccinated by year and Type of Vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 7171 | 7171 |
| Measles | 6,340 | 6,340 |
| DPT1 | 7,384 | 7,384 |
| DPT3 | 6,923 | 6,923 |
| fully | 6,206 | 6,206 |
| **Total** | **34,024** | **34,024** |

Source: Lemu Bilbilo district health office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 161 children to be orphan in the year 2011.These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 227 in the year 2012.This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also 406 children with different types of disability in the district who are in most cases not benefited from social services and the economy to in the district. From the total disabled children, 33.9 % is female.

Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Asphyxia-ABA-NR, Sepsis, Preterm, Tetanus and infection of skin.

**Table: 4.7. Children socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| **1** | Number of Orphan and Vulnerable children | Number | 161 | 227 |
| 2 | Full immunization | Number | 6544 | 6698 |
| 3 | Disabled children | Number | 406 | 406 |
|  | Male | Number | 268 | 268 |
|  | Female | Number | 138 | 138 |

Source: District Health Office

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 26526 and 23993 in the year 2011 and 2012 from which only 89% and 86% of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, the total number of school in the district 100 % was access to toilet facilities. However, of the total school in the district, only 8.3% of school was access to potable water supply facilities.

**Table: 4.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | ***Description of activities*** | **Health center** | | **Health post** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of health institutions in the district | 7 | 7 | 27 | 27 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 7 |  |  |  |
| 3 | Number of health institution access to water supply | 7 |  |  |  |
| 4 | Number of health institution access to toilet facilities | 7 | 7 | 27 | 27 |
| 5 | Number of Health institution access to dry waste disposal facilities | 7 |  |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 7 | 7 | 0 | 0 |

Source: - District Health Office

**Table: 4.9 School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | **Primary school** | | **Secondary school** | |
|  |  | **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 61 | 61 | 6 | 6 |
| 2 | Number of school access to water supply | 9 | 9 | 5 | 5 |
| 3 | Number of school having toilet | 61 | 61 | 6 | 6 |

Source: - District Education Office

**3.5 Mineral Resources and Industry**

**Mining:** Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from Arsi Zone office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as Whitestone for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rock quarrying and pottery making mining activities by local communities in the district.

**Industry*:*** Similar to other parts of the Zone, industrial development is at its infant stage in Lemuna-Bilbilo district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned. There are also no medium scale industrial establishments in the district. In the year 1999 there were about 112 permanently licensed grain mills industries.

**3.6. Trade Activities and Tourism**

**Trade:** Concerning the number of traders, no data available. Regarding tradable items and cash crops production activities, the district is known in the production of linseeds, Neug, rape seeds, etc. In addition, the district is known by exportable items like hide and skin.

**Cash Crops and Exportable Items production:** There are different types of cash crops and exportable items produced in the districts. Small local traders in the district purchase crops and sent to the central market. However in the year 2012 there is no data collected about this point.

**Tourism and Its Amenities:**Due to lack of promotion and tourist amenities like standard Hotels, and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Lemu and Bilbilo district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by district culture and tourism Office. These are Kaka Mountain, Galema massif, Red fox, Mountain Nyala, Haji Nasir and Zemzema Dilala’a traditional worshipping place are mentioned as an example. All of them are under developed.

**3.7. Finance and Financial Institutions**

**Financial Institution:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the transformation the economy of the district. Accordingly, the district has one governmental bank institutions in Meraro town. In the year 2011 and 2012 the number of saving and Credit Associations was 28 and 29 in the above year respectively having a member of 1497(38.6% are female) and having a member of 1790(38.5 % are female) respectively. These cooperatives were providing saving and credit service to its member farmers in their localities which have a significant impact on improving the lives of the farmers.

**Table: 3.11. Saving and Credit Association and Beneficiaries**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Place of Residence | **2011** | | | | | | | **2012** | | | | | | | |
| **Number of Association** | **Number of farmers Service Cooperatives** | | | **Number of their beneficiaries** | | | **Number of Association** | **Number of farmers Service Cooperatives** | | | | **Number of their beneficiaries** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | | **Male** | **Female** | **Total** |
| Rural | 22 | 450 | 301 | **751** | 2392 | 3289 | **5681** | 23 | 168 | 159 | **327** | 2170 | | 1225 | **3395** |
| Urban | 6 | 1447 | 320 | **1767** | 3147 | 3596 | **6743** | 6 | 750 | 420 | **1170** | 2480 | | 3000 | **5480** |
| Total | **28** | **1897** | **621** | **2518** | **5539** | **6885** | **12424** | **29** | **918** | **579** | **1497** | **4650** | | **4225** | **8875** |

Source: Lemu Bilbilo district cooperative office

**Annual Budget allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount which accounts for more than 85 % of the total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low. Between the year 2011 and 2012, the total annual budget of the district was increased from more than 141 million birr to 150 million birr showing an increment by 6.1%. Moreover, in addition to block grant given by the central regional government, revenue collected in the previous year was allocated for the district for constructing additional infrastructure development.

**Table: 3.12. Annual budget Allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 141,626,596 |  |
| 2012 | 150,970,547 | 6.1 |

Source: Lemu Bilbilo district Finance and Economic Development Office

**Revenue:** Between the year 2011 and 2012, the total annual revenue collected by the district was increased from 21.8 million birr to 24.6 million birr. This indicates the revenue collected was showing an increment between the years under consideration. The main sources of revenue in the district are Direct tax, indirect tax and non-tax items as Zonal Inland Revenue Office cumulative annual report indicates. As shown in the table below, indirect revenue and non-tax revenue accounts for the highest share of the total revenue.

**Table: 3.13. Total in Land Revenue Collected in the District by type of Revenue Source**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **%** | **Indirect revenue** | | **%** | **Non-Tax revenue** | **%** | **Total** |
| 2011 | 1,138,890 | 5.2 | | 2,022,377 | 9.2 | 18,658,005 | 85.5 | 21,819,272 |
| 2012 | 1,883,535 | 7.6 | | 19,385,462 | 78.5 | 3,409,937 | 13.8 | 24,678,934 |

Source: Lemu Bilbilo district Inland Revenue office

**CHAPTER FOUR**

**4. Basic Infrastructural Development condition**

**Roads:** the districthas 42 km length of Asphalt, gravel 281.06 , 323.06 km length of all-weather roads , and 24 km dry weather roads .This gives a road density (for all weather roads) of 0.5 km per km2 and 1.57kmper 1000 people.

**Telecommunication:**one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. All the urban areas of the district has supplied with Automatic type of telephone service. On the other hand, most rural areas of the district has supplied with wireless type of telephone services. Moreover, some parts of the district are under full mobile services coverage.

**Post Office:**Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed.

**Water supply:** potable water coverage of the district is slightly low. According to data obtained from Lemu and bilbilo werda Water Resource Office, of the total rural population of the district only­­75,000(55.77 %) was supplied with potable water in the year 2011.. However, in the year 2012 the number of population access to potable water supply was increased to 112,787 (51.92%) were supplied with potable water, which is 59.52 % for rural and 44.33% for urban areas. Regarding potable water schemes, 75 spring development schemes .There are 7 deep wells ,0 shallow well ,11 motorized and 57 spring on spot was used in providing water to the local community.

**Energy Supply:**Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. All towns of Lemun-Bilbilo district have supplied with electric power. However, 7 rural village of the district have electric services.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, fire wood is the most important energy source followed by charcoal, animal dung, crop residue, kerosene and electricity. On the other hand, fire wood is the major energy source in rural area followed by animal dung, crop residue and kerosene. Regarding fuel filling station, Lemu and Bilbilo has no any type of fuel filling station.

**Table: 4.11. Sources of Domestic Energy Supply**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 4 |
| 2 | Fire wood | 1 | 1 |
| 3 | Animal Dung | 3 | 2 |
| 4 | Crop Residue | 4 | 3 |
| 5 | Kerosene | 5 | 5 |
| 6 | Electricity | 6 | 6 |

Source: Lemu Bilbilo district Agriculture and Rural Development Office.

**Sports**;- Lemun-Bilbilo is the source of worldwide known and famous athletes such as Kenenisa Bekele, Tirunesh Dibaba, Derartu Tulu, Tariku Bekele, Tiki Galana and the like. In addition, the district is known in Football and Volleyball sport activities. Accordingly, the number of sport team was decreased from 103 to 19 while the number of sportsmen was also decreased from 705 to 315 between the year 2011 and 2012. However, it has no well-organized and standardized sport facilities. For details see the table below.

**Table: 4.10. Sport Clubs and Members in the District**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Club or Team | 2011 | | 2012 | |
| Number of( team) | Member | Number of (team) | Member |
| Foot-ball | 1 | 25 | 1 | 25 |
| Volleyball | 33 | 450 | 16 | 240 |
| Athletics | 7 | 234 | 2 | 50 |
| **Total** | **103** | **705** | **19** | **315** |

Source: Lemu Bilbilo districts youth and sport office

**CHAPTER** **FOUR**

**4. Development Activities**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided into salary, recurrent budget and capital budget. The capital budgets are directly used for the construction of different types of development projects. It is expected that of the total budget of the districts, 10.13 % is used for development projects. Moreover, from excess revenues allowed for the district (which is about 37.5%) some amount was used for development projects.

**4.1. Ongoing Government Development activities**

**Social sector Development projects:** in the district there are 7 health centers, 27 health posts. Human health clinics are being constructed by regional government, local government and community participation.

**Economic ongoing development projects:** Since 2012 fiscal year, 25 farmers training centers (FTC), 75 spring development, 7 deep well, 3 D-type, 5 C and 1 B-type animal health clinics are being constructed by regional government, local government and community participation.

On other hand, there are different social and economic development program such as construction of around,85.8k,Road,(Sirbo\_Gimbite,Ukamsa\_lemumirt,w/naga,Balitu,Boqoji\_koji,Bokoji\_L/Mika’ela,Bokoji\_koma,Bokojii\_L/Burkitu)and other new road construction activity is Going on like (Ginbite\_samera , Mararo\_Koma hangara, ) etc

**Major Problems of ongoing Development Projects**: Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction is the major problem during the construction.

**CHAPTER FIVE**

**5. PROBLEMS AND POTENTIALITIES**

**5.1 Major Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing unbalance between grazing land and number of livestock, rapid deforestation rate and low soil and water conservation practices, variability of rain fall which results into crop production failure are the major problems.

**Economic Problem:** Shortage of farm land high prevalence of crop diseases and pests, Shortage of Agricultural inputs and lack of capacity to buy, acute shortage of grazing land and over utilization of the same land for a long period of time, low investment activities and absence of industrial development.

**Social service problem:** rapid population growth, large family size and land fragmentation, unemployment, low output and low productivity, underutilization of the available health institutions due to shortage of medical facilities and trained man power, high student class-room ratio due to shortage of class room, underdeveloped transportation and communication facilities, high prevalence of HIV/AIDS, high dropout rate, low Potable Water coverage, low electric power supply are the major problems.

**5.2. Potentialities**

**Land Resource:** It has suitable climate and amble cultivable land for the production of different crops mainly grown in the district such as cereals, pulses and oil seeds and livestock production.

**Tourist attraction sites:**  Kaka Mountain, Galema massif with endemic wild animals (red fox, mountain Nyala) and other wild animals such as Minilik Bush Buck, Columbus Monkey, Monkey and apes, Marufa Cave are potential tourist attraction centers. All of them are yet under developed.

**Forest resource:** The district has government protected forests in the district like Chilalo Galema forest, Chalelaka forest, Damota forest, Bekoji and Lemu forest that are used as home of wild animals, raw materials for industries and construction purposes.

**Investment Opportunity:** due to availability of vast grazing land the district has potential of livestock rearing, mutton production and, milk and milk product production.

**Minerals and energy resources:** even though potentials of minerals and energy resources are not surveyed by expert, the district has potential of energy resources such as solar energy, bio gas, and wind energy resource

**Labor resources:** Like any other parts of the country, there is a potential of labor resource in the districtespeciallyunskilled labor power.

**CHAPTER SIX**

**6. Conclusion and Recommendation**

**6.1 Conclusion**

Lemuna Bilbilo district is one of the 26 administrative units of Arsi Zone which is further sub divided in to 25 rural administrative kebeles and seven urban areas. The district has a total area of 81,400 hek./1196.6 sqkm.and total population of 280,730 in the year 2012. Of the total population of the district more than 95% are living in rural areas.

The district enjoy with conducive climate condition ranging from cool to moderately cool climatic types which has a significant impact on the production and productivity of crops. The district is one of the districts that receive maximum rainfall amount received in the zone.

Such suitable climate condition causes the district to be known by the production of variety of crops in different climatic zones. The district is mainly known by the production of cereal crops like wheat and barley both during Meher and Belg season. Moreover, the district is known by the production of pulses, oil seeds, vegetables and other root crops. So as to improve production and productivity of crops, a lot has been done by the district agriculture office by motivating the farmers to use modern agricultural inputs and farm tools on their farm lands. That is why the amount of the agricultural input distributed to the farmers has been increasing between the years under consideration. Moreover, three development agents with different field of study were assigned in each rural kebeles so that they can support the farmers to adopt modern way of farming and how to increase their productivity. However, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

On the other hand, suitable topographic condition and availability of many rivers causes the district to have high potential for both modern and traditional irrigation. This reality brings most areas of the district are being under irrigation. Moreover, most of the river and streams descended from Galema massif were used for traditional irrigation by the farmers for the production of different crops like fruits; vegetables, etc.

Availability of vast grazing land causes the district to be known by livestock rearing. However, the traditional rearing and. Despite of the fact, animal rearing is one of the back bones of the livelihood of the farmers in the district, livestock rearing and production is known to be traditional one that causes the farmers benefit less than expected level. Moreover, shortage of forage for food, drought and shortage of medicine for treatment causes the animals to be affected by diseases.

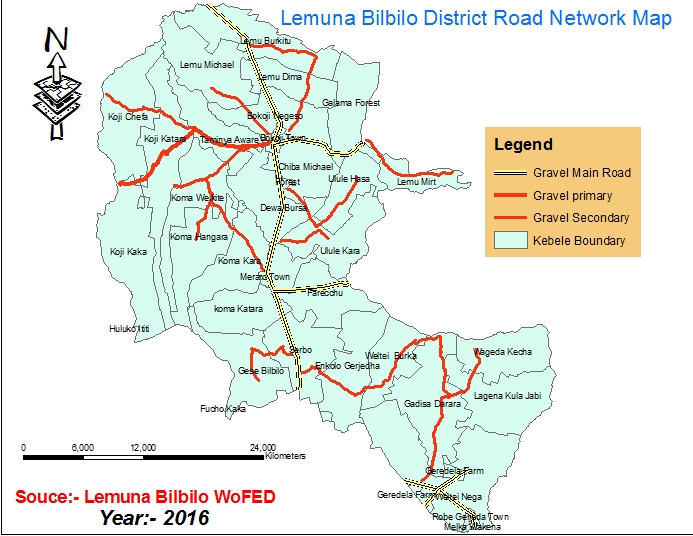
So as to achieve universal primary education coverage, the district provides education in 61 primary schools in each rural kebeles for more than 42,040(49.8% female) students in the year 2012. The number of female student was slightly decreased from 21,222 in the year 2011 to 20,963 in the year 2012. During

the Same year, the number of teachers teaches at this level was increased from to 847(43.2 % females) to 873(44.6%females) teachers while the number of class-rooms were 873. The student to teacher’s ratio was improved from 1:48 while student to class-room ratio was improved from 1:48 .Likewise, the district has also six secondary schools (9-12). The number of students enrolled to these schools 2,039 (46.7 % females) students in the year 2012. During the indicated year, the number of teachers was 107 while the number of class-rooms was 35. These gives student to teacher ratio was 1:19 and student to class-room ratio was 1:58 in the year 2012. During the indicated year the district has also no Preparatory School (11\_12) The number of students enrolled to these school .

A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. Not only this but also the number of health professionals working in the health facilities were increasing. However, still the health coverage of the district was low as compared with WHO standard and other districts. Likewise, as one can be seen from the ratio of population to health personnel, there was a need for additional health personnel in the district to ensure quality health service delivery.

Infrastructure developments like Road, Energy supply and Postal Service are under developed but, most rural areas of the district are access to wireless and mobile telephone service while. Moreover, the district has a road density of (for all weather roads) 0.5 km per km2 and 1.75 km per1000 of people for all weather roads where as 0.15 km per km2 and 0.9 per 1000 of people for dry weather road which indicate low coverage.



The district has a high potential of cultivable land that is suitable for the production of cereals, pulses and oil seed crops and endowed with mineral resource, energy resource etc. In addition the district has a potential for the production of cash like Apple, spices, vegetables, sugar cane, on potentially irrigable low

land areas. Moreover, the availability of natural beauty like forest, mountain ranges and different species wild life causes the district has a potential for tourism.

**6.2. Recommendation**

To overcome the existing social and economic problems prevailing in the district the regional government, Local Government, Non-Governmental Organization as well as the surrounding community has to perform the following activities

* Infrastructure development like road, water supply and energy supply are needed. So the concerned body has to develop these facilities.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural office should have to create awareness among the farmers so that all farmers of the district adopt modern way of farming and input utilization. Moreover; modern inputs have to be supply in sufficient amount and on time to farmers,
* The district has Potential Irrigable Land that is used for the production of different cash crops. So, the regional government or the local government has to build modern irrigation in the district so as to benefit the country in general and the surrounding community in particular.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* So as to improve livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, as compared with increasing livestock population, additional health facilities have to be constructed and the required health profession would be recruited for health facilities,
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted.
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is very good. Instead the district education office have to focus on other factors like continuous teacher development (CDP), improving the educational level of teacher, etc.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF LODE HITOSA DISTRICT YEAR 2011 AND 2012 E.C**

**Chapter 0ne**

**1. Introduction**

**1.1 Background of the District**

***Lode Hetosa*** district is one of the 27 administrative unit of Arsi zone. The name of the district is derived from two tribes called Lode and Hetosa living in the area. Lode Hetosa district has 22 Administrative units of which 19 of them are Peasant Associations while three are urban administrative units. Huruta town is the capital town of the district. It is located at 164 km from Regional Capital City, Finfine and 39km from zonal capital, Asella Town to Eastern direction found on Iteya-Arsi Robe main road.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Lode Hetosa district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pagume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district’s different departments, institutions, 1999(2007) census result report and other related documents available in our office. Lack of accuracy and required data, lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document. Moreover, lack of accurate data, lack of professional personnel, well organized and consistence data in different sectors and the like were the main limitation. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district

The paper has seven parts The first parts deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second parts focused on population size and distribution, the parts deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively

**CHAPTER TWO**

**2.** **Physical Setting, Location and Area**

Lode Hetosa is one of the administrative units of Arsi Zone. Astronomically the district is located between 7037’08’’N-7057’27’’N latitude and 39013’36’’E-39043’21’’E longitude. Relatively the district share a boundary line with Dodota district in the north and north west, Sire district in the north and north east, Hetosa district in the west, north west, south west, Diksis in the east and south east direction, total area of 509.7 Km2/50970hek. It shares 2.43% of the total area of the Arsi Zone.

**Geology:**  Different internal or external forces acting up on the surface of the earth for a long period of time causes the district to have the present land features. Except few pocket areas in the north-west, most of the northern and north western part of the district was covered by Adama Series. Lower Chilalo formation covers extensively the central parts of the district from south west direction up to the eastern peripheries. Moreover, the southern part was covered by Upper Chilalo formation.

**Relief, Drainage, Geology and Climate**

**Relief ;-**The relief structure of altitude of the district varies from adulating high plateau dissected by Major River of the district on its high land areas and low laying plain areas in its rift valley part. The highest place of the district is found Gebe Peasant association with an altitude 3060meters above the sea level while the lowest place is found in **Melka Jebi** Peasant Association (1700m).

**Drainage;-** Due to its location, the district has high network of river systems. The major permanent rivers of the district are Keleta, Shaya and Wodecha .Generally, the district has high potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate: -** Due to its altitudinal location, the climatic condition of the district is dominantly moderately warm having a temperature of 100c-250c. This type of climate consists about 47% of the total area of the district. The remaining ones are cool and moderately warm accounting for 40%, and 13% respectively. Hence, the dominant type of climatic condition of the district is Woinadega agro-ecological zone. The mean annual rainfall is 800-1400mm and the average rainy days are about 120 days in the year. The rainfall pattern is bi-modal, which are short rainy season (Belg from February to April) and summer or long rainy season (Meher from June to September).

**Soil,:-**Themajor types of soil found in the district arePellic vertisols, Orthic Luvisols, Chromic vertisols and Eutric Cambisols having very good fertility status. Beside these soil types Eutric Nitosols, Mollic Andosols and Eutric Regosols are found in few parts of the district.

**Land use:** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing.

**Vegetation and Wild life**

**Vegetation: -** Regarding vegetation type of the district, Afro alpine, sub afro Alpine, Natural forest, woodland, bush and shrubs are the main vegetation type in the district.

**Wild Life: -** The major wild animals are fox, monkeys, ape, Wild goat, Rabbit, Different species of birds, etc.

**CHAPTER THREE**

**3. Socio Economic Condition**

**3.1 Population Size**

According to the estimation made from 1999 (2007) census report, Lode Hetosa had 155234 total populations of which 25719 urban and 127,875 rural in the year 2012. From the total population of the district, only 16..**%** are living in urban areas in the same year. This indicates that about **84.3%** of the population of the district is living in rural area depending on agricultural activities. From the total population, females accounted for **50.1%**

**Table: 3.1. Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Rural** | | | **Urban** | | | **Rural + Urban** | | |
|  | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 63,072 | 62,684 | 125,756 | 12,252 | 12,862 | 25114 | 75,324 | 75,547 | 150870 |
| 2012 | 64,733 | 64,335 | 129,069 | 12,764 | 13,401 | 26,165 | 77,498 | 77,736 | 155,234 |

Source: ***Projected based on 1999/2007 CSA, Report***

**Table: 3.2. Population size of Rural and Urban by wider age group Classification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age/Sex** | **Male** | **Female** | | **Total** |
| **No** | **No** | **%** | **No** |
| **Rural** | **64733** | **64336** |  | **129068** |
| 0-14 | 33594 | 32355 | 49 | 65949 |
| 15-64 | 28664 | 30192 | 51.2 | 58856 |
| 65+ | 2475 | 1789 | 42 | 4263 |
| **Urban** | **12765** | **13401** |  | **26166** |
| 0-14 | 4081 | 4634 | 53 | 8714 |
| 15-64 | 8305 | 8289 | 50 | 16594 |
| 65+ | 379 | 478 | 56 | 857 |
| **Total** | **76498** | **77735** |  | **155233** |
| **0-14** | **36678** | **36988** | 50 | **74663** |
| **15-64** | **36969** | **38481** | 51 | **75450** |
| **65+** | **2854** | **2266** | 44 | **5120** |

**School Age population;-** School age population is one of the best indicators for planning and budget preparation of education facilities and expansion of schools to satisfy the social need of education for all policy. In addition to these to keep the education quality with different indicators like student classroom ratio, student text book ratio, student teachers ratio and others school age population is too essential. Accordingly, the number of school age population of the district was increasing from 149,818 students to 153,694 student between the years 2011 to 2012 These groups of population account for 42% of the total population of the districts which is almost near to half of the total population of the district in the year As far as different school age population was concerned the number of kindergarten, primary and secondary school population was increased from 57987 to 61346 between the years 2011 to 2012.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth centre, etc.

**Population density and Rural Settlement;-** Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the district had a crude density of 300 persons per km2 in the year 2011This ratio indicates the district is one of the densely populated district of the zone. Concerning the settlement pattern of the district, most of the high land areas of the district is characterized by scattered type of settlement (far distance between the homestead) while some low land areas are known by group settlement .

**Agricultural Service Cooperatives:** there were 19 Peasant Associations (PAs) in the district. Which have 22,350 households in the year 2012  During the same years, there were 48 Agricultural Service cooperative with 10,940 member farmers and family size which have 73,172,601.76 total capitals. The number of farmers served from these cooperatives was 11580 during the year 2012 The cooperatives distribute Fertilizer, improved seeds, sugar and Edible Oil to its members and local community.

**Table: 3.3 Agricultural Service Cooperatives**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | Number of Agricultural Service Cooperatives | Members | | |
| Male | Female | Total |
| 2011 | 47 | 6686 | 2786 | 9472 |
| 2012 | 48 | 7398 | 3545 | 10940 |

**Source:** Lode Hetosa district Agricultural Development Office

**Households Affected By Drought:** during the years, , 2011 and 2012 there were no households affected by drought and there is no relief distributed The reason is in the past 2 consecutive years was because of the aducate amount of belg season rain meher season in the districts.

**3.2 Crop Production.**

Crop production is the major agricultural a ctivity in the District. In this regard, crops such as cereals, pulses oil seeds and others like vegetable are grown in the area. Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg***.*** However, Big rainy season called Meher which comprises all parts of the District and small rainy season “belg” which covers some high land areas. The agricultural sector is the source of food, raw materials for local small industries (like flour, oil processing and wood industries) and income of the society.

The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown ones. From the total area of the district the cultivated lands (the lands covered by annual and perennial crops) represented about 25940 hectares in the year 2011 and 25940in the year 2012 Accordingly, Productivity increased from 44 quintal per hec to 46 qt/hec. In addition to this Lode Hetosa is known in producing of some cash crops like tomato, onion, oilseeds, and the like.

As stated above the District is suitable for the production of different crops during the “meher” and “belg” season. Statistically, land cultivated (‘000’ hectares) and production (000 Quintals) of major crops produced annually (meher and belg seasons) for peasant sector in the years 2011- 2012 is shown as below.

**Table: 3.4 Area cultivated and production obtained in the *district (Meher+ Belg)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of crop** | **2011** | | **2012** | |
| **Area** | **Production** | **Area** | **Production** |
| 1 | **Cereals** | **3,406.00** | **159384** | **22811** | **881343** |
|  | Teff | 559 | 21242 | 0 | 0 |
|  | Wheat | 13607 | 653136 | 14536 | 666424 |
|  | Barley | 4773 | 229104 | 7501 | 178358 |
|  | Sorghum | 33 | 1155 | 37 | 1665 |
|  | Maize | 1023 | 41040 | 717 | 34416 |
|  | Oats | 0 | 0 | 20 | 480 |
| 2 | Vegetables | 3878 | 880120 | 2836 | 389677 |
|  | Root Crops | 784 | 125440 | 347 | 42453 |

The highest productivity is obtained from the production of wheat while the lowest is in the case of a lentil which is 18 quintals per hectare in the year 2012 respectively. From the fact that the District is known with its surplus production of wheat and onion, their productivity is still among the highest. In the case of cereal crop productivity, wheat is the leading while from the total production and onion is the second highest productive agricultural output in the District among the cash crops.

The above specified crop types are grown in almost all parts of the District with different quantity. The high land areas are suitable for the production of barely, horse beans, chick beans linseeds and the like while the low lands are suitable for wheat, teff, maize, etc

**Fertilizers and Improved Seeds Utilization: -** Now a day’s intensifying the use of the existing cropped arable land strategy is more appropriate and applicable due to shortage of land and high population pressure. In this case, an increase in agricultural production ispossible mainly due to increase in yield per hectare. Moreover, increased in production and productivity is a result of adoption of agricultural input by the farmers of the district. Accordingly, the amount of chemical fertilizers used by the farmer increased from 18164 to 19336 between the years 2011 to 2012.

**Table: 3.5 Agricultural in put utilization of the districts between the years 2011-2012**

|  |  |  |  |
| --- | --- | --- | --- |
| ***No*** | ***Type of in put*** | ***2011*** | ***2012*** |
| ***1*** | ***Fertilizer (Qun)*** |  |  |
|  | *DAP* | *0* | *0* |
|  | *Urea* | *1340* | *1949* |
|  | *NPS* | *887.5* | *1082.5* |
|  | *NPSB* | *18402* | *21671.5* |
| ***2*** | ***Improved seeds(Qun)*** |  |  |
|  | *Teff* | *27* | *0* |
|  | *Wheat* | *2234* | *2272* |
|  | *Barley* | *200* | *8454* |
|  | *Maize* | *35* | *133* |
|  | ***Pesticides(lit)*** | *6296* | *11778* |
|  | ***Herbicides (Lit)*** | *10159* | *16682* |

Source: Lode Hetosa district Agricultural Development Office

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung,, crop rotation, fallowing and using crop residuewhile the modern one is the using of artificial fertilizer and compost (organic fertilizers).

**Methods for Soil Conservation:** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation are modern way of soil conservation in the district.

**Agricultural Calendar:**It is well known thatthe farmers of the District are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Lode Hetosa district is shown in table below.

**Table: 3.6. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | March-June | February- April |
| 2 | Planting (Sowing) | June-end of July | Mid April- June |
| 3 | Weeding | August-September | June-July |
| 4 | Harvesting | October-December | July-September |

Source: Lode Hetosa district Agricultural and Rural Development Office.

**Average number of oxen per house hold**

**Table : 3.7 Number of household by Ox holding size**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Average ox holding size per household** | **Number of households by Ox holding size** | | | | | |
| **1 oxen** | **2 oxen** | **3 oxen** | **4 oxen** | **5 oxen** | **>5 oxen** |
| 2012 | 2 | 7757 | 10258 | 2387 | 1285 | 734 | 18 |

Source: Lode Hetosa District Agricultural Development **Office**

**Average land holding size**

**Table 3.8 Averege land holding size**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Godina/Aanaa** | **Average land-holding sizes per household (ha)** | **Number of farmer households** | | | | |
| **<1 hek** | **1-2 hek** | **2.01-3 hek** | **3.01-4 hek** | **4.01 -5hek** |
| 2011 | 1.6 | 22350 | 1118 | 3358 | 10058 | 2906 |
| 2012 | 1.6 | 22350 | 1118 | 3358 | 10058 | 2906 |

**Crop Pests and disease:** The major crops pests in the district are Aphids, cutworms, Armyworms, etc while the major diseases are rust, smut and others. Weeds and rain fall variation increase or decrease are also the major constraints in the production of crop. They have a great contribution in decreasing volume of production both before and post harvest time.

**Table: 3.9 Major crop pests and disease in the year 2011 and 2012**

|  |  |  |
| --- | --- | --- |
| **No** | **Pests** | **Diseases** |
| 1 | Aphids | Rust |
| 2 | Cutworms | Smut |
| 3 | Birdshot Fly | Weeds |
| 4 | ABO(Africa Ball Warm) | Rain fall variations |
| 5 | Armyworms | Armyworms |

**Source:** Lode Hetosa District Agricultural Development Office

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Tradition** | | **Modern** | | **Pump** | | **No of farmer engaged** |
| **Area (ha)** | **Produ (qun)** | **Area (ha)** | **Produ (qun)** | **Area (ha)** | **Produ(qun)** |
| 2011 | 622 | 109065 | 92 | 18900 | 101 | 21400 | 115 |
| 2012 | 1220 | 173720 | 177 | 30880 | 166 | 29500 | 105 |

**Table 3.10 land cultivated and production by type of irrigation**

**Development Agents and Farmers Training Centres*:*** They are one of the most important agricultural infrastructures that play animportantroleinimprovingagriculturalproductionandproductivity.In the year 2011 there are19Number of Farmers Training Centers(FTC)and 55 Number of Development Agents (DAs) which increased to 19 FTC and The Development Agents help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection. From these FTC and development agents 22,350 house hold were benefited during the year 2012.

**Table: 3.11 Numbers of Development Agents and FTC (2011 - 2012).**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 19 | 19 |
| Number of Development Agents | 55 | 55 |
| Number of beneficiaries | 22,350 | 22,350 |

**Source**: Lode Hetosa District Agricultural Development Office

**Surplus Production;-** The District is known with its surplus production of wheat and onion, their productivity is still among the highest. In the case of cereal crop productivity, wheat is the leading while from the total production and onion is the second highest productive agricultural output in the District among the cash crops.The above specified crop types are grown in almost all parts of the District with different quantity. The high land areas are suitable for the production of barely, horse beans, chick beans linseeds and the like while the low lands are suitable for wheat, teff, maize, etc

**Constraints of Agricultural;-** The major agricultural constraints in the district are Aphids, cutworms, Armyworms, etc while the major diseases are rust, smut and others. Weeds and rain fall variation increase or decrease are also the major constraints in the production of crop. They have a great contribution in decreasing volume of production both before and post harvest time.

**3.3 Livestock, Poultry and Bee-keeping**

**Livestock:** Lode Hetosa district is famous in livestock resources. Cattle, sheep, goats, horses, mules and donkeys are the major livestock population found in the district. The number of livestock population was increased from **572543** *to* **612,604** between the year **2011 and 2012**  from the livestock population found in the **district, cattle, sheep and goats** account for about **30.08**% and **48.11%** and **10.5%** of the total livestock population respectively in the year **2012.**

The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table:3.12 . Distribution of Livestock and poultry production in the district (2011-2012)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Livestock and poultry** | **2011** | **%** | | **2012** | **%** |  |
| **1** | **Livestock** | **572,543** |  | **100** | **612,604** | **100** |
|  | Cattle | 172,243 |  | 30.08 | 184,300 | 30.08 |
|  | Sheep | 274,147 |  | 47.9 | 298,820 | 48.11 |
|  | Goat | 59,569 |  | 9.77 | 64,335 | 10.55 |
|  | Donkey | 53,797 |  | 9.7 | 55,411 | 9.9 |
|  | Horse | 10,326 |  | 1.9 | 10,635 | 1.9 |
|  | Mule | 2161 |  | 0.41 | 2,183 | 0.41 |
| **2** | **Poultry** | 214,908 |  | 100 | 214,398 | 85.5 |

**Source** ; Animal developement,health and market agency

**Major livestock disease;-** lack leg, pasteurolosis, Fasciolosis, Chronic Respiratory diseases and External and internal parasites, lymphatic diseases and Anthrax are the major livestock and poultry disease in the district. Accordingly, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the dis

trict. The following table shows the type of vaccination and treatment given to the livestock during the indicated. The numbers of animal got health services increased in the case of different types of Vaccinations and , Treatment in the year 2011-2012 asshown inthe table below

**Table 3.13 types of Vaccinations and , Treatment in the year 2011-2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Render Pest | C.B.P.P | Rinderpest and C.B.P.P | Blackleg | Haemorhagic Septicemia | Anthrax |
| 2011 | **0** | **0** | **57386** | **75603** | **55310** |
| 2012 | **0** | **0** | **55753** | **57386** | **75603** |

Source Animal developement,health and market agency

**Livestock Health Infrastructure:-** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. The district animal health protection and marketing office provides health services by two C-type and 3 D –type clinics and with 20 animal health personnel in the year 2012. The number of health facilities and the health personnel was increased to 5 clinics and 4health post during the year This gives improvement in animal population to health facilities from 68067:1to 57,254:1 between the year 2011and 2012. This indicates there is additional health infrastructure needed.

**Table: 3.14 Distribution of Lode Hetosa district Animal Health infrastructure (2011-2012)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Description** | **2011** | **2012** |
|  | **Veterinary Personnel** | **18** | **20** |
| 1 | Veterinarian(Dr.) | 5 | 6 |
| 2 | BVSC & Animal Health Assistance | 12 | 14 |
| 3 | Others (specify) | 2 | 0 |
|  | **Health Infrastructure** | **5** | **6** |
| 4 | Clinic (A,B,C,D-Type) | 5 | 6 |

**Source;**- Animal developement,health and market agency

**Poultry:** Poultry production is one of the important sources of family income and food in the district. Accordingly, in the district, the poultry populations were decreased from214,908 to 214398 between the year 2011 and 2012 However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints

**Bee keeping and Fishery activities;-** Bee-keeping farming is another source of cash income for farmer family. Using of herbicides and insecticides are the main problems in bee farming.

**Table 3.15 Types of Beehives in number and Production in kg**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Types of Beehives In number and Production in kg** | | | | | | **No. of Participant** | |
|  | **traditional** | **Production** | **Intermediate** | **Production** | **Modern** | **Production** | **Male** | **Female** |
| 2011 | 9077 | 63539 | 5150 | 10,300 | 850 | 25,500 | 1516 | 189 |
| 2012 | 13107 | 65,535 | 4023 | 33,475 | 401 | 6015 | 5179 | 768 |

**Source** ; Animal developemen,health and market agency

Regarding the number of beehives and production obtained in the year 2012 we could not say anything since there is no reliable data. However, the number and production of Beehives increased from 2011 to 2012 but it fluctuate in the year 2012 in the case of modern beehives because of fluctuation of weather condition/drought.

**Factors affecting bee keeping;-**  Using of herbicides and insecticides are the main problems in bee farming. the other factors is because of fluctuation of weather condition/drought.

**Fishery:** fishing activity is as simple as that of poultry production and other livestock rearing, however, there is no fishing activity in the district since there is no large water body like lakes

**3.4 Mineral Resources and Industry**

**Mining:** Like other parts of our country in general and in the district in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from of Mineral and Energy resource office indicates that, the district has a high potential of some mineral resources such as , sandstone Gravel stone and clay coil for construction purpose and solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rocks quarrying, potteries making mining activities by local communities in the district

**Industry:**Similar to other parts of the Zone, industrial development is at its infant stage in Lode Hetosa district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. Most of them are food processing and privately owned. There were also no medium scale industrial establishments in the district. However, according to the data obtained from industry and urban development office, there were 46 different small scale industries in the year 2012 These number were constant during the year 2012 When the type of industries were considered, the Flour Factory were decreasing while those of Grain mill and metal &wood work were increased between the year 2011 and 2012 Regarding their capital these small scale industries have a capital more than 140,000 birr in the year 2012

**CHAPTER FOUR**

**4. Social Services and Infrastructures Condition**

**4.1 Education**

**Kindergarten:** -According to the data obtained from Statistical Abstract of the district, in the year there were 12 kindergarten schools with **48** teachers and students. However in the year 2012 the number of kindergarten schools were stay the same and while the numbers of students were increased to **1316** respectively. One of the main problems related with kindergarten school is lack of clear management system.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 4.1** | ***Number of students in Kindergarten school*** | | | | **Gov’t** | |
| **Year** | ***Students enrollment by sex*** | | | ***No of schools by level*** | | |
| ***Male*** | ***Female*** | ***Total*** |  | | **Total** |
| 2011 | *13* | *4* | *17* |  | | 1 |
| 2012 | *7* | *11* | *18* |  | | 1 |

**Source:** Lode Hetosa district Education Office

**Primary Schools(1-8):** between the year 2011and 2012, the number of primary schools were not indicate increment (i.e 35 from 2011-2012) where as the number of student enrolled to school were increase from 20846 to 21466 Of the total students enrolled to school, the female students accounts for 46.8% and 47.9 % for the year 2011 and 2012respectively. This indicates the participation of female students in primary schools was increased . During years, the number of student to teacher ratio and classroom ratio was 46:1 and 51:1 respectively.

**Table: 4.2. Number of primary school by level and student enrolled between the years 2011-2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of students in Primary school govt** | | | | | | | | | |
| **Year** | **Students enrollment by sex (First Cycle 1-4)** | | | **Students enrollment by sex (Second Cycle 1-8)** | | | **No of schools by level** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **1-4** | **5-8** | **1-8** |
| 2011 | 507 | 454 | 961 | 11086 | 9760 | 20846 | 6 |  | 35 |
| 2012 | 67 | 56 | 123 | 11170 | 10296 | 21466 | 6 |  | 35 |

**Source:** Lode Hetosa district Education Office

**Senior Secondary education (9-12) -** In the districtthere is only four high schools (9-12) in the year 2012 namely Huruta (9-12), Lode Jimata towns (9-12), Gebe, and (9-12), Ligaba kebele (9-12).The number of students enrolled to school were icreased 2896 (44% female) to 3217 (44.1% male) between the year 2011 to 2012. However, the number of students in grade 11-12 was increased in the year 2011 ,2896 to 3217 in the year 2012. Unlike in primary school the participation rate of female students in the secondary school was increased during the indicated years. During the year the number of student to teacher ratio and student to classroom ratio was 20:1 and 43:1 respectively.

**Table: 4.3. Number of secondary School by level and student enrolled between the years 2011-2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Number of students in Secondary school** | | | | | |
| **Students enrollment by sex (9-12)** | | | No of schools by level **9-12** | student to teacher ratio | student to classroom ratio |
| **Male** | **Female** | **Total** |  |  |  |
| 2011 | 1618 | 1278 | 2896 | 4 | 20:1 | 43:1 |
| 2012 | 1818 | 1399 | 3217 | 4 | 20:1 | 41:1 |

**Source:** Lode Hetosa district Education Office

**Private school;-** According to the data obtained from Statistical Abstract of the district, in the year2012 there were 12 kindergarten schools with 48 teachers and 1316 students

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 4.4** | **Number of students in Kindergarten school** | | | |  | |
| **Year** | **Students enrollment by sex** | | | **No of schools by level** | | |
| **Male** | **Female** | **Total** |  | | **Total** |
| 2011 | 668 | 648 | 1316 |  | | 12 |
| 2012 | 668 | 648 | 1316 |  | | 12 |

**Primary Schools(1-8):** between the year 2011 and 2012 the number of private primary schools were increased from 4 to 7where as the number of student enrolled to school were increase from 1093 to 1157 . Of the total students enrolled to school, the female students accounts for 53 % and 46% for the year 2011 and 2012 respectively. This indicates the participation of female students in primary schools was increased from time to time

**Table: 4.5 Students enrollment evel of education**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Year** | **Students enrollment by sex (First Cycle 1-4** | | | **Students enrollment by sex (Second Cycle 1-8)** | | | **No of schools by level** | |  | **Male** | **Femal** | **Total** | **Male** | **Female** | **Total** |  | | 2011 | 117 | 134 | 251 | 509 | 584 | 1093 | 11 | | 2012 | 186 | 197 | 383 | 538 | 619 | 1157 | 12 | |

**Source:** Lode Hetosa district Education Office

**TVET:** There is one governmental technical and vocational school that provide education in Huruta town in more than 12 fields of study.

**Education Quality:**The quality of education can be judged from educational qualification of teachers, Students-teacher ratio, Student-class ratio, student-text book ratio, etc. Accordingly, by the year 2 from total primary school teachers, those who full fill the minimum qualification requirement (diploma level and above) to teach grade 1-8 are 313 and 234 respectively from the total teachers teaching this level. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence we have to look into other factors mainly continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say.

To improve the quality of education student to teacher ratio, student to class room ratio and others are very essential, so as we see from the given information education office of district are expected to construct additional classroom to decrease student to classroom ratio to the recommended which improve the quality of education. As far as the numbers of teacher by level of school are concerned, the number of TTI teachers was decreased from 326 to 322 in primary school (1-8) between the years 2011 to 2012. Likewise, the number of diploma teachers was also increase from zero to 4 teachers in preparatory schools (9-12) during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below

**Table: 4.6. Number of Teachers by level of education and School for 2012( govt)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Grade 12 & below** | | | **T.T.I** | | | | **Diploma** | | | | **B.A/B.Sc** | | **M.A/M.Sc** | | **Total** | | **total** |
|  | **Male** | **Female** | | **Male** | | **Female** | | **Male** | | | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** |
| **1-4** | 0 | 0 | | 0 | | 0 | | 3 | | | 8 | 4 | 2 | 0 | 0 | 7 | 10 | 17 |
| **1-8** | 0 | 0 | | 9 | | 19 | | 163 | | | 159 | 141 | 55 | 0 | 0 | 313 | 237 | 530 |
| **9-12** | 0 | 0 | | 2 | | 0 | | 4 | | | 0 | 107 | 19 | 24 | 2 | 137 | 21 | 158 |
| **Number of Teachers by level of education and School for 2011( govt** | | | | | | | | | | | | | | | | | | |
| 1-4 | 4 | | 1 | | 2 | | 1 | | 11 | | 10 | 0 | 1 | 4 | 1 | 17 | 13 | 30 |
| 1-8 | 0 | | 22 | | 23 | | 5 | | 161 | | 1165 | 94 | 30 | 0 | 0 | 282 | 223 | 505 |
| 9-12 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 140 | 26 | 2 | 0 | 144 | 26 | 150 |
| **Number of Teachers by level of education and School for 2011(None govt** | | | | | | | | | | | | | | | | | | |
| 1-4 | 0 | | 0 | | 0 | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 |  |  | 44 |
| 1-8 | 26 | | 1 | | 11 | | 1 | | | 5 | 5 | 0 | 0 | 0 | 0 |  |  | 44 |
| 9-12 |  | | 0 | | 0 | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| **Number of Teachers by level of education and School for 2012(None govt** | | | | | | | | | | | | | | | | | | |
| 1-4 | 0 | | 0 | | 0 | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-8 | 26 | | 1 | | 1 | | 11 | | | 5 | 5 | 0 | 0 | 0 | 0 | 7 | 42 | 49 |
| 9-12 | 0 | | 0 | | 0 | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Source: Lode Hetosa district Education Office | | | | | | | | | | | | | | | | | | |

**4.2 Health**

**Health Institution:** There were four Government Health center 19 Health post during the year 2012. In addition, there were 8 non- governmental clinics and 6 rural drug vender in the district during the indicated year. The ratio of population to Health Center, and health post was 38423.5:1, and 8089:1 respectively in the year 2012which is above the WHO standard (25000, and 5000 respectively).

***Table: 4.7 Health personnel by types of profession***

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Type of institution** | **2011** | **2012** |
| 1 | Doctors | 0 | 0 |
| 2 | Health officers | 17 | 13 |
| 2 | Nurses | 51 | 50 |
| 3 | Pharmacy Technicians | 10 | 12 |
| 4 | Laboratory “ | 6 | 8 |
| 5 | Sanitarians | 1 | 0 |
| 6 | Health assistants | 0 | 0 |
| 7 | Extension workers | 40 | 40 |
| 8 | Supportive staffs | 40 | 43 |
|  | **Total** | **165** | **166** |

**Source**: Lode Hetosa District Health Office.

In the year 2011 and 2012, the number of pregnant women get counseling for HIV/AIDS 3588and 3762 and all of them was tested for HIV/AIDS out of which only 23 and 9 living with HIV/AIDS. This data indicated that, currently the trends of diseases like HIV were in decreasing trends because of awareness creation through community conversation program.

**Table: 4.8 Ten top diseases existed in the district in the year 2011-2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Type of Diseases** | **Number** | **Type of Diseases** | **Number** |
| 1 | Acute upper respiratory infection | 729 | Acute uper resparation tract | 689 |
| 2 | Typoid fever | 725 | Typoid fever | 681 |
| 3 | Acute pharangities | 269 | Acute pharangities | 425 |
| 4 | Bacterial infection | 228 | Bacterial infection | 425 |
| 5 | helmantasis | 193 | helmantasis | 193 |
| 6 | Acute fibrile illness | 190 | Acute fibrile illness | 190 |
| 7 | amebiosis | 187 | amebiosis | 187 |
| 8 | penumonia | 182 | penumonia | 182 |
| 9 | Diarrheal disease | 157 | Diarrheal disease | 157 |
| 10 | Acute urinary infection | 148 | Acute urinary infection | 148 |
| **Total** |  | **3008** |  | **3277** |

**Source:** Lode Hetosa District Health Office

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc**.**

**Women and Children Socio-economic condition**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 4675 and 25236 in the year 2011 while their number was increased to 4807and 27211 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 32144 in the year 2011 while those who attended delivery service by health extension works was 37625 in the year 2012 These improvement was observed due to awareness created by HEW and sufficient facilities like access to road and availability of health facilities at nearby , standby Ambulance for these purpose and social and economic problems like “**Buna Ceremony”** at the delivery time .

However still there no women attended delivery traditional at their home in 2008 due to lack of awareness. In addition, the district health office provides different type of vaccination to mothers so as to

improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 3588 to 3966 between the year 2011 and 2012 . Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Lode Hetosa district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like 1**, food preparation, 2,child care,3, home care, 4,fetching of water, 5,fuel collection,** farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was 26 in the year 2011 and 26 in the year 20112 Moreover, the number of women who are member of woreda cabinet was 6 and 5 during the year under consideration.

**Table: 4.9 Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2012 |
| 1 | **Access to save delivery service** | Number | 32144 | 37625 |
|  | Women's used ANC/Antenatal care/services | Number | 4675 | 4807 |
|  | Women's used PNC /Postnatal care/services | Number | 25236 | 25236 |
|  | Women’s assisted delivery | Number | 3791 | 3077 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 1487 | 1487 |
|  | Deliveries attended by HEWs | Number | 3791 | 3077 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 3588 | 3966 |
|  | NPW TT2 | Number | 0 | 0 |
| 3 | **Family planning condition** |  | **0** | **0** |
|  | Modern methods | Number | 32144 | 37625 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council | Number | 1 | 1 |
|  | Member of woreda council | Number | 26 | 26 |
|  | Member of woreda cabinet | Number | 11 | 10 |

**Children issue Children health condition and health problems**

**Children mortality;-** To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from in the year 2011to 59796 in the year 2010. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 4272 and 3550 in the year 2011 and 2012get vaccination. Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the top five major diseases that are the causes of infant and child mortality in the district are 1, Acute fiber illness, 2,Acute upper respiration tract, 3,trauma , 4,peneumonia and 5,infection of skin. In the district, more children’s were affected by one or more than one of the above mentioned diseases. There are 8 neonatal mortality rate per1000 life births and zero death under five years old and the EPI coverage of the district is 4213 which is 86%

**Table: 4.10Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| Type of Vaccination | 2011 | 2012 |
| BCG | 3290 | 4274 |
| Measles | 3815 | 3981 |
| DPT/Penta1 | 3883 | 4213 |
| DPT/Penta3 | 3536 | 4137 |
| Polio | 3536 | 4118 |

Source: Lode Hetosa district health office.

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes to be orphan. These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 12568 in

the year 2012

**Orphan and Vulnerable children**

**Table: 4.11 Children socio economic indicators in the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | | | | | | **Measurement** | **2011** | **2012** |
| **1** | **Number of Orphan and Vulnerable children** | | | | | | **Number** | **12568** | **12568** |
|  | Age | | | | total | | Number | 6448 | 6448 |
|  | 0-3 | 4-9 | 10-13 | 13-18 | male | female | Number | 6120 | 6120 |
|  | 4212 | 3211 | 3421 | 1724 | 6448 | 6120 | Number |  |  |
| 2 | Full immunization | | | | | | Number | 3518 | 3975 |
| **3** | **Number of disabled Children** | | | | | |  |  |  |
|  | Male | | | | | | Number | 128 | 128 |
|  | Female | | | | | | Number | 132 | 132 |
| **3** | **Child disease and causes of death** | | | | | | **Number** |  |  |
|  | Malaria prone area | | | | | | Number of kebele | 8 | 8 |
|  | Children affected by Malaria | | | | | | Number | 0 | 0 |
|  | Children treated for malaria | | | | | | Number | 0 | 0 |
|  | Children died due to malaria | | | | | | Number | 0 | 0 |
|  | Children living with HIV/AIDS | | | | | | Number | 17 | 13 |
|  | Children Died due to HIV/AIDS | | | | | | Number | 0 | 0 |
| 4 | ITN Coverage | | | | | | % | 87 | 87 |
| 5 | Number of OVC who received care and support | | | | | | Number | 260 | 260 |
| 6 | Number of PLWHA who received care and support | | | | | | Number | 298 | 298 |
| 7 | Malnourished children | | | | | | Number | 45 | 45 |

Source: District Health Office

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 25,707 and 2570 in the year 2011 and 2012 As a result of this, the health condition of the community was improving through time in the district.

Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, 14 school in the district was access to standard toilet facilities. However, of the total school in the district, only 80% of school was access to potable water supply facilities.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health center | |  | Health Post | |
|  | 2011 | 2012 | 2011 | 2012 |
| 1 | Number of health institutions in the district |  | 4 | 4 | 19 | 19 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) |  | 3 | 3 | 1 | 1 |
| 3 | Number of health institution access to water supply |  | 3 | 3 | 1 | 1 |
| 4 | Number of health institution access to toilet facilities |  | 4 | 4 | 1 | 1 |
| 5 | Number of Health institution access to dry waste disposal facilities |  | 3 | 3 | 1 | 1 |
| 6 | Number of Health institution access to liquid waste disposal facilities |  | 3 | 3 | 1 | 1 |

**Table: 4.12 Health Facilities Access to hygiene and Sanitation**

**Source**: - Lode Hetosa District Health Office

|  |  |  |  |
| --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | |
| 2011 | 2012 |
| 1 | Number of school in district | 39 | 39 |
| 2 | Number of kinder garten school access to water supply (private) | 12 | 12 |
| 3 | Number of primary school access to water supply (gov’t) | 14 | 14 |
| 4 | Number of secondary school having water(gov’t) | 4 | 4 |
| 5 | Number kinder garten of school having toilet (private) | 12 | 12 |
| 6 | Number of primary school having toilet(gov’t) | 28 | 28 |
| 7 | Number of secondary school having toilet | 4 | 4 |

**Table4.13 School access to hygiene and sanitation** Source: - District Education Office

**4.4 Infrastructure and social facilities**

**Roads:** Lode Hetosa district is found 39 km away from zonal capital town, Asella and 164 km from Regional Capital city, Finfinne. It has 127.076 km length of road , of which 118.576 km of them are all weather and 8 km of dry weather road and no Asphalt road

**Communication;-** telecommunication is one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. In the district urban areas of the district has supplied with Digital type of telecommunication. On the other hand, most rural areas of the district has supplied with wireless type of telephone services. All peasant associations have wireless type telecommunication and full coverage of mobile service

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has agent type of postal services in Huruta town

**Water supply** potable water coverage of the district is (good, very good, excellent, low, high) According to data obtained from Lode Hetosa Water Resource Office, of the total rural population of the district 71 % was supplied with potable water in the year 2012. During the same year, about 90 % of urban population was supplied with potable water

**Table: 4.14Rank of drinking water according to their importance**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Type | Rank | |
| Rural | Urban |
| 1 | Pond | 3 | 5 |
| 2 | Well | 4 | 4 |
| 3 | Spring | 1 | 2 |
| 4 | River | 2 | 4 |
| 5 | Tap-water | 5 | 1 |

*Source: Lode Hetosa water Mineral and Energy office*

**Energy Supply:**Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Only Huruta town has been supplied with electric power. On the other hand, a very small rural area of the district was covered by electric power services.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene.

**Table: 4.15 Sources of Domestic Energy Supply**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 3 |
| 2 | Fire wood | 1 | 2 |
| 3 | Animal Dung | 3 | 4 |
| 4 | Crop Residue | 4 | 1 |
| 5 | Kerosene | 5 | 5 |
| 6 | Electricity | 6 | 6 |

**Source:** Lode Hetosa water Mineral and Energy office

**Table 4.16** percentage and total population supplied with potable water

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | No of Rural Population supplied with potable water | Rural Population supplied with potable water (%) | No of urban Population supplied with potable water | Rural Population supplied with potable water (%) |
| 2012 | 90,750 | 71 | 23,435 | 90 |

**Table 4.17 Name of towns supplied with electricity by source of power**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | | --- | | **Sources of electric power** | | | | | |
| **Name of town supplied with electricity** | **Hydro** | **Wind** | **Diesel** | **Solar/Biogas** | **Service hours per day** |
| **huruta** | **√** |  |  |  | **24** |
| **Jimata lode** | **√** |  |  |  | **24** |
| **ligaba** | **√** |  |  |  | **24** |

**Fuel station and their capacity by types of fuels,** There is only one fuel station in our district and there is no data about its Capacity and types of fuel

**4.3 Social Security**

**Table 4.18**. Number Of Registered Unemployed Persons by Level of Education and Sex

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Illiterate | | Grade 1-8 | | Grade 9-12 | | Certificate | | Diploma | | Degree | |
| Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 2011 | 270 | 221 | 561 | 221 | 406 | 185 | 323 | 483 | 38 | 188 | 9 | 0 |
| 2012 | 275 | 707 | 561 | 221 | 406 | 185 | 323 | 483 | 188 | 9 | 132 | 5 |
|  | |  | |  | |  | |  | |  | |

**Criminal and civil cases lodged in courts, Table 4.19 number of criminal and civil cases**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Criminal cases** | | | **Civil cases** | | | **Total** | | |
|  | Lodged | Decided | Pending | Lodged | Decided | Pending | Lodged | Decided | Pending |
| **2011** | 133 | 130 | 3 | 0 | 0 | 0 | 133 | 130 | 3 |
| **2012** | 179 | 171 | 8 | 0 | 0 | 0 | 179 | 171 | 8 |

**4.4 Finance and Financial Institutions**

**Revenue: -** During the 2011 and 2012, the District collected total revenue of Ethiopian Birr 25,590,644.43 and 28,722,160 respectively, which indicating 3131515 birr increment. The main sources of revenue in the district are Direct tax, indirect tax and non-tax items as Inland Revenue Office of the district cumulative annual report of both year shows.

**Table: 4.20. Total in land revenue collected in the district by type of revenue source**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non-Tax revenue** | **Total** |
| 2011 | 20,078,738 | 4,824,850 | 687,057 | 25,590,644 |
| 2012 | 23,248,452 | 4,233,744 | 1,239,964 | 28,722,160 |

Source: Lode Hetosa Inland Revenue Office.

**Annual Budget Allocation:** Annual budget requirement of districts is covered mainly from two sources regional government grants and district Inland Revenue. Regional government contribution shares the largest amount which accounts for more than 85 % of the total annual budget allocated for the districts. This indicates how far the current Inland Revenue share of the annual budget allocated for the districts is too small.According to the data obtained from Finance and Economic Development office of the district from the year 2011 to 2012 the total budget allocated for the district is 114,868,520and 121,189,081 Ethiopian Birr, the budget allocated for the district showing an increasing trend from year to year. For instance, between these years, the total budget allocated for the district was increased by Ethiopian Birr 6,320,561

**Table: 4.21. Annual budgets allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | |
| ***Annual Budget*** | ***Growth rate (%)*** |
| 2011 | 114,868,520 | 12.95 |
| 2012 | 121,189,081 | 5 |

Source: Lode Hetosa Finance and Economic Development Office.

**Banks and insurance company’;-** The district has one Commercial Bank of Ethiopian,and six private banks namely Oromia International and Oromia Cooperative Bank ,dashen baks,Awash banks, Abysinia bank,Nib banks and no inssurace copany

**Recurrent and capital expenditure**

**Table 4.22 Recurrent and capital expenditure**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Recurrent Budget | | | Capital | Total |
| Salary | Operating expenses | Total |  |
| 101,982,513 | 9,717,603 | 111,700,116 | 9,488,965 | 121,189,081 |
| Source: Lode Hetosa Finance and Economic Development Office. | | | | |

**Rural Credit and Saving Association** ;-Rural Credit and Saving Association play a significant role in the transformation of the economy of the district. four rural credit and saving association namely Oromia credit and saving association, WESASA,PEACE and Metemamen

**4.5 Trade Activities and Tourism**

**Trade:** In the district there are a high potential of cash crops like onion, potato, different types of cabbages, produced in the district. In addition to these there are a high potential of hides and skins used for commercial activities. But there is no trader engaged in trading hide and skin legally.so people sold hides and skin for illegal trader and due to low prices they used it for home purpose

**Tourism and Its Amenities:** Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the district in general and Lode Hetosa district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism Office of the district. These are chilalo Galema Mountain ranges endemic animals like Red fox, Nyala etc. Apart from these there are also government protected man-made forests, namely Alito gura in Tulu Jebi peasant Association, Dayu, Jib-Gore,Gefersa three of them in Ifa Lode peasant association are the main tourist attraction of the district

**Sport and entertainment center ;-** In lode Hetosa District there are different types of sport activities hosting a number of participants. The major sport types include **foo ball,, athletics. Tennis, volley ball, And Tec undo scout.** Numbers and members of football, Table tennis and Volley ball teams are increasing from year to year as shown in the table below;

**Table: 4.23 Sport Clubs and members in the district**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Type of club | **2012** |  | **2012** | |
| No of Team | Memebers | No of Team | Memebers |
| 1 | Foot-ball | 1 | 24 | 1 | 24 |
| 2 | Athletics | 1 | 1 | 23 | 25 |
| 3 | Table tennis | 0 | 0 | 0 | 0 |
| 4 | Valley ball | 1 | 12 | 1 | 12 |
| 5 | Tec undo | 1 | 50 | 1 | 50 |
| 6 | Scout | - | - | - | - |

***Source: Lode Hetosa districts youth and sport office***

The district has different types of sport activities like Foot Ball, Athletics, Table Tennis, Volley Ball and Tec undo. Lode Hetosa has one Mini-standard stadium constructed in the district that helps to practice different types of sport

**CHAPTER FIVR**

**5DEVELOPMENT ACTIVITIES**

**5.1 On Going Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the years under consideration are the following.

**Social sector Development projects:** in the year 2011 one primary hospital , two primary school and one secondary school have been constructed by the local government budget and community participation in the district.

**Economic Sector Development Projects:** in the economic sector in the same year one FTC; two Veterinary clinic 5.37 km of gravel roads and one spring developments, have been constructed.

**Problems of ongoing Development Projects;-** The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction is the major problem during the construction.

**CHAPTER SIX**

**6. PROBLEMS AND POTENTIALITIES**

**6.1 Major Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting are the main environmental problems.

**Economic Problem**: Shortage of farm land, High prevalence of crop diseases and pests, Shortage of Agricultural inputs and lack of capacity to buy, relative to the customer of the district shortage of Financial Institutions like Bank, Saving and Credit Association and well organized rural credit services, acute shortage of grazing land which leads to over cultivation of the same land for a long period of time, low investment activities and industries development are the main economic problems of the district.Specifically budget allocated from the government is low when compared to the social and economic plan and problems.

**Social service problem:** rapid population growth and large family size which leads to land fragmentation, unemployment, low productivity, underutilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low Potable Water coverage, low electric power supply.

**Unwise utilization of financial resources:** after the annual budget of the district is distributed to all sectors they spend the money unwisely and get under deficit within a short time. Then they fail to properly function and need additional financial support or they want to shift their own budget sited to other operation. During this time the other job will be affected due to shortage of funds.

**Problems on plan preparation:** Sometimes sectors design operational (action) plan, but it fail to be performed because may be it is under estimated or overestimated-or they may prepare non-participatory plan (one department in an organization may design the plan alone) .Then when implementation is began the operation fail because only a few of the organizations workers are awarded about the operation.

**Problems of organizing and utilizing data:** Almost in all organization there is lack of arranging data for immediate use even if the activity is performed; if it is not recorded it will be meaningless on data collection and use.

**6.2 Potentialities**

In the district there are high potential of land resources, tourist attraction sites, forest resources both manmade and natural. On the other hand the district is suitable for investment opportunities like commercial crops production (Oilseeds, Onion, different types of vegetables, chat), animal fattening, industrial construction, hotel and tourism activities and others are the main investment opportunities in the district. In addition to these skilled and unskilled labor forces are also the great potentialities of the district.

**CHAPTER SEVEN**

**7. Conclusions and recommendations**

**7.1. Conclusion**

Now it is time to sum up the analyst is and construct a solid link between the facts discussed so far. with common agreement lode Hetosa wored having land area of 46,000 hectare 25940 arable land, more than 612,664 livestock resources, more than 1,572,733 quintal annual crop production and 145,942 population is highly potential area for economic development. As agriculture is the mean stream of life of the society the activity on the sector is to say on a better stage. There are 19 farmers training centers, 5 animal health clinics and 2 DA in each kebele.

Concerning education there are more than 723 eachers and 50 different types of schools hosting more than 21,469students now a day. The coverage of education is around **91%** and enrolment rate is growing from time to time. Still there is one public library in Huruta town. Again the health sector is widening its scope from time to time. In the District there are 4 health centers 19 health post, and 19 private institutions (12clinics, 4 drug venders ). There are 118.576 km all weather and 8.5 km dry season roads in the District. Potable water supply has reached around 71%.

With its diverse agro-ecological zone, the area encourages economic activities .Investment opportunities are open and enormous in types. Any investor can invest in different activities like commercial farming, animal fattening, Hotel and tourism, education, construction etc and the gain will come soon. The present government policies and strategies pave a way for investment activities at large.

Regarding social service, there is one commercial bank of government ,one agent postal service, fully net- work tell communication service ,24 hours electric power supply and complete potable water supply in towns while there exist partial in rural kebeles. Generally, The District is at good social economical and political situation by now and the Districts’ administration is working with the society to bring good governance, social stability, economic development and at large to change the phase of long poverty history .On this occasion it is possible to conclude that if all economic agents (individual owners, households and government) work in cooperation inevitably change will come within a short period of time.

**7.2 Recommendation**

So far it has been observed that there exist different social, economical and other related problems in the District. If these development hindrances are not given immediate remedies from the concerning bodies, their outcomes will lead to failure. With this regard the analyzing body observed them carefully and recommended the following.

* Since always the District faces budget deficit there should be clear communication between the Districts bureau of finance and the zone one .In this case the District’s finance should organized and prepare accurate budget proposal on the existing situation; again the Regional finance Bureau must observe all things about the District and release the proposed budget reasonably.
* Another problem in the District is turnover of skill man-power so the concerning body should give special attention to this problem; In that forming attractive and conducive working environment by give motivation.
* In every sectors and kebele levels there is a problem of organizing and utilizing data. In this regard continuous training must be given to them by the concerning sides.
* Sectors and kebeles are at early stage of prepare operational and participatory plan. But to make them prepare accurate plan again capacity building training should be given.
* The last but not the least problem is partial absence of good governance at kebele level. Even though sectors have almost improved this problem, kebeles are late on this issue .So continuous monitoring and evaluation must be conducted by the capacity building and finance bureaus in cooperation. Again training may also upgrade their operation*.*

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF MERTI DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER ONE**

**1. INTRODUCTION**

**1.1 Back Ground**

Merti is one of the 27 districts of Arsi zone. The historical name of the district is derived from Maru which means to round something in Afan Oromo. The district has divided into 23 kebeles of which 19 are Peasant Associations while four of them are urban administrative. Abomsa town is the capital city of the district. It is located at 205 km from Regional Capital City, Finfinne and 180 km from zonal capital, Asella Town.

Sources of information Data and Information contained in this material are collected from various sources such as wereda sector offices, questionnaires and , 1999 E.C population census result report and other related documents available in our office.

**CHAPTER TWO**

**2. PHYSICAL SETTING LOCATION AND AREA**

**Location** Merti is one of the administrative units of Arsi Zone. Astronomically, the district is located at between 8o00’00”N-8o34’28”N latitude and 39o36’55”E- 40o00’55”E longitude. When we see the relative location of the district, it is located to the east of Jeju ,north of Guna, west of Aseko , south of Fentale and Boset district of east Shewa zone and south west of Ancher districts in West Hararghe zone.

**Area;-** Thetotal area of Marti Wereda is about 1056.2Km2 and it shares 5% of the total area of Arsi Zone.

**Geology;-** Regarding its geological formation the present land form of the district were formed when Great East African Rift- valley system formed during Cenozoic era of quaternary period. Most of its central, northern, north eastern and north western part is covered by Dino(sedimentary rock) formation while it’s southern, south western, and south eastern and some eastern part is covered by Nazeret Series(Igneous rock).

**2.1 Relief, Drainage and Climate**

**Relief:** -The relief of Merti wereda is characterized by the plain of low altitude and small hills dissecting the plain along its eastern parts with an altitude ranges from less than 1000 to 2000 Meters. The lowest and the highest place of the district are Gologota and Molame-Arjo respectively.

**Drainage:** - All parts of the district are found within Awash River drainage system. Awash River, Arba Dima River, Arba Guracha and Homba River are the major rivers of the district while Derk Wenz, Ija Michika, Ayichilu, Ejersa and Kete Oromo are the major seasonal streams of the district. The district has potential for both modern and traditional irrigation.

**Season:** **:** The mean annual rain fall of the district ranges between 700mm-1100mm. The rainfall pattern is bimodal, which are short rainy season (Belg season from February to April) and summer long rainy season (Meher season from June to August).

In general most parts of the district (sub tropical account for 62%) are characterized by high water deficit area. As a result, most of the time this part of the district, especially the low land of Wetaro Dino (Wetero Dino in Italy means No water in the area) and Hela areas of the district is constantly hit by drought.

**Climate-** Due to its altitudinal location, the climatic condition of the wereda is mostly dominated by moderately warm air condition which ranges between 20oC-25oC. This type of climatic condition consists about 61.91% of the total area of the district. The remaining part of the district has climate condition of moderately cool type with a temperature of 15oC-20oC which accounts 38.09% of the total area of the district.

**Soils:** The major soil types are clay (10 %), sandy (30 %),silt (45%) andloam (15 %). Their fertility status is medium to good. However, rapid erosion due to high rate of deforestation is one of the major problems of the district. Not only deforestation but also due to high population of animals overgrazing is the main causes of soil erosion.

**2.2 Vegetation and Wildlife**

**Vegetation:**The dominant vegetation of the wereda is different species of acacia trees such as dodoti, gerbi.Broad leaf trees such as wanza, Makanisa and ever green trees Oda are grown in lowland area in of wereda.In Wainadega area the common vegetation are wedesa. Makinisa,birbirsa and hindhessa.The main grass grown in wereda are woodland grasses and various types of grasses are used for animal feedings.The major forest areas are getara abdo artificial forest,gara mude,gara,bilawa and gara siri natural forest.

**Wildlife :** The major wild animals are hyena, monkey, apes, nyala(gadamsa) and area closure currently recovered are gara mude, gara sirri,gara gora, she gado, gara bilawa and gara bicho.

**CHAPTER THREE**

**3. SOCIO ECONOMIC CONDITION**

**3.1** **Population Size and trend**

According to the data obtained from CSA of 1999, the total population of the district was increased from **120,642** to **124,164**  between the years 2011 to 2012 showing an increment by 2.9%. From the total populations of the district, only 17.93% are living in urban areas in the years 2011 and 2012. This indictes that more than 82.57% of the population of the district is living in rural area depending on agriculture. Of the total population, females accounted for 48.30% during the year 2011. An overall sex ratio of the district was 100 male per 100 female (100 male per 100 female in urban and 100 male per 100 female in rural) by the year 2012.

**Table: 1 Population distribution by urban, rural and sex for the district**.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Urban** | | | **Rural** | | | **Total** | | |
| **Both sex** | **male** | **female** | **Both sex** | **male** | **female** | **Male** | **Female** | **Total** |
| 2008 | **21,274** | **11,446** | **9,828** | **95,950** | **49,239** | **46,712** | 60,685 | **56,540** | 117,224 |
| 2009 | **22,164** | **11,925** | **10,239** | **98,478** | **50,536** | **47,942** | 62,461 | 58,181 | **120,642** |
| 2010 | **23,092** | **12,424** | **10,668** | **101,072** | **51,867** | **49,205** | 64,291 | 59,872 | **124,164** |
| 2011 | **24,059** | **12,944** | **11,114** | **103,734** | **53,233** | **50,501** | 66,177 | 61,615 | **127,792** |
| 2012 | **25,065** | **13,486** | **11,579** | **106,466** | **54,635** | **51,831** | 68,121 | 63410 | **131,532** |

Source: Projection made from CSA of 1999.

**Age and Sex Structure of Population**;- is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district. According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 44.8%, 52.1% and 3.1% of the total population respectively in the year 1999. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 47.76%, 49.23% and 3.01% for rural areas and 29.66%, 66.97% and 3.37% for urban area respectively. The dependency ratio of the district is 92 % (103% for Rural and 49% for urban) which indicates 92 people are dependent on 100 economically active populations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table: 2. Population size by wider age group Classification of the year 2012** | | | | |
| **Year/Sex** | **Male** | **Female** | | **Total** |
| **No** | **%** | **No** |
| **Rural** | **38874** | **36618** |  | **75492** |
| 0-14 | 18613 | 17440 | 48.37 | 36053 |
| 15-64 | 18855 | 18309 | 49.27 | 37164 |
| 65+ | 1406 | 869 | 38.20 | 2275 |
| **Urban** | **7885** | **6770** | **46.20** | **14655** |
| 0-14 | 2183 | 2164 | 49.78 | 4347 |
| 15-64 | 5462 | 4352 | 44.34 | 9814 |
| 65+ | 240 | 254 | 51.42 | 494 |
| **Total Rural + Urban** | **46759** | **43388** | **48.13** | **90147** |
| 0-14 | 20796 | 19604 | 48.52 | 40400 |
| 15-64 | 24317 | 22661 | 48.24 | 46978 |
| 65+ | 1646 | 1123 | 40.56 | 2769 |
| **Source: 1999 CSA population & Housing census report** | | | | |

**Population Density and Rural settlement;-** indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, a crude density was increased from 93 persons per km2 to 110 persons per km2 between the year 1999 and 2012. .This ratio indicates even if the ratio was increasing, that the district is one of the sparsely populated of the district. Concerning the settlement pattern of the district, the rural parts are characterized by clustered type of settlement.

**School age Population;** is important for planning educational facilities like school, class room, teachers, text book and other teaching materials. In addition, it is also important for planning the number of students to be enrolled to the school every year. The following table shows school age population of the district for each educational level. Accordingly, the number of school age population of the district was increasing from 34,304 students to 39,588 student between the years 2011 to 2012. These groups of population account for 31.8% of the total population of the districts in the year 2012.

As far as school age population by level of school was concerned the number of kindergarten, primary and secondary school population was increased by 13.3% per annum. This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment which in turn improve the quality of education in the district. Moreover, there is a need for expansion for other social services like clean water, health facilities, youth centre, etc.

**Population Density and Rural settlement;-** indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, a crude density was increased from 93 persons per km2 to 110 persons per km2 between the year 1999 and 2012. .This ratio indicates even if the ratio was increasing, that the district is one of the sparsely populated of the district. Concerning the settlement pattern of the district, the rural parts are characterized by clustered type of settlement.

**3.2 Agriculture**

**Farmers Associations /Agricultural Service Cooperatives**: in the year 2011 and 2012There were 48 and 47 general service cooperatives from which 9186 and 10531 farmers are directly benefited and their capital was 11,465,019.1.and 14,109,010 respectively. In the year one general service cooperatives was shut down due to members with drawn out from the cooperatives. On the other hand, there were six irrigation participant agricultural cooperatives in the year 2011 and 2012 with member of 1030 and 1059 member and have a total capital of 2881202.0 and 3,813,261respectively.

**Table: 3..Number credit and saving cooperatives, (in the year 2011 and 2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Type of Activity/Cooperatives** | **No** | **Number of members** | | | **Capital** | | |
| **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| **2011** | General service cooperatives | 48 | 7471 | 1715 | 9186 | 9,285670.17 | 2,179349.15 | 11,465,019.1 |
| Irrigation participant cooperative | 6 | 609 | 421 | 1030 | 13i32691.91 | 1548510.1 | 2881202.0 |
| **Total** | 54 | **8080** | **2136** | **94870** | **10,618,362** | **3,727,859.2** | **14,346,221.1** |
| **2012** | General service cooperatives | 47 | 8561 | 1970 | 10531 | 11,823,550 | 2,285,460 | 14,109,010 |
| Irrigation participant cooperative | 6 | 609 | 450 | 1059 | 2,451,791 | 1,361,470 | 3,813,261 |
| **Total** | 53 | **9170** | **2420** | **11590** | **14,275,341** | **3,646,930** | **17,922,271** |

Source: Merti District Cooperative Office

**Fertilizers, improved seeds and Herbicides:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, between the years 2011 and 2012, the amount of chemical fertilizer distributed to the farmers was increased from **16651.5** to **19850.5** quintals while the amount of different types of improved seeds distributed to the farmers was increased from quintal **772.75** to **977.7** respectively. Furthermore, 2507 and 11377 liters of pesticides and herbicides were distributed to the farmers in the year 2011 and 2012 These figures however, does not indicate the actual amount of inputs distributed as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data

**Table:.4. Agricultural inputs distributed to Farmers (2011 and 2012) in Quintals**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of input** | **2011** |  | **2012** |
| **Chemical Fertilizer** | **16651.5** |  | **19850.5** |
| DAP (qt.) | 1.5 |  | 0 |
| Urea (qt.) | 4153.5 |  | 6207.5 |
| NPS | 12496.5 |  | 13,643 |
| **Improved Seeds (qt.)** | **772.75** |  | **977.7** |
| Wheat | 16.5 |  | 102 |
| Maize | 6.25 |  | 42.25 |
| Teff | 750 |  | 773.5 |
| Barley | 0 |  | 0 |
| **Herbicides and pesticides** | **2507** |  | **11377** |
| Pesticides (lit) | 2137 |  | 536 |
| Herbicides(lit) | 370 |  | 10841 |

**Land Resources by Use (in hectares;-** The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops, Teff, Wheat and Barley are the most widely grown ones while haricot beans and horse pea are the most widely grown crops from pulses in the year 2011 and 2012. In addition, the district is known in producing some cash crops like vegetables, spices, root crops, etc).

During the Meher season, the total land cultivated was increased from 24868 hectares to 24942.5 hectares while the production obtained was increased from **314,308** quintals to  **219,360** quintals between the year 2011 and 2012. However, the average productivity was increased from 7.9 quintals per hectare to 11.3 quintals per hectares during the years under consideration.

Likewise during the Belg season, the total land cultivated was decreased from 4376 hectares to 3579.5 hectares while the production obtained was increased from 89574 quintals to 142669 quintals between the year 2011 and 2012. These give an average productivity to be increase from 4.8 to 2.5 during the year under consideration..

**Table:5 Land Use in the Wereda**

|  |  |  |
| --- | --- | --- |
| No | Land use type | Area in hectares |
| 1 | Pasture land/Grazing land | 35088 hec. |
| 2 | Forest land | 5835 hec |
| 3 | Irrigated land | 3500 hec |
| 4 | Arable land, | 27371hec |

**Crop Production**

**Table 3.1 Area Cultivated and production obtained seasons (2011-2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Crop type** | **2011** | | | | **2012** | | |
| **Meher Season** | | | | **Meher Season** | | |
| **Area (Hect.)** | | **Prod(Qunt.)** | | **Area (Hect.)** | | **Prod(Qunt.)** |
| **I** | **Cereals** | **20975** | | **201883** | | **21058** | | **200981** |
| 1 | Wheat | 3302 | | 42800 | | 3190 | | 35049 |
| 2 | Teff | 6258 | | 32962 | | 8595 | | 35140 |
| 3 | Barley | 2700 | | 31789 | | 2625 | | 32789 |
| 4 | Maize | 4000 | | 51289 | | 2860 | | 49300 |
| 5 | Sorghum | 4320 | | 41100 | | 3444 | | 46360 |
| 6 | Oats | 395 | | 1943 | | 344 | | 2343 |
| **II** | **Pulses** | **2329** | | **6108** | | **2190** | | **6470** |
| 7 | Horse Beans | 840 | | 2869 | | 732 | | 2869 |
| 8 | Lentils | 150 | | 1260 | | 150 | | 1360 |
| 9 | Haricot Beans | 1250 | | 1089 | | 1188 | | 1224 |
| 10 | Chick Peas | 89 | | 890 | | 120 | | 1017 |
| **III** | **Oils Seeds** | **462** | | **2185** | | **460** | | **2470** |
| 12 | Peas | 130 | | 890 | | 130 | | 990 |
| 13 | Linseed | 275 | | 968 | | 276 | | 1168 |
| 14 | Rape Seed | 22 | | 172 | | 23 | | 168 |
| 15 | Neug | 20 | | 110 | | 20 | | 95 |
| 16 | Sesame | 15 | | 45 | | 11 | | 49 |
| **IV** | **Others** | **18** | | **64** | | **24** | | **78** |
|  | **Sub.Total of Crop** | **23784** | | **210240** | | **23732** | | **209999** |
| **V** | **Vegetables** | **1084** | | **104068** | | **1192.5** | | **93661** |
| 17 | Root Crops | 84 | | 1468 | | 1192 | | 9660 |
| 18 | Fruits | 1.5 | | 75 | | 2.5 | | 125 |
| 19 | Coffee | 55 | | 330 | | 61.81 | | 368.5 |
| 20 | Chat | 22 | | 110000kg | | 28 | | 140000kg |
| 21 | Sugarcane | 3.5 | | 35000kg | | 4.5 | | 45000kg |
| 22 | Hops | 16 | | 300 | | 12 | | 360 |
|  | **Grand Total** | **24868** | | **314308** | | **24924.5** | | **219360** |
|  |  |  | |  | |  | |  |
| **Table 3.1 Area cultivated and production obtained by the seasons (2011-2012)** | | | | | | | | |
| **No** | **Crop type** | | **2011** | | | | **2012** | |
| **Belg Season** | | | | **Belg Season** | |
| **Area (Hect.)** | | **Prod(Qunt.)** | | **Area (Hect.)** | **Prod(Qunt.)** |
| **I** | **Cereals** | | **3969** | | **73724** | | **3313** | **39939** |
| 1 | Wheat | | 1852 | | 37330 | | 1577 | 21615 |
| 2 | Teff | | 270 | | 2576 | | 147 | 2241 |
| 3 | Barley | | 1597 | | 29568 | | 1262 | 15568 |
| 6 | Oats | | 250 | | 4250 | | 327 | 515 |
| **II** | **Pulses** | | **254** | | **1330** | | **121** | **383** |
| 9 | Lentils | | 134 | | 670 | | 103 | 285 |
| 10 | Haricot Beans | | 120 | | 660 | | 18 | 98 |
| **III** | **Oils Seeds** | | **40** | | **960** | | **21** | **143** |
| 12 | Peas | | 40 | | 960 | | 21 | 143 |
|  | **Sub Total of Crop** | | **4263** | | **76014** | | **3455** | **40465** |
| **V** | **Vegetables** | | **113** | | **13560** | | **124.3** | **102204** |
| 17 | Root Crops | | 20 | | 1356 | | 54 | 3686 |
| 18 | Fruits | | 1.7 | | 75 | | 2.5 | 125 |
| 20 | Chat | | 22 | | 110,000kg | | 28 | 140,000kg |
|  | **Grand Total** | | **4376** | | **89,574** | | **3579.3** | **142669** |

**Methods for maintaining Soil fertility:** There are two ways of soil fertility maintaining methods in the district. These are : Traditional and modern methods. The Traditional method includes using of animal dung and crop residue, crop rotation and fallowing while the modern one is the using of artificial fertilizer.

**Methods used for Soil Conservation**:Contour ploughing, strip cultivation, trash line, diversion ditch on cultivated land are a traditional method while Microbasin constraction 31000 m3 and 41682, Terrace construction around 7619 and 6912 meter, land rehabilitation 3600 and 4700 hectare , seeding production 6.77 and 5 million and afforestation are modern way of soil conservation in the year 2011 and 2012 respectively.

**Crop pests and diseases:**Sorghum Chaffer, stock borer, Aphids, Barely shoot fly, army Worm, termites, locust and birds are the major crop pest, while Rust, Coffee berry disease, fungus and Root Rot are the major crop production diseases found in the district.They have a great contribution in decreasing the amount of crops produced / production both before and post harvest.

**Livestock and poultry diseases:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastoralists, New castle, External and internal parasites are the major livestock and poultry disease in the district. In addition high prevalence of diseases, traditional method of rearing, inadequate food supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district.

**The major types of animal feeds in the district are ;** forage and crop residues, which are limited in nutritional values. at the cause of Deforestation, shortage of moisture and Herbicides are the major problem in bee farming. To overcome these problems, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock production. Accordingly, the following table shows the type of vaccination and treatment given to the livestock during the indicated year.

**Agricultural calendar: -** It is well known that the farmers of the Woreda are not busy through out the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio- cultural related ceremonies. The time of performing agricultural activates such as land preparation, planting, weeding and harvesting vary with season depending on Agro climatic Zone.

**Table: 3.6. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | January-June | October - January |
| 2 | Planting (Sowing) | June- September | February-March |
| 3 | Weeding | July – August | April – may |
| 4 | Harvesting | October-January | June- august |

Source: Marti district Agricultural Development Office.

**Irrigation:**

In the year 2011 and 2012 there were 4485 and 4568 hectares of land covered by modern irrigation in the district. From the total modern irrigable land 1,096,398 and 1,196,057 quintals of production was obtained in the year 2011 and 2012 respectively. From this type of irrigation 2433 and 2847 households were benefited under the year consideration

**Table: Types of Irrigations and yield gained**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Irrigation types | year | Production period | | Land in hectares | Total Production in quintals |
| 1st round | 2nd round |
| modern | 2011 | 2242.2 | 2242.5 | 4485 | 1,096,398 |
| traditional | 171.1 | 171.1 | 343 | 49,104 |
| lake | 9 | 9 | 18 | 1620 |
| pump | 437.5 | 437.5 | 875 | 227,525 |
| modern | 2012 | 2284 | 2284 | 4568 | 1,196,057 |
| traditional | 172 | 172 | 344 | 79,847 |
| lake | 9 | 9 | 18 | 1,925 |
| pump | 443 | 443 | 886 | 227,763 |

Source: Merti Wereda Irrigatio

**Development Agents and Farmers Training Centers:** Agricultural infrastructures are important in increasing agriculture production and productivity. Accordingly, the district agricultural office, construct farmers training center (FTC) in each rural kebeles and employed three development agents with different field of study so that they can help the farmers in all aspect on crop production and animal management, natural resource conservation, child care and family planning. Hence, the number of FTC was increased to 18 while the number of development agents was 61 from which 25460 farmers were benefited from the services during the year 2012.

**Table: 3.1. Number of Development Agents, FTCs and Beneficiaries**

|  |  |  |
| --- | --- | --- |
|  | **2011** | **2012** |
| Number of Development Agents | 57 | 61 |
| Number of FTC | 18 | 18 |
| Number of Beneficiaries | 25460 | 25460 |

Source: Merti district Agriculture and Rural Development Offices

**Agricultural Constraints**

**Drought**; *-* since the district is found within hot agro-ecological zone, drought is commonly affect the households of the district. As the result of this, in the year 2011 and 2012, the households faced drought were 17514 and 14446 respectively.

**Table3.2. Number of house hold affected by drought in the year 2011 and2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Number of house hold affected by drought** | | |
| **Male** | **Female** | **Total** |
| 2011 | 13595 | 3909 | 17514 |
| 2012 | 10835 | 3611 | 14446 |

|  |
| --- |
|  |

**Livestock, Poultry, Bee-keeping and Fishery**

**Livestock:** Beside crop production the livelihood of the farmers of the district was depends on rearing animals. Accordingly, the livestock population of the district was increased from **355520** to **362,630** between the year 2011 and 2012. From the livestock population found in the district, cattle, sheep and goats account for more than 55% of the total livestock population in the district. The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Poultry:**Poultry production is one of the important sources of family income and food in the district. Accordingly, the number of poultry population was increased from **104,223 t**o **106,307** between the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 3.2. Distribution of livestock and poultry in year 2009 and 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Type of livestock | 2011 | 2012 |
| 1 | Livestock | 355520 | 362,630 |
|  | Cattle | 98,058 | 100,019 |
|  | Sheep | 30443 | 31052 |
|  | Goat | 66299 | 67625 |
|  | donkey | 17408 | 17756 |
|  | Horses | 8503 | 8673 |
|  | Mules | 3311 | 3377 |
|  | camel | 27275 | 27821 |
| 2 | Poultry | 104,223 | 106,307 |

Source: - merti district livestock resource and health office

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Since 2000 there was one B-type clinics and two D-type clinics with which in the district provides health services and there was no C-type health post in the year 2011.These limited number of health facilities indicates low health coverage. On the other hand, so as to provide animal health service delivery having qualified health personnel is very important. To this end, there were 1 veterinary personnel (one DVM doctor), 12 health assistance, in the year 2012.

**Table3.3. Distribution of Merti district Animal Health infrastructure (2011 and 20120)**

|  |  |  |
| --- | --- | --- |
| Description | 2011 | 2012 |
| Veterinary Personnel | 13 | 13 |
| DVM doctor (VET) | 1 | 3 |
| Animal Health Assistance | 12 | 12 |
| Animal health Technician | - | 6 |
| Meat Inspector | 2 | 2 |
| Health Infrastructure | 3 | 3 |
| Clinic B-Type | 1 | 1 |
| Clinic C-Type | 0 | 0 |
| Clinic D-Type | 2 | 2 |

Source: Merti District Agricultural Development Office

**Livestock and poultry diseases:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastoralists, New castle, External and internal parasites are the major livestock and poultry disease in the district. In addition high prevalence of diseases, traditional method of rearing, inadequate food supply; poor marketing facilities are

**The major types of animal feeds in the district are ;**forage and crop residues, which are limited in nutritional values. at the cause of Deforestation, shortage of moisture and Herbicides are the major problem in bee farming. To overcome these problems, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock production. Accordingly, the following table shows the type of vaccination and treatment given to the livestock during the indicated year.

**Table: 3.4. Number of Animals got health services by type of service given**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of service given** | **2011** |  | **2012** |
| **Vaccination** | **257320** |  | **266,100** |
| Blackleg | 29700 |  | 31100 |
| Hemorrhagic Septicemia | 30900 |  | 1600 |
| Anthrax | 412200 |  | 32220 |
| **Others** | **155,520** |  | **201,180** |
| **Treatment** | **180,162** |  | **252717** |
| External Parasites | 87,234 |  | 120563 |
| Internal Parasites | 80985 |  | 119336 |
| Others | 11035 |  | 11255 |
| Operation | 26 | 22 | |
| castration | 882 | 1541 | |

Source: Merti District livestock health development and marketing agency

**Bee-Keeping and Fishery**

**Bee-Keeping activities:** Bee-keeping farming is another source of additional income for the farmer. Accordingly, there were 3752 traditional, 938 transitional and 52 modern bee hives from which 19183kg of production was obtained in the year 2012. Number of participant Male =1128 & Female =28 in this year. However, using of herbicides and insecticides are the main problems in bee farming.

**Fishery:** Since there is no big water bodies like rivers, lakes and ponds there is no fishery activities in the district.

**Table: 3.4- Number of Bee –keeping and production obtained in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of bee hives** | **2011** | | **2012** | |
| **No of bee hives** | **Prod(kg)** | **No of bee hives** | **Prod(kg)** |
| Traditional bee hives | 3687 | 13902 | 3752 | 11340 |  |  |
| Intermediate bee hives | 1473 | 8932 | 938 | 5426 |  |  |
| Modern bee hives | 37 | 1072 | 37 | 1072 |  |  |
| **Total** | ***5297*** | ***23906*** | ***4727*** | ***17838*** |  |  |

**Livestock and poultry diseases:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastoralists, New castle, External and internal parasites are the major livestock and poultry disease in the district. In addition high prevalence of diseases, traditional method of rearing, inadequate food supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district. .

**3.3 Mining and Industry**

**Mining:** Like other parts of country in general and the District in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as stones, sands for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. but Since the year 2007 the district started utilizing some of these minerals resources. However, there are insignificant (may be rock quarrying, pottery making mining activities) by local communities in the district.

**Industry:**Similar to other parts of the woreda, industrial development is at its infant stage in Merti district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned. There are also no medium scale industrial establishments in the district. In the year 2009 there were about 54 grain mills which accounts 95% of the total types of permanently licensed small-scale industries. Due to lack of recording and further investigation about these industries total amount of capital and job opportunity created as a result of these industries is not clearly known.

**3.4 Education**

**Kindergarten:**According to the data obtained from Statistical Abstract of the district, between the year 2011 and 2012, the number of kindergarten schools was five which was not enough for the children read for KG.

**Primary Schools:**Due to efforts made by the district education office so as to achieve universal education, the number of primary school was increased from 38 to 39 between the year 2011 and 2012 .In the same year the coverage of primary school was improved but its quality needs great effort. During the year 2009 and 2010, the number of teachers was 475(292 male teacher and 183 female teacher) and 462(male 285 and 177 females) respectively.

**Senior Secondary education (9-12) -** In the districtthere is one Senior Secondary (9-12) school located in Abomsa town since 1999 and one high school opened in Angada town in 2010. The number of student enrolled to this school was 2411(41.89% females) and (58% males) and 2857(59.9% male student) and (40.1% female student) in the year 2011 and 2012 respectively. During the indicated years, the number of teachers was decreased from 102 to 98. while the number of class-rooms was decreased from 50 to 47. The student to teacher’s ratio was on average decreased from 22:1 to 23:1 while the student to class-room ratio was also improved from 48.2:1 to 51:1 between the year 2011 and 2012. On the other hand, there was one preparatory school until 2011.

**Table. 4.1 Student achievement by level of school (government) year 2011 and 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Description of activities** | **Primary school** | | **Secondary school 9-10** | **Preparatory school 11-12** |
| **First cycle(1-4)** | **second cycle(5-8)** |
| **2011** | Enrolment | 18991 | 8581 | 1992 | 289 |
| Promoted | 18564 | 7643 | 1803 | 282 |
| Drop out | 427 | 719 | 108 | 7 |
| detained | 0 | 219 | 81 | 0 |
| **2012** | Enrolment | 18093 | 8276 | 2506 | 351 |
| Promoted | 17981 | 7181 | 2304 | 324 |
| Drop out | 112 | 717 | 160 | 27 |
| detained | 0 | 378 | 42 | 0 |

**Student achievement by level of school (non-government) year 2011 and 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Description of activities** | **Primary school** | | **Secondary school 9-10** | **Preparatory school** |
| **First cycle** | **Second cycle** |
| 2011 | Enrolment | 257 | 44 | 0 | 0 |
| Promoted | 250 | 42 | 0 | 0 |
| Drop out | 7 | 2 | 0 | 0 |
| detained | 0 | 0 | 0 | 0 |
| **2012** | Enrolment | 412 | 74 | 0 | 0 |
| Promoted | 408 | 63 | 0 | 0 |
| Drop out | 4 | 0 | 0 | 0 |
| detained | 0 | 11 | 0 | 0 |

**TVET:** There was one governmental technical and vocational education school in the district. In the year 2011 and 2012 there were 65 (49 males and 16 females) teachers and subordinate workers.

**Table: 4.1. Number of Kindergarten and Primary School (1-8) with Student Enrolled (2011 /2012)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Years** | **Primary(1-8)** | | | | | | **Senior Secondary(9-12)** | | | | | **Kindergarten** | | | | | |
| **No of school** | **Male** | **Female** | | **Total** | | **No of school** | | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | | | **Total** |
| **Government** | | | | | | | | | | | | | | | | | |
| **2011** | **38** | **14352** | **13220** | **27572** | | | | **3** | **1288** | **993** | **2281** | **0** | **0** | **0** | | | **0** |
| **2012** | **39** | **13817** | **12552** | **26,369** | | | | **3** | **1713** | **1144** | **2857** | **0** | **0** | **0** | | | **0** |
| **Non-Government** | | | | | | | | | | | | | | | | | |
| **2011** | **3** | **143** | **158** | **301** | | **0** | | | **0** | **0** | **0** | **5** | **487** | | **432** | **919** | |
| **2012** | **3** | **254** | **232** | **486** | | **0** | | | **0** | **0** | **0** | **5** | **414** | | **395** | **809** | |

**Source:** Merti District Education Office

**Education Quality:**The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma & Digri level) to teach at this level are 270 male & 164 female 434 from the total teachers teaching this level. About 28 teachers were teaching above their level of education in this category. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence we have to look into other factors mainly Teacher Development Program (TDP), Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say. **S**o as we see from the given information education office of the district would be expected to do more to improve the quality of education by increasing the needed variables of education quality.

As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI & Diploma for 1-4, Digrii & Diploma 5-8 and Degree and above for secondary school), the number of TTI and below TTI teachers was decreased from **82** to 28 in primary school (1-8) between the year 2009 and 2010. However, the number of diploma teachers was also increased from 341 to 359 teachers in (1-12)th grade level during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below

**Table: 4.2. Number of Teachers by level of education and School (2011 and 2012)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Educational Level** | **2011** | | | | | **2012** | | | | |
| **Male** | **Female** | | **Total** | | **Male** | | | **Female** | **Total** |
|  | **No of teachers in school(1-12)** | | | | | | | | | |
| Below TTI | 30 | 29 | | 59 | | 1 | | | 5 | 6 |
| TTI | 15 | 8 | | 23 | | 14 | | | 8 | 22 |
| Dip | 213 | 128 | | 341 | | 218 | | | 141 | 359 |
| BA/BSC | 130 | 24 | | 154 | | 140 | | | 28 | 168 |
| Level |  |  | |  | |  | | |  |  |
| **Total** | **388** | **189** | | **577** | | **373** | | | **182** | **555** |
|  | **Non-Government** | | | | | | | | | |
| TTI | 0 | 2 | 2 | | 0 | | 2 | 2 | | |
| Dip | 7 | 3 | 10 | | 8 | | 4 | 12 | | |
| BA/BSC | 1 | 1 | 2 | | 0 | | 1 | 1 | | |
| Total | **8** | **6** | **14** | | **8** | | **7** | **15** | | |

**Source:** Merti District Education Office

**3.5 Health**

**Health Institution:** the number of health facilities was not constracted from 2011and 2012which were four health center, 0 clinics, one district hospital,, 16 health post) in both years. In addition, there were **10** non- governmental clinic, 3 drug vender between the year 2011 and 2012 respectively. As we see from this both governmental and non-governmental heath institutions were shows low health coverage in the district during under the year consideration The ratio of population to Health Center, clinic and health post was 31352:1 for health center, 0:0 for clinic and 9797:1for health post which indicates low health coverage of the district as compared with WHO standard (25000 and 5000 respectively.)

**Health Personnel:**so as to improve health service delivery, having qualified health personnel was important. Accordingly, the number of health personnel was increased from 90 to 122 between the year 2011and 2012. By health profession, there were 13 medical doctors, 11 health officers, 37 nurses, 15 technicians and 38 health extension workers. For more information see the table below.

**Table: 4.3. Number of health Institution and Personnel by ownership (2011and 2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** | **21** | **10** | **21** | **11** |
| District Hospital | 1 | 0 | 1 | 0 |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 10 | 0 | 11 |
| Health Post | 16 | 0 | 16 | 0 |
| Rural Drug Vender/shop | 0 | 3 | 0 | 3 |
| **Health Profession** | **88** | **46** | **118** | **14** |
| Medical doctors | 0 | 0 | 13 | 0 |
| Health Officer | 7 | 1 | 11 | 0 |
| Nurse | 37 | 34 | 37 | 10 |
| Health Assistance | 0 | 0 | 0 | 0 |
| Laboratory Technician | 0 | 2 | 15 | 4 |
| Pharmacist | 0 | 8 | 1 | 0 |
| Pharmacy Technician | 0 | 1 | 0 | 0 |
| Sanitarian | 3 | 0 | 3 | 0 |
| Health Extension Workers | 41 | 0 | 38 | 0 |

Source: Merti District Health

**Ten top diseases:** According to the data obtained from Merti district health Office, the highest prevalent disease in the district is acute fiber illness (AFI) (22.2%), Upper Respiratory tract infection (19.49%), Diarrhea /no bloody(13.1%), Pneumonia (11.54%), and Urinary tract infection (7.38%) in the year 2010. See table below for more information.

**Table: 4.4. Ten top diseases existed in the district in the year 2011and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | 2011 | | | 2012 | | |
| **Type of Diseases** | **Number** | **%** | **Type of Diseases** | **Number** | **%** |
| 1 | Acute febrile illness | 5662 | 22.2 | Acute upper respiratory infection | 2176 | 29 |
| 2 | Acute upper respiratory infection | 4970 | 19.49 | Dyspepsia/inability to swallow/ | 917 | 12 |
| 3 | Diarrhea/no bloody/ | 3317 | 13.01 | Diarrhea /functional diarrhea/ | 768 | 10 |
| 4 | Pneumonia | 2943 | 11.54 | Typhoid fever | 698 | 9 |
| 5 | Urinary tract infection | 1883 | 7.38 | Urinary tract infection | 642 | 8 |
| 6 | Dyspepsia | 1758 | 6.89 | Pneumonia /bacterial pneumonia unspecified/ / | 619 | 8 |
| 7 | Helmenthiasis | 1616 | 6.34 | Fever/fever of other and unknown origin/ | 451 | 6 |
| 8 | Typhoid fever | 1229 | 4.82 | Helmenthiasis /intestinal helmenthiasis unspecified/ | 451 | 6 |
| 9 | Infection of the skin and subcutaneous | 1075 | 4.22 | Diarrhea /shigellosis due to shigella dysenteriae/ | 401 | 5 |
| 10 | Diarrhea with dehydration | 1047 | 4.11 | Pneumonia/unspecified/ | 310 | 4 |
|  | **Total** | **25500** | **100** | **Total** | **7590** | **100** |

Source: Merti District Health Office

**Harmful Traditional Practices:**Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in Merti district. Among these, raping, B*uta,* *Dhala****,*** female circumcision, G*eber*a etc can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district.

**Women and Children Socio-economic condition**

**Women Issue**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 8680 and 4470 in the year 2011 and their number was increased to 9841 and 5390 in the year 2012.On the other hand, the number of women gets delivery services in the health institution by health professional was 4112 and 5405 in the year 2011 and 2012. Though such improvement was observed, still there were no women attended delivery traditional at their home in the year 2009 and 2010 due to free delivery service, availability of access road and availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 5371 to 7063 between the year 2011 and 2012while the number of mother get NPWTT2 vaccination was 19950 and 21380 during the year under consideration.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and Merti district in particular is the highest when compared with developed countries due to some cultural value the community to have for children, lack of awareness to use family planning service, early marriage, rape, etc.

To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 11496 in the year 2009 to13,627 in the year 2010. As a result of this, according to the data obtained from Demographic health Survey of the year 2011 indicated the contraceptive prevalence rate of the district was estimated at 79%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing.

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 4169 in the year 2009 to 4308 in the year 2010. Though the above figure indicates the number of children get different vaccination, the number of children who get full immunization was 4308 in the year 2010 .

**Table: 4.6. Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | 2012 |
| BCG | 4169 | 4308 |
| DPT1 | 3869 | 3998 |
| DPT3 | 3869 | 3998 |
| **PCV1** | **3869** | 3998 |
| PCV3 | **3869** | 3998 |
| Polio 1 | **3869** | 3998 |
| Polio 3 | **3869** | 3998 |
| ROTA 1 | **3869** | 3998 |
| ROTA 2 | **3869** | 3998 |
| Measles | **3823** | 3998 |
| Fully Vaccinated | **3823** | 3998 |

Source: Merti district health office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes more than 4776 and 650 children to be orphan and vulnerable in the year 2011 and 2012.These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 3154 in the year 2009 which was dicreased to 497 in the year 2010.This does not indicate all of them get holistic support (food, education, health and psycho-social*).* Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Malaria, Sepsis, Preterm, Tetanus and infection of skin.

**Table: 4.7 Children socio economic indicators in the district 2009 & 2010**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **measurement** | **2011** | **2012** |
| **1** | **Number of Orphan and Vulnerable children** | Number | **4776** | **650** |
|  | Male | Number | 2966 | 302 |
|  | Female | Number | 1810 | 348 |
|  | Total | Number | 4776 | 650 |
| 2 | Full immunization | Number | 3123 | 3601 |
| **3** | **Child disease and causes of death** | **Number** | **270** | **242** |
|  | Malaria prone area | Number of kebele | 17 | 18 |
|  | Children affected by Malaria | Number | 134 | 120 |
|  | Children treated for malaria | Number | 134 | 120 |
|  | Children died due to malaria | Number | 0 | 0 |
|  | Children born with HIV/AIDS | Number | 3 | 2 |
|  | Children Died due to HIV/AIDS | Number | 0 | 0 |
|  | ITN Coverage | % | 100 | 100 |

Source: District Health Office

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 18362 and 21,641 in the year 2009 and 2010. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, three health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities. However, of the total school in the district, only 29% of school was access to potable water supply facilities.

**Table: 4.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | | Health post | | | Hospital | | | Clinic | | |
| 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 4 | 4 | 4 | 16 | 16 | 16 | 1 | 1 | 1 | 0 | 0 | 0 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 3 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 3 | Number of health institution access to water supply | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |

**CHAPTER FOUR**

**4. Infrastructure and social facilities**

**Roads:** Merti district is found 180km away from zonal capital town, Asella and 205 km from Regional Capital city, Finfinne. It has 177.403km length of gravel road (all weather), 18km of dry weather road in the year 2010. This gives the road density of 0.05km per km2 and 1.825 km per 1000 people for all weather roads.

**Table 4.1 Number and Type of vehicles Inspected and Fined in Distirict in the year 2011 and 2012**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of Distirict | year | Government | Public | Taxi/bajaj/ | Freight | Private automomile | Motor-cycle | NGO’s | other | Total |
| merti | 2011 | 8 | 0 | 150 | 0 | 0 | 10 | 0 | 0 | 168 |
| 2012 | 8 | 0 | 160 | 0 | 0 | 12 | 0 | 0 | 180 |

*Source: Merti districts road office*

**Telecommunication:**one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with automatic types of telecommunication. On the other hand, most rural areas of the district has supplied with wireless type of telephone services until 2002; but due to availability of individual mobile this wireless was not functional. . Moreover, since 2001 mobile telephone services are under construction that benefit capital town of the district and the surrounding rural areas. Currently the district provided with 4G data services.

**Table 4.8 Domestic and International Postal service statics in wereda in 2011 & 2012**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Domestic | | | International | | | Total | | |
| Weredas | year | Incoming | outgoing | Total | Incoming | outgoing | Total | Incoming | outgoing | Total |
| merti | 2011 | 1850 | 1700 | 3550 | 165 | 170 | 335 | 2015 | 1870 | 3885 |
|  | 2012 | 1200 | 870 | 2070 | 390 | 257 | 647 | 1590 | 1127 | 2717 |

*Source: Merti districts Post office*

**Post Office:**Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has agent types of postal service in Abomsa town.Number of Post Boxes Rented 25 & Not Rented 35 total 70.

**Water and Energy Supply**

**Water supply:** potable water coverage of the district is low. According to data obtained from Rural Water Resource Office, of the total rural population of the district (51.4) was supplied with potable water in the year 2011/2012, During the same year, about ( 53,349) of rural population was supplied with potable water. During the year 2010 on the other hand, of the total population of the district about (63473) were supplied with potable water, which is 57.1 % for rural and 77.4% for urban areas 51349 town population supplied potable water. on the other hand 58.9% and 65.3% of the urban population was access to clean water in 2011 and 2012respectively.

**Total Rural and urban population supplied with potable water in the year 2011 & 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Wereda name** |  | **Residence** | **Total population** | **populationsupplied with potable water** | **%of population supplied with potable water** |
| merti | 2011 | urban | 55,245 | 32,589 | 58.9 |
| Rural | 103,987 | 53,468 | 51.4 |
| 2012 | urban | 66,351 | 43,372 | 65.3 |
| Rural | 110,583 | 63,473 | 57.1 |

**Energy Supply:**Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. All towns of Merti district have supplied with electric power. On the other hand, almost all parts of the rural areas have no electric services. According to the data obtained from ELPA Statistical Abstract, more than 80% of the total population of town has supplied with Electricity.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that play a significant role in decreasing. The role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene.

**Table: 4.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Health Centre | | | Health post | | | Hospital | | | Clinic | | |
| 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 4 | 4 | 4 | 16 | 16 | 16 | 1 | 1 | 1 | 0 | 0 | 0 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 3 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 3 | Number of health institution access to water supply | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 4 | Number of health institution access to toilet facilities | 4 | 4 | 4 | 16 | 16 | 16 | 1 | 1 | 1 | 0 | 0 | 0 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 4 | 4 | 16 | 16 | 16 | 1 | 1 | 1 | 0 | 0 | 0 |
| 6 | Number of Health institution access to liquid waste disposal facilities | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |

Source: - Merti District Health Office

**Table:4.9 School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | Primary school | | Secondary school | |
| 2009 | 2010 | 2011 | 2012 |
| 1 | Number of school in district | 38 | 39 | 2 | 2 |
| 2 | Number of school access to water supply | 10 | 10 | 2 | 2 |
| 3 | Number of school having toilet | 31 | 34 | 2 | 2 |

Source: - District Education Office

**Finance**

**Financial Institutions:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the transformation the economy of the district. However, the district has three bank institution ,commercial Bank of Ethiopia, Cooperative Bank of Oromia,Dashen bank.There was also rural credit and saving service cooperatives ,Teachers & Workers around Abomsa co-operatives ,oromia credit & saving co-operatives & Meklti that provides credit and saving services to member farmers ,Women,Young Peoples & Workers surrounding community.

**Annual Budget allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount which accounts for more than 85% of the total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low. Between the year 2011 and 2012, the total budget allocated for the district was increased from Ethiopian Birr 78,712,539.00 to 98,513,183.00 birr showing an increment 20.4%. Moreover, from the total over revenue collected in the previous year more than 60% was given the district as additional budget which is used as a capital budget.

**Table: 3.9. Annual budgets allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 78,712,539.00 | 22.4 |
| 2012 | 98,513,183.00 | 20.4 |

Source: Merti district finance and economic development office

**Revenue: -** Between the year 2011 and 2012, the district collected total revenue of Ethiopian Birr increased from 22,357,806 to 32,663,706 respectively. The main source of revenue in the district are directrevenue, indirect revenue item as in land revenue office of the district cumulative annual report of both year shows.

**Trade, Tourism and Sports**

**Trade:** even if trading is one of the economic activities urban dweller engaged on, in the year 2011the number of traders who have license 601 male and 260 female and renewed 150 male and 72 female and in the year 2012 the number of traders who have license 915 male and 372 female and renewed 830 male and 277 female their license was large in number during the year under consideration. As far as trade items were considered, most of the traders in the district purchased crops, fruit and vegetables, skin and hides from the local market and send to the central market. Moreover, livestock and poultry were also sent to the central market. Regarding tradable items and cash crops production activities, the district is known in the production of Onion, sugar cane, different types of Vegetables, fruits etc. In addition, the district is known by exportable items like hides and skins.

**Tourism and Its Amenities:**Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Merti district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism Office. These are, Ferekesa religious pilgrimage, Gado bulto and Dire shek gado(Shrine of sheck gado) are the main tourist attraction sites of the district. All of them are under developed.

**Existing Tourist attraction sites by types in the year 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Distirict** | **Types of tourist attraction** | **Distace from ( Km)** | | **Its present situation** |
| **Natural forest** | **Finfine** | **Zonal capital** |
| merti | Gara gora &Getera forest | 225 | 200 | 20 |
|  | Homba forest | 225 | 200 | 20 |
|  | Wetero forest | 211 | 200 | 20 |
|  | Area closure. Gara siri | 215 | 190 | 10 |
|  | Area closure.shemo Turizim | 210 | 185 | 5 |
|  | Area closure. Tulu Gara muleta | 225 | 200 | 20 |

**Sourc**e: Merti District Culture & Tourism ,

**Sport;-**The district has different types of sport activities like foot ball and volley ball However; it has no well-organized and standardized sport facilities.

**Table: 4.6. Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | 2012 | |
| Number of club | Member | Number of club | Member |
| Foot-ball | 58 | 1276 | 38 | 760 |
| Volleyball | 2 | 22 | 2 | 30 |
| Athletics | 0 | 0 | 0 | 0 |
| Tennis | 1 | 8 | 1 | 25 |

Source: Merti districts youth and sport office

**CHAPTER FIVE**

**5. DEVELOPMENT ACTIVITIES**

**5.1 On –Going Development activities**

The on-going major development activities in the district are carried out by government, non-government and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Moreover, from excess revenues allowed for the district (which is about 60%) some amount must be used for development projects. In addition, Regional Government .Accordingly, the ongoing development projects during the year under consideration are the following.

**Social sector ongoing development projects:** Since 1999 Abomsa TVET school class room expansion with 200,000 birr and four health posts has been constructed by local government and community participation. Moreover, eight health posts, two primary schools, and two DA houses are being constructed by corridor development program, Seft-net program and Ethio-Italian Corporation IFTU and community participation. Accordingly, between the year 2011- 2012 health posts reach 16, thirty nine primary schools and 15 DA houses are being contracted by government and community participation.

**Economic sector development projects:** Since 1999 two farmer training centers (FTC), three water supply scheme, two D-type animal health clinic while between the year 2000 and 2010 26 water supply scheme, one B-type animal health clinic are being constructed by Regional and local governments and community participation. Moreover, two water pond constructions for irrigation purpose are being carried out in Watero Dino areas by Seft net program and community participation since 1999 and people served from the pond in the year 2012.Abomsa- ferekesa rural road construction which is about 16.24 km was completed and ready for use in 2012

**Non- Government ongoing Development project**

Charity Development Association is one of the non-profit non-government organization take part in socio-economic development of the district. The major objective of the project is to help the vulnerable part of the community. The organization is aiming at providing orphan children and poor family headed females with food, clothes and education and health facilities.

**Private investment:** There are 12males and 1 female investors are engaging in the district. They used 5244 hectares of land. Among these investors two of them are foreigners where as the remaining 11 are domestic investors in year 2012. These investors are engaged on activities like Agriculture, mixed farming, etc. As a result job opportunity was created for more than 3500 people.

**Major Problems of ongoing Development Projects**: (Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents & mobilization of Construction is the major problem during the construction.

**CHAPTER SIX**

**6. PROBLEMS AND POTENTIALITIES**

**6.1. Major Problems of the district are:**

* **Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, which may leads to shortage of food and animal starvation and death.
* **Economic Problem:** Shortage of farm land High prevalence of crop diseases & pests, Shortage of Agricultural inputs & lack of capacity to buy, acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.
* **Social service problem:** rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low Portable Water coverage, low electric power supply.

**6.2. Potentialities**

**Land Resource:** Land is an important productive asset of any agrarian population. Accordingly, there is cultivable land resources used for production of industrial crops like cotton, sugar cane around watero dino area of the district which is potential for irrigable land.

**Tourist attraction sites:** Tourism economy is not yet developed in the district. Similarly, meaningful survey and study are not conducted to access tourist attraction sites potential of the district.

Nevertheless, the district culture and tourism office has identified some sites that have potential to attract tourist. These are Farakesa (traditional worship place) can be mentioned as an example. It is yet under developed.

**Forest resource:** The district is largely covered by Accacia trees, bush and shrubs that can be used as a home for wild animals. Likewise the Arbagugu natural and manmade state forest can be used for industrial raw material and fuel purpose.

**Investment Opportunity:** There is amble irrigable and virgin land in Kola areas for cultivating local cash crops like fruits, coffee, cotton, Chat and draught resistant verities of crops. The Wiena Dega part of the district is suitable for producing local cash crops like rapeseeds and linseed. Both in Kola and Wiena Dega parts, there is high potential for livestock rearing especially goat and camel.

**Minerals and energy resources:** even though potentials of minerals and energy resources are not surveyed by, the district has potential of minerals and energy resources such as sandstone, solar energy, bio gas, wind energy, etc.

**Labor resources:** Like any other parts of the country, there is a potential of labor resource in the districtespeciallyunskilled labor power

**CHAPTER SEVEN**

**7. Conclusion and Recommendation**

**7.1 Conclusion**

The district has 23 kebeles of which 19 are peasant Associations while four are urban administrative unit. The major permanent river of the district is Awash River. It has high potential for both modern and traditional irrigation. The district has amble land resource in the low land areas with fertile from good to medium good.

The district has large cultivable land for the production of crops like maize, wheat, pulses. However, due to rainfall variability and high evapotranspiration due to warm temperature condition causes the productivity of crops per hectare decreased even though the production obtained was increasing. So as to increase productivity and production, the amount of agricultural inputs used by the farmers was increasing between the years under consideration. Above all the farmer’s inability to produce variety of drought resistant crops causes the districts farmers to suffer from food insecurity. On the other hand, the district has large number of livestock resources. Having large number of cattle is considered as a prestige; attention is given for quantity rather than quality and the traditional method of rearing and shortage of enough forage causes the livestock rearing activities in the district to be under developed. As a result, the farmers do not get enough benefit from their livestock.

It was founded that most farmers are not busy throughout the year. Even during busy season, most farmers do not fully engage in farm activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

So as to achieve universal primary education coverage, the district provides education in 39 primary schools in each rural kebeles. The number of female student was slightly decreased from 47.9% in the year 2011 to 47.6% in the year 2012. During the same year, the number of teachers were decreased from 475 to 462, teachers while the number of class-rooms was increased from 463 to 469 These causes the student to teacher’s ratio on average improved from 50.1:1 to 57.9:1 while the student to class-room ratio on average improved from 55.8:1 to 63.1:1 during the year under consideration. Likewise the district has also one secondary and preparatory and technical and vocational education schools. A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. Not only this but also the number of health professionals working in the health facilities were increasing. However, as one can be seen from the ratio of population to health facilities indicated, there was a need for construction of additional health facilities in the district. For instance, the ratio of population to Health Center, clinic and health post was 31352:1 for health center, and 9797:1for health post respectively in the year 2012. This indicates that the district needs to construct at least one more health centers. Moreover, the health condition of the people was improved.

The water supply coverage of the district is at low stage as compared with the performance of the zone and other district which indicates the needs to construct additional water supply scheme to increase the current potable water coverage of the district. Moreover, in the district there is no well developed transportation net work. Only 70 rural population of the district were supplied with electric power services areas. In addition, the district has financial institutions like commercial bank, credit and saving association.

On the other hand, the district has large irrigable land resources potential in the low land areas. As a result, the district is highly suitable to produce warm climate food crops and cash crops like maize, sorghum, chat, cotton, papaya, chat, sugar cane and banana, different kinds of green paper, haricot bean, and mango through irrigation along Awash River basin. Moreover, the district has both manmade and natural forest resources that are used as raw material for industry.

**7.2. Recommendation**

To minimize the prevailing problem and bring sustainable social and economic development, the following point were recommended for the concerned bodies.

* The agricultural production and productivity was good as compared with the potential in the district. Hence, the farmers should have to be focus on the cultivation of drought resistant crops in the low land areas and have to use modern agricultural inputs,
* Motivate the farmers to use small scale irrigation by collecting rainfall water and develop large scale irrigation system in potentially irrigable land of the district are expected from concerned bodies,
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Basic socio economic infrastructure like Road, electric energy supply ,water supply , and  com munication facilities (mobile telephone services) should be developed so as to attract potential investors,
* So as to improve agricultural production and productivity, improving the capacity of farmer by training and the farmer training centers and the development agents are important so that the farmers can be benefited from it,
* So as to improve Livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, as compared with increasing livestock population, additional health facilities have to be constructed and the required health profession would be recruited for health facilities.
* Strengthening agricultural institutions such as farmer service cooperatives and rural credit services so as to facilitate farmers access to modern agricultural inputs,
* To improve the quality of education the wereda education office have focused on training better teacher, providing school with educational materials like student text book, laboratories, and over all school condition.
* Since the district has cultivable land and production for cash crop potential, the local and regional government has to invite investor to invest in the district.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted.
* Environmental protection by increasing awareness creation, use available resource wisely, strengthening soil and water conservation, tree planting and putting into practice the land use plan policy,
* As a general there are so many on going project ;like Social sector ongoing development, Economic sector development projects and Non- Government ongoing Development project which need the increment of annual budget allocated for the next year so as to improve social economic need and wants
* To increase the number of NGOs in wereda ,promoting wereda through various mass media, conducting research which shows weredas socio-economic problems and improving infrastructure(road, water, electricity ,hotel and clean water)

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF MUNISA DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER-ONE**

**1. Introduction**

**Back Ground of Munessa** district is one of the 27 administrative units of Arsi Zone. The name Munessa is derived from the “Afaan Oromoo” word Mukni Eessaa. This means, where the tree is. The district has 32 Peasant Associations and 6 urban administrative units. Kersa town is the capital of the district. It is located at 232 km South-East away from Regional capital city, Finfinne and 57 km from zonal capital, Asella Town.

The objective of preparing this profile is to create scientifically organized physical and socio- economic data that reflects the existing situation, development, challenges and potentials of the district to be used by Government and Non-Governmental organizations to identify development gaps, researchers, and the like. Different organizations can use different calendar. Consequently, in this document, only Ethiopian calendar (E.C) is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pagume, which has five days for three consecutive years and six day on the fourth year because of this Ethoipia said to be 13 months Sunshine country.

This document is compiled from the data collected from the district and zonal sectoral departments, 1999 population and Housing Census report for Oromia region and other related documents available in our office. Lack of accuracy and required data, lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document. Moreover, lack of accurate data, lack of professional personnel, well organized and consistence data in different sectors and the like were the main limitation. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district.

This document has four chapters. The first chapter deals with Introduction; Back ground of the District, Map of the District, and source of information. The second chapter focused on physical setting like location, relief, drainage, soil, vegetation and wild life. The Third chapter focused on Socio-Economic Conditions, deals with Population, Agriculture, Mining and Industry, Infrastructure and Social facilities. While the fourth chapter indicate challenges and potentiality, and Existing Situations of the District respectively. In addition; under chapter two and chapter three are supported by Tables of data.

Information, in its most restricted technical sense, is asequence of symbols that can be interpreted as a message. It can be recorded as signs, or transmitted as signals. Conceptually, Information is the message being conveyed in different contexts.

**CHAPTER-TWO**

**2. Physical Setting Location and Area**

**Location*:*** Munessa is one of the administrative units of Arsi Zone. Astronomically, it is located between 7002’45’’N-7031’35’’N Latitude and 38047’04’’E-39004’36’’E Longitude. Tiyo, Zuway Dugda and Digelu-Tijo district in the north, Lemu-Bilbilo district in the east and south, Arsi Zone in the south and west, Shewa Zone in the west and south west direction.

**Area**; - Munessa Woreda fragment having a total area of 1031.4 km2 which accounts 4.9% of the total area of the zone.

**Geology;-**The present Surface rock distribution, the land configuration and other features of the district was formed during different period of Cenozoic era as a result of both internal and external forces acting up on the earth surface. Accordingly, Dino formation covers extensively the northern, north eastern and north western, the western and south western part of the district. Except few areas covered by Lower part Chilalo formation, most of the eastern and east central part of the district was covered by Upper Chilalo formation and Nazeret Series.

**Relief, Drainage and Climate**

**Relief:** The relief structure of the district consists of rugged mountain ranges which is the parts of Kaka mountain massif, high undulating and flat toped plateau on the high land part and flat low laying plain areas in the rift valley. The altitude of the district ranges between 1929m found in Bore area to more than 4180 m in Gara Kaka area.

**Drainage;-** Due to its location and the presence of mountainous area, the district has major permanent rivers like Taji, Kersa, Gujicha, and lakicha, Malika-lola (malka hidha) and Worga, Dima. On the other hand, the major seasonal streams are Gobe, Cawit, Boledena, udee, fawwa and Oshano-caffaa., etc. Generally, the district has low potential for both traditional and modern irrigation system.

**Season;-** Even though the effect of Global warming (International) weather condition is currently changing greatly from time to time; including our country Ethiopia has classified into four major seasons. Similarly, Munessa district has been classified into four major seasons and each has three months.

**Table 2.1: Seasons and Months.**

|  |  |  |
| --- | --- | --- |
| NO | Seasons | Months in the Season |
| 1 | Summer | June, July and August |
| 2 | Spring | September, October and November |
| 3 | Winter | December, January and February |
| 4 | Autumn | March, April and May |

Source: Munessa District Finance and Economic Development

**Climate;-**Due to its altitudinal location, the climatic condition of the district is dominantly cool having a temperature of 100C-150C. The remaining ones are moderately cool and cold having a temperature of 150C-200C and less than 100C respectively. Hence, the dominant type of climatic condition of the district is cool agro-ecological zone, the mean annual rainfall is ranging between 900mm-1200mm and the average rainy days are more than 210 days is the year. The rainfall pattern is bi-modal, which are short rainy season/belg (from March to May), and summer or long rainy season/Maher from June to September

**Soils**;-The major types of soil found in the district are Pellic Vertisols and Chromic Cambisols. Moreover, Mollic Andosols, Eutric Nitosols, Calcic Xerosols, Chromic Cambisols and Eutric Cambisols are found in few pocket areas of the district. The fertility status of the soil is medium to good that are suitable for production of different variety of crops.

**Vegetation and Wildlife**

**Vegetation**: - Regarding vegetation the district has Sub afro Alpine, Different species of both natural and man made forest on the top and adjacent to the mountain ranges and small bushes and shrubs on its low land areas.There is also man made government protected forest which is the parts of Munessa-Shashamanne forest. In addition there are community protected forests in the district.

**Wild Life;-** The major wild animals found in the district like Mountain Nyala, apes, Columbus Monkey, Red fox, Rabbit, etc are mentioned as an example .There is man made government protected Forest which is the part of Munessa-Shashamanne and Community protected fourests are reserved areas for Wild life in the District.Area of forest demarcated is 33074 hek.

**CHAPTER-THREE**

**3. Socio-Economic Conditions**

**3.1. Population;-** According to the projection made from 1999 CSA of Oromia Region, the district’s population was increased from 232184 in the year 2011 to 238687 in the year 2012. From the total population of the district, only 9.75% were living in urban areas while more than 90% were living in rural areas. This indicates that the majority of the population of the district was living in rural area based on agricultural activities. Of the total population, females accounted for 50.42% which was 49.08% for urban and 50.56% for rural.

**Tabl 3.3. Population distribution by urban, rural and sex for the district.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Rural** | | | **Urban** | | | **Rural + Urban** | | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | |
| **2011** | 102,477 | 104,802 | **207,279** | 12,680 | 12,225 | **24,906** | **115,157** | **117,027** | **232,184** | |
| **2012** | 105,176 | 107,563 | **212,739** | 13,211 | 12,737 | **25,906** | **118,387** | **120,300** | | **238,687** |

Source: from CSA of 1999.

According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 49%, 47% and 3.2% of the total population respectively in the year 2012

The dependency ratio of the district is 110% (119% for Rural and 57.5% for urban) which indicates 110 people are dependent on 100 economically active populations. The overall sex ratio of the district was 98 male per 100 female and104 male per 100 female in urban and 98 male per 100 female in rural.

**Table 3.1:- Population size by wider age group Classification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age** | **2012** | | | |
| **Male** | **Female** | **%** | **Total** |
| **Rural** | **105,176** | **107,562** |  | **212,739** |
| 0-14 | 54,583 | 54,094 | 50 | 108,677 |
| 15-64 | 46,572 | 50,478 | 52 | 97,051 |
| 65+ | 4,021 | 2,990 | 43 | 7,011 |
| **Urban** | **13,272** | **12,675** | **49** | **25,948** |
| 0-14 | 4,223 | 4,404 | 51 | 8,628 |
| 15-64 | 8,595 | 7,879 | 48 | 16,474 |
| 65+ | 454 | 392 | 46 | 846 |
| **Total Rural+ Urban** | **118,448** | **120,237** |  | **238,685** |
| 0-14 | **58,806** | **58,498** | **50** | **117,304** |
| 15-64 | **55,167** | **58,357** | **51** | **113,524** |
| 65+ | **4,475** | **3,382** | **43** | **7,857** |

Source1999PopulationandHousingcensusreports

**School Age population; -**School age population is one of the best indicators for planning and budget preparation of education facilities, health and other facilities. Moreover, to measure the education quality with the help of students to classroom ratio, students’ teachers’ ratio, students’ text-book ratio, and others school age population is crucial. Accordingly, the number of school age population of the district was increasing from 88,735 (49.76% female) students to 91,212 (49.76% female) student between the years 2011 to20122. These groups of population account for 42.67% of the total population of the districts which is almost near to half of the total population of the district.

As far as different school age population was concerned the number of kindergarten, primary and secondary school population was increased from 22163, 47908 and 18664 to 22771(24.96%), 49248 (53.99%) and 19193(21%) respectively between the years 2011 to 2012.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth center, etc.

**Population Density*; -*** indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, the district had a crude density was increased from 1.7 person per km2 to 1.76 per km2 between the years 2011and 2012 which in turn increases impact of population on the land resources. Concerning the settlement pattern of the district, most of the rural parts of the district are characterized by cluster settlement except few low land areas having scattered type of settlement.

**3.2. Agriculture**

**Farmers Associations:** There were 32 peasant Associations (PAS) in the district with 2930(29.3% female headed) farmers households in the year 2011 during the same years, there were 32 Agricultural Service Cooperatives with 23,343 member farmers. Regarding their capital, they have 18,624,5901birr of which 186245 % was operational and 40% was capital in the year 2012 .The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, agricultural mechanizations services, etc

**Cooperatives Service by their members, sex and family size** On the other hand, there were also three other cooperatives that engaged in different agricultural activities (milk and milk product producer, consumer).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type ofActivity/Cooperatives** | **No of Coopretives** | **Number of Members** | | | ***Capital*** | | |
|  |  | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| 2011 | | | | | | | |
| General service cooperatives | ***39*** | 11,412 | 2,426 | 13,888 | 10,242,586.55 | 64,793.76 | 11,107,380.31 |
| Forest Development | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** |
| Milk and milk product producer | ***1*** | 11 | 9 | 20 | 20,161.58 | 13,427.82 | 33,589.40 |
| Saving and Credit | ***23*** | 549 | 2,220 | 2,769 | 869,868 | 9,812,699.68 | 10,682567.77 |
| Consumers | ***3*** | 478 | 148 | 626 | 102,492.25 | 179,847.92 | 282,340.17 |
| **Total** | ***66*** | **12,450** | **4,794** | **17,303** | **11,235,108.38** | **10,870769.18** | **22,105,877.77** |
| 2012 | | | | | | | |
| General service cooperatives | ***32*** | 12,639 | 2604 | 12,671 | 3,339,329.08 | 233,834.62 | 3,573,263.70 |
| Saving and Credit | ***19*** | 575 | 2,870 | 3445 | 5,907,672.08 | 3,707,675 | 4,489,356 |
| Consumers | ***3*** | 560 | 250 | 810 | 956,843 | 568,985 | 1,525,828 |
| **Total** | ***54*** | **1,774** | **5,724** | **16,926** | **10,203,641.16** | **4,510,494,62** | **9,588,447.7** |

Source: a District Cooperative OfficeMuunessa

**Table 3.5:- Total Households and members settled in the distric**t

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Numbers of Kebeles Rural** | **Households** | | | **Members received extension service** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| *2011* | *32* | *19318* | *6025* | *25,343* | *1800* | *3019* | *21,019* |
| *2012* | *32* | *20,889* | *6698* | *21,083* | *18064* | *3019* | *21083* |

Source: - Munessa District Agriculture and Rural Development Office

**Table 3.6:- Households affected by drought in the district.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Year*** | Ppulation affected by drought | | | Aid/Support given | | |
| ***Male*** | ***Femal*** | ***Total*** | ***Food(Ku)*** | ***Oile(Ku)*** | ***Supplementary Food(Kg)*** |
| ***2011*** | ***9183*** | *9605* | *18,788* | *1,690,500* | *50,671.80* | *334,500* |
| ***2012*** | 0 | 0 | 0 | 0 | 0 | 0 |

**Land Resources by use*:*** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, man made forest and residential lands are increasing. Accordingly, from the total area of the district the cultivated land covered by annual crops represented was about 3102.925hectares (31.0295%) in the year 2011 and 11693 (116.93%) in the year 2012.The district land use cover was 51579(47.53%) cultivated land, forest land 28030 hectares (515.97), grazing land 9860 (17.3%), in the years 2011/2012.

**Crop Production**

**Meher** is the larges season in terms of both of cultivated land crop production. For instance, in the year **2011/2012** it accounts for **43385hek**.of total cultivated land and **1,145,758 quintals** of production obtained. The major annual crops grown in the district are cereals, pulses and oil seeds. From cereal crops, Wheat, Barley and Teff are the most widely grown types of crops while from pulses crops are Field beans and Horse bean are the most widely grown type of crops. Likewise, the only oilseed crops grown in the district are Linseed and Rapeseed. In addition to these, the district is known in producing some cash crops like Tomato, Onion, Oilseeds, Apple Green paper, Cabbage etc in the district.

In the Meher season, the total area cultivated by all types of crops was increased from **48,769** hectares to **49,103** hectares while the amount of production obtained was dcreased from **1,769,982** quintals to **516,874** quintals between the years **2009/2010 to 2011/ 2012**. However, the average productivity per hectares was increased from **33.36** quintals to **35.95** quintals for all types of crops.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Crop Type*** | ***2010/2011*** | | | | ***2011/2012*** | | | |
| **Meher season** | | **Belg Season** | | **Meher season** | | **Belg Season** | |
| **Area cult (Hac)** | **Prod. (Qut)** | **Area cult (Hac)** | **Prod. (Qut)** | **Area cult (Hac)** | **Prod. (Qut)** | **Area cult (Hac)** | **Prod. (Qut)** |
| Cereals | **39075** | **1,637,785** | **7372** | **206,584** | ***34054*** | ***920,868*** | ***7368*** | ***18848*** |
| Wheat | 18853 | 942,650 | 4 | 280 | *18,855* | *493,424* | *0* | *0* |
| Teff | 521 | 5731 | 0 | 0 | *561* | *6,732* | *0* | *0* |
| Barley | 17312 | 605,920 | 7,368 | 206,304 | *12228* | *409842* | *7368* | *18848* |
| Maize | 1969 | 70884 | 0 | 0 | *1950* | *1170* | *0* | *0* |
| Sorghum | 420 | 12600 | 0 | 0 | *420* | *8820* | *0* | *0* |
| Oats | 0 | 0 | 0 | 0 | *40* | *880* | *0* | *0* |
| Pulses | **1036** | **56027** | **751** | **17479** | ***6004*** | ***171,658*** | ***507*** | ***11154*** |
| Faba beans | 870 | 26100 | 244 | 6832 | *4587* | *142197* |  |  |
| Peas | 1125 | 29250 | 507 | 10,647 | *1346* | *28266* | *507* | *11154* |
| Lentils | 6 | 12 | 0 | 0 | *6* | *25* | *0* | *0* |
| Haricotbeans | 35 | 665 | 0 | 0 | *65* | *1170* | *0* | *0* |
| Oilseeds | 4800 | 99,438 | 0 | 0 | *3327* | *53232* | *3327* | *56559* |
| Linseed | 3427 | 65113 | 0 | 0 | *3327* | *53232* | *3327* | *56559* |
| Rapeseed | 1373 | 34325 | 0 | 0 | *0* | *0* | *0* | *0* |
| Total | **44,911** | **1,793,250** | **8,123** | **22,4063** | **43385** | **1,145,758** | **11,202** | **86,561** |

Source: Munessa District Agriculture Office

By crop type, from cereal crops maize with 30 quintal per hectare followed by Wheat with 38 quintals per hectare Barley 33.27 and sorghum with 21.75 quintals per hectare was the most productive while from pulses Faba bean with 30.2 quintals per hectare followed by Haricot beans with 19quintals per hectare was the most productive crops. However, the least productive crops were Sorghum with 9.5 quintals per hectare was the least productive crops in the district in the year of 2011/2012. Likewise during Belg season, the total land cultivated was increased from 8995 hectares to 11,442 hectares while the production obtained was 129,582 quintals to 93,041 quintals between the year 2009/2010and 2011/2012 Likewise, the average productivity per hectare for all types of crops was increased from 23.23 quintals per hectare to 8.13 quintals per hectare during the indicated years.

**Fertilizer and Improved Seeds Utilization.:-** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, the amount of chemical fertilizer distributed to the farmers was increased from5265to, 56,882 quintals between the year 2011 and 2012.

However, in contrary, the amount of improved seed distributed to the farmers vary from year to year due to price escalation, delay in delivery time as well as utilization of existing better quality seed that the local farmers multiply previous year. For details see the table below. These figures however, may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

**Table3.11:-Fertilizer and improved seeds utilization**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **year** | **Numer of farmers in the district** | **Number of Farmers** | | | |
| **Chemical**  **Fertilizer** | **Improved seed** | **composite** | **Pesticides and**  **Herb.** |
| 2011 | 27587 | 21019 | 21019 | 27,580 | 21019 |
| 2012 | 27587 | 60029 | 10,843 | 0 | 58,615 |

**Methods for Maintaining Soil Fertility**;-There are two ways of maintaining soil fertility in the Zone particularly in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale, fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizers). According to the data obtained from the district’s agriculture and rural development office data**121,728 m3**compost was produced by farmers and used on their farm plots in the same year 2011 and 2012.

**Methods for Soil Conservation** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and afforestation are modern way of soil conservation in the district.

**Agricultural Calendar;** It is well known that the farmers of the Zone are not busy though out the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Munessa district is shown in table below.

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of activities | Meher Season | Belg Season |
| 1 | Land preparation | April- June | March-April |
| 2 | Planting (Sowing) | June & July | April |
| 3 | Weeding | July-September | May-June |
| 4 | Harvesting | October-January | July-August |

Source: - Munessa District Agriculture and Rural Development Office

**Table 3.14:-Number of house hold by ox holding size**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Average ox holding size per house hold | Number of house holdsby ox holding size | | | | | | |
| 0 | 1/2 | 1 oxen | 2 oxen | 3 oxen | 4 oxen | 5 oxen | >5oxen |
| 2011 | 1.5 |  |  | 3246 | 23976 | 3539 | 2627 | 500 | 200 |
| 2012 | 1.5 |  |  | 3246 | 23976 | 3539 | 2627 | 500 | 200 |

**Table 3.15:-Farm land holding size per households**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Year* | Averag land holding size pe house hold(Hek) | 0.5Hek | 1Hek | 1.5Hek | 2 Hek. | 2.5 Hek | > 3 |
| *2011* | *2.5* |  | *6341* | *4501* | *2455* | 2003 |  |
| *2012* | *2.5* |  | *6341* | *4501* | *2455* | 2003 |  |

**Crop Pests and Disease**;- The major crops pests in the district are Armyworrms, locusts, birds, apes and Aphids, while the major diseases are rust, smut and others. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Irrigation;-** There are 7079 hectares of potential irrigable lands by traditional irrigation system in the district. In the year 2011,**4558** hectares of land were cultivated and **407336** quintals of production was obtained from traditional irrigation system of which **7412** farmers was benefited.Likewise, in the year 2012, the same hectares of land 1778 hectare of land was cultivated and **119,365** quintals of production was obtained out of which benefited about **6105** farmers.

**Table 3.16:-Land cultivated and Production from irrigation by type**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Traditional | | Modern | | Pamp | | Hand well | | Pond | |
| Area | Production | Area | Production | Area | Production | Area | Production | Area | Production |
| 2011 | 3381 | 45525 | 351 | 10530 | 866 | 25930 | 0 | 0 | 0 | 0 |
| 2012 | 1331 | 79,860 | 151 | 14345 | 296 | 25,160 | 0 | 0 | 0 | 0 |

**Table 3.17:-Amount of Fertilizer and improved seeds distributed for irrigation**

|  |  |  |  |
| --- | --- | --- | --- |
| *Year* | *Dap* | *Urea* | *Improved Seed* |
| **2011** | **0** | *816* | *0* |
| **2012** | **0** | *0* | *0* |

**Table 3.18:-Small scale Irrigaton development Cooperative participated.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Year* | Number of cooperative | Cooperative member | | Cultivated land |
| Male | Female |
| *2011* | *7* | *505* | *84* | *4658* |
| *2012* | *5* | *474* | *89* | *4656* |

**NGOs found in the district are three (3) by number, and their fuctions is as follows.**

**1. Harmee Education for Development Assocation (HEfDA)** Harmee Education for Development Association (HEfDA) is a grass root, non-governmental and a not - for- profit development organization that caters for the social and economic development of women, men, girls, boys and those challenged by various natural, social and economic problems .

**Table. 3.19:- HEfDA-Over all piroject objectives:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Major on-going Non-government organization** | **No** | **No of Project** | **Objectives** |
| HEfDA | *1* | Integrated community development program with especial focus on skill development (ISDP) | To enhance the Productivity and life quality of the community in 32 peasant Associations. |
| *2* | Multi-purpose Skills Training for Local Community with Esoecial Focus on Women and Youth | Improved production, productivity and life quality of the communities in Munessa woreda through improved skills of women and youth. |
| *3* | Improved participation and academic Performance of Female students in formal Education systems (GSP) | Girls support program has been supporting femalestudents to improve their participation and academic performance. |
| *4* | Community based Rehabilitation and Inclusive Development for Persons with Disability (CBR) | Support to the disabled with focus on children and youth –mainstreaming of disability in social and development work, community based rehabilition, medical care and treatment provide mobility appliances. |
| *5* | Improved participation and academic performance of students with disability in a formal Education (SSD) | Support to student with disability |
| *6* | SASA! Program Awareness Phase | SASA!is an approach of addressing the problem of violence against women and HIV/AIDS ,Inspire community the benefit of balanced power toall oeople. |
| *7* | Family planning /Reproductive (FR/RH) | To improe access and utilization for quality FP/RH information and services among girls and young women through demand creation, reduction of socio-cultural barriers and increased commitment. |

**2. Kersa Luteran Mission**

**Table.3.20;-Qersa Luteran Mission over all projects**

|  |  |  |  |
| --- | --- | --- | --- |
| **Major on-going Non-government organization** | **No** | **No of Project** | **Objectives** |
| Kersa Lutheran mission | 1 | Ground mill | Serving the local community with discount price. |
| 2 | Community Health service | To provide awareness with prime focus on maternal health, childrenheaalth, delivery service curative prevention. |

Source:- Kersa Lutheran Mission

**Development Agents and Farmers Training Centers** They are one the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year 2011 and 2012, the number of farmers training centers (FTCS) in the district were increased from 28 to 29 also the number of development agents were decreased from 91 to 84.

In the district three development agents were assigned in each PA with profession of plant science, Animal science and Environmental protection so that they can help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection. Between the year under consideration, the number of farmers benefited from existing farmer training centre and development agent professionals were increased from3480 in the year 2011 to 21,083 in the year 2012.

**Table 3.21:- Number of Development Agents and FTCs**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Description** | **2011** | **2012** |
| 1 | Number of Farmers Training centers | *29* | *29* |
| 2 | Number of Development Agents | *91* | *97* |
| 3 | Number of beneficiaries | *21,019* | *21,083* |

Source: Munessa district Agriculture and Rural Development Office

**Crops produced in the District are sufficient for the population to feed** The District has high potential for the production of different crops such as wheat, barly and vegetables in the year **2011 and 2012 2,017,313and 1,232,319 has been produced respectively.** The total estimation of the population in the district in 2011 and 2012 was arround 232,184 and 238,687 respectivly and this shows us the number is increasing promptly. Here we can compare the amount of the productin that wilkl be used for feeding and the estimated total number of population.We can say that the amount produced in the district was more or less adequate for feeding.But large amount of the productin was supplied for market to sell and again the amount yield was different from person to person, place to place. Except in same Peasant Associations where there was the **accurance & deffeicnt Rain fall during the crop years 2011/2012**, there was crop failure and due to this was food in sufficient by this three Peasant Assoiations were affected and people were vernulable to the problem occured. The food deficient was covered by the Government.

**Major constraints of Agriculture**

**Crop Pests and Disease:** The major crops pests in the district are Aphids, army worms while the major diseases are rust, smut and others. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases**: - Black leg, Lumpy skin, Trips, Chronic Respiratory diseases and External and internal parasites, lymphatic disease s and anthrax are the major disease of livestock in the district.Accordingly, the district animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. The number of animal vaccinated fluctuates from year to year based on the budget allocated by the district while animal get treatment for different disease was also increased from 30,846 t132, 539 between the years 2011 and 2012.

**Livestock, Poultry and Bee keeping**

**Livestock**: -In line with agricultural production, the farmers of the district engage on livestock rear and poultry keeping. Between the year 2011 and 2012, the number of livestock was decreased from 428,802 to 441,441. Cattle, Sheep and Goats are the major livestock population found in the district. From the livestock population found in the district, **Cattle, Sheep and Goats** account for more than about **90.68%** of the total livestock population in the year **2012.** As source of food, the major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values. However, the farmers of the district benefited less from this sector of economy due to traditional method of rearing. Moreover, the high prevalence of diseases, shortage of the feeds and the like are the major constraints in livestock production in the district.

**Table 3.22:-Nmber and types of Livestock for the year 2011and 2012.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of Livestock** | **2011** | **2012** |
| *1* | Cattle | 210000 | 209900 |
| *2* | Sheep | 8021 | 8050 |
| *3* | Goats | 126600 | 130000 |
| *4* | Mules | 17800 | 17750 |
| *5* | Horses | 81200 | 81150 |
| *6* | Donkey | 820 | 800 |
|  | **Total** | ***444,441*** | ***447,650*** |

Source:-Munessa District Agriculture and rural Development Office

**Table 3.23:- Distribution of animal health infrastructure**

|  |  |  |
| --- | --- | --- |
| **Description** | ***2011*** | ***2012*** |
| Veterinary personnel | **37** | **37** |
| Veterinarian | 4 | 4 |
| Animal health Assistance | 27 | 27 |
| Animal health Technician | 5 | 5 |
| **Health Infrastructure** | **18** | **18** |
| Type of Clinics(A,B,C) | 9 | 9 |
| Health post | 9 | 9 |

Source:-Munessa District Agriculture and rural Development Office

**Livestock and Poultry Diseases;-** Black leg, Lumpy skin, Trips, Chronic Respiratory diseases and External and internal parasites, lymphatic disease s and anthrax are the major disease of livestock in the district. Accordingly, the district animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. The number of animal vaccinated fluctuates from year to year based on the budget allocated by the district while animal get treatment for different disease was also decreased from 302,576 to 9959 between the years 2011 and 2012.

**.Livestock health Infrastructure** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. To this end, in the district the number of animal health facilities was increased from nine (two C-type clinic and seveen health post) to nine (two clinic and seven health post) between the year 2011 and 2012. As a result of these, the ratio of animal population to health facilities was improved from **302576:1** to **9959:1** during the indicated years.

On the other hand, the number of animal health professionals working in these health facilities was increased from 32to35 in the year 2011 and 2012.By types of profession, there were 4 veterinary doctor and 31animal health assistance in the year 2012. Hence, the ratio of population to health personnel was 1,927,368:1 for veterinary Doctor, 139,8675:1 for animal health assistance in the year 2012. This indicates there is a need for additional health professional in the district.

**Table 3.24:- Number of Animals got health services By type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Taype of Service** | **2011** | **2012** |
| **Vaccination** | **59,727** | **252,065** |
| **Blackleg** | **29,100** | **24,300** |
| Hemorrhagic Septicemia | **0** | **82160** |
| Anthrax | **30,627** | **37,190** |
| Others | **0** | **108415** |
| **Treatment** | **9959** | **404,576** |
| External parasites | **3214** | **151,288** |
| Internal parasites | **3045** | **199,875** |
| Castration(Operation) | **3450** | **53413** |
| Others | **250** | **0** |

Source: Munessa District Agriculture and Rural Development Office

**Availability of animal health institutions ;-** is very important to improve animal productivity and control animal diseases. To this end, in the district the number of animal health facilities was increased from nine (two C-type clinic and seven health post) to ten (two clinic andseven health post) between the year 2011 and 2012. As a result of these, the ratio of animal population to health facilities was unimproved from **69,686**:1 to **656,641**:1 during the indicated years.

**Number of Veterinary personnel**:-The number of animal health professionals working in these health facilities was 32 in the year 2011 and 2012.By types of profession, there were one veterinary doctor and 32animal health assistance in the year 2012. Hence, the ratio of population to health personnel was 431,300:1 for veterinary Doctor, 19,605:1 for animal health assistance in the year 2012. This indicates there is a need for additional health professional in the district.

**Poultry;-**  is one of the important sources of family income and food in the district. In the district the number of poultry populations was increased from 8920 in the year 2011 was increase to 16343 in the year 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Beekeeping;-**  is another source of cash income for farmer family. To benefit from this sector of economy, the farmers of the district use modern and traditional method of bee keeping. Accordingly, though the production obtained from traditional bee hives vary from year to year due to various factor, the number of traditional bee hives used by the farmers was decreased from 2217 in the year 2011 to4645 in the year 2012.

On the other hand, the number of modern bee hives distributed to the farmers was increased from **1668** to **11050** while the amount of production obtained was increased from **1668** **kg** to **11050 kg** during the year under consideration.

These figure indicated that productivity per hives was increased from **6.2kg** to **6.4 kg** in case of traditional bee hives between the year 2011 and 2012 and from **17kg** to **40kg** for modern bee hives between the year 2011 and 2012. During the same years, the number of farmers benefited from these hives was also decreased from 186 to 159. However, Using of herbicides and insecticides are the main problems in bee farming in the district.

On the other hand, the number of modern bee hives distributed to the farmers was increased from **412** to **442** while the amount of production obtained was increased from **1648**to **11050kg** during the year under consideration. These figure indicated that productivity per hives was increased from **6.2kg** to **6.4 kg** in case of traditional bee hives between the year 2011 and 2012 and from **17kg** to **40kg** for modern bee hives between the year 2011 and 2012. During the same years, the number of farmers benefited from these hives was also no more increased the increa sing rate is from 1648 to 11050. However, Using of herbicides and insecticides are the main problems in bee farming in the district.

**Table 3.26:- Number of Bee Hives and Honey Production**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Traditional | | | | Intermidate | | | | Modern | | | |
| No.of  h | Production obtained(Kg) | Productivity | No of beneficiaries beneficiar ies | No.of  h | Production obtained(Kg) | Productivity | Beneficiries | No.  of haves | Production obtained  (Kg) | Productivity | No beneficiaries |
| 2011 | 2217 | 0.38 |  | 151 | 715 | 15 |  | 143 | 412 | 1648 |  | 137 |
| 2012 | 4645 | 23225 |  | 935 | 1222 | 24440 |  | 198 | 442 | 11050 |  | 90 |

Source: Munessa District Agriculture and Rural Development Office

**3.3. Mining and Industry**

Like other parts of the country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of mineral and energy resource Development indicates that, the district has a high potential of some mineral resources such as sand stone for construction purpose, solar Energy, Wind energy for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are significant r.ock quarrying, pottery making and wavers mining activities by local communities in the district.

**Table 3.27:-Minerals under extaraction**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Description | Proddction | Value(Birr) |
| 2011 | Quarrying stone(M2 | 9,700 | 18,200 |
| 2012 | Quarrying stone(M2) | 68,500 | 208,500 |

**Table 3.28:-Services provided for micro and small scale enterprises by types of services**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Number of MSSE | Land allocated for MSSE (hek.) | Loan disbured to MSSEs | Members received training | Total Capital |
| 2011 | 447 | 694 | NA | NA | NA |
| 2012 | 204 | 46 | 10,641,000 | 4,997 | 16,364,000 |

**Table 3.29:-Number of Micro and small scale Enterprise by typ.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| year | Numbers of MSSE by types | | | | | | |
| Industry | Service | Agriculture | Construction | Trade | Minerals | Total |
| 2011 | 29 | 59 | 247 | 20 | 90 | 2 | 447 |
| 2012 | 6 | 42 | 112 | 7 | 17 | 0 | 204 |

**Manufacturing Industries**: Similar to other parts of the Zone, industrial development is at its infant stage in Munessa district. Their number is very small and is dominated by small- scale industries. At the same time they had small capital and able to generate job opportunities for small scale number of employees. All of them are food processing and privately owned. Accordingly there were one edible oil factor and one flour factory in the district.

**3.4 Education**

**Kindergarten**: According to the data obtained from statistical abstract of the district, there was one ***governmental*** kindergarten school in the district since 2009 bat oow in the year 2012which was increased to two kindergarten while the number of children enrolled to these schools were increased from 523 to 645 between the year 2011 and 2012. One of the main problems related with kindergarten school is lack of clear management system.

**Table 3.39:- Kindergarten**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Type of School** | **2011** | | | **2012** | | | **Owner Ship** |
| **Students enrollment** | | | **Students enrollment** | | |
| **male** | **Female** | **total** | **male** | **Female** | **Total** |
| 1 | Kindergarten | 188 | 215 | 403 | 167 | 215 | 385 | Gov’t |
| 59 | 61 | 120 | 137 | 123 | 260 | Privat |

Source:- Munessa District Education Office

**Primary Schools**;- Between the year 2011 and 2012, the number of primary schools (1-8) was 55 while the number of students enrolled to these schools were decreased from 23,419(48.63% female) to 23,544 (49.12% females) between the year 2011 and 2012. During the same year, the number of teachers at this level was decreased from 974 (40.3% females) and 917 (36.25% females) while the number of section were decreased from 980 to788. These results in improvement of student to teacher ratio from 65:1 to 56:1 Student to section was increased from 60:1 to 49:1 between the year 2011 and 2012. On the other hand, there were two non-government primary schools in the district since 1999 while the number of students enrolled to this school varies from year to year. The number of teachers was at this level was 20 in year 2012.

**Senior Secondary Education (9-10**);- in the district the number of secondary school (9-10) was five while the number of students enrolled to this school varies from one year to year. During the indicated year, the number of teachers was increased from 200 to 137 while the numbers of section were increased from 52to 56. Student to teacher ratio of this level was improved from 26:1 to 22:1 which is over the standard. However, student to section ratio was increased from 61:1 to 40:1 between the year 2011 and 2012. There was also one preparatory school in the district since 2012.

**Table 3.40:- Number of schools by level ( 1-8, 9-10 and 11-12**)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Type of School** | **2011** | | | **2012** | | |
| **Number of School** | | | **Number of school** | | |
| **Gov’t** | **Non-Gov’t** | **total** | **Gov’t** | **Non- Gov’t** | **Total** |
| 1 | Primary(1-8) | 54 | 1 | 55 | 54 | 1 | 55 |
| 2 | Secondary(9-10) | 5 | 0 | 0 | 5 | 0 | 0 |
| 3 | Priparatory(11-12) | 1 | 1 | 1 | 1 | 1 | 1 |

Source: Munessa District Education Office

**Table 3.41:-A) Total number of enrolled, dropped out and detained students** **for the year2011**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Type of School** | **Students enrollment** | | |
| **Male** | **Female** | **Total** |
| 1 | Primary(1-4) | 17852 | 15849 | 33,701 |
| 138 | 204 | 345 |
| 2 | Primary(5-8) | 8765 | 7382 | 16147 |
| 138 | 140 | 278 |
| 3 | Secondary(9-12) | 2204 | 1453 | 3657 |
| 4 | Priparatory(11-12) | 340 | 133 | 473 |

**Table 3.41:- B) Total number of enrolled, dropped out and detained students** **for the year 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Type School** | **Students enrollment** | | |
| **Male** | **Female** | **Total** |
| 1 | Primary(1-4) | 17673 | 16012 | 33,685 |
| 123 | 129 | 252 |
| 2 | Primary(5-8) | 27,145 | 24,121 | 51,266 |
| 237 | 259 | 496 |
| 3 | Secondary(9-10 or 9-12 | 2875 | 3099 | 5974 |
| 4 | Priparatory(11-12) | 2875 | 3099 | 5974 |

Source: Munessa District Education Offic

**Table 3.42:- Student participation rate:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | School type | 2011 | | |
| Male | female | Av |
| 1 | Primary(1-4) | 15681 | 14151 | 14916 |
| 2 | Primary(5-8) | 7327 | 636 | 68165 |
| 3 | Secondary(9-10) | 1304 | 924 | 1114 |
| 4 | Priparatory(11-12) | 115 | 84 | 84 |
|  | **Total** | **24,427** | **1595** | **84279** |

**Table 3.44:- Results Students sat for national examination (EGSCE)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ACADEMIC YEAR | SAT FOR EXAMINATION | | | PROMOTED | | | FAILED | | |
| male | female | **total** | male | female | total | male | female | total |
| 2011 | 1445 | 1184 | **2,629** | 1410 | 1130 | 2,540 | 413 | 253 | 666 |

Source: Munessa District Education Office

**Table 3.45:- Results of Ethiopian Higher Education Enterance Certificate Examination**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ACADEMIC YEAR | SAT FOR EXAMINATION | | | PROMOTED | | |
| M | F | T | M | F | T |
| 2011 | 772 | 557 | 1,329 | 409 | 307 | 716 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | No of centers | Alternative Basic Education | | | | | | No of centers | IntegratedFunctional Adult | | |
| ABE Enrolment | | | Facilitators | | | IFAL Erolment | | |
| M | F | T | M | F | T | M | F | T |
| 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012 | 0 | 20 | 0 | 20 | 14 | 16 | 30 | 0 | 957 | 349 | 1306 |

Source: Munessa District Education Office

**Table 3.46:-Alternative Basic Education program and IFAL**

Source: Munessa District Education Office

enough to measure educational quality of a district. Hence we have to look into other factors mainly Teacher Development program (TDP). Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say. As far as the number of teacher by level of school are concerned, according to the professional standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above for secondary school), the number of **TTI teachers** was **decreased from 75 to 54** in primary school **(1-8)** between the year 20011 and 2012. Likewise, the number of **diploma teachers** was also **decrease By some numbers** teachers in preparatory schools **(9-12)** during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education. For details see the table below.

**Table 3.47:- Number of Teachers by levels of schools (1-4, 5-8, 9-10,) by sexand level of Education**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| School type | T.T.I. | | | diploma | | | BA/BSc | | |
| M | F | T | M | F | T | M | F | T |
| Primary(1-4) | 58 | 32 | 90 | 169 | 130 | 299 | 20 | 15 | 35 |
| Primary(5-8) | 0 | 0 | 0 | 172 | 125 | 297 | 134 | 17 | 151 |
| Secondary(9-10) | 0 | 0 | 0 | 3 | 1 | 4 | 110 | 15 | 125 |
| Total | 58 | 32 | 90 | 334 | 256 | 600 | 264 | 47 | 311 |

.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| School type | 2012 | | | | | | | | | | | |
| T.T.I. | | | diploma | | | BA/BSc | | | Total | | |
| M | F | T | M | F | T | M | F | T | M | F | T |
| Primary(1-4) | 3 | 0 | 3 | 1 | 0 | 4 |  |  |  | 7 | 0 | 7 |
| Primary(5-8) | 60 | 0 | 60 | 318 | 287 | 605 | 59 | 16 | 75 | 442 | 303 | 745 |
| Secondary(9-10) | 0 | 0 | 0 | 2 | 0 | 2 | 103 | 17 | 120 | 105 | 17 | 122 |
| Total | 60 | 0 | 90 | 321 | 287 | 611 | 162 | 33 | 195 | 543 | 320 | 863 |

Source: Munessa District Education Office

**Table 3.48:- Number of Preparatory Teachers by levels of schools, sex and level of Education**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2011 | | | | | | | | | | | | |
| School type | Grade 12&belw | | | T.T.I. | | | diploma | | | BA/BSc | | | Total |
| M | F | T | M | F | T | M | F | T | M | F | T | M |
| Priparatory(11-12) | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 9 | 0 | 9 | 14 |

Source: Munessa District Education Office

**Table 3.49:-Number of Technical students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of School | 2012 | | | Ownership |
| Students enrollment | | |
| Male | female | Total |  |
| Technical | 71 | 55 | 126 | Gov’t |

Source: Munessa District Education Office

**3.5 HEALTH**

**Health Institution**: The number of government health facilities 39(7 Health center and 32 health post) in both years 2011 and 2012. While the number of private health facilities was increased from 16 to 20 between the year 2011 and 2012. The ratio of population to Health center and health post was 4.64638:1 and 23,4012:1 respectively in the year 2011and 2012 which indicates low health coverage of the district as compared with WHO standard 25000 and 5000 respectively.

**Health Institutions and Personnel**: So as to meet the needs of health service delivery and improve the health service, having qualified health personnel is very crucial. To this end, due to the effort made by district health office, the number of health personnel was increased from 148 to 149 between the year 2011 and 2012. These gives the population to health personnel was 35,625:1 for health center, 4,191:1 for nurses, 31,836:1 for technicians and 13,359:1 for health extension workers in the year 2012. This indicates there is a need for additional health personnel like health officer, technicians in the near future. For more information see the table below

**Table 3.51:- Number of health Institution and Personnel by Ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Institution /Health Personnel | **2011** | | 2012 | |
| Gov’t | Private | Gov’t | Private |
| Health Institution |  |  |  |  |
| Health Center | 7 | 0 | 7 | 0 |
| Clinic | 0 | 17 | 0 | 19 |
| Health Post | 32 | 0 | 32 | 0 |
| Rural Drug Vender | 0 | 10 | 0 |  |
| Health profession | 148 |  | 149 |  |
| Doctors | 0 | 0 | 0 | 0 |
| Health Officer | 11 | 0 | 11 | 0 |
| Nurse | 45 | 0 | 53 | 0 |
| Health Assistance | 0 | 0 | *0* | *0* |
| Laboratory Technician | 10 | 0 | 8 | 0 |
| Pharmacy Technician | 9 | 0 | 11 | 0 |
| Sanitarian | 2 | 0 | 1 | 0 |
| Health Extension Workers | 71 | 0 | 65 | 0 |

Source: Munessa District Health Office

**Top Ten Diseases Existed in the District**.

**Causes of Morbidity**: - As shown in the table below, the highest prevalent disease in the district is other AURI with 21.5% followed by AFI with (17.5%) and other Pneumoni with (14.28%) in the year 2010.However, Acute Febrile illness (AFI) with (22%) followed by AURI with (21.5%) and Faighting with (18.8%) were the highest prevalent disease.These indicates that the highest prevalence disease vary from one year to the other. Hence, it needs further investigation so as to design a proper strategies and policy to control the prevalence of disease in the district.

**Table 3.52:-`Top ten diseases existed in the district**.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | **2011** | | | **2012** | | | |
| **Type of diseases** | **No of population** | **%** | **Type of diseases** | **No of population** | **%** |
| 1 | **AURI** | **4892** | **19.20%** | **AURI** | **2760** | **20.15%** |
| 2 | **AcuteFebrile illness(AFI)** | **4549** | **17.87%** | **AcuteFebrile illness(AFI)** | **2332** | **16.66%** |
| 3 | **Pneumoni** | **3918** | **15.39%** | **Pneumoni** | **2282** | **15.57%** |
| 4 | **Diarrhea** | **2837** | **11.14%** | **Diarrhea** | **1857** | **13.56%** |
| 5 | **Treuma** | **2133** | **8.6%** | **Treuma** | **1049** | **7.66%** |
| 6 | **Dyspsia** | **1525** | **5.99%** | **Dyspsia** | **881** | **6.43%** |
| 7 | **Typhoid** | **1607** | **6.31%** | **Typhoid** | **859** | **6.27%** |
| 8 | **Urinary** | **1525** | **5.99%** | **Urinary** | **796** | **5.81%** |
| 9 | **Helmint** | **1327** | **5.21%** | **Helmint** | **573** | **4.18%** |
| 10 | **Anemia** | **921** | **3.6%** | **Anemia** | **508** | **3.71%** |
| **Total** | | **25234** | **99.3** |  | **13897** | **100** |

Source:-Munessa District Health

**Health coverage**: District health coverage is 72.14% and 70.18% for the year ***2011 and 2012*** respectively.

**Health problems**:

The Health coverage of the district compared to WHO, it was far from the standard  so to minimize the gap between them.is expected to do more from all concernd bodies in both health institutions construction and employing health personnel in health institutions.

**Children and Women Socio Economic Indicators**

**Women Issue Indicators**

**Maternal, mortality ratio** for the year 2011 and 2012 is **zero. Because,** the districts have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district.

**Five top causes for maternal death** According to the 2011 and 2012 data obtained from munnsa District Health office, the highest prevalent disease in the district is **AFI**,(22%),**AURI**,(21.5%),**Faight**,(18.8%), **URTI,**(16.3), **Pneumoni,**(14.28) were the highest prevalentdiseasesin the district

**Harmful Traditional Practices**: - like the zone as a whole, there are many harmful traditional procedures that are being more or less practiced in Munessa district. Among these, raping, Buta, Dhala and Gebare, etc can be mentioned as an example. Now a day these procedures decrease from time to time since there is high awareness creation by health extension workers in each rural kebeles. However, it should not be forgotten that there are also many useful traditional practices that should be appreciated and are being used by the people of the district. From these Ikub, Idir, Debo, Jarsuma etc are men,,y,,ytioned as an example.

**Prevention of mother to child transmition of HIV/AIDS** 5 tested population in existing VCT (Voluntary Counseling Testing) centers about 198 were HIV positive out of which 48 were AIDS patients, respectively in the district. However, out of 603 people tested for HIV/AIDS 38 were patients. Currently, a lot has been done so as to increase the awareness of the community at large through social mobilization, community conversation both in at kebeles and schools level. Moreover, one HIV/AIDS focal persons were represented in all sectors. Inadequate portable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and under utilization of health services also play a great role for the existence of different diseases.

**Table 3.53:-Women who have been tested for HIV/AIDS in the year 2011&2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Number of HIV Carriers people | The Number of newly Identified HIV/ Carriers | Number of treatment centers (VCT) | Death due to HIV?AIDS | Sexual transmitted infection(STI) |
| 2011 | 309 | 0 | 7 | 0 | 0 |
| 2012 | 301 | 0 | 7 | 0 | 0 |

Source: Munessa District Health Office

**Table 3.54:- Women used family planning services for the year 2011&2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Traditional methods | Modern methods | Other | All methods (total) |
| 2011 | Unknown | 37628(93%) | Unknown | 37628(93%) |
| 2012 | Unknown | 30088(72%) | unknown | 30088(72%) |

Source: Munessa District Health Office

**Table 3.55:- Access to safe delivery (mid- wife) For non -complicated delivery**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Types of services given to Mothers | | |  |
|  | Antental care | Delivery service givn by skilled | Postnatal care | In their Home Traditional |
| 2011 | 15380 | 5002 | 5928 | Unknown |
| 2012 | 1724 | 975 | 1533 | Unknown |

Source: Munessa District Health Office

**Table 3.56: Total fertility rate**.

|  |  |  |
| --- | --- | --- |
| Year | Total fertility rate | |
| Rural | Rural |
| 2011 | 1.02 | 0.435 |
| 2012 | 1.04 | 0.435 |

Source: Munessa District Health Office

**Table 3.57:- Facilities access to improved water supply**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Health Center(H/C) | Health Post(H/P) | Total |
| 2011 | 5 | 2 | 7 |
| 2012 | 5 | 2 | 7 |

Source: Munessa District Health Office

**Table 3.58:- Infrastructural access to improved sanitation facilities**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Health Center(H/C) | Health Post(H/P | Total |
| 2011 | 7 | 17 | 24 |
| 2012 | 7 | 17 | 24 |

Source: Munessa District Health Office

**Table 3.59:- Women’s elected at different levels**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Members of Cabinet | % | Members of Council | % |
| 2011 |  |  |  |  |
| 2012 |  |  |  |  |

Source: Munessa District Council Offic

**Maternal and Child Care**As the country health policy in general, the region and the zone specifically the districts have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Totally there were 64 health extension workers in the district. In addition, the district health office provides different type of treatment and children and mothers vaccination to improve the health coverage of the district. For instance, the number of children vaccinated was increased from 54,286 in the year 2011 to 8545in the year 2012. The following table indicates the major vaccination type given to the children.

**Table .3.60:- Facilities access to improved water supply by year and type of vaccination.**

|  |  |  |
| --- | --- | --- |
| Type of Vaccination | 2011 | 2012 |
| BCG | 8479 | 2046 |
| Measles | 8013 | 1906 |
| DPT 1 | 8013 | 1906 |
| DPT 3 | 7426 | 2012 |
| Fully Vaccinated | 6974 | 175 |
| PW-TT2+ | 7894 | 500 |
| NPW-TT2 | 7487 | 1004- |
| Total | 54,286 | 8545 |

Source: Munessa District Health Office

**Table 3.61:- Infant mortality rate (death per 1000) live birth**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NO | Infant mortality rate | Number of infant mortality rate in sex | | | | | |
| 2011 | | | 2012 | | |
| M | F | Total | M | F | Total |
| 1 | Under 1 years old (neonatal mortality rate | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Under 5 years old | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Coverage of EPI under five | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Munessa District Health Offic

**3.4.6.2. Five top reasons those increase infant mortablity rate**

1. Birth Asphyxie

2. Pretern birth

3. Pneumia

4. Diaurhe

5. Acute Febrile illness (AFI)

**Table 3.62: numbar of orphan and vulnerable children age, type, and sex**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Number of orphan and vulnerable children | | | | | | | |
| Age category | | | Type | | Sex | | |
| 1-5 | 6-10 | 11-15 | Semi orphan | full orphan | M | F | Total |
| 2011 | 0 | 9 | 2 | 4 | 7 | 7 | 4 | 11 |
| 2012 | 0 | 9 | 2 | 4 | 7 | 7 | 4 | 11 |

Source: Munessa District Health Office

**Disabled Children**

**Magnitude and type of disability in Munessa district** Harmee Education for Development Associationhas conducted survey on 28 kebele’s of Munessa Woreda.The Woreda hs 38 kebeles (32 Rural and 6 Towns).The survey of remaing 10 kebeles was conducted at the beging of CBR project during the year 2011.The survey was conducted by the support of local community volunteers and the whole social workers, project offices and senior staffs of HEfDA. The base line survey shows that out of 203,000 total population of the district, there are 30,789(15550 male and 15239 female) people with disabilities, which mean 15.1% of the total population has some form of disabilities. This is bcause of luck of awareness of the people and therefore they hide the information of disability cases due to the fear of stigmatizion and discrimination.Especially in rural kebeles that are geographically and in terms of awareness hard-to-rich.

This can evidenced by people who have came to CBR office after the survey was conducted and said “we do not have awareness about the disability and people ignor our children and also us from social releationship. This is the reason why we hide the information of disability cases’’ Even thought the currently conducted suyvey in 28 kebeles shows that the disability magnitude is only 16%, the former survey conduted dring 2013 in 10 kebeles show that the 17%of the total population are living with disabilities. From the total persons which disabilities in the woreda visual impairment takes the highest rank (31.2%) and followed by hearing impairmentwhich constitutes 19.3%.The physical, multiple, mental, and others impairments share 16.5%, 10%, 14.5% respectively

As tried to show on the above **table 3.63** out of over 176,870(90196&86674) people in 28 kebeles of Munessa woreda, there are morethan 28,420 (14,386&14,034) people living with different forms of disabilities. This data is before two years real after that no update data.

**Table 3.64:- School accessed to improved water supply**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | School accessed to improved water supply | 2011 | | 2012 | |
| Number of school accessed to improved water supply | Tap wateer | Number of school accessed to improved water supply | Tap wateer |
| 1 | TVET college | 1 | 1 | 1 | 1 |
| 2 | Secondary school | 4 | 4 | 4 | 4 |
| 3 | Primary school | 22 | 22 | 22 | 22 |
| 4 | Kindergarton | 2 | 2 | 2 | 2 |

Source: Munessa District Health Office

**Table 3.65:- School accessed to improved sanitation facilities (toilet, etc)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| o | School accessed to improved sanitation facilities | 2011 | | 2012 | |
| Number of school accessed to improved sanitationfacilities |  |  |  |
| Toilet | Number of school accessed to improved sanitation facilities | Toilet |
| 1 | TVET college | 1 | 1 | 1 | 1 |
| 2 | Secondary school | 4 | 4 | 4 | 4 |
| 3 | Primary school | 22 | 22 | 22 | 22 |
| 4 | Kindergarton | 2 | 2 | 2 | 2 |

**CHAPTER FOUR**

**4. INFRUSTRUCTURAL FACILITIES**

**Transport and Communiction**

**Transport**: the district is found 57km away from Zone Capital town, Asella and 232km from regional capital city, Finfinne. It has 242.63km length of gravel road and 32 km of dry weather road in the year2011 and 2012. This gives an average road density (for all weather roads) of 0.07km per km2 and 13.79km per 1000 people.

**Table 3.30:-Length of roads by type for the year 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Road length by type (km) | | | |
| Gravel | All weather | Dry weather | total |
| 2011 | 242.63 | 242.63 | 32 | 274.63 |
| 2012 | 242.63 | 242.63 | 56 | 298.63 |

**Communication**: One of the fast and effective ways of transmitting both business and administrative information, especially in the area where road transport system is under developed.

**Telephone services:** Urban areas of the district has supplied with digital type of telephone service. On the other hand, most rural areas of the district has supplied with wireless type of telephone services. Accordingly, 32 peasant associations have wireless type of telephone service and 22 peasant associations have mobile net work coverage service.

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**Water and Energy Supply**

**Table 3.32:-Numbers of water schemes giving services**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Hand-dug wells | Spring development |  |
| 2011 | 15 | 100 |
| 2012 | 15 | 104 |

**Potable water coverage:** According to the data obtained from district water resource office, of the total population of the district about238,687(56.5%) were supplied with potable water, which was **30.93% for rural and 31**% for urban areas. Regarding potable water schemes, there were **14 hand-dug** wells and **104 spring** development on spot and spring with distribution in 2012.

**Table 3.33:-Number of Rural and urban populatin supplied with potable water**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Total Populaion of the District | Total populatin supplied with potable water | Populatin supplied with potable water(%) |
| 2011 | 232,184 | 128,249 | 60 |
| 2012 | 238,687 | **181,578** | 60 |

Sources of Domestic Energy Supply

Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solarenergy. Three towns of Munessa district have supplied with electric power. On the other hand, sub-parts of the two rural areas of the district have electric services.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It has also high contribution in accelerating the deforestation rate of the district. In urban area, Fire wood is the most important energy source followed by charcoal, kerosene, electricity, animal dung’s, and crop residues. One the other hand, fire wood is the major energy source in rural area followed by animal dung, crop residue, kerosene and charcoal.

**Table 3.37:-Urban Population supplied with Electricty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number of Town’s supplied with electricity | Total town’s population in the woreda | Total population of twons supplied with electricty | Percent of towns population supplied with electricity |
| 2011 | 232,184 | 24,906 | 2,466 | 58.68 |
| 2012 | 238,687 | 25,945 | 2,996 | 58.68 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number of Rural kebele supplied with electricity | Total Rural population in the woreda | Total population of Rural kebele supplied with electricity | Percent of Rural kebele population supplied with electricity |
| 2011 | 7 | 207,279 | 810 |  |
| 2012 | 7 | 212,739 | 810 |  |

**Table 3.38:- Rural Kebele Population supplied with Electricity**

**Fuel stations** There is no Fuel station in the district yet, however, three peoples have their own small scale fuel dis tribution center in kersa town.

**Table 3.68:- Number of Prisoners by sex and type of sentence**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| year | Sentences of less than 5 years | | | Sentences of greater than 5 years | | | Total | | |
|  | M | F | T | M | F | T | M | F | T |
| 2011 | 200 | 20 | 220 | 20 | 25 | 45 | 220 | 45 | 265 |
| 2012 | 250 | 125 | 375 | 65 | 0 | 65 | 315 | 125 | 440 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Criminal cases | | | Civil cases | | | Total | | |
| Lodged | Decided | Pending | Lodged | Decided | Pending | Lodged | Decided | Pending |
| 2011 | 627 | 626 | 1 | 3229 | 3050 | 178 | 3856 | 2676 | 179 |
| 2012 | 509 | 500 | 9 | 2533 | 3306 | 273 | 3042 | 3806 | 282 |

**Table 3.70**: ***Number of crimes recorded and number of persons recorded as offenders.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Year*** | ***No .of recorded*** | ***Number of crimes recorded*** | | | |
| ***Muder*** | ***Seriously injure*** | ***Fightly inurey*** | ***Property***  ***damaged*** |
| 2012 |  | ***0*** | ***74*** | ***18*** | ***9*** |

**Table 3.72:-Number of Banks and Insurane companies.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Types of Bank | | | Total |
| Commercial Bank | Oromia International Bank | Oromia CooperativeBank |
| 2011 | 1 | 1 | 1 | 3 |
| 2012 | 1 | 1 | 1 | 3 |

Source: - Munessa District Inland Revenue Offic

**Table 3.73:-Total Expenditure**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grand  total Expenditure | Recurrent Expenditure | | | | Capital Expenditure | | | | Contingency | Grand  total Expenditure |
| Adminitrative&general services | Economic servies | Socialservices | Total | Administrative servies | Economic servies | Social servies | Total |
| 2011 | 28,007,786 | 25,226,734 | 90,403,656 | 143,638,176 | 119,507 | 5,100,000 | 2,000,000 | 7,219,507 | 0 | 150,857,683 |
| 2012 | 31,257,101 | 2,724,726 | 99,342,902 | 133,324,729 | 6,411,506 | 9,650,910 | 3,239,706 | 13,302,122 |  | 146,626,851 |

**Annual Budget Allocation:** Annual budget requirement of the district is covered mainly from two sources regional government grants and district Inland Revenue. Regional government contribution shares the largest amount which accounts for more than 80% of the total annual budget allocated for the district. This indicates how far the current Inland Revenue share of the annual budget allocated for the district is low.Between the year 2011 and 2012, the total budget allocated for the district was increased from 150,857,943birr to 244,497,917showing an increment by 305%. Moreover, from the total over revenue collected in the last years, more than 20% was given as additional budget for the district so that the district use this budget for capital budget every year.

**Table 3.74:- Budget Allocated for the District**

|  |  |  |
| --- | --- | --- |
| Year | Annual Budget Allocated | Growth Rate (%) |
| 2011 | 150,857,943 | 75% |
| 2012 | 244,497,917 | 90% |

Source: Munessa District Finance and Economic Development Office

**Table 3.75:- Rural Credit and Saving Association and**

**Number of beneficiaries by sex**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of rural Credit Association | 2011 | | | 2012 | | |
| Number of Beneficiaries | | | Number of beneficiaries | | |
| Male | Female | Total | Male | Female | Total |
| RCSA  (WALKO) | 3546 | 1027 | 4568 | 2130 | 1650 | 3780 |
| Busa  Gonofa | 561 | 3125 | 3686 | 410 | 3005 | 3415 |
| Harbuu Microo Finance | 620 | 530 | 1150 | 635 | 560 | 1195 |
| Wosasa Microo finance | 351 | 325 | 676 | 459 | 391 | 850 |
| Total | 5078 | 5007 | 10080 | 3634 | 5606 | 9240 |

Source: Munessa District Cooperative Office

**3.6 Trade, Tourism and Sports**

**Trade:** Like any other sector of economy, the district is one of the sources of income of the house hold. Hence, as shown in the table below, the number of traders given new license was decreased from 444to84 while the number of traders who renewed their license was increased from 1239 to 1,470 during the year 2011 and 2012 respectively. However, the number of license renewed and license given was decreased to 231and license given new was increased 360 in the year 2011 and 2012 hence the government give due attention to register those traders who have no license in the zone.

As far as trade items were considered, most of the traders in the district purchased crops, fruit and vegetables, skin and hides from the local market and send to the central market. Moreover, livestock and poultry were also sent to the central market. Regarding tradable items and cash crops production activities, the district is known in the production of linseeds, Neug, rape seeds, linseeds, Onion, sugar cane, different types of Vegetables, etc. In addition, the district is known by exportable items like hides and skins.

**Table 3.76:- Type and Number of Licensed Traders in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Type Traders | 2011 | 2012 |
| 1 | Licensed given new | 444 | 84 |
| 2 | Licenses renewed | 1239 | 1,470 |
|  | **Total** | **1,680** | **1,554** |

Source: - Munessa District Inland Revenue Office

**Table 3.78: Exportable items bytypes and amounts supplied to the centeral market**

|  |  |  |  |
| --- | --- | --- | --- |
| No |  | 2011 | 2012 |
| Major localcash  crop | amounts supplied to the centeral market | amounts supplied to the centeral market |
| 1 | Hides | 0 | 0 |
| 2 | Sheep skins | 11,389 | 8350 |

Source: Munessa District Agriculture and Rural Development Office

**Tourism** : Due to and tourism office. These are Kaka Mountain range; caves, etc are the main tourist attraction sites of the district. However, all of them are under developed. lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi zone in general and Munessa district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture

**Table 3.80:- Number of major hotels, restaunts, bars, beds in the district** .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Hotels | | Restaurants | bars |
| Number of Hotels | Number of Bedds |
| 2011 | 12 | 53 | 25 | 1 |
| 2012 | 12 | 63 | 33 | 1 |

Source: culture and tourism Office

**Sports:**The district has different types of sport activities like foot ball, volley ball and athletics. The total number of sport team (football, volley ball and Athletics) was 51 between the year 2011 and 2012.

Likewise, the number of sports men was decreased from 1203 to 836 between the year 2011 and 2012 except slight increment observed in the year 2001. However; the number of team and sports men for all types sport was varying from one year to another. As far as the sport facilities was considered, there were no well-organized and standardized sport facilities like stadium, gymnasium, youth center, etc in the district. As far as the sport facilities was considered, there were no well-organized and standardized sport facilities like stadium, gymnasium, youth center, etc in the district.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table:3.81.Number of Sport Teams and Members in the district** | | | | |
| Type of Team | 20092011 | | 2012 | |
| No of team | Member | No of team | Member |
| Foot-ball | 38 | 1000 | 26 | 572 |
| Volleyball | 12 | 155 | 22 | 264 |
| Athletics | 1 | 51 | 2 | 30 |
| Total | 51 | 1203 | 50 | 836 |

**CHAPTER FIVE**

**5. Development Activities**

**5.1 On Going Development Projects**

The on going major development activities in the district are carried out by government, non-government and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the on going development projects during the year under consideration are the following. .

**Social Sector Development Projects:** In the social sectors two library clases (one for secondary and one for Preparatory) schools, three government office and one Stadium for Kersa twon were under construction since 2011and 2012 by budget obtained from regional government, local government and community participation.

**Economic Sector Development projects**: In the economic sectors 13 farmers training centers (FTC) and three animal health clinic, one animal health post, one modern and one traditional irrigation were under construction since 2011 and 2012 by budget from local government, regional budget(R-WaSH, MDG,etc) and community participation. Most of projects whose budget allocated by local government were completed with one year period and provide service to the local communities

**Problems of ongoing Development projects**

The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction resources is the major problem during the construction.

Besides this the project committees of the district are inconsistent to deal with the problem faced during the construction of the project. Lack of strong coordination on monitoring and evaluation among project committee and other teams and the executive agents of the capital are not very eager to accomplish the projection times. As the result of this, most of the projects are post pond to the next budget year in the district was the main problem.

**CHAPTER-SIX**

**6. Problems and Potentialities**

**6.1 Problems**

**Environmental problem**: Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting are the major environmental problems in the district.

**Economic problem**: Shortage of farm land high prevalence of crop diseases and pest, shortage of Agricultural inputs and lack of capacity to buy, lack of financial Institutions bank saving, acute shortage of grazing land which leads to over utilization of the same land for long period of time, low investment activities and industries development.

**Social service problem**: Rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence high drop out rate, low potable water coverage , low electric power supply etc.

**6. 2. Potentialities**

**Land Resources**: the district has large land resources that can be used for crop production and livestock rearing. On the other hand, the climate condition and the fertility of land are suitable for producing different types of cereal crops that can be used for food processing factory as a raw material. In addition to these since the district is nearest to the central market it has a great advantage to sent agricultural production to the central market.

**Forest Resources**: the district has both natural and manmade forest resource potential like Tid, Zigba, Koso and others used for different purposes. Investment Opportunities: the district has many types of investment opportunities. Especially for those who would like to participate in agricultural activities, food processing industries, hotels and the like the district is too suitable for them.

**Minerals and Energy Resources:** reasonable research and study was not conducted in the district to know the potentiality of minerals and energy resources found in the district. However, there are some minerals like sand stones used for construction purpose.

**Existing Situation of the District**: There is no, any change of the Administrative unit in the District for the year 2011 & 2012.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF ROBE DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER ONE**

**1. Introduction**

**1.1 Back Ground**

Robe District is one of the 27 administrative units/districts of Arsi Zone. The historical name of the district is derived from the name of a person called "Roba" who lived before 200 years. Robe has 34 *kebeles* of which 28 are Peasant Associations (PAs) while six (6) are urban. Robe town is the capital of the district. It is located at 225 km away from regional and national capital city, Finfinnee,to south east;and 98 away km from Zonal capital town, Asella*,*to North East.

This profile is prepared to create scientifically organized physical and socio economic data base of Robe district which reflects the existing situation, development potential sand problems of the district. As a result, the data presented in this profile can be used by different government and non-government organizations, researchers, and the like to meet various purposes.

This document is compiled using the data collected from sectors in Robe districtand Arsi Zone, 1999 population and Housing Census Report for Oromia Region and other secondary sources available in Robe District Finance and Economic Development office. In the process, efforts were exerted to keep the accuracy and quality of the profile to its optimum. However, it still has some limitations evolved from challenges such as lack of attention and timely response from the concerned organizations, lack of accurate data, lack of professional personnel, lack of well-organized and consistent dataetc in different sectors.Despite these limitations, the document is still very useful in showing the physical and socio-economic condition of the district.

This document has chapters. The first chapter deals with physical features such as: location, relief, drainage, soil, vegetation and wild life. The second chapter focuses on population size and distribution. The third chapter deals with economic condition. In addition, the fourth, fifth, and sixth chapter deals with social services and infrastructure condition, development activities, potentials and problems/challenges of the district respectively. Moreover, the last chapter presents the conclusion and recommendations derived from lessons discussed in the previous chapters

**CHAPTER TWO**

**2. Physical Setting Location and Area**

**2.1 Location and Area**

Astronomically, Robe district is located between 7007’22’’N to 7041’03’’N Latitude and 39021’13’’E to 40008’17’’E longitude. Relatively the district shares a boundary line with Sude district in the North, Amigna district in the East and North East, Seru district in the East and South Sast, Bale Zone in the South East, Shirka district in the South and South West, Tena district in the West and North West, and Diksis district in the North West direction. Although, different sources at different times reveal different areas, according to the recent information obtained from Oromia Bureau of Finance and Economic Development the total area of Robe district equals 1309.3 km2which accounts for 6.23% of the total area of Arsi zone.

**2.2 Relief, Drainage, Geology and Climate**

**Geology;-**The present Surface rock distribution, the land configuration and other features of the district was formed during different period of Cainozoic era as a result of both internal and external forces acting up on the earth surface. Accordingly, Except few area along the south eastern tip of the district covered by AmbaAradom formation, the whole southern, south eastern, eastern, south western and some of the western and central part of the district was covered by Arsi and bale basalt formation formed during Cenozoic era. Moreover, Adjacent to Arsi and Bale Basalt, some of the north western, northern and north eastern part of the district was covered by Nazeret Series. In addition, the northern tip and north western tip of the district was covered by Lower and Upper part Chilalo formation respectively.

**Relief;-** The relief structure of the district consists of undulating and flat rolling high plateau on the high land and undulating low land areas dissected by major rivers of the district like WabeShebelle and Hulul. The altitude of the district ranges between 1000 meters found in Wabe-Shebelle gorge to more than 2600 in Jawi Sire area.

**Drainage;-** The presence of the district at the base of ChilaloGalema mountain range causes the district to have many rivers flowing in the district. Accordingly, Hulul, Robe, Kechino and Wabe are the major permanent rivers of the district where as Jena, Teya, Asendabo and Bortota are the major seasonal streams. Generally, the district has high potential for both traditional and modern irrigation systems if the available water bodies are used effectively.

**Climate;-** Due to its altitude, the climatic condition of the district is dominantly moderately cool having a temperature of 100C-150C.The remaining ones are cool, moderately warm and cold having a temperature of 100C-150C,200C-250C and less than 100C respectively. The mean annual rainfall is between 800-1400mm and the average rainy days are more than 180 days in the year. The rainfall pattern is bi-modal, which are short rainy season (B*e*lg- from February to April) and long rainy season (Me*h*er - from June to end of September).

**2.3 Land use, Soil, Vegetation and Wild life**

**Land use;-** Land use indicates the classification of the land of an area under different type of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural Forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing. The average farm land holding size per house hold is one and half hectares and most of the farmers in the district have two hectares of land which includes cultivated, residential and private forest land.

**Soil;-** The major types of soil found in the district are PellicVertisols,EutricCambisols and Lithosols. Moreover, Chromic Cambisols are found in few pocket areas of the district. The fertility status of the soil is medium which is suitable for production of cash crops like oilseeds.

**Vegetation;-** Regarding vegetation, natural vegetation, bushes and shrubs are the major vegetation types in the district. There are also government protected forests in the district. However, there is no reliable data in the district.

**Wild Life;-** The major Wild animals like ape, hyena, and foxesare mentioned as an example. There are no reserved areas for wildlife conservation by name and local

**CHAPTER THREE**

**3. SOCIO ECONOMIC CONDITION**

**3.1 Population Characteristics**

According to the projection made from 1999 CSA report and indicated in Table 2.1 below, the population of the district increased from **231865** to **238499** between the year 2011 and 2012 showing an increment by 6634 people. Regarding the sex composition of the population of the district in both years, females constituted 49.6% of the total population where males account for 50.6%.Based on area of residence, 15.8% and 84.2% of the population lived in urban and rural areas respectively during the same period.

An overall sex ratio of the district was 102.4 males per 97.6 females by the year 2011 and 2012 implying the number of male was nearly equal to the number of females. By the same year, the sex ratio of urban was 103.8 male per 96.2 female and that of rural was 102.2 male per 97.8 female.This indicates the number of male in urban was greater than the number male of in rural.

**Table 3.1: Population Distribution by rural, urban and sex in 2011 and 2012.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | **Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 98,947 | 98,968 | **197,915** | 17,848 | 16,101 | **33,949** | **116,795** | **115,070** | **231,865** |
| 2012 | 101,553 | 101,575 | **203,128** | 18,595 | 16,775 | **35,370** | **120,148** | **118,351** | **238,499** |

**Age and Sex Structure of Population;** As the 1999 CSA Population and Housing Census report indicates, the young age population (0-14), productive age population 115531 and old age population (65+) accounts for 7856 , 48 % and 3.2% of the total population respectively in the year 2012. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 43.5%, 39% and 2.8% for rural areas and 5%, 10% and 0.4% for urban area respectively. The dependency ratio of the district is 107 . Inferring 107 people are dependent on 100 economically active populations (Refer Table 2.2 below).

**Table 3.2: Population size by wider age group classification, 1999.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year/Sex** | **Male** | **Female** | **Total** |
| **Rural** | **18,594** | **16,775** | **35,369** |
| 0 – 14 | 5944 | 5,801 | **11,745** |
| 15 – 64 | 12,098 | 10,376 | **22,474** |
| 65+ | 552 | 598 | **1,150** |
| **Urban** | **101,553** | **101,575** | **203,128** |
| 0 – 14 | 52,703 | 51,083 | **103,786** |
| 15 – 64 | 44,968 | 47,668 | **92,636** |
| 65+ | 3,882 | 2,824 | **6,706** |
| **Total Rural + Urban** | **120,147** | **118,350** | **238,497** |
| 0 – 14 | **58,647** | **56,884** | **115,531** |
| 15 – 64 | **57,066** | **58,044** | **115,110** |
| 65+ | **4,434** | **3,422** | **7,856** |

**Population density and rural settlement;-** Population density refers to number of people per square kilometre. It measures the intensity of land use i.e. indicates population-resource relationship of a given area. The change in its size across time helps to determine the necessary measures to meet economic and social necessities. As a result, crude density of the district increased from 167.63 people per km2in 2011 to 180.32 people per km2 in 2012. Concerning the settlement pattern of the district, the rural population were characterized by both scattered and grouped type of settlements.

**School Age population;-** School age population is one of the best indicators for planning budget, education facilities, health and other social services facilities etc. Moreover, to measure the education facility with the help of students to classroom ratio, students to teacher’s ratio, and students to text-book ratio etc school age population is crucial. Accordingly, the size of school age population Increased 8.8 % (7331) between the years 2011 and 2012. This group of population accounted for 38.1% of the universal population of the district in 2012. During the same period, the number of male and female school age population Increased by 8.8% (3744) and 8.7% (3588) respectively. Based on area of residence, the population Increased by 8.1% (5861) in rural while it increased by 13.1% (1470) in urban implying.

As far as the school age population in different levels of schools are also concerned, the number of kindergarten and primary schools age increased from 22476 to 24405 (8.6%) and increased 50488 to 54944(8.8%) respectively. However, that of secondary schools increased from 10552 to 11498 (by 8.97%) between the years 2011 and 2012.

**3.2 Crop production and livestock rearing**

**3.2.1 Crop Production**

Robe district is endowed with good fertile and irrigable arable land, and different types of agro-ecological zones and climatic conditions that favor for the growth of different agricultural productions. Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of crops and use the same land twice a year i.e. Meher and *Belg* seasons. However, *meher* is the major season in terms of both the size of land cultivated and amount of crops produced. As it can be seen in Table 3.1 below, although the level of production obtained fluctuates from season/year to season/year due to rainfall variability and other climatic constraints, the land cultivated was the same (**38784.8** hectares) & (**37694.32** hectares) during the *meher* seasons of 2010/11 and 2011/12 while the production and productivity decreased from **981311.38** to **793197.17**quintals and 26.65 to 27.4 quintals per hectare respectively. From the total area cultivated, the proportion of cereals, pulses and oilseeds accounted for 75.7%, 0.93% and 8.9% in 2011 and 72.8%, 15.1% and 12.1% in 2012 respectively. This indicates, The area covered by cereals, Pulses and oilseed showed an increase. Among the crops grown, wheat, teff, field bean, maize and linseed are considered as major crops in terms of area cultivated. About 41.97%, 17.38%, 14.14%, 14.42% and 8.33% in 2011 and 51.83%, 16%, 3.45%, 14.42% and 11.53% in 2012 of the district crop areas were correspondingly under wheat, teff, field bean in 2011 or Haricot bean in 2012, maize and linseed. As the figures depict, the area covered by wheat and linseed showed an increase while that of the other crops decreased. The variation in the area grown across the years aroused from the variability of the rainfall distribution occurred during the production seasons.

Regarding the production per unit of hectare of land, wheat is the leading crop followed by sorghum resulting in 51.83 and 31.5 quintals respectively. On the other hand, among the crops grown in the district during *belg* season barley, field pea and wheat were the major ones and correspondingly 68.12%, 25.6% and 6.24% of the total area cultivated during the season in 2012 were covered by these crops.

**Table 3.3: Area Cultivated and production obtained for private peasant holdings by seasons.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2010/2011** | | | | | **2011/2012** | | | | |
| **Meher season** | | | **Belg season** | | **Meher season** | | | **Belg season** | |
| Area cultiv. (Ha) | Prod. (Quint) | Produc  tivity (Q/Ha) | Area cultiv. (Ha) | Prod. (Quint) | Area cultiv. (Ha) | Prod. (Quint) | Produc  tivity (Q/Ha) | Area cultiv.  (Ha) | Prod. (Quint) |
| **Cereals** | **31,985.05** | **810,293.51** |  | **5,625.00** | **13,964.46** | **31,127.00** | **700,926.00** |  | **8,122.00** | **110,980.00** |
| Teff | 7645 | 60813.6 | 7.95 | 0 | 0 | 11787 | 165018 | 14 | 0 | 0 |
| Barley | 771.5 | 19648.525 | 25.47 | 5079 | 12504 | 712 | 12460 | 17.5 | 7440 | 104160 |
| Wheat | 17030.3 | 475508.92 | 27.92 | 532 | 1397.5 | 12306 | 30765 | 2.5 | 682 | 6820 |
| Maize | 6224.75 | 249360.19 | 40.06 | 0 | 0 | 6034 | 211190 | 35 | 0 | 0 |
| Sorghum | 299.75 | 4766.25 | 15.90 | 0 | 0 | 288 | 4608 | 16 | 0 | 0 |
| Oats | 13.75 | 196.02 | 14.26 | 14 | 63 | 0 | 0 | 0 | 0 | 0 |
| **Pulses** | **6,250.00** | **111,349.87** |  | **41.00** | **3,443.50** | **6,175.00** | **49,368.00** |  | **2,800.25** | **30,798.00** |
| Field bean | 5893.75 | 107019.75 | 18.16 | 0 | 0 | 5879 | 47032 | 8 | 0 | 0 |
| Har. Bean | 284.5 | 3571.625 | 12.55 | 15 | 39 | 280 | 2240 | 8 | 0.75 | 3 |
| Chick pea | 18.25 | 120.94 | 6.63 | 26 | 3404.5 | 16 | 96 | 6 | 2799 | 30789 |
| Lentils | 13.5 | 107.49 | 7.96 | 0 | 0 | 0 | 0 |  | 0.5 | 6 |
| Vetch | 40 | 530.06 | 13.25 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| **Cash Crops** | **549.75** | **59,668.00** |  | **0** | **0** | **392.32** | **42,903.17** |  | **1,189.00** | **146,211.00** |
| Vegetables | 198 | 748 | 3.78 | 0 | 0 | 79.6 | 7087.6 | 89 | 263 | 926 |
| Root crops | 310.3 | 54383 | 175.26 | 0 | 0 | 312.72 | 35815.6 | 114.5 | 24940 | 121271 |
| Fruits | 5.35 | 85 | 15.89 | 0 | 0 | 0 |  |  | 0 | 0 |
| Chat | 2.85 | 360 | 126.32 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| Hops | 29.25 | 3112 | 106.39 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| Sugar cane | 4 | 980 | 245.00 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| **Total** | **38784.8** | **981311.38** |  | **5666** | **17407.96** | **37694.32** | **793197.17** |  | **12111.25** | **287989** |

**3.2.2 Irrigation Development;-**

According to the data obtained from Robe District Irrigation Agency and indicated in 2011 Statistical abstract, the district has a potential area of 3115 hectare of land. From these, in 1370 hectare, which equals 43.98% of the potential, was cultivated by traditional irrigation in 2011 serving 3336 farmers and obtaining 28030 quintals of production. With a 27.37% (375 hectare) increased, 1745 hectare was put under cultivation in 2012. As a result, the number of farmers involved increased to 3454 { 3336} and production of 320548.5 quintals were obtained. However, the district has no modern irrigation schemes and it is only the traditional irrigation practices that are doing a lot. For details see the table below.

**Table 3.2: Land under irrigation and production in 2011 and 2012.**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Land cultivated by traditional irrigation (Ha) | Amount of Production obtained (Quint.) | Served for farmers  (No) |
| 2011 | 1370 | 28030 | 3336 |
| 2012 | 1745 | 320548.5 | 3454 |

**3.3.3 Livestock and Poultry;-**

Livestock plays a significant role in the economy of the country as well as the district in general and the farmers and house holds in particular. In general, they provide food (milk, meat, egg, etc), draught power for cultivation, serve as a means of transportation and as a saving or hoarding. They are also kept for prestige as an indication of social status and wealth in the society.

**Livestock;-** The district is widely known for its large amount of livestock resources. As it can be seen in Table 3.3, the livestock population of the district increased from **384117** in the year 2011 to **391870** (by 2.24%) in the year 2012. The major livestock population found in the district includes cattle, sheep, goats, horses, mules and donkeys. Accordingly, in both 2009 and 2010, the cattle and sheep constituted the largest proportion (more than 61.2%) of the livestock population. On the other hand, the size of cattle increased by 2.1 sheep, horses and mules population increased by 2.3%, 2.1%, and 2.1% respectively in 2012. Contrary to this, the size of population of donkey showed increase followed by goats. Despite the role they play in the life of the people, their outputs (milk, meat, butter, egg, power, off-springs, etc) have remained low. Poor nutrition, prevalence of diseases and insufficient veterinary services, traditional animal husbandry practices and poor genetic potential of the local breeds and shortage of feeds are some of the constraints that affect the productivity of the livestock in the district.

**Poultry;-** Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population increased from 97,646 to 100,097(by 2.5%) between the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional methods of rearing is the major constraints.

**Table 3.3: Distribution of livestock and poultry in 2011 and 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **SN** | **Types of Activity** | **2011** | **2012** |
| **1** | **Livestock** | **384117** | **391870** |
|  | **Cattle** | 206689 | 210873 |
|  | **Sheep** | 88210 | 89974 |
|  | **Goat** | 39356 | 40143 |
|  | **Donkey** | 31064 | 31685 |
|  | **Horses** | 14478 | 14768 |
|  | **Mules** | 4340 | 4427 |
| **2** | **Poultry** | **97646** | **99599** |

**Bee Keeping; -** Beekeeping is another source of income for farmers. In recent years, besides traditional beehives, farmers in the district have started adopting modern beekeeping activities get more honey so as to increase their income. According to the data obtained from Robe District Animal Resources Development and Health Office and presented in Table 3.4 below, the number of bee hives (traditional, modern and transitional)kept by farmers increased from 5351 to 6005. Likewise, the total production and average productivity increased from 74,908.5 to 76,905kg and from 14 to 13 kg/hive respectively between the year 2009 and 2010.

The number of traditional, modern and transitional beehives which accounted for 4649, 452 and 250 in 2009 also grew in number to 5140, 482 and 383 in 2010. Correspondingly, production raised by 11%, 6.64% and 53.2%.Regarding the change in productivity of each type hive, it accounted for 0.5 kg (4.76%) and 10 kg (28.57%) increase respectively for traditional, Modern and transitional respectively.. Here it can be noted that, although the proportion of gross production from each type of hive showed an increase the proportion of their productivity remained below it.

In addition, it can be observed that, in terms the change in productivity across the two years. On the other hand, despite the efforts made to expand the number of hives, production and productivity, preference of farmers to keep traditional methods of production, increase in price of modern hives, reduction in size of bee population due to food shortage and use of herbicides and insecticides etc were major bottlenecks which hampered bee keeping.

**Table 3.4: Number of traditional, modern and transitional beehives and production**

|  |  |  |
| --- | --- | --- |
| Type of activity | 2011 | 2012 |
| **Traditional Beehives** | | |
| Total number of beehives | 4649 | 5140 |
| Productive | 0 | 11.5 |
| Production (kg) | 53463.50/KG | 59110 |
| Productivity (kg/hive) | 11.5 | 11.5 |
| **Modern** | | |
| Total number of beehives | 452 | 482 |
| Productive | 15820/KG | **12050** |
| Production (kg) | 35 | 35 |
| **Transitional** | | |
| Total number of beehives | 250 | 383 |
| Productive | 5625 | **-** |
| Production (kg) | 5625/KG | 5745 |
| Productivity (kg/hive) | 22.5 | 15 |
| Total number of beehives | 0 | 6005 |
| Total Production (Kg) | 0 | 76905 |
| Av. productivity (kg/hive) | 0 | 25635 |

**3.3.4 Agricultural inputs and infrastructures**

**Agricultural service cooperatives;-** Farmers Service Cooperatives play great role in the expansion of modern agricultural innovations. They provide agricultural inputs, agricultural and industrial marketing services, credit, flour mill, saving, potable water and modern crops storage services and facilities for the members.

According to the statistical abstract data obtained from Robe District Cooperatives Promotion Office, there were 68 different primary cooperatives with 17,436 members in 2012.Regarding their capital, they had 47,081,413.16 birr of which 14,489,925.4(30.8 %) was fixed capital and 32,591,487.77 (69.2%) was operational. Of these cooperatives, 32 were agricultural multi-purpose, 4 were irrigation, 3 were seed multiplication, 1 was dairy, 0 was mining, 7 were consumers and 19 were saving and credit cooperatives. Besides, there is also one Union which gives agricultural services to farmers in Robe district as well as other neighbouring member districts. For more details, see Table 3.5 below.

**Table 3.5:Types and number of cooperatives, members and their capital in 2010.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TL | Type of Coops | Number of Coops | Members | | | Capital (Birr) | | |
| Male | Female | Total | Fixed | Operational | Total |
| 2 | Primary | **68** | **15222** | **2214** | **17436** | **14,489,925.39** | **32,591,487.77** | **47,081,413.16** |
| 2.1 | Multi-purpose | **32** | **22025** | **2538** | **24563** | **14281080.5** | **2085371.82** | **16366452.32** |
| 2.3 | Irrigation | **4** | **158** | **9** | **167** | **209850.26** | **212087.61** | **421937.87** |
| 2.4 | Seed multiplication | **3** | **1911** | **79** | **1990** | **971945** | **103467** | **1075412** |
| 2.5 | Dairy | **1** | **24** | **2** | **26** | **12306.67** | **53279.72** | **65586.39** |
| 2,6 | Consumers | **7** | **299** | **40** | **339** | **2848863.49** | **9255774.09** | **12104637.58** |
| 2.7 | Saving & credit | **19** | **920** | **670** | **1590** | **60257.09** | **22687698.30** | **22747955.39** |

**Fertilizer and improved seeds utilization;-** The district’s agricultural activities fall under small-scale peasants. These peasants adopt different agricultural practices and use different agricultural inputs which include fertilizers, improved seeds, herbicides and insecticides to improve their crop production and productivity so that meet their own as well as the rapidly growing market demand for food and industrial raw materials.

The amount of chemical fertilizers used by farmers in the district vary from year to year,among peasant associations and peasants themselves due to a number of reasons such as capacity to purchase and willingness to use, delivery time problem, weather condition, etc.Despite this variation, the application of chemical fertilizers is also increasing from year to year in the district. According to the data obtained from Robe District Cooperatives Promotion Office, in 2010/11 for instance,the amount of fertilizer distributed equals **40327.5** (DAP **30020** and Urea **10307.5**) quintals. This increased to **40496.5**(DAP **27586** and Urea **12911**) quintals in 2011/2012.Although the district adopts blanket fertilizer recommendation, the amount of fertilizer used in the last two years was lower compared to the size of land cultivated during *meher* season i.e. 35956.25 hectares, particularly, urea.

On the other hand, improved seeds are crop varieties that give significantly higher yield and better quality compared to locally produced varieties of seeds. There a highly growing demand for improved seeds in the district over time. However, the amount of improved seeds distributed to the farmers also fluctuates across time as shown in Table 3.6 below. Accordingly, **3612.38** quintals of improved seeds were distributed for the farmers in 2011 through Didea Farmers Union. But this amount increased to **5994.88** quintals (by 66%) in 2012. Similarly, the use of herbicides showed increase from **12167.5 lit**. in 2010/11 where as **31914 li**t.in 2011/012.

**Table3.6: Amounts of agricultural inputs distributed to farmers in 2010/11 and 2011/012.**

|  |  |  |
| --- | --- | --- |
| **Types of input** | **2010/211** | **2011/012** |
| Fertilizers (in Quintals) | **40327.5** | **40496.5** |
| DAP/NPSB | 30020 | 27586 |
| Urea | 10307.5 | 12911 |
| Improved seeds(in Quintals) | **3612.38** | **5994.88** |
| Wheat | 3410 | 5966 |
| Maize | 202.375 | 28.875 |
| Herbicides (in Litres or Kg) | **12167.5** | **31914** |
| Herbicides | 12167.5 | 31914 |

**Development Agents and Farmers’ Training Centres;-** Development Agents (DAs) play great role in modernizing the agricultural sector and improving the production and productivity. They are of different fields of specialization, being engaged in the facilitation and expansion of modern agricultural inputs, modern seeds, modern livestock rearing, poultry production, beehives, vegetables, fruits, natural resources development and management, trainings etc. Accordingly, they play appreciable role in enhancing farmers awareness regarding the uses and application of modern agricultural inputs and by enlarge in transforming agricultural sector in the district. They work to transform the subsistence agriculture into market oriented there by producing farmers who strive for this. In addition, Farmer Training Centres are institutions where farmers receive the above mentioned services from the DAs.

Accordingly, as the data received from Robe District Agriculture Office reveals the number of Farmers’ Training Centres (FTCs) of the district increased from 25 in 2011 to 26 in 2012 although the construction of 1 FTCs were completed. However, compared to the total number of PAsin the district 1 additional FTCs are required. On the other hand, the number of development agents (including supervisors and those in regular education) decreased from 76 to 71 between the year 2011 and 2012 (in 2013 Budget Allocation Criteria).

In addition, as shown in the Table 3.7, the number of farmers, who received extension services,accounted for 25874 during years under consideration. Accordingly, on average, one development agent served 330 and 354 farmers in 2011 and 2012 respectively.

**Table 3.7: Number of FTCs, DAs and beneficiaries by year**.

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centres | 25 | 26 |
| Number of Development Agents | 76 | 71 |
| Number of beneficiaries | 25874 | 25874 |

**Livestock Health Infrastructure ;-** One of the major problems that contribute to the low livestock production and productivity is the inadequacy of health infrastructures, personnel and veterinary services as compared to high prevalence of animal diseases in the district. However, strong efforts have been made in the last consecutive years to overcome the shortage of availability of health infrastructures, personnel and veterinary services in the district.

As a result, among the total health infrastructures found in the districtin 2011 Five(5) and 2012,Five(5) were non-standardized health posts and 5 were clinics (1 B-Type,1 C and 3 D-Type) showing no change in number between the two years. However, the total number of health infrastructures were 10 (Ten) in the district. Regarding animal health professionals during the years under consideration their number decreased from 30 (5 veterinarian,25 Health Assistant to 29 (5 Veterinarian, and 24 Assistants) in 2011 and 2012 respectively. In addition, there is no Animal Health technician and Meat Inspector. In general, it can be observed that there was decreasing trend in the sizes of animal health assistants, technicians, and meat inspectors.

On the other hand, variations were observed in the distributions of veterinary health infrastructures and veterinary personnel from PAs to PAs. The general trend in the sizes of veterinary health infrastructure and veterinary personnel is presented in the table below (Table 3.8).

**Table 3.8: Number of Veterinary Personnel and Infrastructure (2011-2012**).

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| **Veterinary personnel** |  |  |
| Veterinarian | **5** | **5** |
| Animal Health Assistant | **25** | **24** |
| Animal Health Technician | **0** | **0** |
| Meat Inspector | **0** | **0** |
| **Health Infrastructure** |  |  |
| B-Type clinic | **1** | **1** |
| C-Type clinic | **1** | **1** |
| D-Type clinic | **3** | **3** |
| Health posts (non-standardized) | **5** | **5** |

**Agricultural calendar;-** Agricultural activities such as land preparation, planting, weeding, and harvesting etc, by their nature, are season (Belg and Meher), types of crops cultivated and agro-climate based (dega, weyna-dega,kola etc). Accordingly, in Robe district, some PAs start the activities earlier while others engage being late.The agricultural calendar of Robe district is shown in Table 3.9 below.

**Table: 3.9.Agricultural Calendar of the District**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher season** | **Belg season** |
| 1 | Land preparation | March – June | January –February |
| 2 | Planting(sowing) | End of June – Mid-July | Mid-March – Mid-April |
| 3 | Weeding | July to September | April |
| 4 | Harvesting | December to February | June-July |

**Soil conservation methods and soil fertility management**

**Methods for maintaining soil fertility**

There are two ways of maintaining soil fertility in the district. These are the Traditional and Modern methods. In the district, soil fertility maintenance is dominated by traditional methods, for example, application of natural fertilizer such as animal dung, fallowing, inter-cropping, crop rotation, crop residue and sometimes burning of soil. Besides, the farmers also employ chemical fertilizers and compost (organic fertilizer) for the same purpose as modern method.

**Methods for soil conservation; -** Land degradation has a significant consequence of agricultural land deterioration. In the district, in appropriate use of land, especially using steep slopes for crop production, free grazing and cutting trees for different purposes are common practices. Therefore, the challenge facing us currently is to ensure the sustainable use of the resources: soil, water, nutrients and vegetation to secure food supply, conserve the environment and alleviate poverty. To do so, two types of soil conservation practices were under implementation in the district: traditional and modern. Accordingly, the traditional method involves contour ploughing, crop rotation, intercropping etc. Meanwhile, cut off drain, check dam construction, terraces, area closure, controlled grazing, cut and carry, re-forestation, tree planting, trenches, micro-basins etc are modern soil conservation methods. For instance 1.54Mil tree, seedlings were planted in 2011 similarly, 617.5 hectares of land were area closed, 121463 m3 micro-basins were constructed etc.

**Constraints of agriculture and livestock development**

**Households affected by drought**

Relatively, Robe district is not known for drought and drought related problems before some years. However, few years onwards, delay in time of onset of rainfall, variation in amount (excessive or shortage) of rainfall, uneven rainfall distribution among PAs, crop diseases and pests occurred during both seasons has started to result in decline in the size of production obtained. As a result large number of population and animals got affected and became forced to receive aid. For instance, according to the data obtained from Robe District Disaster Prevention and Preparedness Office (indicated in 2011 Statistical Abstract Data), 19387 (male 9675 and female 9712) people affected by drought got 290800 kg food and 8724 litre oil aid/support in 2012.

**Crop pests, diseases, weeds and other factors;-** The data produced by Robe District Agriculture Office reveals the major crop pests in the district are aphids while the major diseases are rust and smut.Equally importantly, weeds and rain fall variation (increase or decrease) were also identified as the major bottle necks of crop production. Being alone or in combination, these factors have greatly contributed (before, during and after harvest) to the loss in large volume of production. Despite these challenges, efforts were made to advice farmers to use resistant variety seeds, to weed by hand (more preferable), touse appropriate chemicals and their recommendation, expand irrigation by harvesting rainfall water and through river division etc.

**Livestock and Poultry Diseases;-** According to the information accessed from Robe District Animal Development and Health Office, in general, Blackleg, Haemorrhagic Septicaemia, African Horse Sickness, Sheep Pox, LCD, PPR, New Castle, Chronic Respiratory Diseases, Internal and External Parasites, Anthrax and Lymphatic Diseases are the major livestock and poultry diseases found in the district. These diseases combined with other factors contributed largely to the reduction of the quality and productivity of livestock and poultry of the district.To control these diseases and parasites and their negative consequences, the concerned institution vaccinated 25000, 25000 and 40000 animals in 2011 and 25000, 25,000 and 40000 animals in 2012 for Blackleg, Haemorrhagic Septicaemia and Anthrax respectively. Similarly, animals infected by External Parasites and Internal Parasites and accounted for **191901** and **183684** and **191234** and **178284** in 2011 and 2012 correspondingly were treated by the same. In addition to these, castration service was also given in 2011 and 2012 for **3769** and **4389** animals respectively. On the other hand, laboratory service was delivered both in 2011 an 2012, it was given for 7063 animals in 2011 and 16461 animals in 2012. For details see the table below i.e.

**Table 3.10: Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of Services** | **2011** | **2012** |
| **\*Vaccination** | **90000** | **90000** |
| Blackleg | 25000 | 25000 |
| Haemorrhagic Septicaemia | 25000 | 25000 |
| Anthrax | 40000 | 40000 |
| **Treatment** | **501889** | **424765** |
| External Parasites | 191901 | 183684 |
| Internal parasites | 206219 | 191234 |
| Castration | 3769 | 0 |
| other | 0 | 49847 |

**3.4 Mineral resources and industry**

**Mining and quarrying**

The mineral resource potential/deposit of the district is not investigated and known so far. However, data obtained from district’s Water, Mineral and Energy Office indicates that the district has a high potential/deposit of stone mineral (for construction).Yet the district did not start to utilize this mineral resource to its optimum. However, there are insignificant mining activities such as rock quarrying and pottery making. These activities are carried out by some local communities and small-scale micro-enterprises.

**Industry; -** Robe district has abundant resources which can create favorable environment for industrial development**.** However, the sector is at infant stage and it is dominated by small number of small-scale industries possessing smaller capital. These industries generated job opportunities for some local residents. They include privately owned food processing grain mills, edible oil processing industries and commonly possessed metal and wood processing micro-enterprises.

According to the data received from the concerned organizations, there were (permanently licensed) 46 grain mills, 10 metal and wood, and 2 (Two) edible oil producing small scale industries with a capital of 3,035,000 birr in 2011. In 2012, the number of 46 grain mill, 10 metal and wood and 2 (Two) edible oil. Similarly producing small scale industries with a capital of 3,160,000 birr , the population employed and capital owned increased from 86 to 92. Here it should be noted that the data mentioned in Table 3.11 below does not show the actual number of industries found in the district. This happened due to the fact that the concerned organizations have no such data

**Table 3.11: Number of small scale industries by type.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Industry** | **2011** | | | **2012** | | |
| **Number** | **Employee** | **Capital (Birr)** | **Number** | **Employee** | **Capital (Birr)** |
| Grain mill | 46 | 73 | 1200000 | 46 | 76 | 1200000 |
| Edible oil | 2 | 3 | 975000 | 2 | 4 | 1100000 |
| Metal and woods | 10 | 10 | 860000 | 10 | 12 | 860000 |

**3.5 Trade and Tourism**

**Trade;-** Regarding tradable items and cash crops production activities, the district is known for the production of different crops (cereals, pulses and oilseeds), fruits and vegetables, livestock and livestock products. This indicates that the district can produce and has the potential to produce different exportable items to maximize foreign exchange earnings. However, this requires huge investment and calls upon local and foreign investors for further development.

**Tourism and its amenities; -** Meaningful survey and study was not conducted to assess district’s potential tourist attraction sites. However, there are some main centres which were identified by Robe District Culture and Tourism Office. These are, RobeFincha Waterfall, Tulu Shato Cave, Abinas Cave, Baruda Cave, and Harbu Cave etc. All of them are under developed.Lack of standard hotels, roads and other infrastructures are also other constraints of tourism sector in the district.

**3.6 Finance and Financial Institutions**

**Financial Institutions**

The availability of various financial institutions play a significant role in the transformation of the economy of the district. Accordingly, there was two Commercial Bank, Five private Bank (OCOB, OIB, Awash Bank, Abyssinia Bank and Dashen Bank) and four Rural Credit and Saving financial institutions in the district during 2011 and 2012. The credit and saving institutions gave credit and saving services to **9874** (male **5320** and female **4554**) beneficiaries in 2011 which increased in 2012 to **9663** (male **5141** and female **4522**).

**Table 3.12: Rural Credit and Saving Association and Number of Beneficiaries**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name of Rural Credit and Saving Associations** | **2011** | | | **2012** | | |
| **Number of Beneficiaries** | | | **Number of Beneficiaries** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Male** |
| OCSSCO | 3828 | 2640 | 6468 | 4035 | 2973 | 7008 |
| Meklit | 1204 | 830 | 2034 | 765 | 450 | 1216 |
| Wasasa | 86 | 780 | 866 | 225 | 835 | 1059 |
| Metemamen | 202 | 304 | 506 | 116 | 264 | 380 |
| **Total** | **5320** | **4554** | **9874** | **5141** | **4522** | **9663** |

**Annual budget allocation**

Annual budget requirement of the district is covered from grants given from regional government and revenue collected within the district. As observed from earlier times, the share of the grant accounts for more than 76% of the total annual budget allocated for the district. The data taken from Robe District Finance and Economy Development Office indicates the annual budget allocated for the district increased from **143,989,146** birr to **159,905,499** birr (by 11.05%) between 2011 and 2012.

**Table: 3.13. Annual budgets allocated in 2011 and 2012.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Adjusted Budget** | **Inland Revenue** | **Supplement** | **Grant** | **Growth rate (%)** |
| 2011 | **143,989,146** | **34,190,167.24** | **6,069,356** |  |  |
| 2012 | **159,905,499** | **38,254,023.97** | **15,616,602** |  | **11.05** |

**Annual revenue; -** The main sources of revenue in the district are direct tax, indirect tax and non-tax items. The total revenue collected by the district increased from **34,190,167.24** birr to **38,254,023.97** birr (by 11.9%) between the year 2011 and 2012.

**Table 3.14: Total revenue collected in 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Type of Revenue | | | |
| Direct Tax | Indirect Tax | Non-Tax | Total |
| 2011 | **26,538,279.72** | **4,837,358.6** | **2,814,528.92** | **23670300.22** |
| 2012 | **30,558,245** | **2,501,173** | **5,194,608** | **33,059,416** |

* 1. **Education**

**Kindergarten; -** According to the data obtained from Robe District Education Office, there are only 2 non-government kindergarten schools in the district during both years. Despite their constant number, the number of children enrolled to these schools increased from 417 (male 213 and female 204) in 2011 to 457 (male 236 and female 221) in 2010. However, lack of clear management system, qualified teachers and school facilities are some of the main problems hampering quality of services delivered and its expansion.

**Primary schools (1 - 8)** between the year 2011 and 2012, as shown in Table 4.1, the number of primary schools remains the same. Also, the size of students enrolled decreased from 44869(male 23908 and female 20961) to 44061 (male 23126 and female 20935).During the same year, the number of teaches at this level increased from 649 and 691 between 2011 and 2012 (Table 4.2). However, the student to teacher’s ratio was decreased from 69.13 in 2011 to 63.8 in 2012

**Secondary schools (9-12);-** In 2011 there were five secondary schools with 4241 (male 2495 and female 1746) students enrolled. These schools similar to 5 in 2012. However, the number of students enrolled during this year increased to 4381 (male 2519 and female 1862). During this period the number of teachers increased from 188 to 195.The student to teachers ratio improved from 22.6 to 22.5.

**TVET;-**There was one governmental TVET school located in Robe town. The school provided training for 712 (male 361 and female 351) and 518 (male 312 and female 206) students on different technical and vocational skills in 2011 and 2012 respectively showing decreasing trend. Similarly, the size of female students decreased over these years.

**Table 4.1: Number of kindergarten, primary and secondary schools with students enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Schools** | **2011** | | | | **2012** | | | |
| **No of schools** | **Male** | **Female** | **Total** | **No of schools** | **Male** | **Female** | **Total** |
| Government |  |  |  |  |  |  |  |  |
| Kindergarten | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| Primary (1-8) | **58** | **23908** | **20961** | **44869** | **58** | **23126** | **20935** | **44061** |
| Second.(9-12) | **5** | **2495** | **1746** | **4241** | **5** | **2519** | **1862** | **4381** |
| Prep. (11-12) |  |  |  |  |  |  |  |  |
| TVET | **1** | **361** | **351** | **712** | **1** | **312** | **206** | **518** |
| Non-Gov't |  |  |  |  |  |  |  |  |
| Kindergarten | **3** | **213** | **204** | **417** | **3** | **236** | **221** | **457** |

**Education Quality;-** Qualification of teachers, student-teacher ratio, student-classroom ratio, student–text book ratio, etc. are some of the factors used to measure level of quality of education.In addition, other factors such as continuous professional development program, teacher’s dedication/commitment to teach, and student’s commitment to receive education offered need to be considered to improve the quality of education.

As far as the number and level of education of teachers are concerned, the number of primary school teachers increased from 649 to 691 between 2011 and 2012. During the same period and in the same schools, the size of TTI teachers decreased from 80 to 61 while that of teachers holding diploma increased from 403 to 475.Similar to primary schools, the total number of teachers in secondary schools increased from 188 to 195. The BA/BSc teachers increased from 165 to 171. For details see the table below.

**Table 4.2: Number of teachers by level of education and school**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Level of education of teachers** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **In primary schools (1-8)** | **266** | **383** | **649** | **265** | **426** | **691** |
| TTI | **30** | **50** | **80** | **21** | **40** | **61** |
| Diploma | **180** | **223** | **403** | **203** | **272** | **475** |
| Diigrii | **56** | **110** | **166** | **41** | **114** | **155** |
| **In secondary schools (9-12)** | **116** | **72** | **188** | **122** | **73** | **195** |
| Diploma | **2** | **4** | **6** | **2** | **4** | **6** |
| BA/BSc | **99** | **66** | **165** | **104** | **67** | **171** |
| Diigrii 2ffaa | **15** | **2** | **17** | **16** | **2** | **18** |

As shown in Table 4.3 below, a total of 44869 and 4241 and 44061 and 4381 students were enrolled in primary and secondary schools in 2011 and 2012 respectively.Among these 98.7% of primary school students were promoted while 1.3% dropped out in 2011. However, these numbers changed and the proportion of students promoted to the next level decreased to 98% where that of dropped out increased to 2% in 2012. During the same period, changes were also observed in the performance of secondary schools.Accordingly, the proportion of promoted students increased from 97.8% to 99.6% whereas that of dropped out decreased from 2.2% to 0.4% between 2011 and 2012.

On the other hand, as far as the participation and performance of female students are concerned, the proportion of female students enrolled in primary and secondary schools accounted for 46.72% and 41.17% and 47.51% and 42.5% in 2011 and 2012 respectively. These figures show that the size of male and female students was nearly equal. However, the proportion of promoted students in primary schools decreased from 98.7% to 98% while that of secondary school students decreased from 97.8% to 99.6%. Besides, the proportion of dropped out female students increased from 0.98% to 1.7% in primary schools and decreased from 2.12% to 0.59% in secondary schools between 2011 and 2012.

In general, as it can be observed from Table 4.3 below, students were enrolled, promoted and dropped out by a rate of 1.8% (-808 students), 2.5% (-1102 students) and 51.5% (294 students) in primary schools respectively showing a Negative decrease. From these rates, it can be noted that the rate by which students were dropped out is by far greater than the rate of those enrolled within the same period. On the other hand, the rate of enrolment and promotion for secondary schools accounted for 3.3% (140 students) and 5.3% (219 students) showing a increase in number of students while that of dropout rate was 83.2% (-79 students) showing an decrease in number of dropped out students.

**Table4.3: Student enrolment, promotion and dropout condition by level of school**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **2011** | | **2012** | |
| **Primary school** | **Secondary school** | **Primary school** | **Secondary school** |
| 1 | Enrolled students | ***44869*** | ***4241*** | ***44061*** | ***4381*** |
|  | Male | 23908 | 2495 | 23126 | 2519 |
|  | Female | 20961 | 1746 | 20935 | 1862 |
| 2 | Promoted students | ***44298*** | ***4146*** | ***43196*** | ***4365*** |
|  | Male | 23543 | 2437 | 22623 | 2514 |
|  | Female | 20755 | 1709 | 20573 | 1851 |
| 3 | Dropped out students | ***571*** | ***95*** | ***865*** | ***16*** |
|  | Male | 365 | 58 | 503 | 5 |
|  | Female | 206 | 37 | 362 | 11 |

* 1. **Health**

**Health Institution** Health institutions are places where people receive health services. They can be established by government and private owners. Accordingly, both types of health institutions are found in the district. These include hospitals, health centres, pharmacies, clinics, drug shops, health posts, rural drug vendors etc. As the data mentioned in Table 4.4 below reveals, non-governmental health institutions found in the district increased from 45 to 48 while government ones remained the same i.e. 32 between 2011 and 2012.Among the governmental and non-governmental health institutions, health posts and clinics shared the largest part during the study years. On the other hand, the proportion of government health institutions is greater than the proportion of privately owned health institutions found in the district. Regarding the ratio of health institutions to population ratio, the ratio of health centre and health post to population was1:36580 and 1:8779 in 2011 which increased to 1:39349 and 1:9444 in 2012 respectively. Compared to WHO’s standard (1:25000 for health centre and 5000 for health post), these ratios indicate low health coverage of the district.

**Health Personnel;-** For the health institutions to effectively discharge their service for the society, availability of qualified health personnel, although not sufficient by itself, is a necessary factor. There are health officers, nurses, laboratory technicians, pharmacy technicians, extension workers, doctors and x-ray technicians in the district serving in public as well as privately owned health institutions. However, there is no Health Assistant, Sanitarian and X-ray technicians in the district both in governmental and non-governmental health institutions.

Accordingly, the number of health personnel both in governmental and non-governmental health institutions increased from 130 to 151 and 52 to 95 between 2011 and 2012. If health personnel to population ratio are considered the ratio of health officer, nurses, extension workers, Laboratory Technician, Pharmacy Technician and doctor to population was 1:18161, 1:2071, 1:3422,1:10265,1:9081 and 1:236,096 respectively. These ratios are below the recommended standards. For details see the Table 4.4 presented below.

**Table 4.4: Number of health institutions and personnel by ownership**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of health institutions and personnel** | **2011** | | | **2012** | | |
| **Gov.** | **Non-Gov.** | **Total** | **Gov.** | **Non-Gov.** | **Total** |
| Health Institution | **32** | **45** | **77** | **32** | **48** | **80** |
| Hospital | 1 | 0 | 1 | 1 | 0 | 1 |
| Health Centre | 6 | 0 | 6 | 6 | 0 | 6 |
| Pharmacies | 0 | 4 | 4 | 0 | 4 | 4 |
| Clinic | 0 | 29 | 29 | 0 | 32 | 32 |
| Drug shop | 0 | 11 | 11 | 0 | 11 | 11 |
| Health Post | 25 | 0 | 25 | 25 | 0 | 25 |
| Rural Drug Vendor | 0 | 1 | 1 | 0 | 1 | 1 |
| Health Professionals | **130** | **52** | **182** | **151** | **95** | **246** |
| Health Officer | 12 | 0 | 12 | 9 | 4 | 13 |
| Nurse | 32 | 32 | 64 | 54 | 60 | 114 |
| Health Assistant | 0 | 0 | 0 | 0 | 0 | 0 |
| Laboratory Technician | 7 | 4 | 11 | 9 | 14 | 23 |
| Pharmacy Technician | 10 | 16 | 26 | 10 | 16 | 26 |
| Sanitarian | 0 | 0 | 0 | 0 | 0 | 0 |
| Health Extension Workers | 69 | 0 | 69 | 69 | 0 | 69 |
| Doctor | 0 | 0 | 0 | 0 | 1 | 1 |

**Disease Prevalence Including HIV/AIDS;-** According to the information obtained from Robe District Health Office, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation accounted for low health status in the district. In addition, poor eating habit and underutilization of health services also played great role for the existence of different diseases.

**Causes of Morbidity** According to the data obtained from Robe District Health Office, the highest prevalent disease in the district was typhoid fever followed by acute febrile illness, pneumonia, bronchitis, intestinal parasites and others in 2011. However, in 2012 Acute upper respiratory infection took the first position and Functional intestinal disorders, Helminthiases as well as pneumonia became the second prevalent diseases. Disorders fi urnary system, Typhoid and paratyphoid, bronchitis, Acute tonsillitis, Dyspepsia, Disorders of eye and adnexa, and Amoebiasis ranked third to five respectively..

**Table 4.5: Ten top diseases existed in the district**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **2011** | | | **2012** | | |
| **Type of diseases** | **No of popn** | **%** | **Type of diseases** | **No of popn** | **%** |
| Typhoid fever | 5175 | 17 | Acute upper respiratory infection | 5631 | 18 |
| Acute Febrile Illness | 4047 | 13 | Functional intestinal disorders | 2048 | 6 |
| Pneumonia | 2120 | 7 | Helminthiases | 1992 | 6 |
| Bronchitis | 2060 | 7 | Pneumonia | 1953 | 6 |
| Intestinal Parasites (IP) | 1907 | 6 | Disorders fi urnary system | 1726 | 5 |
| Urinary Tract Infection (UTI) | 1782 | 6 | Typhoid and paratyphoid | 1550 | 5 |
| Anaemia | 1606 | 5 | Acute tonsillitis | 1453 | 5 |
| Fighting | 860 | 3 | Dyspepsia | 1376 | 4 |
| Conjunctivitis | 763 | 2 | Disorders of eye and adnexa | 748 | 2 |
| Skin Infection | 749 | 2 | Amoebiasis | 728 | 2 |

**Harmful Traditional practices;-** In the district there are many harmful traditional practices that are being widely practiced. Among these raping, *buttaa*, *gabbaaraa*, early marriage, *dhaalaa* etc can be mentioned as an example. As a result, in order to decrease its rate, health extension workers are creating awareness. However, it should also be noted that there are also many useful traditional practices, for instance, *idir (for funeral and mourning)*, *ikub* (for temporary saving and rotating chance/draw),*debo* (in farming and other practices) etc which should be scaled up and used by the people of the district to enhance their socio-economic conditions/activities.

**Women and children issue**

**Women issue**

**Women health condition and related problems**

Health Extension Workers of the district provide different types of home to home health extension services such as family planning, environmental hygiene, personal hygiene and sanitation, toilet construction, waste disposal, etc. They use model family graduation to scale up best practices among all house hold farmers and their family members. To this end, two health extensions workers were assigned for each PA.

Accordingly, the data obtained from district’s Health Office indicated, the number of women who received antenatal and postnatal service was 7719 and 3537 in 2011. These increased to 8732 and decreased to 3482 in 2012 correspondingly. On the other hand, the number of deliveries attended by skilled birth attendants in health institutions and health extension workers increased by 76.6% and decreased by 23.2% respectively in 2008.However, one mother gave delivery at their home traditionally during 2011. In addition, different types of vaccinations were given to mothers so as to keep them from being infected by different diseases. To this end, 4055 and 4947 mothers were vaccinated with PWTT2 and NPWTT2 in 2011 and 2012 respectively. During these years, only PWTT2 vaccinated mothers increased to 4055 and also NPWTT2 vaccinated mothers increased to 4947.

Regarding family planning practices, the number of women in reproductive age and who used modern contraceptive methods accounted for 24517 in 2011 and this increased to 38961(by 58.9%) in 2012. As a result, the contraceptive prevalence rate increased from 57% to 90%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender imbalance, currently the government induced a policy that promotes women participation on political, economic and social aspects. In this aspect, now a days the number of women’s participation in education, political nomination and other social affairs is increasing. Accordingly, as the data obtained from Robe District Women and Children Affairs Office indicates, the number of women who were member of cabinet was 6 during the years under consideration.

**Table 4.6: Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Meas’t** | **2011** | **2012** |
| 1 | **Access to safe delivery service** |  |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 7719 | 8732 |
|  | Women's used PNC /Postnatal care/services | Number | 3537 | 3482 |
|  | Women’s assisted delivery | Number |  |  |
|  | Deliveries with in health institution(attended by skilled birth attendant) | Number | 1870 | 3303 |
|  | Deliveries attended by HEWs | Number | 6175 | 4743 |
|  | In their home traditionally | Number | 1 | 0 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 4055 | 4947 |
|  | NPW TT2 | Number | - | - |
| 3 | **Family planning condition** | Number |  |  |
|  | Modern contraceptive methods | Number | 24517 | 38961 |
|  | Contraceptive prevalence rate | % | 57 | 90 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council |  |  |  |
|  | Member of woreda council |  |  |  |
|  | Member of woreda cabinet |  |  |  |

Though the government made a lot of efforts to alleviate the prevailing health problems in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are haemorrhage, blood pressure, obstructed labour, pregnancy induced hypertension and abortion.

On the other hand, different harmful traditional practices practiced among some group of population in the district affected many women. The major harmful traditional practices in the district are abduction, raping, female genital mutilation (FGM), early marriage etc.

**Children issues**

**Children health condition and health problems**

To protect children from infection by different diseases different type of vaccinations were given for children in the district. As shown in the table below, the number of children vaccinated for different diseases increased from 26478in 2011 to 27802 in 2012.

**Table 4.7: Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 6924 | 7320 |
| Measles | 5859 | 6443 |
| DPT1 | 7190 | 7296 |
| Polio 3 | 6505 | 6743 |
| Total | **26478** | **27802** |

Despite the efforts exerted o provide vaccinations and treatments for children over past years, still there are some major types of diseases which affect the health of children in the district. Some of these include pneumonia, malaria, mal-nutrition, tetanus and infection of skin. As the data from district’s Health Office indicates, among the total PAs of the district 1 were malaria prone during both years. The number of children affected by and treated for malaria was 7 and 7 respectively during both years. To decrease prevalence of malaria the ITN coverage of the district was 98% during the year under consideration. For details, see Table 4.8 below.

**Table 4.8: Children socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| 1 | Full immunization | Number | 5623 | 6351 |
| **2** | **Child disease and causes of death** |  |  |  |
|  | Malaria prone area | Kebeles/PAs | 1 | 1 |
|  | Children affected by Malaria | Number | 2 | 5 |
|  | Children treated for malaria | Number | 2 | 5 |
|  | Children died due to malaria | Number | 0 | 0 |
|  | Children born with HIV/AIDS | Number | 0 | 0 |
|  | Children Died due to HIV/AIDS | Number | 0 | 0 |
|  | ITN Coverage | % | 85 | 98 |
| 4 | PLWHA received care and support | Number | 216 | 381 |

**Hygiene and sanitation issue**

Due to the continuous health education given and awareness created, the toilet utilization and personal hygiene and sanitation condition was improved in school compounds and health institutions. As the data obtained from District Health Office and indicated in Table 4.9 below, all health centres in the district had access to full sanitation facilities (water supply, toilet and dry waste disposal) while only 4 health posts had access to toilet facilities and dry waste disposal.

**Table 4.9:** **Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | Description of activities | Health Centre | | Health Post | |
| 2011 | 2012 | 2011 | 2012 |
| 1 | Number of health institutions in the district | 6 | 6 | 25 | 25 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 6 | 6 |  |  |
| 3 | Number of health institution access to water supply | 5 | 5 |  |  |
| 4 | Number of health institution access to toilet facilities | 6 | 6 | 4 | 4 |
| 5 | Number of Health institution access to dry waste disposal facilities | 6 | 6 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 6 | 6 | 4 | 4 |

**\*Robe -Distrct Health Office 2012**

As the data stated in Table 4.10 reveals, the number of primary schools accessed to water to water supply and toilet was 18 (31%) and 40(69%) respectively during the years under study. Similarly, among secondary schools only one (20%) had access to water supply while 5 (100%) had access to toilet.

Table 4.10: School access to hygiene and sanitation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Primary school** | | **Secondary school** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 58 | 58 | 5 | 5 |
| 2 | Number of school access to water supply | 18 | 18 | 1 | 1 |
| 3 | Number of school having toilet | 40 | 40 | 5 | 5 |

Source-Robe District EducationOffice. 2010

**3.9 Sport**

The district has different types of sport activities like football, volleyball, athletics and tennis. As indicated Table 4.11, the total number of sport clubs stayed 11 in 2011 and 10 in 2012. With this, the size of club members also decrease from 169 to 141 respectively. For details see the table. Despite this trend, lack of well-organized and standardized sport facilities as well as poor management and training practices are bottle necks of the development of the sector.

**Table 4.11: Sport clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of club/team | 2011 | | 2012 | |
| Number of club | Member | Number of club | Member |
| Foot-ball | **4** | **88** | **2** | **60** |
| Volley ball | **4** | **60** | **3** | **45** |
| Athletics | **1** | **12** | **3** | **17** |
| Tennis | **1** | **4** | **1** | **5** |
| Basket ball | **0** | **0** | **0** | **0** |
| Culture sport | **1** | **5** | **1** | **14** |
| **Total** | **11** | **169** | **10** | **141** |

**Table 4.12: Length of road by type**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | **All weather Gravel road** | | | **Dry weather road** | | |
| Length in Km | Road density per 1000km2 | Road per 1000 people | Length in Km | Road density per 1000km2 | Road per 1000 people |
| 2011 | 272.8km | 0..2728km | 0.2728 | 180km | 0.18km | 0.18% |
| 2012 | 272.8km | 0.2728km | 0.2728km | 180km | 0.18km | 0.18% |

Source –Robe District Roads Authority, 2012

**Table 4.13: Number of postal service stations and services given in 2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Post Offices** | | | | | **Number of Post Boxes** | | |
| Agent | Permanent Agent | Regular Agent | Post | Total | Rented | Not Rented | Total |
| 0 | 0 | 0 | 1 | 1 | 21 | 124 | 145 |
| Number of Postal Services Given by the post Offices year 2012 | | | | | | | |
| **Domestic** | | | **International** | | | **Total** | |
| Incoming | Outgoing | Total | Incoming | Outgoing | Total | Incoming | Outgoing |
| 1950 | 1370 | 3320 | 890 | 498 | 1388 | 2840 | 1868 |

**Table 4.14: Types schemes, number of functional schemes and water supply coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| **SN** | **Types of schemes** | **2011** | **2012** |
| **1** | **Functional schemes** | **193** | **196** |
|  | Spring development | 28 | 25 |
|  | Hand dung well | 162 | 166 |
|  | Deep well | 3 | 3 |
| **3** | **Potable water supply coverage (%)** | **54.67** | **49.7** |
|  | Rural | 51.7 | 49.8 |
|  | Urban | 71.9 | 48.6 |

As far as the source of water supply and their importance are concerned, most of the population in urban areas get water from tap water as first and Spring, Well and river being the second, third and fourth alternatives respectively. However, tap water, spring well, pond and river are the sources of water in rural areas ranked first to fifth in their order stated.

**Table 4.15: Rank of sources of drinking water according to their importance**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of drinking water** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Pond | - | 4 |
| 2 | Well | 3 | 3 |
| 3 | Spring | 2 | 2 |
| 4 | River | 4 | 5 |
| 5 | Tap-water | 1 | 1 |

**Energy Supply**

Energy sources can be traditional or modern. The traditional sources of energy include charcoal, animal dung, farm residue and fire wood while the modern energy sources are electricity, bio-gas, fossil fuel and solar energy. All towns of Robe district have 24 hours hydro power energy sources.However, still in most rural and urban areas traditional sources of energy are the widely used sources for cooking and other purposes. However, these decrease the role animal dung and crop residues have in crop production. Besides it highly contributes to the rate of increase of deforestation. In terms of its importance as a source of energy, electricity, charcoal, firewood, and ranks first to third where kerosene, animal dung and crop residue stands fourth to sixth in urban areas. On the other hand, rural population prefer firewood, animal dung and crop residue ranking them from one to three while kerosene, charcoal and electricity are stated as fourth, fifth and sixth preference. Here, it can be noted, firewood is the most preferred energy source both in urban and rural areas.

**Table 4.16: Sources of domestic energy supply and their importance**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Source of Energy Supply | Rank | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 5 |
| 2 | Fire wood | 3 | 1 |
| 3 | Animal Dung | 5 | 2 |
| 4 | Crop Residue | 6 | 3 |
| 5 | Kerosene | 4 | 4 |
| 6 | Electricity | 1 | 6 |

Sources- Robe District Water, Mineral and Energy Office 2012

**CHAPTER FOUR**

**4. Development Activities**

**4.1. On going development projects**

The on-going development activities in the district are carried out by government, non-government and community participation. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is observed that the total budget used for development projects is increasing from time to time so as to fulfil the development gaps in the district.

Accordingly, some of the on-going development projects during the years under consideration include the following. Water supply schemes (spring development, tap water, wells, etc), modern irrigation projects in Doyo Gora PA, PA to PA joining roads, primary schools, farmers' training centres etc can be mentioned as some of the projects in the district. The cost of these projects were covered by government, non-governmental organizations and the beneficiaries of the projects.

**2. Problems of on-going Development projects**

The major problems of on-going development projects are poor quality, inaccessibility of the site, lack of capacity of contractors, dalliance of project bids, etc

**CHAPTER FIVE**

**5. Problems and Potentialities**

**5.1. Major Problems**

**Environmental problems:** soil degradation due to over cultivation, overgrazing, deforestation, low soil and water conservation practices, rainfall variability which results crop production failure, etc are some of the environmental problems found in the district.

**Economic problems:** Economic problems of the district include shortage of farm land, land fragmentation, high prevalence of crop diseases and pests, shortage of agricultural inputs and lack of capacity to buy, lack of financial institutions, low investment activities and industries development and etc.

**Social Problems:** rapid population growth and large family size which leads to land fragmentation, unemployment, low productivity, under utilization of health institutions and education facilities, electric power suetc can be mentioned as some social problems.

**5.2. Potentialities**

**Land Resource:** the district has ample resources of land for cultivation and livestock rearing. Especially, in kola areas of the district there are high potentialities of irrigable land used for production of different types of crops and vegetables. On the other hand the climatic condition of the district is also suitable for the production of crops and livestock rearing.

**Tourism attraction sites:** the district has some attractive places which can be used as tourism purposes even though the infrastructure condition is not well developed. Among these, Wabe Gorge, Robe Waterfalls, and Historical Caves and Religious sites like Ayo Momina, Gode Baruda, etc are mentioned as an example.

**Investment opportunities:** if infrastructures are well developed, there is high opportunity for investment development. The kola area of the district is suitable for irrigation activities and production of cash crops like coffee, chat, fruits and vegetables etc. Moreover, the Dega part of the district is also suitable to produce oilseeds, livestock, fruits like apple, etc.

**CHAPTER SIX**

**5. Conclusions and Recommendations**

**6.1. Conclusions**

Robe district is one the 27 administration units of Arsi Zone. The district has 34 kebeles of which 28 are PAs and 6 are urban administrative units. Robe town is the capital town of the district and located 225km away from the regional capital city, Finfinnee and 98 km away from zone capital, Asella.

According to the projection made from 1999 CSA census, the district has 238439 population of which males and females constitute about 50% each. In addition, more than 86% of the population lived in rural areas. The bimodal climatic condition of the district helps to produce twice a year i.e. in *meher* and *belg* seasons.

Accordingly,the land cultivated during the *meher* seasons of 2010/11 and 2011/12 and the crops grown in the district during *belg* season barley, field pea and wheat were the major ones and correspondingly 68.12%, 25.6% and 6.24% of the total area cultivated during the season in 2011/12 were covered by these crops.

Agricultural inputs, although not sufficient by itself, play important role to increasing the production and productivity of productivity of the agriculture. Accordingly, in 2010/11, for instance, the amount of fertilizer distributed equals **40327.5** (DAP **30020** and Urea **10307.5**) quintals. This increased to **40496.5**(DAP **27586** and Urea **12911**) quintals in 2011/2012 .By the same token, **3612.38** quintals of improved seeds were distributed for the farmers in 2010/11. But this amount increased to **5994.88** quintals (by 66%) in 2011/12. Similarly, the use of herbicides showed increase from **12167.5 lit**. in 2010/11 where as **31914 li**t.in 2011/012.

Farmers’ Training Centres (FTCs) of the district was 25 in 2011 and 2012. When compared to the number of PAs in the district, these numbers relatively good. On the other hand, the number of development agents (including supervisors and those in regular education) decreased from 76 to 71 between the year 2011 and 2012. Accordingly, on average, one development agent served 330 and 354 farmers in 2011 and 2012 respectively.

The district is widely known for its large amount of livestock resources. The major livestock population found in the district includes cattle, sheep, goats, horses, mules and donkeys. On the other hand, mong the total health infrastructures found in the district in 2011 and 2012 ,5 were non-standardized health posts and 5 were clinics (1 B-Type,1 C Type and 3 D-Type) no changes on non-standardized (Health post) 5 in number between the two years. However, compared to the total livestock, there was decreasing trend in the sizes of animal health assistants and remain the same on Veterinarian Doctors.

There are only 3 non-government kindergarten schools in the district during both years. Despite their constant number, the number of children enrolled to these schools increased from 417(male 213 and female 204) in 2011 to 457 (male 236 and female 221) in 2012. The number of primary schools (58) remains the same both years. Similarly, the size of students enrolled decreased from 44869 (male 23908 and female 20961) to 44061 (male 23126 and female 20935). In 2011 there were Five secondary schools with 4241 (male 2495 and female 1746) students enrolled. These schools are not increased to 2012. However, the number of students enrolled during this year increased to 4381(male 2519 and female 1862). During this period the number of teachers increased from 188 to 195 the student to teachers ratio improved from 22.6 to 22.5 in 2012.

As far as health institutions are concerned, non-governmental health institutions found in the district increased from 45 to 48 while government ones remained the same (32) between 2011 and 2012. Among the governmental and non-governmental health institutions, health posts and clinics shared the largest part during the study years. On the other hand, the proportion of government health institutions is greater than the proportion of privately owned health institutions found in the district. Regarding the ratio of health institutions to population ratio, the ratio of health centre and health post to population was1:36580 and 1:8779 in 2011 which increased to 1:39349 and 1:9444 in 2012 respectively. Compared to WHO’s standard (1:25000 for health centre and 5000 for health post), these ratios indicate low health coverage of the district.

**6.2 Recommendations**

To overcome the existing social and economic problems prevailing in the district the regional government, local government, non-governmental organizations as well as the surrounding community has to perform the following activities:

* Compared to the total number of PAs and farmers, the number of FTCs built so far is good. As such, this would result in poor agricultural extension services delivery. Therefore, the district has build the remaining FTCs , full the materials and address all of the PAs to start the training and demonstration site to satisfy the changing needs of the farmers in the district.
* The rate of services given by the available animal health infrastructures is not proportional to the number of animals in the district. Therefore, the district is expected to do more upon this.
* The road density in the district is very low as compared to the size of population and the size of the district. Hence, concerned bodies should take rapid and appropriate measures so as to ameliorate these gaps.
* Potable water is crucial for human health. However, its coverage is found at lower level. So to improve this, the district it is expected to work hard on improving the coverage of the potable water.
* The level of health services in the district very low and the standard set was not met. To minimize this gap and meet the nationally (regionally) set standards maximum effort has to be exerted by the concerned bodies,
* So many factors need to be considered to ensure education quality. Hence, it is vital to consider these factors and allocate necessary resources.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF SERU DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER-ONE**

**1. INTRODUCTION**

1.1 Back Ground

**Seru** **District** is one of the 27 administrative units of Arsi Zone. The historical name of the district is derived from the place where the local administrators used to gather to formulate the rules used to control the local community. In Oromic word, the specific place was called “Iddoo seeraa”, which means Law making place in English word. Later on, this name was changed into the present name, Seru

Currently, Seru district is divided into 15 kebeles of which 14 are Peasant Associations while one is urban administrative. Since 1999 Bele Gesgar district was separated from Seru district and established as an independent administrative unit. Seru Abbas town is the capital city of the district. It is located at 300 km from Regional Capital City Finfinne and 175 km from Zonal capital Asella Town.

The objective of preparing this profile is to assess the natural resource base and socio-economic situation of the Seru district that reflect the existing situation, development problems and the available opportunities for its development. The data used to organize this document is collected from the district and zonal level sectoral departments, 1999 census result report and other related documents available in the office.

The data used to organize this document is collected from the district and Zonal level Sector department, 1999 census result report for Oromia Region and other relate documents available in our office. All data used during the preparation of this document is based on Ethiopian Calendar.

Different organizations can use different calendar year. Consequently, in this document, only Ethiopian Calendar (E.C) is used. In Ethiopia year, there are 12 months of 30 days each with an addition of a short period often referred to as ‘plague’, which has five days for three consecutive years and six days on the fourth year.

The paper has eight chapters. The first chapter deals with physical features like location, relief, drainage, land use, soil, vegetation and wild life. The second chapter focused on population size and Distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and the seventh chapter deals with Social Service and Infrastructure Condition, Development Activities, Problems and Potentialities, and Conclusions and Recommendations respectively.

**CHAPTER TWO**

**2. Physical setting and Situation**

**2.1. Location and Area**

**Seru** **District** is one of the administrative units of Arsi Zone. Astronomically, the district is located between 7o23’18”N-7o38’04”N latitude and 40o00’14”E-40o44’31”E longitude. It shares boundary line with Bale zone in the south, South east and east, western Hararge Zone in the North east, Bele district in the West, Amigna district in the North and north east and Robe district in the south west having total area of **1765.5**km2 which account for about 8.41% the total area of Arsi Zone.

**2.2. Geology, Relief, Drainage and Climate**

The district’s present land form was the result of various forces acting up on the surface of the earth during Mesozoic and Cenozoic era. Its present northern and eastern part is covered by Haman lei formation of during Jurassic period while it’s most south eastern peripheries, northern part and its eastern part in between Hamanlei formation is covered by Urandab formation formed during late Jurassic period. In addition, its south western peripheries, central part and north east central part are covered by upper sandstone formed during cretaceous period. All its western part (except few areas that is covered by Nazerate series) and its central part are covered by Arsi Bale Basalt formed during Cenozoic era of quaternary period.

**The Relief** of the district is characterized by undulating plain of extensive low land, hill and high plateau with an altitude ranges from less than 1000 to 2860 Meters. The lowest place is found in Wabe gorge area (less than 1000m) while the highest place is located in Abal kasim (2860). The major permanent river of the district is WabeShebele. On the other hand, the major seasonal streams are Waji and Dero. Generally, the district has high potential for both traditional irrigation systems along Wabe-Shebele River which can be used to increase agricultural productivity if they are utilized efficiently.

Due to its altitudinal location, the climatic condition of the district is dominantly moderately warm with a temperature 20oc-25oc .This type of climate consists about 98 % of the total area of the district. The remaining ones are moderately cool with a temperature of 15oc-20oc. The mean annual rainfall is 800mm-1200mm and the average rainy days are about 110 days in the year. The rainfall pattern is bi-modal, which are short rainy season (Belg from March to April) and summer or long rainy season (Meher from June to August)

**2.3. Land use, Soil, vegetation and Wild life**

The major **soil** types of the district are: clay, Sandy and loam covered the area of the districts. The **vegetation** including acacia, gallery forest, bush and shrubs are the main vegetation type in the district. There is also very small community forest in the district. The major wild animals are Monkey, Lion, Leopard, Apes and so on.

**Land use and cover**: Land use indicates the classification of the land of an area under different types of socio- economic uses. Types of land use changes from time to time depending on socio- economic change for instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing.

**CHAPTER T****HREE**

**3. Population Size and Distribution**

**3.1. Population size**

According to the estimation made from 1999 census report, the total population of the district was increased from 66497(49.65% female) to 68329 between the year 2011 and that is (49.34 %female). From the total population of the district, the urban population accounts for only 7.9%. This indicates more than 92.7% of the district populations are living in rural areas depending on agriculture.

**Table: 3.1. Population size of the district by place of residence and sex**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Urban** | | | **Rural** | | | **Total** | | |
| Male | Female | **Total** | Male | Female | **Total** | **Male** | **Female** | **Total** |
| 2011 | 2,643 | 2,568 | **5,211** | 30,831 | 30,455 | **61,286** | **33,474** | **33,022** | **66497** |
| 2012 | 2754 | 2675 | **5429** | 31643 | 31257 | **62900** | **34397** | **33932** | **68329** |

Source: Projected based on 1999 CSA, Report.

**3.2. Age and Sex Structure of Population**

The age structure of a population is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district. According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 49.7%, 47% and 3.3% of the total population respectively in the year 2012. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 51, 45.5% and 3.3% for rural areas and 33.2%, 63.4% and 3.2% for urban area respectively. The dependency ratio of the district is 113 % (119% for Rural and 57% for urban) which indicates 113 people are dependent on 100 economically active populations. As far as the sex structure of population was considered, of the total population of the district the female population accounts for more than 49.67% which is nearly equal with that of the counterpart male population. The overall sex ratio of the district is 101 male per 100 female (103 male for 100 female in urban and 101 male for 100 female in rural). This ratio indicates there is more male population than female population both in urban and rural areas. An average house hold size is 5.0 for the district (5.1 for rural and 4.3 for urban) based on 1999 census report for Oromia region.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: 3.2. Population size by wider age group Classification of the year 1999** | | | | | | | |
| **Year/Sex** | **Male** | **Female** | | **Total** |  |  |  |
| **No** | **%** | **No** |  |  |  |
| **Rural** | **31,644** | **31,257** | **98.7** | **62,901** |  |  |  |
| 0-14 | 16,422 | 15719 | 48.9 | 32,141 |  |  |  |
| 15-64 | 14,012 | 14669 | 51 | 28,681 |  |  |  |
| 65+ | 1210 | 869 | 41.7 | 2,079 |  |  |  |
| **Urban** | **2754** | **2675** | **97** | **5,429** |  |  |  |
| 0-14 | 880 | 925 | 51.2 | 1,805 |  |  |  |
| 15-64 | 1792 | 1655 | 48 | 3,447 |  |  |  |
| 65+ | 82 | 95 | 53.6 | 177 |  |  |  |
| **Total Rural + Urban** | **34398** | **33932** | **98.6** | **68,330** |  |  |  |
| 0-14 | **17,302** | **16,644** | **49** | **33,946** |  |  |  |
| 15-64 | **15,804** | **16,324** | **50.8** | **32,128** |  |  |  |
| 65+ | **1,292** | **964** | **42.7** | **2,256** |  |  |  |
| **Source: 1999 CSA population & Housing census report** | | | | |  |  |  |

**3.3. Population density and rural settlement**

Population density indicates the relationship among population and land resources, social service and economic resources. A crude density of Seru district was 38 people per km2 in 2011 and 39 people per km2 in 2012. This ratio indicates that the district is one of the sparsely populated districts of the zone where population pressure on the natural resource is less. Concerning the settlement pattern of the district, all the rural areas are characterized by scattered settlement except few high land area known by grouped settlement.

**3.4 school age population**

School age population is one of the best indicators for planning and budget preparation of education, health and other social services facilities. Moreover, school age population is important for planning the number of students enrolled to school every year. As shown in the above table, the number of school age population of the district was increasing from 15694(29.35%) students to 15793 (10.28%) students between the year 2011and2012. These groups of population account for 23% of the total population of the districts in the year 2012.

**CHAPTER FOUR**

**4. Economic Condition**

**4.1. Crop Production and Livestock Rearing**

**4.1.1. Crop Production**

Bimodal pattern of the rain rainfall gives a wide opportunity for the district to produce different type of the crops and use the same land twice a year that is for Maher and Belg. However, Meher is the largest season in terms of both of cultivated land and crop production. Maher season accounts for the total cultivated land and production obtained. The total cultivated land in the district accounts more than 85% of the total areas of the district. It includes crop land, plantation horticulture and pastoral farming land. The major cultivated lands are found on the flat topped high and low plateau and flat low laying areas.

**Intensive Cultivation:** - this type of cultivation includes intensive rain-fed crop cultivation and sedentary livestock rearing and small farms. These types of cultivation are practiced on the most parts of the high land areas of Jidda Jiru and Weltei kebeles where there is large population.

**Extensive Cultivation:** - includes land under rain-fed cultivation of grains livestock grazing and browsing on un- improved or fallow land and rain-fed peasant perennial crop cultivation. This types of cultivation prevails over low plateau areas of Waji, Bubukulche, Dhero, Negaya, Dhibayu, Seada, Bulala and Dherro Murti kebeles adjacent to incentive cultivation areas.

The major annual crops grown in the district are cereals, pulses and oil seeds. From cereal crops Barley, Wheat Teffe and Sorghum are the most widely grown ones. In addition, the district is known by producing some cash crops like (chat, coffee, and Haricot bean).

In the meher season of the year 2012, 12175.5 hectors of land cultivated and 235,873.5 Quintals of production was obtained. This gives an average productivity of 20 quintal per hectare. By crop type, from cereal crops, Wheat with 24 quintals per hectare followed by Maize with 26 and Sarghum with 25 quintals per hectare is the most productive while Teff with 12 quintals per hectare is the least productive. On the other hand, horse beans, field peas, chickpea and lentils are the major productive types of crops from pulses.

During the Belg season, due to shortage of rain fall and high evapotranspiration in the low land areas almost there is no production. However, in the belg season of 2012, 5119 hectors of land and 72552.5 quintals of production was obtained. This gives an average productivity of 14 quintals per hectors. The most widely grown types of crops during Belg season are Teff, wheat, barley, maize, field pea and haricot beans.

**Table: 4.1. Area Cultivated and Production Obtained for Private Peasant Holdings by seasons (2008-2012)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | ***2008/2009*** | | | | ***2009/2010*** | | | | ***2010/2011*** | | ***2011/2012*** | | | |
| **Maher season** | | **Belg Season** | | **Maher Season** | | **Belg Season** | | **Maher Season** | | **Maher Season** | | **Belg Season** | |
| **Area (Hec)** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** | **Area (Hec** | **Prod. Quin** |
| **Cereals** | **9783** | **112903.8** | **2343** | **36488** | **10489** | **346178.5** | **3920.5** | **63,637** | **10480** | **227266.6** | **10116.5** | **206490** | **4157** | **63669** |
| Teff | 3427 | 29441 | 861 | 7786 | 3441 | 65076 | 1136 | 11927 | 3042 | 24336 | 3042 | 36504 | 911 | 10386 |
| Wheat | 2425 | 51342 | 410 | 7539 | 2671.5 | 106077 | 801 | 14750 | 3071 | 80767 | 3071 | 73716 | 675 | 10800 |
| Barley | 725 | 800 | 5070.5 | 10016 | 830 | 25870 | 814 | 13143 | 820 | 17430 | 907 | 18294 | 1252 | 15024 |
| Sorghum | 1753 | 16729 | 0 | 0 | 1884 | 76334 | 0 | 0 | 1984 | 61306 | 1834 | 45850 | 0 | 0 |
| Maize | 1379 | 13237.8 | 484.5 | 10950 | 1588.5 | 71215 | 1169.5 | 23817 | 1489 | 42288 | 1188.5 | 31090 | 1295 | 27195 |
| Oats | 74 | 1354 | 17 | 197 | 74 | 1606.5 | 0 | 0 | 74 | 1139.6 | 74 | 1036 | 24 | 264 |
| **Pulses** | **2599** | **34875.5** | **333.17** | **3483..25** | **1987** | **44728** | **1088** | **14560.5** | **1918** | **22018.4** | **1918** | **27716.5** | **962** | **8883.5** |
| Lentils | 15 | 125 | 0 | 0 | 86 | 1367 | 0 | 0 | 16 | 174.4 | 16 | 144 | 0 | 0 |
| Horse beans | 230 | 4255 | 0 | 0 | 238 | 5675 | 0 | 0 | 238 | 3927 | 238 | 4284 | 0 | 0 |
| Chickpea | 75 | 1085 | 0 | 0 | 75 | 1591 | 0 | 0 | 375 | 3975 | 375 | 4342.5 | 0 | 0 |
| peas | 45 | 725 | 240.5 | 2679 | 50 | 1078 | 793 | 11020.5 | 150 | 1755 | 150 | 2000 | 477 | 5247 |
| Haricot beans | 2234 | 28685.5 | 91.2 | 804.25 | 1538 | 35017 | 295 | 3540 | 1139 | 12187 | 1139 | 16946 | 485 | 3636.5 |
| **Oilseeds** | **168** | **15635** | **0** | **0** | **141** | **2228** | **0** | **0** | **141** | **896.1** | **141** | **1667** | **0** | **0** |
| Neug | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Linseed | 85 | 845 | 0 | 0 | 86 | 1367 | 0 | 0 | 86 | 610.6 | 86 | 1347 | 0 | 0 |
| Rapeseed | 28 | 279 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sesame | 45 | 364.5 | 0 | 0 | 45 | 712 | 0 | 0 | 45 | 220.5 | 45 | 270 | 0 | 0 |
| Groundnuts | 10 | 75 | 0 | 0 | 10 | 149 | 0 | 0 | 10 | 65 | 10 | 50 | 0 | 0 |
| **Total** | **12550** | **163414.3** | **2676.7** | **39971.25** | **12617** | **393134.5** | **5085** | **69,197.5** | **12539** | **250181.1** | **12175.5** | **235873.5** | **5119** | **72552.5** |

Source: - **Data of statistical Abstract**

**Irrigation:-.** The kola part of the district has a good potential for modern irrigation development. Wabe, Weltei, Waji, Daro Dibayu and Bulalla areas are some of the traditional irrigation site mentioned as an example. There are about 1554 hectares of potential irrigable land in the district. In the year 2008, 326 Hectares (21 %) of land were cultivated by traditional irrigation system of which 100 hectares was occupied by annual crops and 226 hectares of land by permanent crops served for about 980 farmers. On the other hand, in the year 2011 the traditional irrigation land increased to 2045.25 hectares of which 1903.75 hectares of land were covered by annual crops while 141.5 hectares of land was covered by permanent crops which benefited about 1925 farmers.

On the other hand, more than 2062 hectares of land is under traditional irrigation for the production of both annual and perennial crops from which 421,090.5 quintals of production was obtained by the year 2010. Moreover, there is no any hectares of land was under modern irrigation for the production of both annual and perennial crops from which is not any(none of) quintals of production was obtained during the year 2011.

During the year 2012, 1215 hectares of land was under traditional irrigation both for annual and perennial crops which 107,600 quintals of production was obtained. From this irrigation 1737 households were benefited during the same year /2012.

**Table: 4.2. Area cultivated in tradition and modern irrigation and production obtained in the year 2011-2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2011 | | | 2012 | | |
| **Period of Cultivation** | **Area (Hectares)** | **Production obtained (Quit)** | **No. Farmer serves** | **Area (Hectares)** | **Production obtained (Quint)** | **No. Farmer serves** |
| **Traditional** | **2045.25** | **421090.5** | **1925** | **1215** | **107600** | **1737** |
| Annual crops | 1903.75 | 396495.5 | 1925 | 931 | 80620 | 1737 |
| Perennial crops | 141.5 | 24595 |  | 284 | 26980 |

**Source:** - Seru Agriculture office

4.1.2. Livestock, Poultry and Bee-keeping

**Livestock: -** Seru district is famous in livestock resources. Cattle, sheep, goats, horse, mule donkeys and camels are the major livestock population found in the district. The livestock population of the district was increased from **171869** to **192102** between the year 2009 to 2012 showing an increment by 20.233 (12%). In the year 2012 cattle, goats and sheep account for more than 91.2 of the total livestock population of the district. This indicates that except sheep, there is livestock increment. However, the high prevalence of diseases, traditional method of rearing, shortage of the feed and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are grazing and crop residues, which are limited in nutritional values.

**Poultry:** - poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population was decreased from **76961** to **74920** between the year 2009 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 4.3. Distribution of Livestock and Poultry (2008-2012)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Type of livestock** | **2008** | **%** | **2009** | **%** | **2010** | **%** | **2011** | **%** | **2012** | **%** |
| **1** | **Live stock** | **182174** | **100** | **171869** | **100** | **184810** | **100** | **184677** | **100** | **192102** | **100** |
|  | Cattle | 92911 | 51.21 | 83098 | 48.4 | 92966 | 50.3 | 93113 | 50.42 | 96849 | 50.4 |
|  | Sheep | 14531 | 77.97 | 14351 | 8.3 | 14821 | 8 | 14626 | 8 | 15307 | 8 |
|  | Goat | 57217 | 31.4 | 57731 | 33.6 | 59841 | 32.4 | 60100 | 32.5 | 63035 | 32.8 |
|  | Donkey | 14322 | 7.86 | 14351 | 8.3 | 14821 | 8 | 14522 | 7.9 | 14532 | 7.56 |
|  | Horses | 1667 | 0.91 | 1671 | 1 | 1598 | 0.9 | 1679 | 0.9 | 1734 | 0.9 |
|  | Mules | 654 | 0.36 | 667 | 0.4 | 763 | 0.41 | 637 | 0.34 | 645 | 0.34 |
| **2** | **Poultry** | **73614** | **100** | **76961** | **100** | **80461** | **100** | **74119** | **100** | **74920** | **100** |

**Source:**- Seru District fishery &livestock development Office.

**Bee- Keeping activities:-** Bee-keeping farming is another source of cash income for farmer family. There were 36833, 983 and, 182 traditional, transitional and modern bee-keeping hives respectively in the year 2011. In the year 2012, the number of traditional bee hives was increased to 36841 and 52300kg of honey production was obtained. This gives 1.42 kg of honey production per hives for traditional beehives. Rapid deforestation rate and lack of enough moisture due to shortage of rainfall, herbicides and insect sides are main problems in bee farming. However, using of herbicides and insecticides are the main problems in bee farming.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type/Activity** | **Number of box (in district )** | | | | | | | |
| **2009** | | **2010** | | **2011** | | **2012** | |
|  | **No of bee beehive** | **Produ.** | **No of bee beehive** | **Production** | **No of bee beehive** | **Production** | **No of bee beehive** | **Production** |
| **Traditional bee hives** | 36381 | 181905 | 36480 | 191520 | 36833 | 191620 | 36841 | 52300 |
| **Transitional bee hives** | 2102 | 23122 | 2203 | 24233 | 983 | 1966 | 985 | 24300 |
| **Modern bee hives** | 172 | 4644 | 138 | 3,726 | 182 | 4500 | 222 | 7000 |

**Source:** Seru Data of Statistical Abstract

**Fishery:** Even though fishing is one of the additional sources of food and income for the farmers, there are no fishing activities using large water bodies like Wabe Shebelle River and its tributaries.***3.1.3.* Agricultural Infrastructures and Inputs**

**Agricultural service cooperatives:-**Between the year 2011 and 2012, the number of agricultural service cooperative was 14 and 16. While the numbers of members were increased from 1900 to 2596 the cooperatives have total capital of 12,198,048.556 during the year 2012. On the other hand the General Service cooperatives were 15 and 16 in the year 2011-2012 respectively. The Cooperatives engaged in delivering different services such as agricultural input on credit basis, etc.

**Table:4.4. Number of agricultural service cooperative, their capital and member farmers in the year 2011 to 2012**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Cooperatives** | **2011** | | | | | | | **2012** | | | | | | |
|  | **Number of Members** | | | **Capital** | | |  | **Number of Members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** | **No** | **Male** | **Female** | **Total** | **Operational** | **fixed** | **Total** |
| General service cooperative | 15 | 2346 | 1050 | 3396 | 10,424,270.2 | 1,948,300.12 | 12,372,570.32 | 16 | 2448 | 1243 | 3691 | 6,294,993.4097 | 4,014,857.035 | 10,309,850.4447 |
| Saving & Credit | 14 | 295 | 1605 | 1900 | 6,105,061.76 | 2,778,776.46 | 8,883,838.22 | 16 | 594 | 2002 | 2596 | 9,365,093.896 | 2,832,954.66 | 12,198,048.556 |
| Total | 29 | 2641 | 2655 | 5296 | 16,529,331.96 | 4,727,076.58 | 21,256,408.54 | 32 | 3042 | 3245 | 6287 | 15,660,087.31 | 6,847,811.7 | 22,507,889 |

Source:- Seru District Cooperative Office

**Fertilizers and Improved Seeds utilization**: - Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, so as to meet rapid increase in demand for food and industrial raw materials. During the years 2007, the amount of chemical fertilizer and improved seeds distributed to the farmers by different cooperatives was 2999.5quintal of chemical fertilizer, 2930 Dap, 69.5 urea and 438.25 quintals of different improved seeds was distributed. In the contrary in the year 2011 the total fertilizers distributed to the farmers was decreased to 732 quintal of urea. The amount of improved seeds increased to1115 quintals in the year 2011 and to 546 quintals of improved seeds in 2012 also the amount of chemical fertilizer decreased to 550 in this year. These figures, however, may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

Table: 4.5. Agricultural inputs distributed to farmers (2007-2012)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of input** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| Amount(Qt.) | Amount(qt) | Amount(Qt.) | Amount(qt) | Amount(Qt.) | Amount(qt) |
| **Fertilizers** | **2999.5** | **3444** | **2769.5** | **4558.5** | **732** | **550** |
| Dap (qt.) | 2930 | 2880 | 2721.5 | 4558.5 | 0 | 0 |
| Urea(qt.) | 69.5 | 663.5 | 48 | 0 | 732 | 550 |
| **Improved seeds(qt)** | **438.25** | **1676** | **363** | **274** | **1115** | **546** |
| Wheat | 414.5 | 1544 | 300 | 274 | 1110 | 0 |
| Barley | 0 | 7 | 0 | 0 | 0 | 0 |
| Maize | 1.75 | 40 | 18 | 0 | 5 | 5 |
| Teff | 0 | 0 | 45 | 0 | 0 | 0 |
| Pesticide (lit) | 22 | 22 | 20 | 1661 | 3015.8 | 541 |

**Source:** - Seru district Agriculture and Rural Development office.

**Development Agents and farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. During the year 2008- 2012 the number of farmers training center was 14 on these years, the number of development agents was increased from 41 in the year 2008 to 47 in the year 2012. These development agents with profession of plant science, Animal science and, Environmental protection are assigned for each kebeles with the aim of supporting the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and environmental protection which are three in some PA. However, the numbers of development agents are below the standard in the district.

Table: 4.6. Number of Development Agents and FTC (2008-2012).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Description** | **2008** | **2009** | **2010** | **2011** | **2012** |
| No of DA trained | 41 | 44 | 52 | 46 | 47 |
| No of FTC | 14 | 14 | 14 | 14 | 14 |
| Beneficiaries | 9393 | 9393 | 9542 | 9542 | 11567 |
| Ratio of peasant to DA | 229:1 | 213:1 | 183:1 | 207:1 | 246:1 |

Source: Seru District Agriculture and Rural Development Office

**Agricultural calendar:-** It is well known that the farmers of the Zone are not busy throughout the year since agricultural activities are seasonal based as a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season some farmers do not fully engage in farm activity due to some socio-cultural related ceremonies. The time of performing agricultural activities such as land preparation, planting weeding and harvesting vary with season on Agro-climatic Zone and types of crops cultivated. In some `kebele` these activities are started earlier while in other `kebele` they started late. **Table: 4.7. Agricultural calendar of the District**.

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Maher season** | **Belg season** |
| 1 | Land preparation | March to June | October to march |
| 2 | Planting(Sowing) | July to August | March to April |
| 3 | Weeding | August to September | May |
| 4 | Harvesting | November to January | June to August |

**Source:** - Seru district Agriculture and Rural Development office.

**Livestock Health Infrastructure**: Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. During the year 2008**,** there was only one- C and 5 -D type clinics in the district to deliver health service to the animal population and also in the year 2009-2011, the district animal health protection and development agency provide health services by one C-type and five D-type health post. This was not increased to one C-type and five D-type health post. The ratio of population to health facilities were improved from is 1: 42631, 1:43344 and 1:44791 between the year 2010, 2011 and 2012. However, this ratio indicates that there is a need to construct additional health facilities in the district as compared with the number of animal population. On the other hand, these health facilities was staffed by thirteen animal health assistance in the year 2008 however, the year 2010, the number of health assistance was increased to seventeen, but in 2011 and 2012 decreased to eleven and twelve. This gives the ratio of animal population to health personnel 1: 13264 in the year 2010, 1: 21672 in the year 2011, and 1: 20673 in the year 2012.

**Table 4.8 Distribution of district Animal health information /2008-2012/**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Distribution** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **Health Infrastructure** | **6** | **6** | **6** | **6** | **6** |
| Clinic/C type | 1 | 1 | 1 | 1 | 1 |
| Clinic/D type | 5 | 5 | 5 | 5 | 5 |
| **Animal Health Personnel** | **16** | **16** | **20** | **12** | **13** |
| Animal Health Assistant | 13 | 13 | 17 | 11 | 12 |
| Vet. Doctors | 3 | 3 | 3 | 1 | 1 |

**Source**: Seru District fishery and livestock Development Office.

4.1.4. Method of Maintaining Soil fertility and Soil Conservation

**Methods for maintaining soil fertility:** In area like Seru district where agricultural lands were intensively used for cultivation, agricultural lands were exposed to degradation of lands. To overcome this problem the farmers use different method of soil conservation. These are the traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, burning soil in small scale( burning), fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost/organic fertilizer/.

**Methods for Soil Conservation:** Contour plowing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation modern way of soil conservation in the district.

|  |  |  |
| --- | --- | --- |
| **Methods** | **unit of measurement** | **Amount** |
| Terrace constructed | Km | 3009 |
| Terrace rehabilitation | Km | 286 |
| Water ways | Km | 387 |
| Cut off drains | Km | 356 |
| Check dam construction | m3 | 3595 |
| Micro basin construction | Number | - |
| Area closure | Hec | 1602 |

Seru: - Agriculture Office 2012

4.1.5. Major Agricultural Constraints

**Rainfall Variability, drought and flood:** Seru district was considered as one of the food insufficient area in the zone. These severities of problem however vary from year to year depending on rainfall condition. In the year 2008, 2009, 2010, 2011 and 2012, 36, 054, 16,098, 37,686, 31851 and 60532 people were affected by drought. On the other hand in the district, none of the people were affected by flood during the year under consideration (2008, 2009, 2010, 2011 and 2012 there is no flood affected people). So as to overcome these problems, the district disaster prevention and preparedness office in collaboration with the regional government provides grains, pulses, oil and supplementary food for the children and affected families during the disaster. For details see the table below.

**Table: 4.9.Amount of food Distribution by government and number of population benefited.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Amount of Aided by type** | | | | **No. of beneficiaries** |
| **Grain (Qt)** | **Pulses (Qt)** | **CSF\* (Qt)** | **Oil (lit)** |
| 2008 | 37145.85 | 3714.558 | 41.79 | 3714.58 | 36054 |
| 2009 | 13280.85 | 0 | 905.50 | 47812.5 | 16098 |
| 2010 | 5652.9 | 925 | 269.75 | 16958.7 | 37686 |
| 2011 | 3183.9 | 0 | 334.30 | 9551.7 | 31851 |
| 2012 | 9541.8 | 0 | 0 | 385.924 | 60532 |

***\*CSF Children Supplementary Food, /preparedness &disaster prevention office/***

**Crop pests and disease:** The major crops pests in the district are stake borer, cut warm, ball warm while the major disease are rust, smut and root. Weeds and rain fall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time.To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems.

**Livestock and poultry Diseases: -** Black leg, lumpy skin, chronic respiratory diseases and External and internal parasite Lymphatic diseases and Anthrax are the major livestock and poultry disease in the district.Accordingly, the districts fishery & Animal resource production department has been providing different type of Animal health services and treatments to improve the productivity and quality of livestock found in the district. The following table shows the type of vaccination and treatment given to the livestock during the indicated year.

**Table:-4.10. Number of Animals and Health services given by type of diseases**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of service** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **Vaccination** | 226700 | 157.050 | 219.450 | 241100 | 192100 |
| Type A | 155800 | 95.500 | 138000 | 193643 | 149900 |
| Type B | 70900 | 61550 | 81,450 | 28507 | 26000 |
| Blackleg | 29600 | 26500 | 24210 | 18950 | 16200 |
| **Treatment** | 267755 | 139004 | 157820 | 209025 | 187637 |
| External parasites | 116141 | 56104 | 62100 | 97998 | 86611 |
| Internal Parasites | 147523 | 66864 | 75329 | 108293 | 99160 |
| Castration | 4091 | 1623 | 8457 | 2734 | 1866 |

**Source:** - Seru district fishery& live stock development Office

4.2. Mineral Resources and Industry

**Mining:** Like others parts of country in general and the Zone in particular, the mineral resources potential of the Seru district is not investigated and known. However, some data obtained from office of mineral indicates that, the district has a potential of some mineral resources such as building stone for construction purpose, Minerals like dolomite and Gypsums, Sand and also solar Energy, wind Energy and Biogas for alternative energy resource yet the district does not start more to utilize these minerals resources.

**Industry: -** Similar to other parts of the Zone industrial development is at its infant stage in Seru district. Their number is very small and dominated by small scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned. There are also no medium scale industrial establishments in the district.

**Table: 3.11.Number of Small-scale industries of the district by type**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of Industry** | **2011** | | | **2012** | | |
| **Number** | **Employment** | **Capital(Birr** | **Number** | **Employee** | **Capital(Birr** |
| Grain mill | 34 | 72 | - | 34 | 74 | - |

Source: - Seru District worker and social affairs Office.

4.3. Trade Activates and Tourism

**Trade**: Seru District has 420 and 361permanently licensed traders in 2009 and 2010 respectively. However in the year 2011 and 2012 there were 372 and 361 licensed private traders in the district respectively. Concerning tradable items and cash crops production activities, the district is known in the production of Linseeds, Sesame, rapeseeds. Hides and skins are also exportable items of the district.

**Tourism and Its Amenities:** Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Seru district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism office.These are kokobe; Abelkasim, kimigne, Arbliji, Gamo Abinas and mole are the main tourist attraction sites of the district. All of them are under developed. They are not opened for tourists during the indicated years.

**4.4. Finance and Financial Institutions**

**Financial Institution:** The availability of various financial institutions like banks and insurance, rural credit and Saving Association play a significant role in the transformation the economy of the district. However, the district has no any governmental and non- governmental financial institutions.

**Annual Budget allocation**: Annual budget requirement of districts is covered mainly from two sources, regional government grants and district Inland Revenue. Regional government contribution shares the largest amount which accounts for more than 68% of the total annual budget allocated for the district. This indicates how far the current Inland Revenue share of the annual budget allocated for the district is very low. Between the year 2008 and 2012 the total budget allocated for the district was increased from 59,997,640 Ethiopian Birr to 88,725,063 showing an increment by 28,728,423 according to the data obtained from Finance and Economic Development office indicated. As shown in the table below, the rate of increment in budget was decreasing from 64.7% in the year 2008 to 4.63% in the year 2012.

**Table: 4.12.Annual budget allocated for the district**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual budget Allocated** | **Growth rate (%)** |
| 2008 | 59,997,640 | 64.7 |
| 2009 | 63,269,367 | 5.45 |
| 2010 | 72,256,024 | 14.2 |
| 2011 | 84,794,888 | 17.35 |
| 2012 | 88,725,063 | 4.63 |

Source: - Seru district Finance and Economic Development office

**Revenue:** The total revenue collected by the district was increasing from 9,344,507.36 Ethiopian birr to 10,641,157.10 birr between the year 2008 and 2012. The main source of revenue in the district is direct tax, indirect tax and non-tax items as Inland Revenue office of the district cumulative annual report both year shows.

**Table: 4.13.Total Inland Revenue collected in the direct by type of revenue source**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non-tax revenue** |
| 2008 | 8,132,573.64 | 369,341.90 | 842,591.82 |
| 2009 | 6,842,864 | 849,050 | 54,539,808 |
| 2010 | 6,979,058.51 | 946,634.70 | 549,957 |
| 2011 | 8,030,360.81 | 404,012 | 874,000 |
| 2012 | 9,255,582.37 | 711,816.76 | 673,757.97 |

Source: Seru District Inland Revenue office

CHAPTER FIVE

5. Infrastructure and Social Facilities

5.1. Education

**Kindergarten:** - According to the data obtained from statistical abstract of the district, between the year 2008 and 2012, there was one kindergarten school in the district while the number of children enrolled to these school was decreased from 152 students (male 39, female 73) 89 (male 46, female 43) students in the district. However, the number of student enrolled to this school was too small as compared to the school age population of this level. One of the main problems related with kindergarten school is lack of infrastructure with clear management system.

**Primary schools:** between the year 2008 and 2012, the number of governmental primary school was increased from 39 to 41 while the number of students enrolled to this level of school was decreased from 13269 (40.06%female) to 12160 (42.4% females) students respectively, with a slight decrement of female students. During the same year, the number of teacher was increased from 206 (36.4%females) to 432 (35.6 % females) teachers. On the other hand the numbers of classrooms were also increased from 330 to 372 during the year under consideration. The Student to teacher’s ratio was improved from 60:1 to 27:1 while student to class- room ratio 42:1 to 30:1 during the year under consideration. The gross participation rate (GPR) and net enrollment participation rate (NER) of primary school students was 109%(78%female) and 99%(74.54%female) during 2011 respectively. Likewise, in the year 2012, student gross participation rate was 95% (71.9% female) and net enrollment participation 86.8% (67.2% female).

**Senior secondary & preparatory education/ 9-12/:-** In the district there is one senior secondary & preparatory(9-12) school located in Seru Abbas town while the number of student enrolled to school was increased from with 576 ( 37.3% females) to 873 (36.08% female) students between the year 2008 and 2012. During the indicated year the number of teacher’s was increased from 27 to 54 while the number of classroom was also increased from 16 to 18 between the year 2008 and 2012.The student to teacher ratio was improved from 18:1 to 16:1 while student class-room was increased from 45.3;1 to 48;1 during the Indicated years and, there was one governmental technical and vocational education school in the district

**Table: 5.1.Number of schools with student Enrolled (2009-2012)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of school** | **2008** | | | | **2009** | | | | **2010** | | | | **2011** | | | | **2012** | | | |
| No of school | Male | Female | Total | No of school | Male | Female | Total | No of school | Male | Female | Total | No of school | Male | Female | Total | No of school | Male | Female | Total |
| Government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kindergarten school | 1 | 39 | 73 | 152 | 1 | 75 | 105 | 180 | 1 | 67 | 63 | 130 | 1 | 90 | 92 | 182 | 1 | 46 | 43 | 89 |
| Primary/1-8/ | 39 | 7953 | 5316 | 13269 | 41 | 9,104 | 6,012 | 15116 | 41 | 8812 | 6091 | 14903 | 41 | 7569 | 5167 | 12736 | 41 | 7004 | 5156 | 12160 |
| Senior secondary /9-12/ | 1 | 361 | 215 | 576 | 2 | 425 | 309 | 734 | 2 | 480 | 283 | 763 | 2 | 448 | 275 | 723 | 1 | 558 | 315 | 873 |

Source: Seru district educational office

**Education Quality:** - The quality of education can be judged from educational qualification of teachers, student’s teacher ratio, student class ratio, student, text- book ration, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement/ diploma level/ to teach grade 5-8 are 334 from the total teachers teaching this level in the year 2012. Actually only depending on the above ratios are not enough to measure quality of a district. Hence we have to look in to other factors mainly CPD (continuous professional development) program, teachers dedication/ commitment to teach and students commitment to receive what teachers say. Accordingly, teachers those who completed induction course were 13. To improve the quality of education student teacher ratio, student classroom ratio others are very essential, so as we see from given information education office of the district expected to do more to improve the quality of education by increasing the needed variables of education quality.

**Table: 5.2.Number of teachers by Profession and schools**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **No. of teachers in primary (1-8)** | **130** | **75** | **206** | **217** | **126** | **343** | **213** | **169** | **382** | **237** | **185** | **422** | **278** | **154** | **432** |
| TTI | 4 | 0 | 4 | 66 | 55 | 121 | 57 | 49 | 106 | 36 | 42 | 78 | 42 | 37 | 79 |
| DIP | 126 | 75 | 201 | 137 | 69 | 206 | 143 | 115 | 258 | 183 | 138 | 321 | 221 | 113 | 334 |
| BA/BSc | 0 | 0 | 0 | 14 | 2 | 16 | 13 | 5 | 18 | 18 | 5 | 23 | 15 | 4 | 19 |
| **Secondary school (9\_12)** | **21** | **6** | **27** | **34** | **11** | **45** | **36** | **10** | **46** | **40** | **9** | **49** | **43** | **11** | **54** |
| DIP | 0 | 2 | 2 | 0 | 2 | 2 | 3 | 1 | 4 | 3 | 1 | 4 | 4 | 1 | 5 |
| BA/BSC | 21 | 4 | 25 | 33 | 8 | 41 | 31 | 8 | 39 | 33 | 7 | 40 | 32 | 9 | 41 |
| M.A/MSc | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 3 | 4 | 1 | 5 | 7 | 1 | 8 |

### Source: - Seru district educational office

5.2. Health

Health institution: there was two Government Health center, one non government clinics and Fifteen Health post during the year 2008. During the year 2012, the government health center was two and government clinics was one, the number of health post was also had no change that was 15.The ratio of population to Health Center and health post was 34,145:1 and 4553:1 respectively in the year 2012 which indicates very low health coverage of the district compared with WHO standard (except health post that is 4553:1 (25000 and 5000 respectively).

**Health personnel:** between the year 2010 and 2012, the number of health personnel was decreased from 90 to 76 in governmental health institution respectively. By health professionals, there were 7 health office, 24 Nurses, 4 Laboratory technician, 5 Pharmacy technician, 3 sanitarians and 33 health extension workers giving services in governmental health institution in the year 2012. For more information see the table below.

**Table: 5.3.Number of health Institution and Personnel by ownership (2008-2012)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Institution/Health Personnel** | **2008** | | **2009** | | **2010** | | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** | **Gov** | **Non-Gov** | **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| Health Institution | **17** | **4** | **17** | **1** | **17** | **1** | **17** | **1** | **17** | **1** |
| Health Center | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| Clinic | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| Health post | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 |
| **Health personnel** | **57** | **9** | **64** | **2** | **90** | **2** | **73** | **2** | **76** | **2** |
| Health officer | 2 | 0 | 4 | 0 | 6 | 0 | 8 | 0 | 7 | 0 |
| Nurse | 18 | 5 | 20 | 1 | 19 | 1 | 24 | 1 | 24 | 1 |
| Health Assistance | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 |
| Laboratory Technician | 3 | 2 | 3 | 0 | 3 | 0 | 2 | 0 | 4 | 0 |
| Pharmacy Technician | 3 | 2 | 3 | 1 | 3 | 1 | 5 | 1 | 5 | 1 |
| Sanitarian | 2 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 0 |
| Health Extension Workers | 29 | 0 | 32 | 0 | 33 | 0 | 31 | 0 | 33 | 0 |

## **Source:** Seru District Health Office

According to the new health policy of country, the region and the zone specifically the districts have followed primary health care policy. With this manner, the district with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension Services in the district. To this end, two health extensions workers were assigned for each peasant associations and one health extensions worker assigned for urban (seru 01 keble). Except DH/Murti kebele because have large population which has four extensions worker. Totally there were 33 health workers in the district in the year 2012.

In addition, the district health office provides different type of treatment and children and mothers vaccination to improve the health coverage of the district. The available data shows health service provision improvement from time to time. The following table indicates the major vaccination type given to the children. For more information see the table below

**Table: 5.4.Number of children vaccinated by year and type of vaccination**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Vaccination** | **2009** | **2010** | **2011** | **2012** |
| BCG | 2191 | 2299 | 2286 | 2313 |
| Measles | 2001 | 2016 | 1921 | 2109 |
| DPT | 2129 | 2324 | 2081 | 2168 |
| Polio | 2113 | 2287 | 2073 | 2191 |
| **Total** | **8334** | **8926** | **8361** | **8781** |

Source: Seru District health office

**Maternal child Health:** Actions take to decrease maternal and child mortality through increasing Anti natal care (ANC),Post natal care (PNC) and institutional or safe delivery service for mother and increase EPI and growth monitoring service for children by HWS, HEWS and CHWS.

**Disease prevalence including HIV/AIDS:** In 2012 using 4305 VCT (Voluntary Counseling Testing) the district health center identified twenty six HIV carriers. However, there were seventy four AIDS patients identified in the district. The prevalence rate of HIV AIDS was 0.03 % in the district in the 2008; however the pre valence rate of HIV/AIDS in 2012 was increased to 0.6 in the district. The less awareness through community conversation at Keble level is reason of increments to the prevalence rate of HIV/AIDS in the district.

**Prevalence rate of HIV AIDS in 2008 to 2012**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Total tested** | **Total +ve** | **Pre valence rate** |
| 2008 | 3766 | 1 | 0.03 |
| 2009 | 1712 | 4 | 0.23 |
| 2010 | 3624 | 2 | 0.06 |
| 2011 | 3965 | 24 | 0.6 |
| 2012 | 4305 | 26 | 0.6 |

Inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and under utilization of health services also play a great role for the existence of different diseases.

**Causes of Morbidity:** According to the data obtained from Seru district health office, the major causes of morbidity and death in the district are pneumonia infection (26%) followed by Trauma (15%), Malaria (12%),Diarria and URTS(both 10%) respectively in the year 2012.

**Table: 5.5.Ten top diseases existed in the district in the year 2008-2012**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **2008** | | | **2009** | | | **2010** | | | **2011** | | | **2012** | | |
| **Type of Diseases** | **No of population** | **%** | **Type of Diseases** | **No of population** | **%** | **Type of Diseases** | **No of population** | **%** | **Type of Diseases** | **No of population** | **%** | **Type of Diseases** | **No of population** | **%** |
|
| 1 | AFI | 869 | 20.48 | Pneumonia | 718 | 17.26 | Pneumonia | 1240 | 41.2 | AFI | 913 | 16 | Pneumonia | 821 | 26 |
| 2 | I/P | 706 | 16.64 | Acute febrile illness | 711 | 17.095 | Acute febrile illness | 1123 | 39 | Pneumonia | 872 | 15 | Diarria | 295 | 10 |
| 3 | RTI | 638 | 15.04 | Diarrhea | 617 | 14.83 | Non bloody diarrhea | 802 | 37.5 | Nnaboodydiarria | 789 | 14 | URTS | 300 | 10 |
| 4 | F/C | 518 | 12.21 | Menthes | 497 | 11.95 | Helminthes | 657 | 26 | Helmithites | 721 | 12 | Trauma | 456 | 15 |
| 5 | PUD | 401 | 9.47 | Anemia | 391 | 9.40 | malaria | 539 | 24.8 | Malaria | 584 | 10 | Eye infecation | 180 | 6 |
| 6 | UTI | 313 | 7.38 | Trauma | 395 | 9.49 | Trauma | 504 | 20.04 | Traum | 495 | 9 | Acute ear infecation | 175 | 6 |
| 7 | Anemia | 227 | 5.35 | Dyspepsia | 212 | 5.09 | Dyspepsia | 498 | 16.74 | Dspessia | 428 | 7 | Intastial parsiate | 128 | 4 |
| 8 | Diahearia/non-bloody | 203 | 4.78 | Diarrhea with dehydration | 237 | 5.69 | UTI | 319 | 15.6 | UTI | 347 | 6 | Skin infecation | 200 | 6 |
| 9 | Malaria/PF/ | 194 | 4.57 | UTI | 218 | 5.24 | Anemia | 311 | 14.01 | Anrmia | 342 | 6 | MAM | 188 | 6 |
| 10 | Acute-URI | 173 | 4.08 | AURI | 152 | 3.65 | Diarrhea | 297 | 4.66 | Diaarria | 309 | 5 | Maalria | 358 | 12 |
| **Total** | **Total** | **4242** | **100** | **Total** | **4158** | **100** | **total** | **6290** | **100** | **Total** | **5800** | **100** | **total** | **3101** | **100** |

# Source: Seru District Health Office

**Harmful Traditional practices:-** Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in Seru district. Among these, raping, `Buta`, `Dhala`, Female circumcision, `Gebere`, etc can be mentioned as an example before. However, now a day its trend is decreasing from time to time. On the other hand, it should not be forgotten that there are many Useful traditional practices such as Ikub, Idir, Debo, Jarsuma etc. should be appreciated and are being practiced.

**5.3. Sport Activities**

The district has no any type of stadium and well organized sport facilities. However, according to the report of youth and sport office of the district there were different type of sport activities and teams like Foot-ball, Volley-ball, Athletics and Tennis were the main sport activities in the district.

**Table: 5.6. Sport clubs and members in the district**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Team** | **2008** | | **2009** | | **2010** | | **2011** | | **2012** | |
| **Number of team** | Member | **Number of team** | **Member** | **Number of team** | **Member** | **Number of team** | **Member** | **Number of team** | **Member** |
| Foot ball | 26 | 456 | 27 | 486 | 26 | 550 | 8 | 144 | 4 | 81 |
| Volley ball | 14 | 206 | 27 | 270 | 18 | 120 | 8 | 80 | 2 | 30 |
| Athletics | 0 | 0 | 6 | 150 | 1 | 6 | 0 | 0 | 0 | 0 |
| Tennis | 1 | 4 | 1 | 4 | 1 | 10 | 1 | 4 | 1 | 8 |

**Source:** Seru districts youth and sport office

**5.4. Basic Socio-Economic Infrastructure Condition**

**Road:** the district has 115 km length of gravel road (all weather) and 7 km of dry weather road .This gives a road density (for all weather roads) 6.8km per km2 1:68 per 1000 people for all weather roads.

**Telecommunication:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed.

Urban areas of the district has supplied with wireless type of telecommunication. However, the rural areas of the district have no any type of (not enough) telephone services.

**Post Office:** postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has one agent type of post service but not give service.

**Water supply**: potable water coverage of the district is very low. According to data obtained from Seru district Water Office, the total population of the district 54.72(54% for urban and 54.73 for rural) was supplied with potable water in the year 2012.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are charcoal, animal dung, farm residue and firewood. However there is not enough modern energy sources in the district. In rural and urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, crop residues and animal dung. On the other hand, fire wood is the major energy source in rural area followed by animal dung, crop residue, and kerosene.

**Table: 5.7.Sources of domestic energy supply**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 1st | 4th |
| 2 | Fire wood | 2nd | 1st |
| 3 | Animal Dung | 3rd | 2nd |
| 4 | Kerosene | 4th | 5th |
| 5 | Crop residue | 5th | 3rd |

##### Source: Seru district water & energy Office

**CHAPTER** **SIX**

**6. Development Activities**

6.1. On-going Development Project

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided into salary, recurrent budget and capital budget. The capital budgets are directly used for the construction of different types of development projects. It is expected that of the total budget of the districts, 9 % s used for development projects. Moreover, from excess revenues allowed for the district (which is about 75%) some amount must be used for development projects.

**Government development Activities**

**Social sector ongoing development projects:** There is one Operation Room being constructed in one health center (Seru). The whole cost of this project will be covered by MDG (regional gov.)

**Economic development projects:** there collaboration with corridor development, Action Aid (until to June 2012E.C) and seft net program.

**Non- Government were** two Greenhouse Multipurpose cooperative in Hadido-Indas and Jida-Jiru kebele, two pond developmet Hadido-Indas, Dero dhibayu and Lilo gurati kebeles.Development Agent House in Hadido-Indas kebele.Boji Primary School Constraction in Dero Dibayu kebele.All projects mentioned above was constructed by non-government organization which called Action Aid Ethiopia and Seft Net Program.

**Ongoing Development activities****;-** Seft net was one of the organizations carried out development activities in the district. The objective of the organization is to alleviating poverty. The ongoing activities which are taken place by the MDG (Regional gov’t) are construction of Modern Irrigational canal of Muta in Waji kebele for insure food insecurity of the district.

**CHAPTER** **SEVEN**

**7. Problems and potentialities**

**7.1. Major problems**

**Environmental problem;** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low water conservation practice on the other hand, variability of rain fall which results in crop production failure, uncontrolled hunting.

**Economic problem:** Shortage of farm land high prevalence of disease and pests, shortage of Agricultural inputs and lack of capacity to buy, lack of financial Institutions (there is only one Bank and saving and credit association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.

**Social service problem:** rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, under developed transportation and communication facilities, high prevalence of harm full traditional practices, HIV/ADIS prevalence, high dropout rate, low potable water coverage, no electric supply.

**6.2. Potentialities**

**Land Resource:** Land is an important productive asset of any agrarian population. From the total area of the district the cultivable land (62,000 hectares) only 12,655 hectares (19.5%) of land was cultivated. This indicates that even though the district has high potential of cultivable land for extensive agricultural practice the cultivated land was very low.

**Tourist attraction sites:** Tourism economy is not yet developed in the district. Similarly, meaningful survey and study are not conducted to access tourist attraction sites potential of the district.

Nevertheless, there are some major tourist attraction centers identified by the district culture and Tourism Office. These are kemene/Worrishop area/, Kokobe /Cave/, Abelkasim /High Mountain, Arebliji and topography of the land and gorges of Wabe River. All of them are under developed.

**Forest resource:** The district largely covered by acacia trees, bush and shrubs as well as Gallery forest along river course. There are also very small man made forest and public protected forest in the district that used as home of wild animals.

**Investment Opportunity:** The area of the district is 1765.5km2 of which around 98% is low land. Most of the low land is not yet cultivated, and further not surveyed. However, according to Seru district fishery &Animal production and Agriculture and Rural development Office, it is favorable for livestock rearing ( like goat, Camel, and Cattle) and production of major cash crop like chat, banana, different kinds of green paper, haricot been, cotton, mango, papaya and etc using potentially irrigable water resource called Wabe Shebele River.

**Minerals and energy resources:** even though potentials of minerals and energy resources are not surveyed, from its geological formation it is anticipated that the district has potential for some minerals resources such as energy such as sandstone, even natural gas and metallic mineral resource.

**Labor resources:** Like any other parts of the country, there is a potential of labor resource in the district especially unskilled labor power.

**Chapter EIGHT**

**8. Conclusion and Recommendation**

**8.1. Conclusion;-**

The district has 15 kebeles of which 14 are peasant Associations while one (1) is urban administrative unit. The major permanent river of the district is Wabe Shebele River. It has high potential for traditional irrigation. The district has amble land resource in the low land areas with fertile from good to medium good.

The district has large cultivable land for the production of crops like maize, wheat, pulses. However, due to rainfall variability and warm temperature condition where evapo transpiration causes the district not to produce different types of crops from the productive soil. So as to increase productivity and production, the amount of agricultural inputs used by the farmers was decreasing between the years under consideration which have a significant effect on production. Above all the farmer’s inability to produce variety of drought resistant crops causes the districts farmers to suffer from food insecurity. On the other hand, the district has large number of livestock resources. Having large number of cattle is considered as a prestige; attention is given for quantity rather than quality and the traditional method of rearing and shortage of enough forage causes the livestock rearing activities in the district to be under developed. As a result, the farmers do not get enough benefit from their livestock. It was founded that most farmers are not busy throughout the year. Even during busy season, most farmers do not fully engage in farm activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

So as to achieve universal primary education coverage, the district provides education in 40 primary schools in each rural kebeles. Likewise the district has also one secondary & preparatory school in Seru Abbas town.One technical and vocational education schools. A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance. For instance, the student to teacher ratio and student to class room ratio was decreased to 16:1 and 48:1 in the year 2012 for secondary school.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. But the numbers of health professionals working in the health facilities were decreasing. However, as one can be seen from the ratio of population to health facilities indicated, there was a need for construction of additional health facilities in the district. For instance, the ratio of population to health center and population to health post was 34145:1 and 4553:1 respectively in the year 2012. This indicates that the district needs to construct at least one more health centers. Moreover, the health condition of the people was improved.

The water supply coverage of the district is still not enough that is 54.72% which indicates the needs to construct additional water supply scheme to increase the current potable water coverage of the district. Moreover, in the district there is no well developed transportation net work. All population of the district is not successfully supplied with any type of electric power services. Concerning telecommunication, Seru town has supplied with net work and wireless telephone service. In addition, the district has only one type of financial institutions including credit and saving association.

On the other hand, the district has large irrigable land resources potential in the low land areas. As a result, the district is highly suitable to produce warm climate food crops and cash crops like maize, sorghum, chat, cotton, papaya and banana, different kinds of green paper, haricot bean, and mango through irrigation along Wabe Shebelle River basin. Moreover, the district has high potential for livestock rearing and bee keeping activities.

**8.2. Recommendation**

To minimize the prevailing problem and bring sustainable social and economic development, the following point were recommended for the concerned body.

* The agricultural production and productivity was very low as compared with the potential in the district. Hence, the farmers should have to be focus on the cultivation of drought resistant crops in the low land areas and have to use modern agricultural inputs,
* Basic socio economic infrastructure like Road, electric energy supply and communication facilities (mobile and digital telephone services) should be developed so as to attract potential investors,
* To meet Social service delivery, social service facilities like kindergarten and secondary school, health facilities, TVET School has to be developed.
* Environmental protection by increasing awareness creation, use available resource wisely, strengthening soil and water conservation, tree planting and putting into practice the land use plan policy,
* Strengthening agricultural institutions such as farmer service cooperatives and rural credit services so as to facilitate farmers access to modern agricultural inputs,
* Motivate the farmers to use small scale irrigation by collecting rainfall water and develop large scale irrigation system in potentially irrigable land of the district like Waltei, Waji, and Bulalla areas.
* Improve access to improved agricultural technologies such as fertilizers (commercial and compost), verities of improved seeds, farm implements and machineries.
* So as to improve agricultural production and productivity, improving the capacity of the farmer training centers and the development agents are important so that the farmers to be benefited from it.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF SHENEN KOLU DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER-ONE**

**1. INTRODUCTION**

**1.1 Back Ground**

**Shenen kolu** is one of the 27 districts of Arsi Zone. The historical name of the district is depending on 3 things. that derived from the name of the 5 river, 5 Hada Arse Children & 5mountain flowing in the district called Shenen kolu. The district is established in 2009 as one of the zone administrative units.It has 12 administrative units of which 12 are peasant Associations while 1 is urban administrative. tumuga town is the capital town of this district. It is located at 345 km from Regional capital city, Finfinne and 323 km from zonal capital city Asella town to East direction on **Dera- machara** main road. As the five rever names Darba,kolu,tumuga,bekeksa& Ejersa rivers. As the five peoples Hadha Arse children name Tumuga the father of Arsi,Murawwa the father of Itu,Dulecha the father of kerayu,humbena the father of anniya & kalo the father of Afren kalo olso as the five mountains have the above of shenen kolu wereda named which locate in the bahima harcumma kebele.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of shenen kolu district that reflects the existing situation, development problems and potentials of the district to be used by Government organization, to identify development gaps for researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only Ethiopian calendar (E.C) is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as perfume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district and zonal level sectors departments, 1987 and 1999 census result report and other related documents available in our office. The Problem faced during compiling these documents are **Lack of well-organized** and consistent data in the district and zonal sectors etc.

This profile has seven chapters. **The first** chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. **The second** chapter focused on population size and distribution, **The third** chapter deals with economic condition while **The** **fourth, fifth, sixth and seventh** with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

**CHAPTER TWO**

**2. Physical Setting**

**2.1. Location and Area**

**Shenen kolu** is one of the administrative units of Arsi Zone. Astronomically, it is located between 08025’289 ” N to Latitude and 040o14’422”E Longitude. The district is found South east of Hawi gudina District, South of Seru & Gololcha district, South West of Gololcha and North west of Aseco district, in the North East and East of Hararge Zone Daro lebu district . the total population of shanan kolu wareda **129,375**. The district is further sub-divided in to 12 rural kebeles and 1 urban areas. The generaly shenen kolu distirict is 641.11 km2.

**2.2. Geology, Relief, Drainage and climate**

**Geology;** The present surface rock distribution, the land configuration and other features of the district was formed during late Mesozoic era and different period of Cenzoic era as a result of both internal and external forces acting up on the surface. Accordingly, more than 45% of the district was covered by AmbaArdom Formation in the form of belt from Northern part of the district to the Southern and South Eastern part in the form belt through the central part of the district. Moreover, AmbaArdon formation covers some of the eastern part in the form of narrow belt. Likewise, Alajae formation covers extensively form Northern tip to Southern tip adjacent to AmbaArdom formation in the west. In addition, some of the Western border of the district was covered by Tarmbar Megezez formation. On the other hand, the whole eastern and east central part of the district was covered by Lower part of formation except few areas covered by Amba Aradom formation

**Relief:-** The Relief structure of the district consists of high flat rolling plateau, undulating low land area dominated by small hills and low laying plain Area. The altitude of the district is 1400-1800 meters above the sea level. The lowest place is found in Badeyi area 1400m while the highest place is located in Gafitedarba 1800m.

**Drainage: -**Due to its location, the district has different gorges’ and river systems. There are no permanent rivers in the district. The major seasonal streams found in the districtare Derba,Kolu,Tumuga, Bekaksa & Ejersa, Generally, the district has high potential for both traditional and modern irrigation system, which can be used to increase agricultural productivity if they are utilized efficiently.

**Season** the major rain season including Belg & maher . the belg(Arfesa) season including month march,April & May. Then the maher(Gena) season including month is June,Julay & Augost

**Climatic condition:**Due to its altitudinal location, the climatic condition of the district is dominantly moderately warm which is between 1400m-1800m. This type of climate consists about 75% of the total area cola. The remainings are which account for 25 % of the total area of the district is waynadega. The mean annual rainfall is ranging between 200-1400mm and the average rainy days are more than 70 days in the year. The rainfall pattern is bi-modal, which is short rainy season (Belg from March to May) and summer or long rainy season (Maher fromJune to August).

**2.3. Soil, Vegetation and Wild life**

**Soils:** The major types of soil in the district are: clay (7%), sandy (57 %), silt (17 %) and loam (19 %) covered the area of the districts.

**Vegetation***;* In the district vegetation is covered by different species indigenous natural forest and small bush and shrubs.

**Wild life*:-***The major wild animals found in the district are Hyena, Tiger, Lion, pigs, Monkey, Apes, Echidna, Rabbit, Wild dukula and etc. There are no reserved areas for wild life conservation in the district.

**CHAPTER THREE**

**3. Population Characteristics**

**3.1. Population Size**

According to the estimation made from 1999/2007 census, the population of the district was increased from 95427 to 97940 between the years 2011 to 2012. This indicates 100% of the population of the district is living in rural area depending on agriculture. An overall sex ratio of the district is 100 male per 104 females (urban 100 males per 110 females and rural 99 males per 101 females).

**Table: 3.1 Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Rural** | | | **Urban** | | | **Total** | | |
| Male | Female | **Total** | Male | Female | **Total** | **Male** | **Female** | **Total** |
| 2011 | 48,574 | 46,853 | **95427** | 0 | 0 | **0** | 48,574 | 46,853 | **95427** |
| 2012 | 49,853 | 48,087 | **97,940** | 0 | 0 | **0** | 49,853 | 48,087 | **97,940** |

Source: 1999 CSA population & Housing census report \*2.3%

**3.2. Age and Sex Structure Population**

According to 1999 CSA population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 48%, 50.5% and 41% of the total population respectively in the year 2012. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 48%, 50.5% and 41% for rural areas respectively. The dependency ratio of the district is

122% (124% for Rural and 71% for urban) which indicates 122 people are dependent on 100 economically active populations.

**Table: 3.2. Population size by wider age group Classification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age**/**Sex** | **Male** | **Female** | | **Total** |
| **No** | **%** | **No** |
| **Rural** | **49853** | **48087** |  | **213,683** |
| 0-14 | 25,872 | 24,183 | 48 | 50055 |
| 15-64 | 22,075 | 22,567 | 50.5 | 44642 |
| 65+ | 1,906 | 1,337 | 41 | 3243 |
| **Total Rural** | **49853** | **48087** | **%** | **97940** |
| 0-14 | 25,872 | 24,183 | 48 | 50055 |
| 15-64 | 22,075 | 22,567 | 50.5 | 44642 |
| 65+ | 1,906 | 1,337 | 41 | 3243 |
| Source: 1999 CSA population & Housing census report | | | | |

**3.3. Population density and Rural Settlement:**

Population density indicates population recourse relationship for social services, economic and land recourses. Regarding population land resource ratio/relation, the district had a crude density of district 113 people per km2 in the year 2011. The crude density of the district increased to 0.081 people per km2 in the year 2012. Regarding the settlement pattern of the district the rural parts of the district characterized by scattered type of settlement.

**3.4. School Age Population:**

School age population is one of the best indicators for planning and budget preparation of education facilities, health and other facilities. More over, to measure the education facility with the help of students to classroom ratio, students-teachers ratio, students’ text-book ratio, and others school age population is crucial. Accordingly, the number of school age population of the district was increasing from 22288 students to 25872 students between the years 2011 to 2012. From total population account 39.82% was school age group .This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that play a significance role in improving the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth center, etc.

**CHAPTER FOUR**

**4. Economic Condition**

**4.1. Crop Production**

Bimodal pattern of rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg*.* However, Meher is the largest season in terms of both of cultivated land and crop production. For instance, in the year 2011/2012 14,078hec cultivated and 200,000qtls of production obtained

The major annual crops grown in the district are cereals, Pulses and fruit and same vegetables. From cereal crops Teff and Maize are the most widely grown while from pulses beans, field peas, haricot beans are the most widely grown crops. In addition, the district is known in producing some cash crops like (tomato, onion, fruits, spices, root crops and different same vegetables and the like)

**Table: 4.1. Area cultivated and production obtained for private peasant holdings by season**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop Type** | **2011/2019Meher** | | | **2012/2020Meher** | | |
| **Area(Hect.)** | **Prod (Qunt.)** | **Productivity per hectare** | **Area(Hect.)** | **Prod (Qunt)** | **Productivity/ hectare** |
| **Cereals** | 3994 | 79148 | 46 | 3994 | 92406 | 56 |
| Wheat | 0 | 0 | 0 | 0 | 0 | 0 |
| Teff | 758 | 6064 | 8 | 758 | 6822 | 9 |
| Barley | 58 | 464 | 8 | 58 | 9522 | 9 |
| Maize | 0 | 0 | 0 | 0 | 0 | 0 |
| Oats | 21 | 147 | 7 | 21 | 294 | 14 |
| Sorghum | 3157 | 72473 | 23 | 3157 | 75768 | 24 |
| **Pulses** | **53** | **524** | **14** | **53** | **639** | **35** |
| Horse beans | 0 | 0 | 0 | 0 | 0 | 0 |
| Field peas | 38 | 190 | 5 | 38 | 456 | 12 |
| Lentils | 0 | 0 | 0 | 0 | 0 | 0 |
| Check pea | 6 | 18 | 3 | 6 | 48 | 8 |
| Haricot beans | 9 | 54 | 6 | 9 | 135 | 15 |
| **Oilseed** | **735** | **5848** | **12** | **753** | **6549** | 17 |
| Sesame | 8 | 32 | **4** | 8 | 6 | 8 |
| Ground nut | 727 | 5816 | **8** | 727 | 6543 | 9 |
| **Others** | 1156 | 107180 | 310 | 1161 | 118055 | 365 |
| Fruits | 65 | 2275 | **35** | 70 | 3500 | 50 |
| Vegetable | 101 | 8080 | **80** | 101 | 10605 | 105 |
| Beverage | 0 | 0 | **0** | 0 | 0 | 00 |
| Rootcrops | 555 | 55500 | **100** | 555 | 58275 | 105 |
| Spices | 0 | 0 | **00** | 0 | 0 | 0 |
| Others | **435** | **41325** | **95** | **435** | **45675** | **105** |
| **Grand Total** | **6373** | **234025** | **394** | **5961** | **217649** | **473** |
| **Cereals** | **0** | **0** | **0** | **0** | **0** | **0** |
| Sesame | 45 | 70 | **6** | 55 | 385 | **7** |
| Barley | 48 | 480 | **10** | 60 | 600 | **10** |
| Maize | 2998 | 4870 | **15** | 2956 | 7900 | **25** |
| Ground nut | 680 | 600 | **10** | 650 | 2500 | **10** |
| **Pulses** | **0** | **0** | **0** | **0** | **0** | **0** |
| Field peas | 0 | 0 | **0** | 0 | 0 | **0** |
| Coffee | 7122 | 91220 | **10** | 8122 | 19464 | **12** |
| Vetable | 255 | 325 | **15** | 350 | 1500 | **30** |
| **Oilseed** | **725** | **7250** | **10** | **705** | **7755** | **11** |
| **Grand Total** | 11873 | 104815 | 76 | 12898 | 40104 | 105 |

**Irrigation:** There are 5,540 hectares of potential irrigable lands in the district. Between the year 2011 and 2012, the land cultivated by traditional irrigation was increased from 5,000 hectares (99%) of land to 5004 hectares of land. Likewise, the production obtained was increased from 46587 to 600,000 quintals in the indicated years. However still now there is no modern and developed irrigation system in the district.

**4.2. Livestock, poultry and Beekeeping**

**Livestock:** the district is famous in livestock resources. Cattles, sheep, goats, mules and donkeys are the major livestock population found in the district. Between the 2011 and 2012 the livestock populations were, 414,634 and 420,040 respectively. From the total livestock population found in the district, cattle, goat, donkey, and sheep account for about 61.3%, 29.4%, 4.1% and 4.10% respectively, which is altogether for more than 98.74%of the total livestock population in the year 2012.

**The high prevalence of diseases,** traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table: 4.2. Distribution of Livestock and poultry in the year 2011 and 2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of livestock** | **Number of livestock during the year** | | | |
| **2011** | **%** | **2012** | **%** |
| **Livestock population** | **197066** | **100** | **202329** | **100** |
| Cattle | 64000 | 64.61727 | 80,000 | 80.61 |
| Sheep | 15000 | 3.391757 | 45000 | 3.39 |
| Goat | 35000 | 26.33737 | 20,000 | 26.33 |
| Donkey | 1280 | 4.737499 | 5000 | 4.73 |
| Horses | 190 | 0.36739 | 500 | 0.36 |
| Mules | 380 | 1.532482 | 1500 | 1.53 |
| Camel | 150 | 0.016238 | 300 | 0.017 |
| **Poultry** |  |  |  |  |

Source: Shenen kolu District Animal health and marketing agency

**Poultry production:-** is one of the important sources of family income and food in the district. Accordingly, between the year 2011 and 2012, the number of poultry populations was similarly 81525. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Bee Keeping and Fishery**

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family which is practiced by many farmers in the district. However, Using of herbicides and insecticides are the main problems in bee farming. The number of bee hives and the production obtained in the year 2011 and 2012 was as shown as table below.

**Table 4.3: Number of Behives and Honey production**

|  |  |  |
| --- | --- | --- |
| **Types of hives** | **2011** | **2012** |
| **Traditional beehives** | **8640** | **13320** |
| No hives | 960 | 1480 |
| Production(kg) | 7680 | 11840 |
| **Intermediate beehives** | **11040** | **7110** |
| No hives | 690 | 790 |
| Production(kg) | 10350 | 6320 |
| **Modern beehives** | **9880** | **7120** |
| No hives | 380 | 445 |
| Production(kg) | 9500 | 6675 |

**Fishery:** fishing activity is as simple as that of poultry production and other livestock rearing even in their garden by harvesting rain water. However, there is no fishing activity in the district since there is no large water body like lakes, pond and river and due to the farmer’s inability to practice fishing activities using water harvesting.

**4.3. Agriculture Input and Infrastructure**

**Agricultural Service Cooperatives**: there were 22 Peasant Associations (PAS) in the district with 7517 (2744 Female) and 4836 (2744 female)households in the year 2011 and 2012 respectively. During the year 2010, the number of Agricultural Service cooperative was 90 where as the number of member farmers was 7517 (2744 are female). Regarding their capital, they have 5,985,245.13 Ethiopian birr in the indicated year. The cooperatives are also engaged in delivering different services such as agricultural input for local peasants. We couldn’t say anything about the year 2012, since there is no collected data of the year.

**Table: 4.3. Number of Cooperatives on different type of Activities in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Cooperatives** | **Number of member farmers** | | | |
| **No** | **Male** | **Female** | **Total** |
| **2011** | | | | |
| Saving & Credit | 9 | 2239 | 1140 | 3379 |
| Consumers | 2 | 155 | 35 | 190 |
| Coffee | 1 | 120 | 19 | 139 |
| Multi-Purpose | 10 | 2430 | 1550 | 3980 |
| **Total** | **22** | **4836** | **2744** | **7517** |
| **2012** | | | | |
| Saving & Credit | 9 | 2239 | 1140 | 3379 |
| Consumers | 2 | 155 | 35 | 190 |
| Coffee | 1 | 120 | 19 | 139 |
| Multi-Purpose | 10 | 2430 | 1550 | 3980 |
| **Total** | **22** | **4836** | **2744** | **7517** |

*Source:-shenen kolu district cooperative office*

**Agricultural input Utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase in 2011/2012 production year the amount of chemical fertilizers (Urea, Dap and NPS) distributed to the farmers was increased from 8,893.5quintal to 9,683 quintals while the amount of improved seed distributed to the farmers was decreased from 227.42 quintal to 65.16quintals between the years 2011/2012 to 2011/2012. Likewise, the amount of pesticides distributed was also decreased from 1220 liters to 50 in 2011 to 2012.However, the number of herbicides distributed to the farmers was decreased from 0 liters to 80 liter in the year 2011 to 2012 liters.

**Table: 4.4. Amounts of agricultural inputs distribute to farmers by type**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2011/2019** | **2012/2020** |
| **Amount(qt.)** | **Amount(qt.)** |
| **Fertilizers** | **6510** | **5353** |
| DAP (qt.) | 0 | 0 |
| Urea (qt.) | 1950 | 910 |
| Other (NPS) | 4560 | 4443 |
| **Improved Seeds (qt)** | **189** |  |
| Teff | 5 | 0 |
| Wheat | 2 | 0 |
| Maize | 182 | 200 |
| **Herbicides** | **2000** | **2500** |
| Herbicides (lit.) | 2000 | 2500 |
| **Pesticides** | **124** | **524** |
| Liquid(lt) | 124 | 374 |
| Powder(kg) | 100 | 150 |
| Tablet(Doze) | 0 | 0 |

Source: shenen Kolu district Agricultural Development Office.

**Development Agents and Farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year 2009 and 2010 the number of farmer training centers (FTCs) and development agents were 33and 34 while the number of Developmental Agent was 93 and 90 respectively. However, the number of farmers benefited from these farmers training centers were 1609 and 996 in the year 2009 and 2010 respectively. So as to increase agricultural production and productivity, three development agents are assigned in each PA with profession of plant science, Animal science and Environmental protection so that they can help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection.

**Table 4.5: Number of Development Agents and FTC (2011- 2012).**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers | 10 | 10 |
| Number of Development Agents | 16 | 23 |
| Number of beneficiaries | 10474 | 13967 |

*Source:* shenen Kolu *District Agricultural Development Office*

**Livestock Health Infrastructure:** - Availability of Animal health infrastructure is very important to improve Animal productivity and control Animal diseases. Between the year 2011 and 2012 the number of health personnel and animal health infrastructure was increased from 8 to 10 health facilities (from two C-type and D-type to 1 c-type and 3-D-type)respectively. This gives the health personnel and health facilities to ratio of 1: 6620 and 1:11806 during the year 2009. This shows the number of health personnel and health facilities increasing at slow rate.

**Table: 4.6. Animal health personnel and Health facilities**

|  |  |  |
| --- | --- | --- |
| **Service for live stock** | **2011** | **2012** |
| **Veterinary Personnel** | **8** | **10** |
| Veterinary doctors | 2 | 1 |
| Animal health Assistants | 0 | 0 |
| **Animal Health infrastructure** | **4** | **4** |
| Number of clinics type C | 0 | 1 |
| Number of clinics type D | 0 | 1 |

Source: shenen kolu District Animal Health and Marketing Office

**Agricultural Calendar**: It is well known that the farmers of the district are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers very low engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of shenen kolu district is shown in table below .The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Maher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district.

**Table: 4.7. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Maher Season** | **Belg Season** |
| 1 | Land preparation | May –June | January –February |
| 2 | Planting (Sowing) | June-july | March |
| 3 | Weeding | August –September | April –May |
| 4 | Harvesting | October-December | July –August |

*Source: shenen kolu district Agricultural Development Office.*

**4.4. Methods of Soil Conservation and Maintaining Soil Fertility**

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, fallowing and using crop residue while the modern one is the using of chemical fertilizer and compost (organic fertilizers).

**Methods for Soil Conservation:** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation are modern way of soil conservation in the district ay of soil conservation now a days increasing in the district.

**4.5. Constraints of Agricultural and Livestock Production**

**Households Affected By Drought:** According to the data obtained from the district’s disaster prevention and preparedness office due to rainfall variability and dalliance and let coming in Belg and Summer rainfall and due to change of weather condition; 35058 and 38136 people are affected in the year 2011 and 2012 by drought respectively. The total **Amounts of relief distributed to drought affected Supoorted by money (Birr)is in the year 2011 and 2012 32,175,936** supported in the year.

**Table 4.8.Amounts of relief distributed to drought affected people**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Type of relief** | **Unit** | **Amounts of relief distributed in year.** | | **No. of people affected** | | **No. of people supported** | |
| **2011** | **2012** | **2011** | **2012** | **2011** | **2012** |
| 1 | Wheat | Quintal | 182,000 | 177,450 | 7280 | 7098 | 7280 | 7098 |
| 2 | Maiz | Quintal | 1095 | 1153.5 | 7280 | 7098 | 7280 | 7098 |
| 3 | Famix | Quintal | 678 | 918 | 7280 | 7098 | 7280 | 7098 |
|  | Total |  |  |  | 35058 | 38136 | 35058 | 3813 |

*Source:* district disaster prevention and preparedness office

**Crop Pests and disease:** The major crops pests in the district are Aphids, Rust, and Smut. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases:** is one of the constraints that affect the livestock production in the district. The major animal disease are Black leg, Hemorrhagic Septicemia, Anthrax, External and internal parasites, etc. So as to overcome the problem, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. Accordingly, between the year 2011 and 2012 the number of animal get vaccination was increased from 170,766 to 438,853. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table:4.9. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** | **170,766** | **438,853** |
| Blackleg | 35,650 | 292,283 |
| Hemorrhagic Septicemia | 35,500 | 46,950 |
| Anthrax | 0 | 0 |
| Others | 99,616 | 99,620 |
| **Treatment** | **83,795** | **300,267** |
| External Parasites | 50,962 | 186,047 |
| Internal Parasites | 32,627 | 114,008 |
| Operation | 206 | 212 |
| Others | 0 | 0 |

Source:Shenen kolu District Animal health and marketing agency

**4.6. Mineral Recourses and Industries;**

**Mining:** Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from Arsi Zone office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as lime stone and sand stone for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rock quarrying and pottery making mining activities by local communities in the district.

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in *Shenen kolu* district. Their number is very small and is dominated by medium-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are coffee mill and privately owned. There are also no small and large scale industrial establishments in the district. However, there were the same number 2 and 2coffee mill industries with 1,722,962 and 2,421,624 birr capital during the year 2011 and 2012. These medium scale industries create job opportunity for more than 28 peoples of which 7 permanent and 20 temporary.

**Table 4.10. Number of Medium-scale industries of the district by type**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of industry** | **2011** | | | **2012** | | |
| **Number** | **Employee** | **Capital (Birr** | **Number** | **Employee** | **Capital (Birr)** |
| Coffee Mill | 2 | 28 | 1,722,962 | 2 | 28 | 2,421,624 |
| **Total** | **2** | **28** | 1,722,962 | **2** | **28** | 2,421,624 |

Source:- Shenen kolu trade district

**4.7. Trade**

**Trade:** Since the district is known by tradable cash crops like coffee, root crops, etc. trading is one of the major activities that the livelihoods of most urban households relay on. In case of this the number of trader in the district was increase from time to time. For instance, there are 549 licensed traders are registered in different trade items in 2012 like whole seller, tailor, services and industries.

Regarding tradable items and cash crops production activities, the district is known in the production of coffee, chat, different types of spices, sugar cane, fruit and vegetables, etc are produced in the districts. In addition, the district is known by exportable items like hide and skin. These indicates that the district is known by trading of inspected skin and hides, inspected coffee, chat, fruit and vegetables to the central market.

**Tourism and its Amenities**

Due to lack of standardized infrastructure like standard Hotels, Roads and other social infrastructures, Tourism is not yet developed in the Arsi Zone in general and Shenen kolu district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by district culture and tourism office. These are Arba-Gugu Forest (Natural and manmade), Shenenkolu mountain, walbatostone, Natural bridge of ‘holqa baro’ and etc, are the main tourist attraction sites of the district. All of them are under developed.The Tourism and cultural development district now on a weak activities ,it needs support and initiation from Federal and zonal buruea

**Table: 4.11. Tourist attraction sites in the district**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Name of attraction site** | **Type** | **Location (kebele)** | **Distance in km from** | | |
| **Wereda capital city(tumuga)km** | **Zonal capital(Asella)** | **Federal capital(Finfinne)** |
| 1 | Walbato stone | Natural | Badeyi | 8 | 323 | 353 |
| 2 | Holka hula sadeti | ‘’ | Badeyi | 9 | 324 | 354 |
| 3 | Iftoha water | ‘’ | Badeyi | 9 | 324 | 354 |
| 4 | Goda Baro cave(dandano) | ‘’ | Badeyi | 10 | 325 | 355 |
| 5 | Shanankolu Mountains | ‘’ | B/hacuma | 11 | 326 | 356 |
| 6 | Burkitu water spring | ‘’ | Badeyi | 20 | 335 | 365 |
| 7 | Gafite mauntain | ‘’ | Badeyi | 10 | 325 | 355 |
| 8 | Burkitu walda | ‘’ | Bedeyi | 11 | 326 | 356 |
| 9 | Ujuba hada Arse | Cultural | Dh/bal'a | 8 | 323 | 353 |
| 10 | Abelkasim | Cultural | Dh/bal'a | 8km | 323 | 353 |
| 11 | Sida dande | Natural | B/kune | 11 | 326 | 356 |
| 12 | Dhaba kolu | Natural | B/harcuma | 10 | 325 | 355 |
| 13 | Holqa carisa | Natural | F/bala | 38 | 353 | 383 |
| 14 | Holka ija faye | Natural | F/bala | 36 | 351 | 381 |
| 15 | Holka jinfugeta | Natural | F/bela | 37 | 352 | 382 |
| 16 | Awala boora jersa jigdu | Cultural | F/bela | 39 | 354 | 384 |
| 17 | Bosona Derba | Natural | F/bela | 20 | 335 | 365 |
| 18 | Gafite mountains | Natural | G/derba | 30 | 345 | 375 |
| 19 | Tulu tilo | Natural | Dh/wachota | 3 | 318 | 348 |
| 20 | Arda jila | Cultural | C/qame | 30 | 345 | 445 |

Source: *shenen kolu culture and tourism office*.

**4.8. Finance and Financial Institutions**

**Financial Institution:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the transformation the economy of the district. On both years no any financial institution in the shenen kolu district.

**Annual Budget allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount, which accounts for more than 85% of the total annual budget allocated for the districts. This indicates how far the current in land revenue share of the annual budget allocated for the districts is low.Between the year 2011 and 2012, the total budget allocated for the district was increased from 78,535,706 to 81,933,212 Ethiopian birr showing an increment by 13% which indicates an increasing trend in the budget allocated for the district.

**Table 4.11: Annual budget allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 78,535,706 | 10.4 |
| 2012 | 81,933,212 | 2.5 |

*Source: Shenen kolu district finance and economic Development office.*

**Revenue;** The total revenue collected in the district was increased from 10,90,580.00 to 872,464.00 birr between the year 2011 and 2012. The main sources of revenue in the district are Direct tax and non-tax revenue.

**Table: 3.13. Total revenue collected in the district by type of revenue source**

|  |  |
| --- | --- |
| **Year** | **Total** |
| 2011 | 1090580 |
| 2012 | 872464 |

*Source: Shenen Kolu district Revenue Authority office*

**CHAPTER FIVE**

**5. Social Service and Basic Infrastructure Condition**

**5.1. Education**

**Kindergarten:** According to the data obtained from Statistical Abstract of the district, there were one non-Government kindergarten schools in the year 2012 while the number of children enrolled to this school was 121 the same in the year 2011 and 2012. This school provides education with 3 teachers (male 2,Female 1) during the year 2009. One of the main problems related with kindergarten school is lack of clear management system.

**Primary Schools:** between the years 2011 and 2012 the number of government primary school were increased from 28 to 29 while the number of students enrolled to school was decreased from 25072,(11279

Female) to 24707,(11220 female). Likewise, the number of teacher was decreased from 436 to 268

in the indicated years.

**Senior Secondary education (9-12)** - In the district there is 2 Senior Secondary (9-12) school located in tumuga and Lafto-Rifeso Kebele. The number of students enrolled to these schools was decreased from 1039 (323 females) to 928 (343females) between the year 2011 and 2012. Likewise, during the same year, the number of classroom was also increased from 23 to 32 while the number of teachers was increased from 52 to 53. On average the Student to teacher and student to classroom ratio 45: 1 and 40: 1 in the year 2011 was decreased to 35:1 and 45:1 respectively in the 2012.

**Table: 5.1. Number of School and Student Participation in the district**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Years** | **Government** | | | | **Non-Government** | | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
| **Kinder garden** | | | | | | | | |
| 2011 | 1 | 43 | 40 | 83 | 0 | 0 | 0 | **0** |
| 2012 | 1 | 53 | 48 | 101 | 0 | 0 | 0 | **0** |
| **Primary School(1\_8)** | | | | | | | | |
| 2011 | 28 | 14021 | 10782 | 24803 | 0 | 0 | 0 | 0 |
| 2012 | 29 | 13397 | 10925 | 24322 | 0 | 0 | 0 | 0 |
| **Secondary School(9-12)** | | | | | | | | |
| 2011 | 1 | 797 | 345 | 1142 | 0 | 0 | 0 | 0 |
| 2012 | 2 | 716 | 323 | 1039 | 0 | 0 | 0 | 0 |

*Source: shenen kolu District Education Office*

**Education Quality**: The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio and student-text book ratio. Accordingly, from total primary school teachers who teach at this level, the number of teacher who holds degree was increased from 66 to 70 between the year 2011 and 2012. This indicates there was increment in the degree teachers. So as we see from the given information, Education office of the district would be expected to do more to improve the

quality of education. To this end, only depending on the above parameters are not enough to measure educational quality of a district. Hence we have to look into other factors mainly continuous professional development program, teachers’ commitment to teach and students’ commitment to receive what teachers say , Likewise, the number of diploma teachers was also decrease from 463 to 340 teachers in primary schools (1-8) during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education.

**5.2. Health**

**Health Institution;-** Between the year 2011 and 2012, the number of Government health facilities were increased from 43 to 45 while the number of private health facilities were also decreased from 14 to13. On the other hand, the ratio of population to health center was increased from 1:4799 in the year 2011 to 1:4811 in the year 2008. The below data indicates that even though there is improvement in the potential primary health coverage still it is far below the WHO standard.

**Health Personnel:** Between the 2011 and 2012 the number of health personnel working in the government health institution was increased from 158 to 167. From the total health personnel, nurse accounts 70, health officer 5 and health extension workers accounts for 75 in the year 2008. The Ratio of population to health personnel is 1:34478 for health officer, 1:34.4 for nurses, and 1:51.56 for extension workers during the year 2012. This ratio indicates that there is a need for additional health professionals like doctor, health officer and technicians so as to improve health service delivery. For more information see the table below.

**Table: 5.3. Number of health Institution and Personnel by Types of Ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non gov** | **G0v** | **Non gov** |
| **Health Institution** | **16** | **5** | **16** | **5** |
| Health Center | 2 | 0 | 2 | 0 |
| Clinic | 1 | 5 | 1 | 5 |
| Health Post | 13 | 0 | 13 | 0 |
| Rural Drug Vender | 0 | 0 | 0 | 0 |
| **Health Profession** | **67** | **5** | **67** | **5** |
| Health Officer | 12 | 0 | 10 | 0 |
| Nurse | 16 | 5 | 13 | 5 |
| Health Assistance | 0 | 0 | 1 | 0 |
| Laboratory Technician | 1 | 0 | 4 | 0 |
| Pharmacy Technician | 6 | 0 | 5 | 0 |
| Sanitarian | 2 | 0 | 2 | 0 |
| Health Extension Workers | 30 | 0 | 32 | 0 |

*Source:* Shenen kolu *District Health Office*

**Ten top diseases:** According to the 2011 and 2012 data obtained from Shenen kolu district health Office, the highest prevalent disease in the district is Dyspepsia (1681) followed by Pneumonia(1613) and Acute Upper Respiratory Infection (1296) in the year 2012. See table below.

**Table: 4.4. Ten top diseases existed in the district in the year 2011 and 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **2011** | | | **2012** | | |
| |  |  |  | | --- | --- | --- | | **Type of Diseases** | **No.of population** | **%** | | **No. population** | **%** | **Type of disease** | **No. population** | **%** |
| 1 | NOA Body | 1225 | 89 | Dyspepsia | 1228 | 90.5 |
| 2 | Respiratory Infection | 1227 | 99 | Pneumonia | 1232 | 89 |
| 3 | Pnuemonia | 664 | 92 | Acute Upper Resparatory Infection | 672 | 93 |
| 4 | Dyspopsu | 2198 | 125 | Diarrhea /Non bloody/ | 2281 | 99 |
| 5 | Thyphoid fever | 1224 | 88 | Acute Febrile Illness/AFI/ | 1229 | 92 |
| 6 | Helmentiasis | 888 | 86 | Trauma | 912 | 90 |
| 7 | U/Track Infection | 1320 | 104 | Urinarty Tract Infection | 1350 | 101 |
| 8 | APFI | 1120 | 97 | Thyphoid Fever | 1210 | 95 |
| 9 | Skin infection | 1224 | 89 | Helminthiasis | 1355 | 91 |
| 10 | Moscular tissue | 1225 | 92 | Infections of Skin and b Subcuneous Tissue | 1275 | 88 |

*Source:* Shenen kolu *District Health Office*

**Harmful Traditional Practices:** Like the Zone as a whole, there are many harmful traditional procedures that are being widely practiced in shanan kolu district. Among these, raping, Buta,Dhala, female circumcision, Gebera, etc can be mentioned as an example. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district.

**5.3. Women and Children Socio-economic Issue**

**4.3.1. Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 13,588 and 7,922 in 2008. On the other hand, the number of women gets delivery services in the health institution by health professional was 6,780 in the year 2012.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers gets PWTT2 and NWTT2 vaccination increased from 3,035 and 0 to 8,253 and 4,300 in the year 2011 and 2012 respectively.

To overcome rapidly growth of population, the country design family planning policy and strategy so as to decrease through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods.

**Table: 5.5 Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| **1** | **Access to save delivery service** |  |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 1760 | 1861 |
|  | Women's used PNC /Postnatal care/services | Number | 766 | 800 |
|  | Deliveries with in health institution (attended by skilled birth attendant) | Number | 736 | 800 |
| **2** | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 553 | 669 |
|  | NPW TT2 | Number | 475 | 520 |
| **3** | **Family planning condition** |  |  |  |
|  | Modern methods | Number | 1235 | 2210 |

Source: Shenen kolu Health Office.

On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc

**4.3.2. Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from 33,899 in the year 2007 to 45,393 in the year 2008. Though the below figure indicates the number of children get different vaccination. The number of children who get full vaccination was 6,698 in the year 2010.

**Table: 5.6. Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 2883 | 3176 |
| Measles | 2965 | 3872 |
| DPT | 2376 | 2452 |
| Polio | 2985 | 29139 |
| Total | **22400** | **38639** |

*Source: Shenen kolu district health office*

**5.3.3. Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities. However, of the total school in the district, only 5.79% of school was access to potable water supply facilities.

**Table: 5.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Health Center** | | **Health post** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of health institutions in the district | 12HP&2HC | 12HP&2HC | 12 | 12 |
| 2 | Number of health institution access to improved sanitation facilities (full sanitation) | 1 | 2 |  |  |
| 3 | Number of health institution access to water supply | 2 | 2 |  |  |
| 4 | Number of health institution access to toilet facilities | 2 | 2 | 11 | 11 |
| 5 | Number of Health institution access to dry waste disposal facilities | 2 | 2 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 1 | 1 | 0 | 0 |

Source: - District Health Office

**Table: 5.9. School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Primary school** | | **Secondary School** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 28 | 29 | 1 | 2 |
| 2 | Number of school access to water supply | 10 | 10 | 1 | 1 |
| 3 | Number of school having toilet | 28 | 29 | 1 | 2 |

Source: - District Education Office

**5.4. Sport:**

**Sport:** The district has different types of sport activities like Foot-ball, Volley ball, By the year 2009 and 2010, in our distirict we haven’t any sport club.

**5.5. Basic Infrastructure Condition**

**Roads:** shenen kolu district is found 315 km away from zonal capital town, Asella and 345 km from Regional Capital city Addis Ababa. It has 1.2 km asphalt road, 1.2 km length of gravel road (61 all weather), 62.2 km of dry weather road by the year 2008. This road constructed by government budget (60%) and local community participation (by labor force and money cotta) (40%).

**Water supply:** The potable water coverage of the district is at its low stage as compared with other part of the zone. Based on the data obtained from the district’s water, Mineral and Energy Resources development Office, of the total rural population of the district, the number of population supplied with potable water supply was increased from 54273 (40.1%) to 60,000 (40.56%) between the year 2009 and 2010. As far as the number of water supply scheme is concerned, their number was increased from 982 to 116 between the year 2009 and 2010. By types of scheme, the number of hand dug well, spring development scheme was increased from 9 to 16 and 82 to 95 between the year 2009 and 2010 respectively.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung; farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. tumuga of the district have supplied with electric power and total population who supplied are 820 in 2009 and 4560 in 2010. However, all parts of the rural areas have no electric services. However, in rural and urban centers, traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dung’s. On the other hand, firewood is the major energy source in rural area followed by crop residue, animal dung and kerosene.

**Table: 5.10.Sources of domestic energy supply.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal |  |  |
| 2 | Fire wood |  |  |
| 3 | Animal Dung |  |  |
| 4 | Crop Residue |  |  |
| 5 | Kerosene |  |  |
| 6 | Electricity |  |  |

Source-: shenen kolu water,mineral and energy district

**4.6. Unemployment Condition of the district**

One of the indicators of development of the country in general and the district in particular is the level of unemployment condition and the chance of job created. Accordingly, the workers and social affairs Agency was registered 3,041 unemployed personnel during the year 2008 out of which only 1,049(34.4%) peoples get job.

**Table: 4.12.Number of Unemployed Registered, and Employed by level of education**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Types of Activities** | **2011** | | | | | | | | **2012** | | | | | | |
| **Male** | | | **Female** | | **Total** | | | **Male** | | | **Female** | | | **T0tal** |
| **UNEMPLOYED PERSONS** | | | | | | | | | | | | | | | |
| Illiterates |  | |  | |  | |  | | | |  | |  | | |
| 1-8 |  | |  | |  | |  | | | |  | |  | | |
| Certificate & 9-12 | 76 | | 17 | | 93 | | 124 | | | | 574 | | 181 | | |
| Diploma |  | |  | |  | | 420 | | | | 221 | | 641 | | |
| Degree | 211 | | 26 | | 237 | | 220 | | | | 37 | | 257 | | |
| **EMPLOYED PERSONS** | | | | | | | | | | | | | | | |
| Illiterate | 0 | 0 | | | 0 | | | 127 | | 107 | | | | 234 | |
| 1-8 | 18 | 9 | | | 27 | | | 17 | | 10 | | | | 27 | |
| 9-12 | 98 | 38 | | | 136 | | | 112 | | 162 | | | | 274 | |
| Certificate & 9-12 | 76 | 17 | | | 93 | | | 124 | | | 574 | | 181 | | |
| Diploma |  |  | | |  | | | 420 | | | 221 | | 641 | | |
| Degree | 211 | 26 | | | 237 | | | 220 | | | 37 | | 257 | | |

*Source:-Shenen kolu* *public service office.*

**CHAPTER SIX**

**6. DEVELOPMENT ACTIVITIES**

**6.1. Ongoing Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The Annual budget of the district is divided into recurrent and capital budgets. The Capital budget is directly used for the construction of different types of development projects. It is expected that total budget used for the development project are increasing from time to time so as to fulfill the development gaps in district. Accordingly, the ongoing development projects during the year under consideration are:

**Social sector Development projects:** during the year 2009 in the district there is 2 Helth center, 1 Animal health clinic,9 and dug, 23 spring development and more others of projects are constructing by government budget, safety net fund and community participation.

**Major Problems of ongoing Development Projects**: Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents & mobilization of Construction is the major problem during the construction

**CHAPTER SEVEN**

**6. PROBLEMS AND POTENTIALITIES**

**6.1. Major Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure, uncontrolled hunting are the major environmental problems of the district.

**Economic Problem:** Shortage of farm land High prevalence of crop diseases & pests, Shortage of Agricultural inputs & lack of capacity to buy, lack of Financial Institutions (Bank Saving and Credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.

**Social service problem:** rapid population growth and large family size which land fragmentation, unemployment, low productivity, underutilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low Potable Water coverage, low electric power supply

**6.2. Potentialities**

**Land resource:-**The district has a large size of land resources that can be used for different types of commercial crops production and livestock rearing. Since the district is less densely population there is a large size of free land resources.

**Tourist attraction site:-**The topography of the district is very attractive naturally. Moreover there are many tourist attraction sites in the district from this natural bridge, different types wild Animal, mountains, caves, etc. are mentioned as an example.

**Forest resources:-**The district has a large size of government protected forest and community forests. Since the district is known in coffee production most parts of the district is covered by both natural and manmade forests. These natural forests resources can be used for saw mile activities.

**Minerals and energy resources:-**Even though visible study was not conducted in the district it has expected that the district has many types of minerals and energy resources. From this gemstone, sandstones, solar energy and others are mentioned as an example.

**CHAPTER EIGHT**

**8. Conclusion and Recommendations**

**8.1. Conclusion**

**Shenen kolu**  district is one of the districts’ found in Arsi Zone which has 12 peasant associations and one urban administrative units having total areas of 1730.1 km2.It has a total population of 118393 by estimation in the year 2012 of which more than 95% are living in rural Areas engaged on agricultural activities.

The district experiences two climate types. The dominant climatic type is moderately warm. The mean annual rain fall of the district ranges between 200- 1400mm. It has high potential for irrigation since many rivers are flowing in the district. Bi-modal types of rain fall condition causes the district to produce twice a year.

The district is known by the production of different types of crops. The average production per hectare was improved even though the area cultivated was decreased. The district is known by the production of cereals, pulses, oilseeds and different cash crops like coffee, chat, spices etc. Maher season is the major production season in the district both in terms of both area cultivation and production obtained.

Regarding production and productivity the districts Agriculture office motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizers and herbicides and pesticides to produce intensively using extension package on small land as well as how to protect the environment.

Agricultural inputs are distributed by agricultural service cooperatives under cooperative promotion office. However, the amount of chemical fertilizers, pesticides and other agricultural technologies used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

Despite of the fact that animal rearing is one of the backbones of the livelihood of the farmers in the district, livestock rearing and production is known to be traditional one that causes the farmers benefit less than expected amount. Moreover, shortage of forage for food, drought and shortage of medicine for treatment causes the animals to be affected by disease. The district animal health department has been providing different type of animal health service and treatments to improve the productivity and quality of livestock found in the district.

In the district a lot has been done to achieve access to primary school coverage by constructing primary and secondary schools and promoting satellite schools in areas where there is no school. Moreover, to improve the quality of education the district also construct additional classroom and recruit professional teachers so as to improve the student to teacher ratio and student to classroom ratio. However, deterioration in quality of education and drop out is a series problem in the district.

So as to improve primary health coverage in the district, the number of health facilities was increasing in the district. This leads to improvement in population to health facilities in the district however still below the recommended standard set by WHO standard. On the other hand, the number of health personnel with different profession was increased between the years under consideration which in turn improve the population to health professions for different profession even though it reaches on sufficient number.

Regarding infrastructure development, the district’s potable water coverage is good. Moreover, there is a great disparity between the rural areas and urban areas of the district. Regarding the water supply schemes there were increment in spring development and distribution schemes.

On the other hand, the district have ample of land suitable for production of different types of crops like fruits, coffee, spices, green paper, sugarcane, etc both using rain fed agriculture and using irrigation(both modern and traditional) since the district is endowed with potentially rivers and streams suitable for irrigation.

**8.2. Recommendations**

To overcome the problems and make sustain the development the concerned government bodies’, non-government, communities and others should perform the following activities,

Infrastructure development like road, energy supply and transportation, network facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.

To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems.

The district has potentially irrigable land and water bodies suitable for irrigation that is used for the production of different cash crops. So, the regional government or the local government has to build modern irrigation in the district so as to benefit the country in general and the surrounding community in particular.

Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements are important.

In the district there are high potential of livestock population but the farmers use traditional way of rearing and benefit less than the expected output from this sector. Moreover, the animals’ health facilities are very small in number. So farmers should be expected to motivate to adopt modern way of animal rearing and construction of additional animals’ health clinics and employing additional animals’ health professions to improve the quality as well as the quantity of the livestock population. Moreover, high quality breed has to be distributed to the farmers,

To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is greater than the standard. Hence, additional teacher has to be employed and additional classroom has to be constructed. Moreover, the educational level of the teachers has to be improved,

The health coverage of the district is showing improvement but below WHO standard. Hence, So as to improve the quality of health services delivery and to increase the health coverage additional health facilities should have to be constructed by the concerned bodies,

In the district, especially for primary schools, student to teacher ratio, student to classroom ratio, the educational level of teachers, etc. below the recommended level. Hence, the district education office and other concerned bodies have to construct additional classroom, recruit qualified teachers and improve the education level of the teachers,

The potential potable water coverage of the district was very low. Hence, additional water supply schemes should have to be constructed On the other hand, the best way of decreasing unemployment rate and acquiring skilled 9man power is through technical and vocational school training for student. To do so the concerned government bodies or other stakeholders would have to strengthen the capacity of the TVET School in the locality,

Since the district has cultivable land and potential for cash crop production, the local and regional government has to invite investor to invest in the district.

To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE SHIRKA DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER ONE**

**1. INTRODUCTION**

**1.1 Back Ground**

Shirka is one of the 27 districts of Arsi zone. The historical name of the district is derived from Serko clan of Arsi Oromo that occupied during the Oromo mobilization. Gobessa town is the capital city of the district. Legendary, the historical name of the town is derived from the name of the man Gobessa.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Shirka district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

This document is compiled from the data collected from the district sectoral departments, 1999 population and Housing Census report for Oromia region and other related documents available in our office. Lack of accuracy and required data, lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document. Moreover, lack of accurate data, lack of professional personnel, well organized and consistence data in different sectors and the like were the main limitation. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district.

This paper has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

**1.2 Map of the shirka district**

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**CHAPTER TWO**

**2. Physical Setting Location And Area**

**Location** Shirka is one of the administrative units of Arsi Zone. Astronomically, it is located between 7008’18’’N-7028’08’’N Latitude and 39016’36’’E-39053’18’’E Longitude. Relatively the district share a boundary line with Honkolo Wabe District in the south, Lemu & Bilbilo in the west, Digelu & Tijo District in the north west, Tena district in the North, Robe district in the east and Bale Zone in the south east direction. The district have a total area of 1155.6Km2, it shares 5.5% of the total area of the Arsi Zone.

**2.1 Geology, Relief, Drainage, and Climate**

**Geology: -** Continuous faulting, Folding and fracturing of land cause the district to have the present physiographic features. The Upper Chilalo formation formed during Quaternary period Covers few areas extending from north to north -western parts of the district while Lower Chilalo formation and Nazeret Series covers the most of the central part extending from south west and south to north and north east respectively. On the other hand, Arsi and Bale basalts cover most of eastern and south eastern part of the district.

**Relief and Drainage: -** The altitude of the district is 1253 meters above the sea level. The lowest place is found in Kola area while the highest place is located in Dega (3135m).There are ten mountains and one hill, that called Kore with 700m and Seden Aba Bilo , Akililu, Haji Shale,jiru,Bultum,Arbadoyo,Gogota,Kebelle,Sire and Warguba mountains. Due to its location, the district has high net work of river systems. The major permanent rivers of the district are Chale, Farakasa, Anfote, Amato, Sirba, Gumalo, Rapesa, Hulul, Wabe, Dima and Gumagn. On the other hand, the major seasonal streams are Tuja, Chancho, Kulumsaa, Guna, Shafi, Dorgata, Kersa & Bedessa. Those rivers are used for modern & traditional irrigation and in some place used for drinking for human and animals. Generally, the district has high potential for both traditional and modern irrigation system which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate: -** Due to its altitudinal location, the climatic condition of the district is dominantly Moderately Warm (500m-1500m), the Eastern & South Eastern part of the district consists of verymoderately Warm covers 45.17 % of the total area of the district. The remaining are moderately cool (1500m-2500m)and cool (2500m-3500m) above sea. Hence, the dominant type of climatic condition of the district is moderately warm, the mean annual rainfall is 700mm -1450mm and the average rainy days are about 158. The rainfall pattern is bi-modal, which are short rainy season (Belg from March to May) and summer or long rainy season (Meher from Jun to August).

**2.2 Land Use, Soil, Vegetation and Wild life**

**Land use and Land cover:** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, man-made forest and residential lands are increasing.

Accordingly, from the total area of the district the cultivated lands (the lands covered by annual and perennial crops) represented about **21566** hectares (**19.38%).**The vegetation covered land (forest & woodland) accounted for about **83545.764** **hectares (75%).** Grazing land account and about **1472.286** hectares (**1.33)** while the remaining **4364.4 (3.93%)** hectares of land were used for settlement and other during the year 2012.

**Table: 1.1. Land resources by use (in hec.) in the year 2011 & 2012**

|  |  |  |
| --- | --- | --- |
| **Land resources by use** | **2012** | |
| **Area in hectare** | **% Share** |
| Land under crop ( annual & Perennial) | 21566 | 19.38 |
| Pasture land / grazing land | 1472.286 | 1.33 |
| Forest Natural forest , wood land ,shrub land ,Man made forest | 83545.764 | 75 |
| Settlement and other | 4364.4 | 3.93 |
| **Total** | **110948.5** | **100** |

Source:Shirka District Agricultural & Rural Development Office

**Soil: -** The major types of soil in the district are orthic Luvisols, Eutric cambisols, and pellic vertisols. In addition, Eutric Nitosols and Lithosols are found in pocket areas of the districts. The fertility status of the soil is medium to good used for the production of Varity of crops.

**Table: 1.2. Major soil types and suitability for agriculture**

|  |  |  |
| --- | --- | --- |
| No | Major soil types | Suitability for agriculture |
| 1 | Loam ( **60**  %) | Suitable for cereal ,pulse & vegetable |
| 2 | Clay ( **30**  %) | For cereal |
| 3 | Sandy ( **5** %) | For citrus ( fruits) |
| 4 | Silt ( **5**  %) | Suitability for all types of agriculture |

Source: District Agricultural & Rural Development Office

**Vegetation: -** Regarding vegetation cover the district devoid of different species of vegetation like Afro Alpine, Sub- Afro Alpine, Coniferous forest and wood land on Chilalo Galema mountain range. In addition, Gallery forests, bush and shrubs are found in the low land & high land areas of the district and lower course of major rivers of the district. Accordingly, the government protected forest was increased to **10731..9** hectare in the year 2012. Likewise, bush and shrub vegetation cover was increased to **1663.688** hectares during the year under consideration. For the farther information see the table below.

**Table:-1.3.The vegetation cover of the district by type of Ownership**

|  |  |  |
| --- | --- | --- |
| **No** | **Type of forest** | **2012** |
| **Area/Hectare** |
| 1 | Governmental Protected forest | 10731.9 |
| 2 | Community Forest | 2016 |
| 3 | Bush and Shrub | 1663.688 |
| 4 | **Grass Land /Grazing Land** | 1692.1 |
| 5 | **Afro -alpine** | - |
|  | **Total** | 16103.688 |

Source: Agricultural & Rural Development Office

**Wild Life: -** The major wild animals found in the district are Apes, Monkey, Mountain Nyala, Red fox, Tortoise**,** Crocodile, Different species of Birds, Hyena, Tiger etc

**CHAPTER THREE**

**3. SOCIO ECONOMIC CONDITION**

**3.1 POPULATION SIZE**

According to the estimation made from **1999** census, the population of the district were increased from 227736 to 234053 showing an increment 6317 **(2.69%)** between the year **2011** and **2012**. From the total population of the district, only **9.12%** are living in urban areas and the remaining more than **90.87 %** of the population of the district is living in rural area depending on agriculture in the year **2012** Of the total population, female population accounts for **50.03%** (which is **4.43%** for urban and **45.6%** for Rural) in same year.

The overall sex ratio of the district was **49.97**male per 50.03 female (4.69 male per **4.43** female in urban and **45** male per **45.6** female in rural). An average family size of urban and rural was **3** and **5** for the district respectively in the year **2012.**

**Table: 2.1. Population distribution by urban, rural and sex for the district**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area** | **Rural** | | | **Urban** | | | Total | | |
| **M** | **F** | **Both** | **M** | **F** | **Both** | **M** | **F** | **Both** |
| 2011 | 103229 | 103997 | **207225** | 10553 | 9958 | **20511** | **113781** | **113955** | **227736** |
| 2012 | 105948 | 106736 | **212684** | 10994 | 10375 | **21369** | **116942** | **117111** | **234,053** |

**Age and Sex Structure Population;-** According to **1999 CSA** population and housing census report indicates, the young age population (**0-14),** productive age population **(15-64)** and old age population **(65+)** accounts for 54.5%,45.4% and \_\_\_% of the total population respectively in the year **2012**. Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (**65+)** account for 55.2%, 44.8 % and \_\_\_% for rural areas and 48.7%, 51.2% and \_\_\_% for urban area respectively.

**Table: 2.2. Population size by wider age group Classification of the year 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year/Sex** | **Male** | | **Female** | | **Total** | |
| **No** | **%** | **No** | **%** | **No** | **%** |
| Rural |  |  |  |  |  |  |
| 0-14 | 58226 | 50.3 | 57507 | 49.7 | 115733 | 55.2 |
| 15-64 | 45672 | 48.6 | 48391 | 51.4 | 94063 | 44.8 |
| 65+ |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |
| 0-14 | 5499 | 51.6 | 5168 | 48.4 | 10667 | 48.7 |
| 15-64 | 5902 | 52.6 | 5311 | 47.4 | 11213 | 51.2 |
| 65+ |  |  |  |  |  |  |
| Total Rural + Urban |  |  |  |  |  |  |
| 0-14 | 63725 | 50.4 | 62675 | 49.6 | 126400 | 54.5 |
| 15-64 | 51574 | 49 | 53702 | 51 | 105276 | 45.4 |
| 65+ |  |  |  |  |  |  |

**Source:** Shirka District Education Office

**Population density** indicates population resource relationship for social service, economic and land resources. Regarding population and land resource Ratio/relation, the district have a crude density of district **197** p/km2 in **2011**and **202** p/km2 in **2012**. Concerning the settlement pattern of the district, the rural parts are characterized by scattered type of settlement on the low land and densely populated on the high land areas of the district.

**School age population** is one of the best indicators for planning and budget preparation for education facilities, health and other facilities. Moreover, to measure the education facility with the help of students to classroom ratio, students’ teachers’ ratio, students’ text-book ratio, and others school age population is crucial. Accordingly, the number of school age population of the district was increasing from **95427(46.5 %famale) students** to 98064 **(49.6%** female) student between the years **2011**  to **2012.** These groups of population account for **41.89%** of the total population of the districts which is almost near to half of the total population of the district.

As far as different school age population was concerned the number of kindergarten, primary and secondary school population was increased from **23020, 51688** and **20719** in the year **2011**  to **23648** (**49.4%**female**), 53117 (49.6%** female) and **21299(50%** female) respectively in the year **2012**.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment that improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, road, Electric power, Potable water, youth centre, etc.

**Table 2.3. Project School Age Population Of Shirka Distric**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | | **2011** | | | | **2012** | | | |
| **Male** | **Female** | **Total** | | **Male** | **Female** | | **Total** |
| Rural | | | | | | | | | |
| 4\_6 | 10914 | | 10627 | 21541 | | 11201 | 10907 | 22108 | |
| 7\_14 | 23656 | | 23438 | 47094 | | 24278 | 24055 | 48333 | |
| 15-18 | 9169 | | 9314 | 18483 | | 9410 | 9559 | 18969 | |
| Total | 43739 | | 43379 | 87118 | | 44889 | 44521 | 89410 | |
|  | Urban | | | | | | | | |
| 4\_6 | 729 | | 750 | 1479 | | 759 | 781 | 1540 | |
| 7\_14 | 2385 | | 2209 | 4594 | | 2484 | 2300 | 4784 | |
| 15\_18 | 1185 | | 1051 | 2236 | | 1235 | 1095 | 2330 | |
| Total | 4299 | | 1051 | 8309 | | 4478 | 4176 | 8654 | |
| Rural + Urban | | | | | | | | | |
| 4\_6 | 11643 | | 11377 | | 23020 | 11960 | 11688 | 23648 | |
| 7\_14 | 26041 | | 25647 | | 51688 | 26762 | 26355 | 53117 | |
| 15\_18 | 10354 | | 10365 | | 20719 | 10645 | 10654 | 21299 | |
| Total | 48038 | | 44430 | | 95427 | 49367 | 48697 | 98064 | |

**Source:** Shirka District Education Office

**3.2 Crop Production**

Bimodal pattern of the rain rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg. However, Meher is the largest season in terms of both of cultivated land and crop production.

The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown, from Pulse, horse beans, field peas, haricot beans the major and from oil seeds, linseed, Niger seed are the majors. In addition, the district is known in producing some cash crops like (tomato, onion, fruits, spices, root crops and different types of vegetables and the like)

In the Meher season, the amount of land cultivated by different types of crops was the **21556** hectares in the year **2010/2012** and **23890** in the year **2011/2012.** However, the production obtained was increased from **590354 quintals** to **916877** quintals. These give in an average productivity of **165.9**quintal per hectare during the year **2012**

By crop type, from cereal crops, barley with **33.3**quintal per hectare and followed by wheat with **31.9**quintals per hectare ,are the most productive while maize with **26.1**quintals per hectare were the least productive during the production year of **2011/2012**. In size of area cultivation and production Barley, Wheat, Maize, Sorghum, and Teff are the most important crops produced in the district.

Likewise, during Belg season crops, land covered by different types of crop was also increased from **2862**hectares to **7383** hectares of land between the year **2010/2011** and **2011/2012** due to insubstantial Belg rainfall in the district. Where as the productions obtained were increased from **51230**to **82175**quintals. These give an average productivity of land to be increased from 40.65 to **127.54**quintals per hectares during the year under consideration.

**Table: 3.1. Area cultivated and production obtained for private peasant holdings by seasons**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No** | **Crop Type** | **2010/2011** | | | | | | **2011/2012** | | | | | |
| **Meher season** | | | **Belg season** | | | **Meher season** | | | **Belg season** | | |
| Area Cult(Hect | Prod(Qunt) | Prod. per hect | Area Cult(Hec | Prod(Qunt) | Prod. per hect | Area Cult(Hect | Prod(Qunt) | Prod. per hect | Are(Hect) | Prod(Qunt) | Prod. per hect |
| 1 | cereals | **19322.5** | **555651** | **162** | **1248** | **18454** | **52** | **19838** | **581000** | **156.6** | **2506** | **45084** | **71.8** |
|  | Teff | 4019 | 72342 | 18 | 0 | 0 |  | 4843 | 67802 | 14 | 10 | 90 | 9 |
|  | barley | 2991 | 19693 | 6.5 | 604 | 7450 | 12 | 2297 | 75410 | 32.8 | 1126 | 20268 | 18 |
|  | wheat | 10579 | 407865 | 38.5 | 126 | 1764 | 14 | 10943 | 364690 | 3 | 241 | 3374 | 14 |
|  | maize | 1091 | 32819 | 30 | 508 | 9160 | 18 | 1133 | 48514 | 42.8 | 1106 | 21080 | 19 |
|  | sorghum | 576.5 | 20754 | 36 | 0 | 0 | 0 | 545 | 22890 | 42 | 0 | 0 | 0 |
|  | oats | 66 | 2178 | 33 | 10 | 80 | 8 | 77 | 1694 | 22 | 23 | 272 | 11.8 |
| 2 | Pulses | **1591** | **28270** | **78.6** | **1614** | **13420** | **29.3** | **1257** | **19568** | **70.1** | **2355** | **22376** | **22** |
|  | Faba beans | 491 | 8651 | 17.6 | 76 | 618 | 8 | 521 | 7578 | 14.5 | 149 | 149 | 1 |
|  | Chick peas | 18 | 216 | 12 | 0 | 0 | 0 | 90 | 1080 | 12 | 0 | 0 | 0 |
|  | Field peas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Lentils | 90 | 1080 | 12 | 658 | 5522 | 8 | 22 | 198 | 9 | 1415 | 12735 | 9 |
|  | Haricotbeans | 525 | 9450 | 18 | 278 | 658 | 2.3 | 380 | 6320 | 16.6 | 791 | 9492 | 12 |
|  | Vetch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Peas | 467 | 8873 | 19 | 602 | 6622 | 11 | 244 | 4392 | 18 | 0 | 0 | 0 |
| 3 | Oilseeds | **642.5** | **6433** | **23.2** | **0** | **0** | **0** | **525** | **6291** | **21** | **0** | **0** | **0** |
|  | Linseed | 640 | 6400 | 10 | 0 | 0 | 0 | 522 | 6264 | 12 | 0 | 0 | 0 |
|  | Sun flower | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |
|  | Neug | 2.5 | 33 | 13.2 | 0 | 0 | 0 | 3 | 27 | 9 | 0 | 0 | 0 |
| 4 | Other | 0 | 0 | 0 | 0 | 0 | 0 | 2270 | 310018 | 415.9 | 2522 | 347566 | 416.76 |
|  | Fruit | 0 | 0 | 0 | 0 | 0 | 0 | 654 | 74331 | 113.6 | 671 | 76133 | 113.46 |
|  | Vegetable | 0 | 0 | 0 | 0 | 0 | 0 | 1135 | 157009 | 138.8 | 1261 | 173783 | 137.8 |
|  | Root crops | 0 | 0 | 0 | 0 | 0 | 0 | 481 | 78678 | 163.5 | 590 | 97650 | 165.5 |
|  | **Grand Total** | **21556** | **590354** | **65.8** | **2862** | **31874** | **40.65** | **23890** | **916877** | **165.9** | **7383** | **415026** | **127.54** |

Source: Shirka District Agricultural & Rural Development Office

**Irrigation;-**  In the year **2011/2012**, the total area under traditional irrigation was increased to **475** hectares and the production obtained from these hectares of land was also equal to **48865** quintals. The number of farmers benefited from traditional irrigation was increased to **1979**. In the year **2011/2012**, of the land cultivated by traditional irrigation **475** **hectares** of land was covered by permanent crops from which **48865** quintals of production was. Even though the amount of production that the farmers obtained from irrigation was increased, market problem, lack of infrastructure like road in some part of the district and crop pest and diseases are the major problems of the area.

**Table: 3.2. Area cultivated by Traditional Irrigation and Production Obtained**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **Irrigated** | | | | | | Noof households(farmers)served |
| **Annual crops** | | **Permanent Crops** | | **Total** | |
|  | **Area(ha)** | **Prod(quint)** | **Area(ha)** | **Prod(quint)** | **Area(ha)** | **Prod(quint)** |
| 2011 | - | - | 475 | 48865 | 475 | 48865 | 1979 |
| 2012 | 2788 | 5414606 | 346 | 45970 | 3134 | 460576 | 8325 |

**Livestock:** Shirka district is famous in livestock resources. Cattles, sheep, goats, horses, mules and donkeys are the major livestock population found in the district. Between the year **2011** and **2012** the livestock and poultry population were increased from **511227** to **512188**. From the total livestock population found in the district, cattle, sheep and goats account for about **56.97%, 16.72%,** and **15.07%** respectively which is altogether for more than **88.76%** of the total livestock population in the year **2011.**

The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | **2011** | | **2012**  **2012** | |  |
| **1** | **Live Stock (total)** | **408199** | **%** | **409187** | **%** |
|  | Cattle | 232578 | 56.97 | 232904 | 56.52 |
|  | Sheep | 68259 | 16.72 | 68624 | 16.77 |
|  | Goat | 61540 | 15.07 | 62155 | 15.18 |
|  | Donkey | 21872 | 5.35 | 21761 | 5.31 |
|  | Horses | 16510 | 4.04 | 16320 | 3.98 |
|  | Mules | 7440 | 1.8 | 7423 | 1.8 |
| **2** | **Poultry** | **103028** |  | **103001** |  |

**Source: Shirka District Livestock health Development and marketing agency.**

**Poultry:** is one of the important sources of family income and food in the district. Accordingly, in the year **2012** there were **103001** poultry populations in the district. However, the prevalence of disease and low productivity in the district, poultry population was decreased in years **2011** and **2012**. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.to traditional method of rearing is the major constraints.

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family. Accordingly, in the year **2012** the district’s farmers have **2181** traditional bee hives ,**927** intermediate beehives and **720** modern beehives from which **8714kg , 11124kg & 14400kg** of honey production was obtained respectively. This gives productivity per beehives of **3.99kg** for traditional ,**12kg** for intermediate and **20kg** for modern. However, Using of herbicides and insecticides are the main problems in bee farming.

**Fishery:** fishing activity is as simple as that of poultry production and other livestock rearing even in their garden by harvesting water. However, there is no fishing activity in the district since there is no large water body like lakes, pond and river and due to the farmer’s inability to practice fishing activities using water harvesting.

**Agricultural Inputs and Infrastructures**

**Agricultural Service Cooperatives:** there were **33** Peasant Associations (**PAs**) in the district with \_\_ **15327** members households in **2012.** There were **32**Agricultural Service cooperatives during the year under consideration. However, their member farmers were increased from **14031(\_12.85)%** are female) to **15327**(out of which **12.7%** female). Regarding their capital, they have .

**Table: 3.4.Farmers Associations & agriculture service cooperatives by their members, sex and family size .**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **lakk** | **Name Of FAASC** | **2011** | | | | **2012** | | | |
| **Members** | | **Family size** | | **Members** | | **Family size** | |
| **M** | **F** | **M** | **F** | **M** | **F** | **M** | **F** |
| **1** | **Dorgeta & Sirba** | 471 | 45 | 1060 | 663 | 545 | 62 | 1067 | 674 |
| **2** | **Ameto &Gumelo** | 419 | 41 | 1209 | 643 | 433 | 44 | 1234 | 683 |
| **3** | **Gudina Walin** | 438 | 59 | 1050 | 251 | 445 | 60 | 1078 | 321 |
| **4** | **Galmiyo &Burka Kebena** | 485 | 39 | 1124 | 321 | 466 | 78 | 1134 | 345 |
| **5** | **Gumelo Kersa** | 340 | 30 | 1366 | 265 | 497 | 44 | 1374 | 284 |
| **6** | **Birkitu Tijo Lebu** | 425 | 57 | 878 | 130 | 486 | 37 | 889 | 134 |
| **7** | **Gemechu** | 281 | 52 | 754 | 210 | 390 | 44 | 764 | 216 |
| **8** | **Darara** | 277 | 38 | 623 | 208 | 350 | 8 | 623 | 212 |
| **9** | **Burka Sole Negele** | 455 | 51 | 1780 | 320 | 676 | 57 | 1800 | 323 |
| **10** | **Burka Sole Digelu Guna** | 574 | 62 | 1726 | 312 | 604 | 66 | 1736 | 328 |
| **11** | **Bedatu** | 501 | 131 | 1314 | 158 | 523 | 135 | 1320 | 170 |
| **12** | **Haji Shale** | 426 | 130 | 874 | 204 | 450 | 140 | 874 | 213 |
| **13** | **Walena Bultum** | 253 | 49 | 547 | 130 | 281 | 56 | 547 | 132 |
| **14** | **Meda Zembaba** | 594 | 56 | 1819 | 366 | 594 | 56 | 1824 | 378 |
| **15** | **Biftu Genema** | 396 | 48 | 900 | 335 | 396 | 48 | 900 | 340 |
| **16** | **Hela Zembaba** | 291 | 51 | 734 | 311 | 291 | 51 | 743 | 321 |
| **17** | **Burka Chancho** | 560 | 65 | 1627 | 596 | 582 | 63 | 1638 | 600 |
| **18** | **Gelebe Goro** | 333 | 92 | 673 | 123 | 360 | 103 | 673 | 123 |
| **19** | **Bereka Gudina** | 190 | 15 | 531 | 131 | 204 | 20 | 531 | 131 |
| **20** | **Burka Gabina** | 465 | 32 | 1449 | 429 | 478 | 33 | 1456 | 431 |
| **21** | **Jidugala Lemu Guna** | 455 | 73 | 739 | 298 | 465 | 91 | 739 | 300 |
| **22** | **Tokuma Mitana Hindesa** | 357 | 24 | 1003 | 326 | 364 | 24 | 1009 | 326 |
| **23** | **Ido Anole** | 463 | 87 | 816 | 240 | 490 | 95 | 836 | 243 |
| **24** | **Muleta Soji Sade** | 440 | 80 | 788 | 236 | 465 | 90 | 789 | 240 |
| **25** | **Tokuma Jawi** | 444 | 102 | 936 | 145 | 460 | 106 | 936 | 145 |
| **26** | **Tokuma Birbo & Chole** | 469 | 42 | 1222 | 189 | 538 | 47 | 1242 | 189 |
| **27** | **Lega Jarti & Ameja** | 249 | 85 | 531 | 65 | 258 | 89 | 531 | 65 |
| **28** | **Bultum Sire** | 33 | 8 | 543 | 50 | 38 | 9 | 543 | 50 |
| **29** | **Waligala Hela Tereta** | 466 | 46 | 996 | 418 | 527 | 67 | 1002 | 420 |
| **30** | **Burka Hulul** | 263 | 15 | 557 | 55 | 264 | 15 | 557 | 55 |
| **31** | **Gudina Waji Repesa** | 174 | 53 | 521 | 64 | 207 | 60 | 521 | 64 |
| **32** | **Biftu Beri** | 240 | 46 | 749 | 69 | 253 | 49 | 749 | 69 |

**Source: - Shirka District Cooperative Promotion Office**

On the other hand, so as to improve the livelihood of their members, there were also **27** rural saving and credit association with **3925** members that provide credit and saving services for their member farmers in the year **2012**.

**Table: 3.5. Rural saving and Credits associations available in the district by types and member size by sex**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Name of rural Saving and credits associations** | **Member size by sex** | | | | | |
| **2011** | | | **2012** | | |
| **male** | **Femal** | **Total** | **Male** | **Female** | **Total** |
| 1 | Bar /hojjatta A/Shirkaa | 524 | 260 | 784 | 524 | 260 | 784 |
| 2 | Tokuma Gudina | 250 | 31 | 281 | 250 | 31 | 281 |
| 3 | Walta`ii Atootaa | 116 | 35 | 151 | 151 | 35 | 186 |
| 4 | Tokkummaa L/Xiijoo | 94 | 6 | 100 | 100 | 6 | 106 |
| 5 | Furtuu Guddinaa | 115 | 9 | 124 | 122 | 2 | 124 |
| 6 | Walta`ii Guddinaa | 123 | 20 | 143 | 163 | 34 | 197 |
| 7 | Qananisaa H/Jaawwee | 34 | 2 | 36 | 34 | 2 | 36 |
| 8 | Urjii Burqituu | 92 | 14 | 106 | 92 | 14 | 106 |
| 9 | Qananiituu ciisaa | 2 | 117 | 119 | 2 | 117 | 119 |
| 10 | Biiftuu Ganamaa | 0 | 171 | 171 | 0 | 95 | 95 |
| 11 | Nageenya fi Guddina | 47 | 2 | 49 | 44 | 1 | 45 |
| 12 | Guddina waliiinii | 44 | 1 | 45 | 48 | 2 | 50 |
| 13 | Wabii jireenya | 74 | 7 | 81 | 124 | 31 | 155 |
| 14 | Biqiltuu Gallee bahaa | 12 | 2 | 14 | 12 | 2 | 14 |
| 15 | Goda halkoo | 293 | 12 | 305 | 293 | 12 | 305 |
| 16 | Magariisa Gannaa | 214 | 18 | 232 | 214 | 18 | 232 |
| 17 | Cimmis mana guutti | 52 | 22 | 74 | 52 | 22 | 74 |
| 18 | Birkaa dharraa | 35 | 0 | 35 | 35 | 0 | 35 |
| 19 | Biftuu Barii | 81 | 3 | 84 | 81 | 3 | 84 |
| 20 | Badhaadhina jawwii | 20 | 136 | 156 | 26 | 134 | 160 |
| 21 | Tokkummaa Gooroo | 2 | 60 | 62 | 2 | 60 | 62 |
| 22 | Roobee yaayyaa | 119 | 25 | 144 | 123 | 10 | 133 |
| 23 | Mul`ata B/collee | 109 | 4 | 113 | 124 | 10 | 134 |
| 24 | H/xareeta | 114 | 9 | 123 | 148 | 28 | 176 |
| 25 | Adda dureessaa L/Gunnaa | 93 | 7 | 100 | 93 | 7 | 100 |
| 26 | Lattuu W/Raphasaa | 59 | 17 | 76 | 59 | 17 | 76 |
| 27 | Tokuma qubsaa | 7 | 56 | 63 | 3 | 53 | 56 |

Source: Agricultural service cooperative office

**Agricultural input utilization**: Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, between the years **2010/2011** to 2011/2012 production year the amount of chemical fertilizers (Urea ,NPS and Dap) distributed to the farmers was increased from **29724.**5 quintal to **237027.5** quintals while the amount of improved seed was increased from **5148.125** quintal to **6056.55** quintals between the years **2010/2011** to **2011/2012**. On the other hand, the amount of herbicides was also increased from **250** liters to **450** liters showing an increment by **200** liters during the year under consideration. The above data was the data collected from Farmers’ Service Cooperatives only

**Table: 3.6. Amounts of agricultural inputs distribute to farmers by type**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2010/2011** | **2011/2012** |
| **Amount(qt.)** | **Amount(qt.)** |
| Fertilizers | 29724.5 | 237027.5 |
| NPS(qt) | 468.5 | 0.5 |
| DAP (qt.) | 0 | 0 |
| Urea (qt.) | 4770.5 | 7722 |
| NPSB | 24485.5 | 220216 |
| NPSzn | 0 | 9089 |
| Improved Seeds (qt) | 5148.125 | 6056.55 |
| Wheat | 3500 | 4300 |
| Barley | 1500 | 1600 |
| Maize | 98.125 | 150 |
| Teff | 50 | 6.55 |
| Peas | 0 | 0 |
| Herbicides | 700 | 1150 |
| Topic | 100 | 150 |
| Herbicides (lit.) | 250 | 450 |
| Pesticides (lt) | 350 | 550 |

**Source: Agricultural service cooperative office**

**Development Agents and Farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year **2011**and **2012**, the number of farmers training center **(FTC)** were equal from 32 to 32in the district respectively. During the same years, the number of development agents was also decreased from **83** to **85**. Three Development Agents are assigned in **5 PA** with profession of plant science, Animal science and Environmental protection , two development agent are assigned in **17** **PA** and one development agent are assigned in **11 PA** to help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry and management and environmental protection

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. The number of animal health infrastructure was constant (three C-type ,four non standard that give service in kebele’s office ) during the year under consideration. While, the number of animal health personnel was equal **22** to **22** during the year under consideration. This gives an average ratio of **23237.6.:1** and**: 23281:1** animal population to animal health personnel respectively during the year **2011-2012**

**Table: 3.7. Distribution of Shirka district Animal Health infrastructure**

|  |  |  |
| --- | --- | --- |
| Description | 2011 | 2012 |
| Veterinary Personnel | 22 | 22 |
| Animal Health Assistance | 14 | 14 |
| Doctor | 4 | 3 |
| Animal Health Technician | 4 | 5 |
| Health Infrastructure | 2 | 2 |
| Clinic C-Type | 2 | 3 |
| D-Type clinic | 5 | 4 |

**Source: Shirka District livestock health development Office**.

Accordingly, with these existing health facilities and health personnel the district animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district.

**Agricultural Calendar:** It is well known that the farmers of the District are not busy through out the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some Kebeles these activities are started earlier while in other Kebeles they started later.

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Meher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district.

**Table: 3.8. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of activities | Meher Season | Belg Season |
| 1 | Land preparation | April- June | February and March |
| 2 | Planting (Sowing) | June- August | March and April |
| 3 | Weeding | August - September | May and June |
| 4 | Harvesting | November and December | June and July |

Source: Shirka district Agriculture and Rural Development Office.

**3.9 Number of house holding by ox size year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| year | Average ox holding size | 1Oxen | 2Oxen | 3Oxen | 4Oxen | 5Oxen | >5Oxen |
| 2011 | 3 | 525 | 13121 | 3936 | 6561 | 1837 | 263 |
| 2012 | 2 | 2794 | 13171 | 3945 | 813 | 637 | 263 |

**Methods of Soil Conservation and Maintaining Soil Fertility**

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the Zone particularly in the district. These are the traditional and modern methods. The traditional method includes using of animal dung, crop rotation and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizers).

**Methods for Soil Conservation:** Contour plough and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation are modern way of soil conservation in the district.

**Constraints of Agricultural and Livestock Production**

**Households Affected By Drought:** According to the data obtained from the district’s disaster prevention and preparedness office due to rainfall variability and dalliance and let coming in Belg and Summer rainfall, in the year **2012** more than **5944** households and **10256** children were affected by drought.

**Table: 3.9. Number of Households and Children Affected by Drought**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Households and members affected by drought** | | | | | |
| **House holds** | | | **Children** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 5416 | 220 | 5636 | 4768 | 5496 | 10264 |
| 2012 | 5719 | 225 | 5944 | 4636 | 5620 | 10256 |

**Source: Shirka District disaster prevention and preparedness office**

To overcome the effect of drought the district agriculture & Rural Development office in collaboration with District disaster prevention and preparedness office provide relief of gain, oil, and balance diet for affected households. For details see the table below.

**Table: 3.10.Amounts of relief distributed to drought affected people by types and year**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Amount of relief distributed by types to the people** | | | |
| Grain(Kg) | Oil(lit) | Addition food (Kg) | Oil seeds(Kg) |
| **2011** | 2385 | 7155 | 225042.5 | - |
| **2012** | 2430 | 7290 | 25515 | - |

**Source:** Shirka District disaster prevention and preparedness office

**Crop Pests and disease:** The major crops pests in the district are Aphids, Rust, and Smut. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post harvest time.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Livestock and Poultry Diseases:** (Hemorrhagic Septicemia Black leg, Lumpy skin, pasturelosis, Fasciolosis, Trips, Salmonellae, New castle, Chronic Respiratory diseases and External and internal parasites, and Anthrax are the major livestock and poultry disease in the district. Accordingly, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. During the year **2011** for instance, the number of animal get vaccination and treatment was **278045 and 462446** respectively. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.11. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** | **278045** |  |
| Blackleg | 38650 | 42000 |
| Hemorrhagic Septicemia | 12800 | 25797 |
| Anthrax | 43945 | 54662 |
| Rinder pest | 50700 | 0 |
| others | 131950 | 250581 |
| **Treatment** | 462446 |  |
| External Parasites | 188843 | 130130 |
| Internal Parasites | 228646 | 146208 |
| Castration | 0 | 0 |
| Meat Inspection | 0 | 0 |
| Operation | 64 | 8508 |
| Trypanosomes | 660 | 3827 |
| others | 44233 | 62518 |

**Source: Shirka District Livestock health development agency**

**3.3. Mineral Resources and Industry**

**Mining:** Like other parts of country in general and the district in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of Water, Mineral and Energy office indicates that, the district has a high potential of some mineral resources such as Graphite, Granite, Scoria, Basalt rock and Sand for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant (may be rock quarrying, pottery making mining activities, scoria under extraction use for construction) by local communities in the district

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in the district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are metal processing private owned industries. There are no medium scale industrial establishments in the district. Between the year **2011**and **2012** the number of permanently licensed small-scale industries was increase to **5** to **7** out of which **7** of them are Private.

**Table: 3.12. Number and type of registered small-scale industries of the district by type ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of industry** | **2011** | | **2012** | |
| **Number** | **Types of Owners** | **Number** | **Types of Owners** |
| **Metal work** | 3 | Private | 4 | Private |
| **Wood work** | 2 | Private | 3 | Private |

**Source**: Statistical Abstract Document

**Table: 3.13.Number and type of small scale manufacturing industries**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of industry** | **2011** | | | **2012** | | |
| Owners | workers | capital | Owners | workers | capital |
| **Metal work** | Private | 7 | 374211 | Private | 6 | 501000 |
| **Wood work** | Private | 5 | 251321 | Private | 3 | 421348 |

S**ource: Source:** Statistical Abstract Document

**3.4. Trade Activities and Tourism**

**Trade:** In the district trading one of the major activities that the livelihoods of most urban households relay on. In the district the number of permanently licensed trader was increased to **12655** in the year **2012**.Moreover, the number of traders renewed their license was also increased to **1312** during the year under consideration. Likewise, during the same years the new license given for new entrant trader was also decreased to **175** which indicate the growing demand of trading activity since the district is known by production of cash crops.

Regarding tradable items and cash crops production activities, the district is known in the production of green paper, different types of spices, sugar cane etc cash crops produced in the districts. In addition, the district is known by exportable items like hide and skin.

**Table: 3.14.Type and number of linseed traders from district.**

|  |  |  |
| --- | --- | --- |
| No | Description of activities | 2012 |
| 1 | Licensed | 12655 |
| 2 | Applied for license | 97 |
| 3 | Licenses given (New) | 175 |
| 4 | Licenses renewed | 1312 |
| Total | |  |

**Source: Shirka District Trade & Market Development Office**

**Cash Crops and Exportable Items production;-** There are different types of cash crops and exportable items like Spice,( Fenugreek ,Black cumin ),Linseed, Teff, wheat, pepper(filaanjoo) ,onion, vegetable, carrot, potatoes etc produced in the districts. Moreover, hides and skins were also one of the exportable items sent to the central market.

**Tourism and Its Amenities:** Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Shirka district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism Office. These are, Gara saden abba bilo, Kabir muda, sodu haji Ali, Hade Gejo and Hanjo are the main tourist attraction sites of the district. However, it has no facility and all of them are under developed.

**3.5 Finance and Financial Institutions**

**Finance and Financial Institutions: -** so as to increase the resource potential of the region and district, the government promotes the district have to collect revenue from different sources. Accordingly, between the years **2011** to **2012**the total revenue collected by the district from different sources was increased from **24208767.82** Ethiopian Birr **27613118.62** Ethiopian Birr showing an increment by **3404350.8**birr. The main sources of revenue in the district are Direct tax, indirect tax and non-tax items as Inland Revenue authority of the district cumulative annual report indicated. During the year 2012, of the different source of revenue, the revenue collected from direct tax accounts for more than **84%** which is the highest and revenue collected from indirect tax was account only **10.5%.**

**Table: 3.15. Total in land revenue collected in the district by type of revenue source**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct taxes** | **%** | **Indirect taxes** | **%** | **Non-Tax revenue** | **%** | **Total** |
| **2011** | 19635740.28 | 81.11 | 3051859.49 | 12.6 | 1521168.05 | 6.28 | 24208767.82 |
| **2012** | 23338082.4 | 84.5 | 2907131.79 | 10.5 | 1367904.43 | 4.95 | 27613118.62 |

**Annual Budget allocation:** Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount which accounts for more than **81.96%** of the total annual budget allocated for the districts in the year **2012.** This indicates how far the current in land revenue share of the annual budget allocated for the districts is low.

According to the data obtained from Finance and Economic Development office, the annual budget allocated for the district was increased from **131975606** birr to 138177053 birr between the year **2011** and **2012** showing an increasing trend from year to year. **.**

**Table: 3.16. Annual budget allocated for the District**

|  |  |  |
| --- | --- | --- |
| Year | Annual Budget Allocated | Growth Rate (%) |
| 2011 | 131975606 | 17.17 |
| 2012 | 138177053 | 4.48 |

**Source: Shirka District Finance & Economic Development**

**Financial Institution:** The availability of various financial institutions like banks and Credit and Saving share company play a significant role in the transformation the economy of the district. The District has one credit and saving share company & four Banks .Those are Oromia credit & Saving Share Company , Commercial Bank Of Ethiopia, Absiniya bank Cooperative Bank Of Oromia, International Bank of Oromia,

**Table: 3.17. Rural Credit, saving & number of beneficiaries (by sex),**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name of Rural Credit & Saving**  **Association** | **2011** | | | **2012** | | |
| **Number of Beneficiaries** | | | **Number of Beneficiaries** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Oromia Credit & Saving Share Company Shirka Branch | 1892 | 618 | 2510 | 1523 | 521 | 2044 |

Source: Oromia Credit & Saving Share Company Shirka Branch

**3.6 Education**

**Kindergarten: -** According to the data obtained from Statistical Abstract of the district, the Woreda’s had two kindergarten (one private and one other) ,while the number of children enrolled was decreased from **397** to **293** between the year **2011** and **2012**.However, the number of student enrolled to this level is very low as compared with the school age children in the district. However, the number of teachers with which these schools provides education was equal **10 to10 between**  the year **2011**and **2012**.The major problems of kindergarten school is lack of well organized management system and little attention by government concerned bodies.

**Primary Schools:** So as to achieve universal primary school education coverage, the number of primary schools was equal **60** to **60** between the year 2011 and 2012.Likewise, during the same years the number of students enrolled to school was decreased from **41020(46.8%** female) to **40719 (47.99%** female) with slight increment by female students in number. During the same year, the numbers of class-rooms were increased from **727** to **745** however the number of teachers was increased from**741(36.6%** female to **751(35.5)%** female). Student to teacher’s ratio and student to classroom ratio are one of the major indicator used to measure quality of education as compared with the standard set by Oromia education bureau. Accordingly, the student to classroom ratio was decreased from **56:1** to **54.6:1** while student to teacher’s ratio was idecreased **55:1 to 54:1** between the years **2011** and **2012**.

**Secondary Education (9-10)** In the district there was four Secondary **(9-10)** school located in Gobesa,Tereta,sole and Gado towns in the year **2011** and four secondary (**9-12**) in the year **2012**. During the indicated years, the number of student enrolled to these school was increased from **3085(41.9%** females) to **4384(43.5%** females) with slight increment in female students. Likewise, in the **2012,** the number of classroom were **74** while the number of teachers were also **159(8.17%** female).

Since Student to classroom ratio and student to teacher ratio is crucial for measuring education quality. Accordingly, the student to classroom ratio and student to teacher ratio were **59:1** and **27.5:1** respectively in the year **2012**..

**TVET:** since **2002**, there was one **TVET** school in the district that provides technical and vocational training for **119** & **154** students in different field of study in the year **2011&2012** respectively.

**Table: 4.1.Number of school and number of student enrolled by level of school**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of owner** | **2011** | | | | **2012** | | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
|  | Government | | | | | | | |
| **First cycle(1-6)** | 6 | 13836 | 12268 | 26104 | 5 | 13324 | 11998 | 25322 |
| **Second cycle(1-8)** | 60 | 21808 | 19212 | 41020 | 60 | 21174 | 19545 | 40719 |
| **Senior Secondary school (9-10)** | 4 | 1791 | 1294 | 3085 | 4 | 2478 | 1906 | 4384 |
| **Preparatory school (11-12)** | 1 | 340 | 194 | 534 | - | - | - | - |
|  | Private or Kindergarten | | | | | | | |
| **Non government Kindergarten School** | 2 | 204 | 193 | 397 | 2 | 149 | 144 | 293 |

**Source: District Education Office**

**Education Quality:** The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio and student-text book ratio. Accordingly, from total primary school teachers who teach at this level, the number of teacher who holds BA/BSC was increased from **135 (18.2%)** to **143(19%)** between the year **2011**and **2012**. This indicates there was slight increment in the BA/BSC teachers. So as we see from the given information, Education office of the district would be expected to do more to improve the quality of education. To this end, only depending on the above parameters are not enough to measure educational quality of a district. Hence we have to look into other factors mainly continuous professional development program, teachers’ commitment to teach and students’ commitment to receive what teachers say As far as the number of teacher by level of school was concerned, according to the professional standard set by Oromia education office ,the number of **TTI** ,diploma & degree teachers was increased from **741** to**751** in primary school **(1-8)** between the year **2011** to **2012**. Moreover, the number of **MA/MSC**(second degree) ( teachers was also increased to**14** teachers in secondary schools (**9-12)** during the year under consideration. Such an improvement of the professional level of teachers in all level of schools plays a significant role in improving the quality of education.

**Table: 4.2. Number of teachers by levels of schools sex, level of Education and types of schools**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **level of education** | **2011** | | | | | **2012** | | | |
| **Male** | **Female** | | **Total** | | **Male** | | **Female** | **Total** |
| First cycle (1-4) | | | | | | | | | |
| TTI | 52 | 46 | | 98 | | 54 | | 29 | 83 |
| Diploma | 129 | 149 | | 278 | | 130 | | 150 | 280 |
| Degree |  |  | |  | | 14 | | 11 | 25 |
| **Total** | **181** | **195** | | **376** | | **198** | | **190** | **388** |
| Second cycle(1-8) | | | | | | | | | |
| TTI | 52 | 46 | | 98 | | 76 | | 29 | 105 |
| Diploma | 315 | 193 | | 508 | | 301 | | 202 | 503 |
| Degree | 103 | 32 | | 135 | | 108 | | 35 | 143 |
| **Total** | **470** | **271** | | **741** | | **485** | | **266** | **751** |
| Secondary school(9-10) | | | | | | | | | |
| Diploma | 6 | 1 | | | 7 | |  |  |  |
| Degree | 114 | 10 | | | 124 | | 104 | 10 | 114 |
| MA?MSC | 4 |  | | | 4 | | 15 | 1 | 16 |
| Total | 124 | 11 | | | 135 | | 119 | 11 | 130 |
| Preparatory school(11-12) | | | | | | | | | |
| Diploma | 1 |  | 1 | | | | - | - | - |
| Degree | 10 | 3 | 13 | | | | - | - | - |
| MA/MSC | 10 |  | 10 | | | | - | - | - |
| **Total** | **21** | **3** | **24** | | | | **-** | **-** | **-** |

**Source:** Shirka District Education Office

**Table: 4.3. Number of students sat for National Examination and promoted to the next level by sex**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **sat for National Examination** | | | **promoted for grade 9th** | | |
| **Male** | **Female** | **Total** | **male** | **Female** | **Total** |
| **Grade 8** | | | | | | |
| 2011 | 1454 | 1203 | 2657 | 1004 | 863 | 1867 |
| 2012 | 1207 | 1218 | 2425 | 1154 | 1154 | 2308 |
| Year | sat for National Examination | | | promoted for preparatory | | |
| **Grade 10** | | | | | | |
| 2011 | 732 | 567 | 1299 | 621 | 457 | 1078 |
| 2012 |  |  |  |  |  |  |
| Year | sat for National Examination | | | promoted for University | | |
| **Grade 12** | | | | | | |
| 2011 | 209 | 115 | 324 | 114 | 67 | 181 |
| 2012 | 114 | 74 | 188 |  |  |  |

**Source:** Shirka District Education Office

**Adult Education: -** is one of the primary focus areas of education Bureau to eradicate illiteracy in the region. To meet this objective the district education office establish adult education center and provide education. Based on the data obtained from district education office, the number of adult education center was increased from **0** to **36** between the year **2011** and **2012**. Likewise, the number of adult who attend education was increased from **0** to **1776** during the year under consideration.

**Table: 4.4.Number of adult education centers and participants by sex,**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number of adult education centers | participants by sex | | |
| Male | Female | Total |
| 2011 | 0 | 0 | 0 | 0 |
| 2012 | 36 | 1331 | 445 | 1776 |

Source: Shirka District Education Office

**3.7 Health**

**Health Institution:** So as to improve the primary health service coverage, the number of health center was increased to six in the year **2012**. During the same year, the number of health post was also increased to 33 while the number of clinics was equal to **18**. On the other hand, the number of private clinics equal **18**  in the year under consideration. This gives **36932:1** and **6714.9:1** ratio of population to Health Center and health post respectively in the year **2012** which is far below the recommended standard by WHO (25,000 and 5,000).

**Health Personnel:** In the government health facilities the number of health personnel was increased to **231** while the number of health personnel in private health facilities was equal to **23** in the year **2012**. By types of profession, The number of nurses, Pharmacy and lab. Technicians, Health office was increased to **108 ,20 ,12 &9**respectively in the year under consideration. Likewise , the number of health extension workers was decreased to **81** in the indicated years .For more information see the table below.

**Table: 4.5. Number of health Institution and Personnel by ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Private** | **Gov** | **Private** |
| **Health Institution** | **40** | **23** | **40** | **23** |
| hospital | 1 |  | 1 |  |
| Health Center | 6 | 0 | 6 | 0 |
| Clinic | 0 | 18 | 0 | 18 |
| Health Post | 33 | 0 | 33 | 0 |
| Drug Shop | 0 | 0 | 0 | 0 |
| Rural Drug Vender | 0 | 5 | 0 | 5 |
| **Health Profession** | **167** | **31** | **231** | **31** |
| Nurse | 59 | 17 | 108 | 17 |
| Health Assistance | 0 | 0 | 0 | 0 |
| Health Office | 9 | 3 | 9 | 3 |
| Laboratory Technician | 3 | 3 | 12 | 3 |
| Pharmacists | 11 | 8 | 20 | 8 |
| Sanitarian | 1 | 0 | 1 | 0 |
| Health Extension Workers | 84 | 0 | 81 | 0 |

Source: Shirka District Health Office

**Maternal and Child Care;-** The district with the help of health extension workers provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Totally there were **81** health workers in the district in the year **2012**

In addition, the district health office provides different type of treatment and children and mothers vaccination to improve the health coverage of the district. Accordingly, the number of children access to different types of vaccination (**BCG.DPT1. Measles, DPT3**). For details see the table below.

**Table: 4.6. Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 7810 | 8471 |
| Measles | 6771 | 7440 |
| DPT1 | 7483 | 7621 |
| DPT3 | 7204 | 7341 |

Source: Shirka district health office

However, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and under utilization of health services also play a great role for the existence of different diseases.

**Ten top diseases:** According to the data obtained from Shirka district health Office, the highest prevalent disease in the district was Pneumonia (11**%)** is followed by **Functiional intestinaldis orders** **(**7**%)** and **Helminthiases (**6**%)** during the year **2011.** However, in the year **2012** the highest prevalence disease wasPneumonia (9.7**%)** followed by **Functiional intestinaldis orders (**8.1**%)** and **Acute upper respiratory infections (**4.7**%).**For details see the table below

**Table: 4.7.The ten top diseases in the district**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2011** | | | | **2012** | | | |
| **Type of Diseases** | **Number** | **%** | **Rank** | **Type of Diseases** | **Number** | **%** | **Rank** |
| Pneumonia | 4137 | 11 | 1 | Pneumonia | 3593 | 9.7 | 1 |
| **Functiional intestinaldis orders** | 2666 | 7 | 2 | **Functiional intestinaldis orders** | 3021 | 8.1 | 2 |
| **Helminthiases** | 2123 | 6 | 3 | **Acute upper respiratory infections** | 1741 | 4.7 | 3 |
| **Typhoid para typhoid** | 1510 | 4 | 4 | **Typhoid para typhoid** | 1563 | 4.2 | 4 |
| **Malnutrition** | 1460 | 4 | 5 | **Helminthiases** | 1472 | 4.0 | 5 |
| **Acute upper respiratory infections** | 1332 | 4 | 6 | **Malnutrition** | 980 | 2.6 | 6 |
| **Amoebiasis** | 1244 | 3 | 7 | Acute tonsillitis | 966 | 2.6 | 7 |
| **cough** | 884 | 2 | 8 | **Disorders of urinary system** | 735 | 2 | 8 |
| **Disorders of urinary system** | 790 | 2 | 10 | **Amoebiasis** | 648 | 1.7 | 10 |
| **Total** | **37448** | **100** |  | **Total** | **37223** | **100** |  |

**Source:** Shirka District Health Office

**Harmful Traditional Practices:** Like the Zone as a whole, there are many harmful traditional practices that are being widely practiced in the district. Among these, raping, Butta, Dhala, , Gebera, etc can be mentioned as an example. But now a day’s these harmful traditional practices are decreasing from time to time because of the awareness creation by the health extension workers.

However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district. Idir, Debo, Ikub and others are mentioned as an example.

**3.8 Basic Infrastructures Condition**

**Roads:-**Shirka district is found **98km** away from zonal capital town, Asella and **254km** from Regional Capital city, **Finfinne**. It has **52.5**km length of gravel road (all weather),**171.58** rural road and **24.9** km of dry weather road in the year **2012**. This gives a road density (for all weather roads) of **0.19km per km2** and **0.1.07km** **per 1000** people.

**Telecommunication:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with Fixed type of telecommunication (digital telephone). On the other hand, all most all peasant associations has supplied with mobile type of telephone services.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has one post office in Gobesa town.

**Water supply:** The potable water coverage of the district is at its low good stage as compared with other part of the zone. Based on the data obtained from the district’s Water, Mineral and Energy Resources development Office, of the total rural population of the district, the number of population supplied with potable water supply was increased from **170447 (74.84%) to 182140 (77.82%)** between the year  **2011** and  **2012**. By area of residence, of the total population the of the district, the number of rural population access to potable water supply was increased from **74.49%** to **77.62%** while the number of urban population access to potable water supply was increase to **79%** to **80%** during the years under consideration.

**Table: 4.10. Total population supplied with potable water**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | **%** | **Urban** |  | **Total** | **%** |
| 2011 | 155110 | 74.49 | 15337 | 79 | 170447 | 74.84 |
| 2012 | 166364 | 77.62 | 15776 | 80 | 182140 | 77.82 |

Source: Shirka District Water, Mineral & Energy Office

Regarding the number of water distribution scheme, the number of spring development and distribution schemes was equal to **60** in the year **2012**.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are Electricity, and Solar energy. Two towns in district was supplied with electric power in the year **2011** & during the year **2012** three towns had been supplied with electricity. On the other hand, some parts of the five rural kebeles (i.e. **1330** households) have access to electric power supply. According to the data obtained from **2012** Statistical Abstract **17858 (91.5%)** peoples of the total population of towns has supplied with Electricity.

However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, electricity is the most important energy source followed by Charcoal, firewood, kerosene ,animal dung and Crop Residue

On the other hand, fire wood is the major energy source in rural area followed animal dung’s, Crop Residue ,kerosene , Charcoal and Electricity. Regarding fuel filling station, there is no any type of fuel filling station.

**Table: 4.11. Sources of domestic energy supply.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | | **Rank** | |
| **2011** | | **2012** | |
| Urban | Rural | Urban | Rural |
| **1** | **Charcoal** | 2nd | 5th | 2nd | 5th |
| **2** | **Fire wood** | 3rd | 1st | 3rd | 1st |
| **3** | **Animal Dung** | 5th | 2nd | 5th | 2nd |
| **4** | **Crop Residue** | 6th | 3rd | 6th | 3rd |
| **5** | **Kerosene** | 4rth | 4rth | 4rth | 4rth |
| **6** | **Electricity** | 1st | 6th | 1st | 6th |

Source: Shirka district Water, Mineral and Energy office

**Sport:** The district has different types of sport activities like Foot ball, Volley ball, Athletics, Cultural sport , and Para olmpic. In the year **2011** and **2012,** the number of Cultural sport team was increased from **4** to **5** ,while the number of sports person was equal from **19** to **19**during the indicated years. However; there were no well-organized and standardized sport facilities like stadium, youth center, gymnasium, etc

**Table: 4.8. Table: Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of teams** | **Member** | **Number of teams** | **Member** |
| Foot-ball | 1 | 25 | 1 | 25 |
| Volleyball | 2 | 24 | 2 | 24 |
| Athletics | 2 | 9 | 2 | 9 |
| Table Tennis | - | - | - | - |
| Para Olympic | 1 | 4 | 2 | 8 |
| Cultural sport | 4 | 19 | 5 | 19 |

Source: Shirka District Sport & Youth Affair Offic

**CHAPTER FOUR**

**4. DEVELOPMENT ACTIVITIES**

**4.1. On Going Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the on going development projects during the years under consideration are the following.

Social sector Development projects: in the district one stadium are under construction by Woreda’s budget & community participation & the projects will be complete & provide services to local communities.

Economic Sector Development Projects: in the district , 32 farmers training centers, one modern irrigation sites , one livestock health clinic and 199.5 km rural road that connect at list seventeen rural kebeles with woreda’s town under construction by Regional gov’t budget , woreda’s budget and community participation.

**4.2. Problems of ongoing Development Projects**

The major on going development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction is the major problem during the construction.

**CHAPTER FIVE**

**5. PROBLEMS AND POTENTIALITIES**

**5.1. Major Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results in crop production failure, is the main problem of the district.

**Economic Problem:** Shortage of farm land High prevalence of crop diseases and pests, Shortage of Agricultural inputs and lack of capacity to buy, acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.

**Social service problem:** rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities,high drop out rate, low Potable Water coverage, low electric power supply.

**5.2. Potentialities**

**Land Resources:** the district has amble resources of land that can be used for different type crop production and livestock rearing. Especially in the low lands of the district there is a large size of land that can be used for investment opportunities for the production of cotton, spices and the like. On the other hand the district has a high potential of both modern and traditional irrigation activities Since the district is endowed with many rivers and streams.

**Tourist attraction site:** - The district has also Tourist attraction site especially Galema forest which have many attractive wild animals and Kile-fincha in Mitana Gado kebeles which have an attractive natural caves and wild animals such as Red fox, etc.

**Type of investment opportunities :-** Shirka district has many investment opportunities which percolate in rearing ,cultivating vegetables , fruit , Cash crops and etc.. There is also grazing land potentialities for rearing goats in Bidu Bala Kebele.

**Mineral: -** Shirka district has some mineral resources like sand stone, lime stone and others that can be used for construction purpose.

**Labor resource: -** Shirka is the populated district in the zone it has many skilled and unskilled man power that can be used for labor forces.

**CHAPTER SIX**

**6. Conclusion and Recommendations**

**6.1. Conclusion**

Shirka district is one of the administrative units of Arsi Zone; it has moderately cool/sub-tropical ,cool/ temperature and moderately warm/tropical climate condition and also has potential for tradition and modern irrigation system. From the total population of the district, more than 90.9% are living in rural area depending on agriculture.

The district is known by the production of different types of crops. The average production per hectare was improved even though the area cultivated was the same. The district is known by the production of cereals, pulses, oilseeds and different cash crops. To improve the productivity, the district’s agriculture and rural development office provide different type of agricultural inputs to the farmer. During the year under consideration, the number of Farmers Training center 32 and development agents which can be,two and one development agents in each rural kebele. However, the amount of chemical fertilizers used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

Despite of the fact that animal rearing is one of the back bone of the livelihood of the farmers in the district, livestock rearing and production is known to be traditional one that causes the farmers benefit less than expected level. Moreover, shortage of forage for food, drought and shortage of medicine for treatment causes the animals to be affected by disease. The district animal health department has been providing different type of animal health service and treatments to improve the productivity and quality of live stock found in the district.

In the district a lot has been done to achieve access to primary school coverage by constructing 60 primary and four secondary schools, ,One TVET College. However, in contrary, the number of students was decreased through time. The student to classroom ratio was **54.6:1** while student to teacher’s ratio was **54:1** in the years **2012** for primary school and the student to classroom ratio and student to teacher ratio was **59:1** and **27.5:1** respectively in the year **2012** for secondary school**(9-12).** The **CPD** program given to the teachers has great contribution to improve educational quality by bringing behavioral, social and economical change and initially work hard. In the district till this document was compiled there is one technical and vocational education college in the district.

So as to improve primary health coverage in the district, the number of health facilities was increasing in the district. This gives population to health facilities of **36932:1** for health center and for health post **67149:1** which is above the recommended standard set by WHO which is **25,000** for health center and 5,000 for health posts. On the other hand, the number of health personnel with different profession was increased between the year **2011** and **2012** which in turn improve the population to health professions for different profession.

The district’s potable water coverage is low even which is below the zonal average. Moreover, there is a great disparity between the rural areas and urban areas of the district. Regarding the water supply schemes there were slight increment in spring development and distribution schemes.

On the other hand, the district have ample of land suitable for production of different types of crops like cereals, pulses, spices, green paper, sugarcane, etc both using rain fed agriculture and using irrigation(both modern and traditional) since the district is endowed with potentially rivers and streams suitable for irrigation.

**6.2. Recommendations**

To overcome the problems and make sustain the development the concerned government bodies’, non-government, communities and others should perform the following activities,

* Infrastructure development like road, energy supply and transportation net work facilities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To improve the agricultural productivity of the district trainings and experience sharing is very essential. For these cases training for farmers should be needed.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centers (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements are important.
* In the district there are high potential of livestock population but the farmers use traditional way of rearing and benefit less than the expected output from this sector. Moreover, the animals’ health facilities are very small in number. So it should be expected to motivate to adopt modern way of animal rearing and construction of additional animals’ health clinics to improve the quality as well as the quantity of the livestock population,
* In the social sector development, the health coverage of the district is at its low stage as compared with WHO standard. Hence, So as to improve the quality of health services delivery and to increase the health coverage additional health facilities should have to be constructed by the concerned bodies’,
* In the district, especially for primary schools, student to classroom ratio, the educational level of teachers, etc below the recommended level. Hence, the district education office and other concerned bodies have to construct additional classroom, and improve the education level of the teachers,
* On the other hand, the best way of decreasing unemployment rate and acquiring skilled man power is through technical and vocational school training for student. To do so the concerned government bodies or other stakeholders would have to strengthen the capacity of the TVET school in the locality,
* The potential potable water coverage of the district was low in kola kebeles of the district. Hence, additional water supply schemes should have to be constructed in those kebeles which have no potable water.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF SIRE DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER-ONE**

**1. INTRODUCTION**

**1.1 Back Ground**

**Sire** is one of the 26 districts of Arsi zone. Its present name is derived from the word ‘Sire’ which means “bed” in Oromic language given to Sire town due to its topographic location on high plateau along the escarpment of the rift valley.

**The objective of preparing this profile** is to assess the natural resource base and socio-economic situation of the Sire district that reflect the existing situation, development problems and the available opportunities for its development. The data used to organize this document is collected from the district and zonal level sect oral departments, 1999 census result report and other related documents available in the office. **Different organizations can use different calendar** year. Consequently, in this document, only Ethiopian Calendar (E.C) is used. In Ethiopia year, there are 12 months of 30 days each with an addition of a short period often referred to as pregame, which has five days for three consecutive years and six days on the fourth year.

**Concerning problem faced lack of accurate and reliable data;** untimely response from the concerned bodies due to low attention for data is some of the major problems faced during collection and organization of the document. Moreover, a regular boundary change among the districts and peasant associations also has become obstacle to obtain the required data and complete the document on time.

**The paper has seven chapters.** The first chapter deals with physical features like location, relief, drainage, land use, soil, vegetation and wild life. The second chapter focused on population size and Distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and the seventh chapter deals with Social Service and Infrastructure Condition, Development Activities, Problems and Potentialities, and Conclusions and Recommendations respectively.

**CHAPTER TWO**

**2. Physical setting and Situation**

**2.1. Location and Area**

**Sire** district is one of the administrative units of Arsi Zone. Astronomically the district is located between 7o49’35”N-8o12’14”N latitude and 39o20’14”E- 39o33’14”E longitude. It shares boundary line with East Shewa zone in the north, Jaju district in the east and south east, Diksis district in the south, Lode Hetosa district in the south west and Dodota district in the West. The total area of the district is 474.2 Km2 (2.26% of the total area of the Arsi Zone

**2.2. Geology, Relief, Drainage and Climate**

**Geology:** Continuous effect of faulting and folding causes the formation of the present land form of the district. Following the formation of Rift valley Volcanism activity causes the present land form to be formed. It’s western, north and east central part, northern Eastern and north -eastern part is covered by Nazerate series. The southern and south eastern part is covered by lower part Chilalo formation while its central pocket areas between Nazerate series is covered by mursi and Bofa basalts. All the formation was formed during Cenozoic era of quaternary period.

**Relief:** The relief of Sire district is characterized by undulating plain of low land, hill and high plateau with an altitude ranges from less than 1000 to 2500 Meters. Its elevation reduces from south east to west and northwest (to the Rift Valley).

**Drainage:** All parts of the district are found within Awash drainage system. Hawas, Keleta and Agemsa River are the major permanent rivers of the district. These rivers are being utilized for modern and traditional irrigation.

**Climate:** Due to its altitudinal location the climatic condition of the district is dominantly characterized by moderately cool air condition which ranges between 15oC- 20oC. The remaining type are cool and moderately warm having temperature ranges 10oC-15oC and 20oC-25oC respectively.

The annual rainfall of the district ranges from 800mm-1200mm and the average rainy days are115 days in the year. The rainfall pattern is bimodal, which are short rainy season (Belg season from February to May and summer long rainy season (Meher season from June to September).

**2.3. Soil, Vegetation and Wild life**

**Soil:** The major soil types include Eutric cambisols, pellic vertisols, Dystric Nitosols, Litho sols and Eutric Fluvisols etc are the major ones. Their fertility status is very good. However, rapid erosion due to high rate of deforestation is one of the major problems of the district.

**Vegetation**: Regarding Vegetation types found in the district different species of Accacia tree are the the dominant type of vegetation. In addition different broad leaf forest and gallery forests are found in the pocket areas of the district. There is also community forest in the district.

**Wild Animals:** in the district there are different type common wild animals Like Monkey, apes, Rhina and Rabbit found in different parts of the district

**CHAPTER THREE**

**3. Population Characteristics**

**3.1. Population Size**

According to estimation made from 1999 population and housing census report for Oromia Region, the total population of Sire district was increased **to 112,315**(Male **57,442** , Female **54,873** ) in the year 2012.

From the total population of the district, only 14 % are living in urban areas. This indicates that more than 86% of the population of the district is living in rural area depending on agriculture. Of the total population, females accounted for 48.8%.Sex Ratio and **House hold Size**: The overall sex ratio of the district was 104 male per 100 female (111male per 100 female in urban and 103 male per 100 female in rural).

**Table 3.1. Population Size by Place of Residence and sex in the year 2011-2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | **Total** | | |
|  | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **2011** | 47,554 | 45,934 | **93,488** | 8,289 | 7,419 | **15,708** | **55,843** | **53,353** | **109,196** |
| **2012** | 48,807 | 47,144 | **95,951** | 8,636 | 7,729 | **16,365** | **57,442** | **54,873** | **112,315** |

**Population Density and Rural Settlement;** Population density indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/relation, a crude density of district was increased from 0.00434 persons per km2 to 0.00422 persons per km2 between the year 2011and 2012. This ratio indicates the district is one the densely populated Zonal district. Concerning the settlement pattern of the district, the rural parts are characterized by sectored type of settlement

**Age –Sex Distribution;** Of the total population of the district, young age (0-14) accounts for 46% (rural 87 % and urban 13%) while old age (65+) consist for 4% (rural 87% and urban 13%). On the other hand, the economically active population (age 15-64) account for 50 %, which is 86.% for rural and 14% for urban. The dependency ratio of the district was increased by 50% (rural 86% and urban 14%) of the total populations in the district.

**Table:3.2. Population size of Rural and Urban by wider Age Group 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year/Sex** | **Male** | | **Female** | | **Total** | |
| **%** | **No** | **%** | **No** | **%** |  |
| **Rural** | **87** | **49396** | **86** | **47676** | **97072** | **86** |
| 0-14 | 46 | 22729 | 46 | 21829 | 44558 | 46 |
| 15-64 | 50 | 24829 | 51 | 24089 | 48918 | 50 |
| 65+ | 4 | 1838 | 4 | 1758 | 3596 | 4 |
| **Urban** | **13** | **7702** | **14** | **7541** | **15243** | **14** |
| 0-14 | 46 | 3529 | 46 | 3473 | 7002 | 46 |
| 15-64 | 50 | 3885 | 50 | 3801 | 7686 | 50 |
| 65+ | 4 | 288 | 4 | 267 | 555 | 4 |
| **Total** | **100** | **57098** | **100** | **55217** | **112315** | **100** |
| **0-14** | **46** | **26258** | **46** | **25302** | **51560** | **46** |
| **15-64** | **50** | **28714** | **51** | **27890** | **56604** | **50** |
| **65+** | **4** | **2126** | **4** | **2025** | **4151** | **4** |

**School Age population-** is one of the best indicators for planning and budget preparation of education, health and other social services facilities. Moreover, school age population is important for planning the number of students enrolled to school every year. As shown in the below, the number of school age population of the district was increasing from **43,636** students to 45,044(49.021% female) students between the years 2011 to 2012. These groups of population account for 40.1% of the total population of the districts in the year 2012.

As far as school age population by level of school was concerned the number of kindergarten, primary and secondary school population was increased from 10,229 to 10,678 and 23,604 to 24,276 and 9803 to 10,090, respectively between the years 2011 to 2012.This increment in the school age population indicates there is a need for additional budget for construction of school and expansion of other school facilities that create favorable school environment which in turn improve the quality of education in the district. Moreover, there is a need for expansion for other social services like health facilities, youth centre, etc.

**Table 3;3 Number of school age populations**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2011** | | | | **2012** | | |
|  |  | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Urban** | | | | | | | |
| 4\_6 | 741 | | 661 | **1402** |  |  | **1618** |  |
| 7\_14 | 1763 | | 1570 | **3333** | 1837 | 1636 | **3473** |  |
| 15\_18 | 747 | | 669 | **1416** | 778 | 697 | **1475** |  |
| **Total** | **3251** | | **2900** | **6151** | **3377** | **3189** | **6566** |  |
|  | | **Rural** | | | | |  |
| 4\_6 | 4507 | | 4320 | **8827** | 4626 | 4434 | **9060** |  |
| 7\_14 | 10327 | | 9944 | **20271** | 10598 | 10205 | **20803** |  |
| 15\_18 | 4246 | | 4141 | **8387** | 4362 | 4253 | **8615** |  |
| **Total** | **19080** | | 18405 | **37485** | **19586** | **18892** | **38478** |  |
| **Urban +Rural** | | | | | | | | **Urban +Rural** | |
| **4\_6** | **5248** | | **4981** | **10229** | **5388** | **5290** | **10678** |  |
| **7\_14** | **12090** | | **11514** | **23604** | **12435** | **11841** | **24276** |  |
| **15\_18** | **4993** | | **4810** | **9803** | **5140** | **4950** | **10090** |  |
| **Total** | **22331** | | **21305** | **43636** | **22963** | **22081** | **45044** |  |

**Chapter FOUR**

**4. Economic Conditions**

**4.1 Crop Production and Livestock rearing**

**Crop production:** Bimodal type of the rain rainfall gives a wide opportunity for the district to produce the crops and use the same land twice a year (for Meher and Belg*).* However, Meher is the main growing season accounts for more than 54% of the total land cultivated in the year 2012 The major annual crops grown in the district are cereals, Pulses and Oil Seeds. From cereal crops wheat , teff, maize, and Barley are the most widely grown crops in the district.

**In the Meher season** of the total land cultivated was decreased from 23775.8hectares to 20191.25hectares in the year 2011 and 2012. While the production obtained was decreased from 529274quintals to 480932.5 quintals between the year 2010/2011 and 2011/2012.

However during **Belg Season** the total land cultivated was decreased from 7611hectares to 6722 hectares and the production obtained was decreased from 241334quintals to 212248quintals between the year 2010/2011 and 2011/2012. These give an average productivity of 31.7 and 31.57 quintals per a hectare in the year2011, 2012.

**Table: 4.1. Area cultivated and production obtained for major crops for by season (2011-2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Crop type** | **2010/2011** | | | | **2011/2012** | | | |
| **Meher Season** | | **Belg Season** | | **Meher Season** | | **Belg Season** | |
| **Area Cult.** | **Prod.(qt)** | **Area Cult.** | **Prod.(qt)** | **Area Cult.** | **Prod.(qt)** | **Area Cult.** | **Prod.(qt)** |
| **Cereals** | **20511.3** | **481038** | **7468** | **239904** | **17494** | **422218** | **6615** | **211075** |
| Wheat | 12136 | 291264 | 906 | 16308 | 8946 | 259210 | 722 | 16606 |
| Teff | 5318 | 63816 |  |  | 5974 | 83636 |  |  |
| Barley | 726 | 17424 | 6562 | 223596 | 634 | 14582 | 5893 | 194469 |
| Maize | 2074 | 62220 |  |  | 1747 | 59772 |  |  |
| Sorghum | 257.3 | 46314 |  |  | 193 | 5018 |  |  |
| **Pulses** | **2806** | **43682** | **143** | **1430** | **2307.25** | **54059.5** | **107** | **1173** |
| H/beans | 75 | 1140 | 143 | 1430 | 27 | 378 | 107 | 1173 |
| F/ peas | 2568 | 41088 |  |  | 1836 | 45376.5 |  |  |
| Har/ beans | 98 | 980 |  |  | 393.75 | 7639 |  |  |
| Chick peas | 42 | 336 |  |  | 30 | 420 |  |  |
| Lentils | 23 | 138 |  |  | 20.5 | 246 |  |  |
| **Oilseeds** | **458.5** | **4554** | **0** | **0** | **390** | **4655** | **0** | **0** |
| Neug | 4 | 16 |  |  | 4 | 32 |  |  |
| Linseed | 451 | 4510 |  |  | 383 | 4596 |  |  |
| Sun flower | 3.5 | 28 |  |  | 3 | 27 |  |  |
| **Total** | 23775.8 | 529274 | 7611 | 241334 | 20191.25 | 480932.5 | 6722 | 212248 |

Source; Agricultural office

**Livestock:**Cattle, goats, sheep, horses, mules, donkeys and camels are the major type of livestock rearing in the district. From the total livestock found in the district cattle, sheep and goats account for about 29.8%, 23.3% and 11.1% respectively during the 2012 year. During the same year cattle occupied the highest share of the livestock found in the district.

**Poultry:**Poultry production is another source of family income and food in the district. In, 2011, 2012 and there were 64,699 and 66,485 poultry populations in Sire district respectively. The prevalence of disease and traditional method of rearing is the major constraints of decreasing the quantity and quality of poultry population in the district.

**Table: 4.2. Livestock and Poultry Population of the District**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of input** | 2011 | % | 2012 | % |
| **1** | **Live Stock (total)** | 252600 |  | 262923 |  |
|  | Cattle | 74172 | 29.4 | 78261 | 29.8 |
|  | Sheep | 27006 | 10.7 | 29255 | 11.1 |
|  | Goats | 60133 | 23.8 | 61222 | 23.3 |
|  | Donkey | 20218 | 8.0 | 21120 | 8.0 |
|  | Horses | 5560 | 2.2 | 5750 | 2.2 |
|  | Mules | 521 | 0.2 | 580 | 0.2 |
|  | Camel | 291 | 0.1 | 250 | 0.1 |
| **2** | **Poultry** | 64699 | 25.6 | 66485 | 25.3 |
|  |  |  |  |  |  |

**Bee-keeping activities**:Bee-keeping is another source of cash income and food for farmer family. Rapid deforestation rate of vegetation and lack of enough moisture due to shortage of rain fall, using of herbicides and insecticides are the main problems in bee farming. However, in the district there were 33 and 1133 modern and traditional bee hives used by 391 farmers in the year 2011 respectively. In the year 2012 there are 52 modern beehives’ and 38 beneficiaries and 992 traditional bee hives 200 beneficiaries.

**Fishery:**Since the district has no big water bodies like rivers, lakes and ponds that have potential for fishery production there is no fishery activity in the district.

**Agricultural Infrastructure and Inputs**

**Agricultural Service Cooperatives:** The district has 19 agricultural Farmers’ Service cooperatives with member of farmers 11,126 in the year 2012. Regarding their capital the cooperatives have 14,071,072.03 Birr of which 69.2% is operational in the year 2012.During the same year they had grain mills and six grain stores. These service cooperatives provide member farmers and the surrounding communities with agricultural inputs, credit services, grain marketing services; grain store rent services, etc

**Table: 4.3. Number of cooperatives and their capital in the year 2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Mineral and mineral product producers | 2 | 8 | 26 | 34 | 116,315.29 | 125,070 | 241,385.29 |
| General service cooperatives | 19 | 9487 | 1639 | 11,126 | 9,750,865.71 | 4,320,206.32 | 14,071,072.03 |
| Irrigation Participant cooperatives | 1 | 38 | 0 | 38 | 3651.91 | 45,075.91 | 47727.82 |
| Improved seed producers | 4 | 149 | 8 | 157 | 302,979.27 | 177,003.27 | 479,982.96 |
| **Total** | 26 | 9682 | 1673 | 11355 | 10173812 | 4667356 | 14840168 |

**Source:** Sire district Cooperative Office

**Development Agents and Farmers Training Centers*:*** They are agricultural infrastructure used to boost agriculture production and productivity.DA offices and residential houses were started in 1986 while farmers training centers construction was started in the year 1996. Accordingly, the district has 35 and 34 development agents 17 Farmers training centers during the year, 2011, and 2012 respectively. The aim is to provide extension services and technical assistances to the farmers on system of crop production and animal management, natural resource conservation, child care and family planning.

**Table: 4.4. Number of Development Agents, FTCs and Beneficiaries**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **2011** | **2012** |  |
| Number of Development Agents | 35 | 34 |  |
| Number of FTC | 17 | 17 |  |
| Number of Beneficiaries | 15668 | 15668 |  |

Source: Sire district Agricultural Offices

**Fertilizers,** improved seeds and Herbicides: Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials.

Accordingly, during the years 2011 and 2012about 21,455and 24,901.5.quintals of fertilizers were distributed to farmers (data from Farmers’ Service Cooperatives). During the same year about 620 and 819 quintals of different types of improved seeds like Wheat, and Maize were distributed. These figures however, does not indicate the actual amount of inputs distributed as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of input** | **2011** | **2012** |  |
|  | **Amount(qt.)** | **Amount(qt.)** |  |
| **Total** | **21,455** | **24,901** |  |
| NPSB | 19,371 | 21,416.5 |  |
| NPS | 279.5 | 870 |  |
| NPSZ |  | 1469 |  |
| UREA | 1805 | 1146 |  |
| Improved Seeds (qt.) | 620 | 819 |  |
| Wheat | 520 | 719 |  |
| Maize | 100 | 100 |  |
| Herbicides (lit.) | 4600 | 5000 |  |

Source: - Siree cooperative office

**Agricultural Calendar:**In the zone the farmers are not busy throughout the year since agricultural activities are seasonal. As a result, during some seasons of the year they are too busy while during some seasons of the year they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related factors. Anyhow, the effect of these factors on living standard of the local community needs further investigation. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated. In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Merti district is shown in table be

**Table: 4.6. Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Maher Season** | **Belg Season** |
| 1 | Land preparation | March | October |
| 2 | Planting (Sowing) | June | April |
| 3 | Weeding | July | May |
| 4 | Harvesting | October | August |

**Land and farm ox holding size**: Due to lack of reliable data, we could not say anything about the average farm land holding size

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung and crop residue, crop rotation and fallowing while the modern one is the using of artificial fertilizer

**Methods used for Soil Conservation:** Contour ploughing, strip cultivation, trash line, diversion ditch on cultivated land are a traditional method while check dam construction, Terrace construction, cut off drain, mixing cultivation and afforest ion are modern way of soil conservation.

**Constraints of Livestock and poultry production:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastrolysts, New castle, External and internal parasites are the major livestock and poultry disease in the district.

In addition high prevalence of diseases, traditional method of rearing, inadequate feed supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values. Deforestation, shortage of moisture and Herbicides are the major problem in bee farming.

**Animal Health Infrastructure:** An availability of animal health infrastructure and animal health personnel are very essential to control the prevalence of animal diseases. Accordingly, the district has five animal health infrastructure and fourteen Veterinary personnel in the year 2011 and in the year 2012 the number of animal health infrastructure was six and the number of veterinary health personnel increased to sixteen in the year 2012. For detail, see the table below.

**Table: 4.7. Animal Health Personnel and Services of Sire district**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| Vaccination | 228386 | 265013 |
| Blackleg | 0 | 6500 |
| Hemorrhagic Septicemia | 22830 | 13600 |
| Anthrax | 50909 | 63829 |
| Treatment | 269738 | 235474 |
| External parasites | 94017 | 91121 |
| Internal parasites | 1175721 | 144353 |
| Castration | 1700 | 3064 |

Source: Sire district Animal health Office.

Accordingly, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 4.8. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of health service** | **2011** | **2012** |
| Veterinary personnel | 14 | 16 |
| Animal Health Assistance | 11 | 9 |
| BVS | 0 | 3 |
| DVM | 3 | 4 |
| Health Infrastructure | 5 | 6 |
| C type | 2 | 2 |
| D type | 3 | 4 |

**Agricultural Constraint**

**Constraints of Crop Production:** Crop pests and diseasessuch asSorghum Chaffer, stock borer, Aphids, Barely shoot fly, army Worm, termites, locust and birds are the major crop pest, whileRust, Coffee berry disease, fungus and Root Rot are the major crop production diseases found in the district.

**Constraints of Livestock and poultry production:** Black leg, Liver flux, Anthrax, African Horse sickness, Lumpy skin, pastoralists, New castle, External and internal parasites are the major livestock and poultry disease in the district.In addition high prevalence of diseases, traditional method of rearing, inadequate feed supply; poor marketing facilities are the major controlling factors to improve livestock and poultry productivity and production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values. Deforestation, shortage of moisture and Herbicides are the major problem in bee farming.

**Mining and Industry**

**Mining:** As Arsi Zone office of Mineral and Energy Development, the district has high potential of sandstone for construction purpose and solar Energy, wind Energy and Biogas for alternative energy resource. However, there are insignificant rock quarrying and pottery making mining activities by local communities in the district.

**Industry*:***Similar to other parts of the Zone, industrial development is at its infant stage in sire district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees.

Even if there are a lot of private grain mills found in the district we couldn’t say anything about their number, their capital and their number of employees due to the absence of reliable data.

**Trade, Tourism and Sport**

**Trade**: Even if there is no reliable data that indicates number of trader, there are many traders that participate on different trading activities in the district.

Regarding cash crops Haricot bean, onion, Tomato, potato, Chick pea, lentils, etc are the major local cash crops produced in the district and sent to the central market. In addition, hide and skin can be an exportable item of the area.

**Tourism:**Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Sire district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, Kurale natural bridge is one of the tourist attraction sites yet identified by culture and tourism office in the district.

**Finance and Financial Institutions**

**Financial Institution:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Association play a significant role in the performance of the district economy. Sire district has no any governmental or non-governmental bank institutions. The district has two credit and saving associations (WALKO and Meklit and Metamaman) to provide credit services for rural population of the district.

**Annual budget allocation:** Annual budget requirement of district is mainly from two sources, regional government grants and district revenue. Regional government contribution accounts for more than 82.5% of total annual budget of the districts. This indicates how far the current revenue generation capacity of the districts is low.

In the year 2 total block grant budget allocated for Sire district was Ethiopian Birr 78,346,373 This was increased to 83,452,085Ethiopian Birr. This was increased by 6.5%.

**Table:4.9. Annual budget allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 98,180,859 | 7 |
| 2012 | 113,903,516 | 16 |
|  |  |  |

**Source: - Siree woreda Finance and Economic Cooperative office**

During the year 2011, 2012 the District collected total revenue of Ethiopian Birr 17,143,525and -17,584,643 respectively, indicate 441.118 birr increment. The main sources of revenue collected in the district are Direct tax, indirect tax and non-tax items as woreda Inland Revenue Office cumulative annual report of both year shows.

On the other hand, climatic change, expansion of illegal traders, lack of transport services, lack of awareness to pay taxes and lack of interest to pay the tax are the major problem in collecting revenue.

**Table: 4.10.Total Revenue collected and expenditure was made in Sire district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Revenue Collected** | **2011** | **2012** |  |
|  | Direct tax | 14,37,4875 | 15,000,881 |  |
|  | Indirect tax | 1,579,905 | 1,460,045 |  |
|  | Non-tax revenue | 1,188,743 | 1,123,120 |  |
|  | Total | 17,143,523 | 17,584,046 |  |

Source: Siree woreda In land Revenue Office

**CHAPTER FIVE**

**5. Social service and Infrastructure Facilities**

**5.1 Education**

**Kindergarten;** - there is four private kindergarten schools in the district with 506 (46.8% females) students and 7 teachers in the year 2012. One of the main problems related with kindergarten school is lack of clear management system.

**Primary Schools:**In the year 2011 and 2012 there were 30 and 31 primary schools (1-8) in the district with 17,329 (47.85% females), 16,315 (49.82% females) student respectively, with a slight increment of female students. During the same years there are 372 (36.82% female), 389 (34.2% female) and teachers in the district. The numbers of class-rooms were 308 and 325 in the year, 2011and 2012 respectively. Student teachers ratio was 51and 46 in the year 2011 and 2012.

**Senior Secondary and preparatory education (9-12):** In the year 2011 and 2012 there were one and three senior Secondary schools (9-10) school with 1352 (41.12%) 1197 (44.86%female) students respectively. Similarly, there was one preparatory school in the district during the same years with 296 and 449 students with 85 and 91 teachers for both senior secondary and preparatory schools during the year, 2011, and 2012 respectively. During the indicated year Student- teachers’ ratio was 19 and 18 respectively.

**Technical and Vocational education:** There is one governmental technical and vocational educations schools in the sire woreda.

**Table: 5.1. Number of Kindergarten and Primary School (1-8) with Student Enrolled (2011-2012)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2011** | | | |  | **2012** | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
| **Government** | 34 | 10020 | 8954 | 18974 | 35 | 9244 | 8717 | 17961 |
| Primary(1-8) | 30 | 9036 | 8293 | 17329 | 31 | 8235 | 8080 | 16315 |
| Senior Secondary (9-10) | 3 | 796 | 556 | 1352 | 3 | 660 | 537 | 1197 |
| Preparatory (11-12) | 1 | 188 | 105 | 293 |  | 279 | 170 | 449 |
| Technical and Vocational education | 1 | 0 |  |  | 1 | 0 |  |  |
| **Non-Government** | 3 | 221 | 220 | 441 | 4 | 269 | 237 | 506 |
| Kindergarten School | 3 | 221 | 220 | 441 | 4 | 269 | 237 | 506 |

Source: Sire District Education Office

**Education Quality:**The quality of education can be measured from educational qualification of teachers, ratio of students- teacher, ratio of student-school, ratio of student-text book, etc. Accordingly, from total primary school teachers, the teachers that full fill the minimum qualification requirement to teach grade 5-8 are 370 in the year 2012. To improve the quality of education student teacher ratio, student class ratio and others are very essential. So, as we can see from the given information, education office of the district is expected to do more to improve the quality of education by increasing the needed variables of education quality.

**Table:5..2. Number of Teachers by level of education and School (2011-2012)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Schools** | **2011** | **2012** |  |
| **Number of teachers in Primary(1-8)** | 372 | 389 |  |
| **Male** | 235 | 256 |  |
| Grade12 and below | 2 | 5 |  |
| TTI | 13 | 8 |  |
| Dip | 141 | 170 |  |
| BA | 79 | 73 |  |
| **Female** | 137 | 133 |  |
| Grade12 and below | 5 | 2 |  |
| TTI | 14 | 4 |  |
| Dip | 82 | 93 |  |
| BA | 36 | 34 |  |
| **Senior Secondary School (9-12)** | 85 | 91 |  |
| **Male** | 72 | 79 |  |
| Diploma | 71 | 5 |  |
| BA/BSc/MA/BSc | 1 | 75 |  |
| **Female** | 13 | 12 |  |
| Diploma | 1 | 2 |  |
| BA/BSc/MA/BSc | 12 | 10 |  |

Source: - Sire District Education Office

**Table: 5.3. Student performance and Drop out condition by level of school**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **2011** | | **2012** | |
| **Primary school** | **Secondary school** | **Primary school** | **Secondary school** |
| 1 | Student enrollment | 17329 | 1645 | 16315 | 1646 |
| 2 | Promoted students | 13972 | 1132 | 15458 | 1458 |
| 3 | Student drop out | 2537 | 297 | 857 | 188 |

Source: - District Education Office

As shown in the above table, of the total student enrolled to primary school, 80% and 94.7% were promoted to the next grade level in the year 2011 and 2012 respectively. Likewise, during the same year,68.8% and 88.5% were promoted to the next grade level in secondary school . This indicates that, there is a gradual improvement of quality of education in the district.

As remedy to student participation and student performance, drop out of student was decreased from 2537 and 297 in the year 2011 to 857 and 188 in the year 2012 in primary and secondary school respectively. This figure indicates that, the dropout rate of the district was 14.6% and 18% in primary and secondary school in the year 2011 while it was decreased to 5.2 and 11% in the year 2012. Such high rate of student dropout from school is due to economic problem(uniform, educational material, fees), unwillingness of some parent not to send their child to school, migration to other countries, early marriage, abduction, lack of interest or motivation, absence of school facilities like toilet especially for female students, etc are mentioned as an example.

**5.2. Health**

**Health Institution:** The district had four health centers and seventeen Health post (Governmental) during the year 2012. In addition, there were three non- governmental clinics in the district during the indicated year. The ratio of population to Health centers and health post was 1.28,079.and 1.6607 respectively, indicates good health coverage of the district compared to WHOM standard (25000; 100000 and 5000 respectively).

**Health Personnel:**In 2011; 2012-; there were; 94; and 96 Health personnel in governmental health institution and eight nurses in non government clinics respectively. In 2012 from all health professionals, there were 34 and 35 Nurses, 7 and 7 laboratory technician and sanitarians giving services in the year of 2011 and 2012 respectively.

**Table: 5.3. Number of health Institution and Personnel by ownership (2011-2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/ personnel** | **Govt.** | **Non Govt.** | **Govt.** | **Non Govt.** |
| **2011** | | **2012** | |
| **Health Institution(GOV)** | 94 | 8 | 96 | 8 |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 3 | 0 | 3 |
| Health Post | 17 | 0 | 17 | 0 |
| **Health Personnel** |  |  |  |  |
| Nurse | 34 | 3 | 35 | 3 |
| Health Assistance | 0 | 0 | 0 | 0 |
| Laboratory Technician | 7 | 1 | 7 | 1 |
| Pharmacy Technician | 9 | 1 | 9 | 1 |
| Sanitarians | 1 | 0 | 1 | 0 |
| Health Officer | 9 | 3 | 8 | 3 |
| Health extension workers | 34 | 0 | 36 | 0 |

Source: Sire Woreda Health Office

**Causes of Morbidity:** According to the data obtained from Sire district health office, the major causes of morbidity and death in the district in 2011 are AFI (36-%) followed by Typhoid fever/18%/, URI and 13 % respectively .In the year 2012 the leading disease that cause morbidity and death is Acute fever illness AFI 34%, Typhoid fever/21%. See table below.

**Table:5.4. Ten top diseases existed in the district in the year 2011 and 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of Diseases** | **No.of Population** | **%** | **Type of Diseases** | **No.of Population** | **%** |
| AFI | 11284 | 36 | AFI | 9356 | 34 |
| Pneumonia | 3510 | 13 | Pneumonia | 2533 | 10 |
| AUR | 1544 | 4 | AUR | 537 | 2 |
| Helmentiasis | 1745 | 2.6 | Helmentiasis | 836 | 3 |
| URI | 4319 | 13 | URI | 3784 | 14 |
| Diarrhea | 153 | 0.4 | Diarrhea | 44 | 0.1 |
| Skin infection | 1854 | 6 | Skin infection | 2479 | 9 |
| UTI | 1722 | 7.4 | UTI | 1638 | 6 |
| Typhoid Fever | 8942 | 18 | Typhoid Fever | 5782 | 21 |
| Malaria | 5 | 0.003 | Malaria | 13 | 0.004 |
| **Total** |  |  | **Total** |  |  |

**Women and Children Socio-economic Issue**

**Women Issue**

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities.

As a result, the number of women gets antenatal and postnatal service was 3248and 3248 in the year 2011 and their number was increased to 3680and 3680 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 2635 and 2427 in the year 2011 and 2012 while those who attended delivery service by health extension works was 0 and 0 in the year 2011 and 2012.Though such improvement was observed, still there many women attended delivery traditional at their home due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 3248 to 3680 between the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was 16748 and19374 during the year under consideration.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and sire district in particular is the highest was compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased from 16748 in the year 2011 to 19374 in the year 2012. As a result of this, according to the data obtained from Demographic health Survey of the year 2011 indicated the contraceptive prevalence rate of the district was estimated at 86%.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home.

For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men.

However, participation on overall decision making and resource utilization is dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing.

On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members was 17 in the year 2011 and 17 in the year 2012. Moreover, the number of women who are member of woreda cabinet was 8 and 8 during the year under consideration.

**Table: 5.5 Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| 1 | **Access to save delivery service** | **Number** |  |  |
|  | Women's used ANC/Antenatal care/services | Number | **3248** | 3680 |
|  | Women's used PNC /Postnatal care/services | Number | 3248 | 3680 |
|  | Women’s assisted delivery | Number | 0 | 0 |
|  | Deliveries with in health institution (attended by skilled birth attendant) | Number | 2635 | 2427 |
|  | Deliveries attended by HEWs | Number | 0 | 0 |
|  | In their home traditionally | Number | 44 | 29 |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 3248 | 3680 |
|  | NPW TT2 | Number | 16748 | 19374 |
| 3 | **Family planning condition** |  |  |  |
|  | Modern methods | Number | 16748 | 19374 |
| 4 | **Women elected at different level** |  |  |  |
|  | Member of regional council | Number | 0 | 0 |
|  | Member of woreda council | Number | 0 | 0 |
|  | Member of woreda cabinet | Number | 0 | 0 |

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are Hemorrhage, sepsis, obstructed labor, pregnancy induced hypertension and abortion. On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage etc.

**Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was increased from12920in the year 2011 to 13,382 in the year 2012. Though the above figure indicates the number of children gets different vaccination accounts 59% and 62% from total children who get vaccination. In the district the EPI coverage was increased from 83% in the year 2011 to 85% in the year 2012.

**Table: 5.6. Number of children vaccinated by year and type of vaccination**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |  |
| BCG | 3219 | 3424 |  |
| Measles | 3011 | 3256 |  |
| DPT | 3345 | 3351 |  |
| Polio | 3345 | 3351 |  |
| **Total** | 12920 | 13382 |  |

Source: sire district health office

**On the other hand, loss of parent due to HIV/AIDS prevalence,** divorce, accident, natural disaster and other diseases causes more than 3 and 51 children to be orphan in the year 28 and 32.These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 28 in the year 2011, 3 in the year 2012. This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also children with different types of disability in the district who are in most cases not benefited from social services and the economy to in the district.

From the total orphan and vulnerable children and disabled children, 56% and 62% are female. Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Malaria, Asphyxia-ABA-NR, Sepsis, Preterm, Tetanus and infection of skin.

**Table:5.7 Children socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| 1 | Number of Orphan and Vulnerable children |  |  |  |
|  | Male | Number | 2 | 1 |
|  | Female | Number | 1 | 1 |
| 2 | Full immunization | Number | 3111 | 3256 |
| 3 | Number of disable children | Number | 1 | 2 |
|  | Male | Number | 1 | 1 |
|  | Female | Number | 0 | 1 |
| 4 | Child disease and causes of death | Number |  |  |
|  | Malaria prone area | Number of kebele | 11 | 11 |
|  | Children affected by Malaria | Number | 5 | 11 |
|  | Children treated for malaria | Number | 5 | 11 |
|  | Children died due to malaria | Number | 0 | 0 |
|  | Children born with HIV/AIDS | Number | 0 | 0 |
|  | Children Died due to HIV/AIDS | Number | 0 | 0 |
|  | ITN Coverage | % |  |  |

**Hygiene and Sanitation issue;-** One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers.

As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions.

As the data obtained from district health office indicated, all health centers in the district were access to full improved sanitation facilities while all health post are access to toilet facilities. Likewise, all school in the district was access to toilet facilities.

**Table: 5.8 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Health Centre** | **Health post** | | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of health institutions in the district | 4 | 4 | 17 | 17 |
| 2 | Number of health institution access to improved sanitation facilities (full sanitation) | 4 | 4 |  |  |
| 3 | Number of health institution access to water supply | 6 | 6 |  |  |
| 4 | Number of health institution access to toilet facilities | 4 | 4 | 17 | 17 |
| 5 | Number of Health institution access to dry waste disposal facilities | 6 | 6 |  |  |
| 6 | Number of Health institution access to liquid waste disposal facilities | 4 | 4 | 0 | 0 |

Source: - District Health Office

**Table: 5.9 School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Primary school** | | **Secondary school** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 30 | 31 | 4 | 3 |
| 2 | Number of school access to water supply | 14 | 15 | 3 | 2 |
| 3 | Number of school having toilet | 25 | 28 | 3 | 2 |

Source: - District Education Office

**5.3. Sport Activities**

**Sport:** Football, Volleyball, Tec undo and Athletics are types of sport activities in Sire district. However, there is no well-organized sport facility in the district.

**Table: 5.10. Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of club** | **Member** | **Number of club** | **Member** |
| Tec undo | 3 | 180 | 3 | 180 |

Source: Sire districts youth and sport office

**5.6. Basic Social Service Infrastructure**

**Roads:** The district has gravel road of 101 km (all weather roads) 3 km asphalt and dry weather road which gives a road density (for all weather roads) in the year 2012.

**Telecommunication:**one of the fast and effective ways of transmitting of both business and administrative activities. Sire town is supplied with Digital and mobile type of telephone service while most rural kebeles of the district are supplied with wireless type of telephone services.

**Post Office:**Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. The district has agent type of postal services.

**Water supply:** potable water coverage of the district is very low. According to data obtained from Sire Woreda Water Resource and Energy Office from the total rural population of the district only (% 63.3 ) was supplied with potable water in the year 2011. During the same year, about (28%)of urban population was supplied with potable water.

**Energy Supply:**Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. From Sire district, Sire Town and three rural kebeles are supplied with electric power. However, in rural and other urban centers traditional sources of energy are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase production in the district. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dings. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene. Regarding fuel filling station, Sire District has no anytype of fuel filling station

**Table: 5.11. Sources of domestic energy supply for Sire district.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 25 | 18 |
| 2 | Fire wood | 30 | 35 |
| 3 | Animal Dung | 5 | 30 |
| 4 | Crop Residue | 5 | 7 |
| 5 | Kerosene | 5 | 5 |
| 6 | Electricity | 30 | 5 |

Source: Sire district Agriculture and Rural Development Office.

**CHAPTER SIX**

**6 .Development activities**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. Annual budget of the district is divided into salary, recurrent budget and capital budget. The capital budgets are directly used for the construction of different types of development projects. It is expected that of the total budget of the districts 10% will be used for development projects in the year 2012 Moreover, from excess revenues allowed for the district some amount must be used for development projects.

**Ongoing Government Development activities**

**Social sector Development projects**: since 2012 health posts are constructed by capital budget allocated from local government and community participation. In addition, three health posts are being constructed by budget obtained from Global Fund in collaboration with district capital budget and community participation.

**Economic ongoing development projects:** Since 2011 fiscal year 17 farmers training centers (FTC), 13 spring development and 5 D-type animal health clinics are being constructed by local government and community participation. Concerning private investment there is no any ongoing development project carried out by private investors.

**Major Problems of ongoing Development Projects**: Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction is the major problem during the construction.

**CHAPTER SEVEN**

7**. Problems and potentialities**

**7.1 Problems**

**Environmental problem:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results into crop production failure.

**Economic Problem:** Shortage of farm land High prevalence of crop diseases and pests, Shortage of Agricultural inputs and lack of capacity to buy, lack of Financial Institutions (Bank Saving and Credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries developmen

**Social service problem:** rapid population growth and large family size leads to land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low Potable Water coverage, low electric power supply

**7.2 Potentialities**

The district has high potential land resources that are suitable for investors to engage in agricultural production such as maize, haricot bean, chickpea, lentils, Teff and etc. It has suitable air condition that help private investors to engage on cattle fattening, poultry production, vegetable production (different kinds of Onion, tomato, cabbages production). Moreover, the district has high potential for livestock production especially goat and camel.

**CHAPTER EIGHT**

**8. Conclusions and recommendations**

**8.1 Conclusions**

The district has location advantage as it is situated close to big market centers such as Adama. Moreover, it is better in terms of basic social infrastructure development, because most part of it has mobile net work coverage and telephone service, road transport, potable water supply and electric power energy supply. In line with these advantages, the district has suitable climatic conditions and amble land resources for the production of different types of food crops and exportable items as well as animal fattening. As a result, sire district has a good potential for crop production and animal rearing. All farmers of the district practice on traditional method of farming both in crop production and livestock rearing. Agricultural input utilization is at its low stage and below its recommended level. Moreover, most farmers are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. As a result, most farmers are living at subsistence level. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation. To improve the prevailing situations three development agents with different professions (animal science, plant science and environmental protection) were assigned in each kebeles. Moreover, 17 farmers training centers and four animal health clinics of D-type and two C-type were constructed in the district during the past years. Currently about 17 farmer training centers are being constructed so as to attain standard of one farmers training center for every kebeles.

Even though it is not investigated and well known, the district has a potential of some mineral resources such as sand for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Of these mineral resources some rock quarrying and pottery making mining activities are currently used by local communities in the district but the local communities/cornering bodies does not fully start to utilize these mineral resources.

**Concerning health service,** 4Health center, and 17 health post served are serving **112,315** population respectively, below the standard recommended by WHO. Therefore, this indicates that the district is expected to construct additional health centers and health posts.

**Concerning potable water supply,** more than half of the total population (62.4%) of the district were supplied with potable water.

The major focus of current health policy of the country is primary health care, emphasis on preventive aspect such as awareness creation on environmental sanitation and self hygiene. To implement primary health care policy, 36 health extension workers, were already assigned for 17 rural kebeles so as to attain the standard of two health workers for each peasant association.

**Concerning education,** currently 35 primary (1-8) schools were available in the district. In addition to these, there are three secondary school that serves the surrounding area.

**8.2 Recommendations**

To overcome, the under developed socio-economic problems found in the district the concerned bodies like government, non-government and the surrounding community should take the following actions:

* Strengthening small scale and large scale irrigation system (using rain fall water harvesting as well as spate irrigation),
* Basic social service infrastructure development (clean water, rural road, etc) to attract potential investors,
* Strengthening rural agricultural institutions such as farmer training centers (FTC), farmer service cooperatives and rural credit services so as to facilitate farmers access to modern agricultural inputs,
* To improve health service coverage, the district needs to construct additional health centers and health posts,
* To meet Social service delivery, social service facilities like kindergarten and secondary school, TVET School has to be developed. and attention should be given for primary health care,
* Controlling pre-harvest and post-harvest crop loss by controlling crop pests and diseases,
* In order to bring sustainable socio-economic development the concerned body has to strengthen Environmental protection, use available resource wisely, soil and water conservation and putting into practice the land use plan policy

PHYSICAL AND SOCIO-ECONOMIC PROFILE OF SUDE DISTRICT

**CHAPTER ONE**

**1. INTRODUCTION**

**Back Ground;-** Sude district is one of the 27 district of Arsi Zone: The Historical name of the district is derived from sude tribe living in the area. The district has 30 administrative units of which **27** are rural peasant association while **3** of them are urban administrative unit. Kulla town is the capital of the district. It is located 93 km from regional capital Asella and 216 km from the regional capital city Finfinne.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of sude district that reflects the existing situation, development problems and potentials of the district to be used by government and Non Governmental organization, to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C).** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

The data used to organize this document is collected from the district and Zonal level sectoral departments, **1999** census result report ,revised final wereda integrated development study lot and other related documents available in our office. The problem faced when we organized the socio economic data are the problem of well prepared and organized data availability and willingness of some individual and sectors.

This paper has **seven chapters**. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation resp.

**CHAPTER TWO**

**2. PHRSICAL SETTING LOCATION AND AREA**

***Location*;-** Sude district is one of the administrative units of Arsi Zone. Astronomically, it is located between 7034’09’’N-7057’54’’N Latitude and 39031’35’’E-40001’22’’E longitude. Relatively, the district share a boundary line with Jeju and Guna district in the north, Diksis district in the west and north west, Robe district in the south and south west, Amigna district in the south and south west, Chole district in the east and south east direction having the total area of 1167Km 2. It shares 5.55% of the total area of Arsi Zone.*1.2. Geology Relief, Drainage, and Climate*

**Geology: -** the district get most its present land form during Cenozoic era as a result of forces like volcanism, faulting and folding. Most of the present northern, southern, south western and some central part of the district was covered by rock formed during tertiary period of Cenozoic era while few areas of

the north eastern boarded and north central part was covered by Termaber Megezez formation. On the other hand, except pocket area in the eastern tip of the district covered by Amba Aradom formation formed during Cretaceous period of Mesozoic era,

Most of the central, eastern and south eastern part of the district was covered by Alajae formation formed during tertiary formation.

**Relief and Drainage**: - The relief structure of the district consists of flat high plateau on the high land area to undulating low land areas. The altitude of the district ranges between1000m and 2500 meters above the seal level. The lowest place is found in Molleta area (1500m) while the highest place is located in Wergen bula area (2500M). Due to its location, the district is drained by major Permanent River like Magna, Azule and Molleta River. On the other hand, the major seasonal streams are Ginbecho and Hiddi. Generally, since most of the major rivers drain the low land areas, the district has a potential for both traditional and modern irrigation system if utilized efficiently which can be used to increase agricultural productivity in the area.

**Climate: -** Due to its altitudinal location, the climatic condition of the district is dominantly cool having a temperature of less than 10o. This type of climate consists about 73.7% of the total area of the district. The remaining ones are moderately cool and moderately warm having a temperature of 15oC-20oC and C20oC-25oC respectively. Hence, the dominant type of climatic condition of the district is cool agro-ecological zone, the mean annual rainfall is 800-1500mm.The average rainy days are about 75-97 days in the year. The rainfall pattern is bi-modal, which are short rain season Belg from January to March and Meher or long rainy season from June to October.

## 

## Land Use, Soil, Vegetation and Wild life

**Land use: -** Land use indicates the classification of the land of an area under different types of socio-economic uses. The types of land use changes from time to time depending on socio-economic change. For instance the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing. Accordingly, from the total area of the district the cultivated land (the lands covered by annual and perennial crops) represented about 29991 Hek in the year 2011 and increased to 30059 in the year 2012.The land covered by vegetation like forest, woodland, bush and shrub/ accounted for the largest area but it’s percentage share decrease from 63.7% to 58.62% between the year 2011 and 2012 respectively.

**Soil:-**The major types of soil in the district are Pellic Vertisols, Eutric Cambisols and Litho sols. Beside these Chromic vertisols are found in few areas of the district.

**Vegetation: -** Regarding the vegetation cover of the district, except few pocket area around Kulla town and along Elele river valley which is covered by different Riparian forest species, most of the eastern and south eastern part of the district is covered by wood land vegetation. On the other hand, the south eastern tip of the district is covered by bushes and shrubs (shrub land).

**Wild Life: -** The major wild animals are Leopard, lion, mountain Nyala, monkey; Ape, pig, fox, duiker, Columbus monkey, bushbuck, pigeon & different species of birds.

**Table:-1.3. The major wild animal in the district**

|  |  |  |
| --- | --- | --- |
| **Name of wildlife** | **Area where they found** | **Distance from district capital(km)** |
| Nyala | Wergenbula forest | 30 |
| Columbus monkey | Karbanii | 58 |
| Gerebelo | 67 |
| Adere forest | 42 |
| Chilada Baboon | Karbanii | 58 |
| Gerebelo | 67 |
| Adere forest | 42 |
| Werganbula | 30 |
| Lion | Karbeni forest | 58 |
| Pig | Karbanii | 67 |
| Gerebelo forest | 67 |
| Ape | Karbanii | 58 |
| Gerebelo | 67 |
| Adere forest | 42 |
| Werganbula forest | 30 |
| Leopard | Karbanii forest | 58 |
| Crocodile | Karbanii forest | 58 |

**Source:** Sude district Agricultural office

**CHAPTER THREE**

# 3. SOCIO ECONOMIC CONDITION

# 3.1 Population Size

According to the data obtained from,Central statistical Agency report of 1999, the total population of the district was increased from 203114 to 208536 between the year 2011 and 2012 showing an increment by 2.9%. In the year 2011, from the total population of the district, only 2.49% is living in urban areas. This indicates that more than 98.49% of the population of the district is living in rural area depending on agricultural activities. Of the total population of the district, females accounted for 48% (which is 47.88% rural and 47.19 for urban) by the year 2012. An overall sex ratio of the district was almost 100 male per 100 female (115.25 male per 100 female in urban and 100 male per 100 female in rural).

**Table: 2.1. Population distribution by urban, rural and sex for the district 2011-2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Rural** | | | **Urban** | | | **Rural + Urban** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **2011** | 99,259 | 99,209 | **198,468** | 2,467 | 2,178 | **4,646** | **101,726** | **101,388** | **203,114** |
| **2012** | 101,873 | 101,823 | **203,696** | 2,571 | 2,270 | **4,840** | **104,444** | **104,092** | **208,536** |

Source: Projected from1999 Central statistical Agency Report.

**Age and Sex Distribution ;-** the total population of the district, young age (0-14) accounts for 50.6% (rural 51% and urban 33%) while old age (65+) consist for 3.3% (rural 3.3 % and urban 3.2%). On the other hand, the economically active population (age 15-64) account for 46%, which is 97% for rural and 2.98% for urban. The dependency ratio of the district is 117% (126% for Rural and for urban) which indicate 117 people are dependent on 100 economically active population for the year 2012 respectively.

**Table: 2.2. Age and Sex structure of population for the year 2011-2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year/Sex** |  | **2012** | | | | |
| **Male** | | **Female** | **%** |  | **Total** |
| **Rural** | **104,548** | | **99,149** |  |  | **203,696** |
| 0-14 | 52,869 | | 51,208 | 49.9077 |  | **104076** |
| 15-64 | 47,785 | | 45,110 | 44.5461 |  | **92,895** |
| 65+ | 3,894 | | 2,831 | 3.22485 |  | **6,725** |
| **Urban** | **2,571** | | **2,270** | 0 |  | **4,841** |
| 0-14 | 822 | | 785 | 0.77061 |  | **1,607** |
| 15-64 | 1,673 | | 1,404 | 1.47552 |  | **3,077** |
| 65+ | 76 | | 81 | 0.07529 |  | **157** |
| **Total** | **107,119** | | **101,419** |  |  | **208,537** |
| **0-14** | **53,691** | | **51,993** |  |  | **105,683** |
| **15-64** | **49,458** | | **46,514** |  |  | **95,972** |
| **65+** | **3,970** | | **2,912** |  |  | **6,882** |

**Source:** 1999 CSA Report

**Population density**;- indicates population resource relationship for social service, economic and land resources. Regarding population land resource ratio/ relation, the district crude density was increased from 0.0065 people per km2 to 0.0063 people per km2 in the year 2012. Such increment in density of population means population pressure on natural resources was increasing. Concerning the settlement pattern of the district, the rural parts are characterized by scattered type of settlement.

**School age population is** one of the best indicators for planning and budget preparation of education facilities, health and other facilities. Moreover, to measure the education facility with the help of students to classroom ratio, students’ teachers’ ratio, students’ text-book ratio, and others school age population is crucial.

Accordingly, the number of school age population of the district was increasing from 73,737 students to 76,021 (49.28% female) student between the years 2011 to 2012. These groups of population account for 39.8 % of the total population of the districts in the year 2012 which is almost near to half of the total population of the district. As far as different school age population was concerned the number of kindergarten, primary and secondary school population was increased from 21,058, 43,722 and 8,957 in the year 2011 to 21638, 44,926 and 9,457 respectively in the year 2012

# 

# 3.2 Crop Production and Livestock Rearing

### 3.1.1. Crop Production

**Sude** district is typically an agrarian economy were by the vast majority of its population derives its livelihood from mixed agriculture that is livestock (mainly cattle) and crop (mainly cereals) production. Bi-modal pattern of the rainfall distribution gives a wide opportunity for the district to produce twice a year on the same land that is for Meher and Belg. However, Meher is the largest season in terms of both cultivated land and crop production. For instance, in the year 2011 29991 Hec. was cultivated and from this **653,203** production obtained. while in the year 2012 it decreased to 29,991 hec. However the production obtained decreased to **653,988** quint. This causes the average productivity to be 22.6 quintals per hectares during the year under consideration. The major annual crops grown in the district are cereals, pulses and oil seeds. For instance, from total cultivated land the area under cereal, pulses and oil seeds accounts for 82 %, 12% and 13% respectively in the year 2011/2012.. In addition, the district is known by production of cash crops like coffee, Fruit, vegetables, sugar cane, etc.

Likewise during the Belg season, between the production years 2011 and 2012, the total area cultivated was decreased from **8,587** to **686**hectares. These give an average productivity decreased from 204,376.6 quintals per hectares respectively during the year under consideration.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: 3.1c. Area cultivated and production obtained for private peasant holdings by seasons 2011-2011/2012**   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Crop type** | **2010/2011** | | | | **2011/2012** | | | | | **Meher season** | | **Belg season** | | **Meher season** | | **Belg season** | | | **Area cult /he/** | **Prod /Qut/** | **Area /He/** | **Prod/Qut** | **Area cult /he/** | **Prod /Qut/** | **Area /He/** | **Prod/ Qu** | | **Cereals** |  | **606,634** |  | **77655.3** |  | **465,010** |  | **7,469** | | Wheat | 15072 | 460939 | 699 | 5801.7 | 15570 | 274032 | 53 | 424 | | Teff | 6296 | 51067 | 0 | 0 | 6984 | 90792 | 0 | 0 | | Barley | 1267 | 24073 | 4796 | 69,542 | 1807 | 27105 | 541 | 7033 | | Maize | 1805 | 59565 | 404 | 1939.2 | 1868 | 48568 | 0 | 0 | | Oats | 30 | 510 | 28 | 372.4 | 17 | 238 | 2 | 12 | | sorghum | 1048 | 10480 | 0 | 0 | 971 | 24275 | 0 | 0 | | **Pulses** |  |  |  |  |  |  |  |  | | Horse beans | 1058 | 12696 | 0 | 0 | 1114 | 12254 | 0 | 0 | | Field peas | 85 | 935 | 2640 | 32208 | 59 | 708 | 90 | 360 | | Lentils | 48 | 288 | 20 | 152 | 32 | 256 | 0 | 0 | | Haricot beans | 630 | 6300 | 0 | 0 | 536 | 10184 | 0 | 0 | | vetch | 120 | 480 | 0 | 0 | 110 | 1540 | 0 | 0 | | chickpeas | 106 | 848 | 0 | 0 | 94 | 1692 | 0 | 0 | | **Oilseeds** |  |  |  |  |  |  |  |  | | Linseed | 1600 | 17600 | 0 | 0 | 2522 | 17019 | 0 | 0 | | Rapeseed | 10 | 80 | 0 | 110019.3 | 5 | 7829 | 0 | 0 | | Neug | 802 | 7218 | 0 | 0 | 1131 | 15834 | 0 | 0 | | Sun flower | 6 | 60 | 0 | 0 | 2 | 30 | 0 | 0 | | sesame | 8 | 64 | 0 | 0 | 3 | 12 | 0 | 0 | | **Grand Total** | **29,991** | **653,203** | **8,587** | **220,034.60** | **29,991** | **524,549** | **686** | **15,658** |   **Source**: - Sude district Agricultural office  **Irrigation: -** Irrigated crop production is not widely practiced in the district .However it was reported that the use of river, spring and ponds as a source of supplementary irrigation for growing crop, vegetable and chat. Between the year 2011 and 2012, the area under traditional irrigation was increased from 1456 hectare to 2,951 hectare while the production obtained was increased from 37257 quintals to 391874 quintals. |

### 

### 3.1.2 Livestock and poultry

**Livestock: -** The district is famous in livestock resources. Cattle, sheep, goats, horses, mules and donkey are the major livestock population found in the district. Between the year 2011 and 2012, the number of livestock population was increased from 576,524 to 602,774 From the total livestock population found in the district, cattle, sheep and goats account for about 46%, 25% and 20% respectively in the year 2012 which accounts for more than 99% from the total population. The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Table: 3.3.b Distribution of livestock and poultry in the year 2011-2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of livestock** | **2011** | **%** | **2012** | **%** |
| **1** | **Livestock** | **576,524** | **100** | **602,774** | **100** |
|  | Cattle | 264,780 | 46 | 265,015 | 44 |
|  | Sheep | 145,876 | 25 | 170,994 | 28.36 |
|  | Goat | 116,997 | 20 | 117,300 | 19 |
|  | Donkey | 11,250 | 1.95 | 11,494 | 2 |
|  | Horses | 32,600 | 5.6 | 32,840 | 5 |
|  | Mules | 5,021 | 0.84 | 5131 | 0.9 |
| **2** | **Poultry** | **156,550** | **0** | **167,840** | **0** |

Source: Sude district livestock resource and health office

**3.1.3. Bee-Keeping and Fishery**

**Bee-Keeping activities:** Bee-keeping farming is another source of additional income for the farmer. Accordingly, there were 2181 traditional, 498 transitional and 494 modern bee hives from which 32,806 kg of production was obtained in the year 2012. However, using of herbicides and insecticides are the main problems in bee farming.

**Table: 3.4- Number of Bee keeping and production obtained in the district 2011-2012**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of bee hives** | **2011** | | **2012** | |
| **No of bee hives** | **Prod(kg)** | **No of bee hives** | **Prod(kg)** |
| Traditional beehives | 5295 | 42,360 | 2181 | 17,448 |
| Intermediate beehives | 867 | 9537 | 498 | 5,478 |
| Modern beehives | 330 | 6600 | 494 | 9,880 |

**Source:** Sude district animal health office

**Fishery:** fishing activity is as simple as that of poultry production and other livestock rearing, however, there is no fishing activity in the district since there is no large water body like lakes, pond and river.

**3.1.4. Agricultural Inputs and Infrastructures**

**Agriculture cooperative:** There were 27 peasant associations. The number of cooperatives that engaged in different activities during the year 2011 and 2012 was increased from 48 to 48.Regarding their capital, they have more than **9,203,118.56** birr capital. Out of which 458980.6 fixed and 8,744,137.96 were operational in the year 2012.

**Table: 3.5. Name of primary cooperatives, their members and their capital 2011-2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **years** | **No cooperatives** | **Member farmers** | | | **Their Capital** | | |
| **Male** | **Female** | **total** | **Operational** | **Fixed** | **Total** |
| 2011 | 48 | 7,680 | 1,000 | **8,680** | 0 | 0 | **0** |
| 2012 | 48 | 8,716 | 1,677 | **10,393** | 8,744,137.96 | 458980.6 | **9,203,118.56** |

**Source:** District cooperative promotion office

**Fertilizers and Improved Seeds utilization:** Fertilisers, improved seed, herbicides and insecticides are some of the agricultural inputs used by farmers so as to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, between the year 2011 and 2012, the amount of chemical fertilizers distributed to the farmers were decreased from quintals 0 to 0 quintals. On the other hand, the amount of improved seeds distributed to the farmers was decreased from 0 to 0 quintals between in the year 2011 and 2012 while the amount of herbicides and pesticides distributed to the farmers vary from year to year depending on crop pests and diseases occur in the district . However, these figures may not indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations.

**Table: 3. 6.b. Amounts of agricultural in puts distribute to farmers by type 2011 - 2012**

|  |  |  |
| --- | --- | --- |
| **Type of In put** | **2011** | **2012** |
| Amount qt./ | Amount /qt./ |
| **Fertilizers** | **0** | **0** |
| **NBSB/ QT** | **17,112** | **21,243.5** |
| DAP/qt/ | 0 | 0 |
| Urea qt/ | 2,561.5 | 4,535 |
| **Improved seeds** | **0** | **0** |
| Wheat | 0 | 0 |
| Maize | 0 | 0 |
| **Herbicides /lit/** | **0** | **0** |
| Liquid /lit/ | 0 | 0 |
| Powder kg | 0 | 0 |

**Source:** - Sude District Agricultural office

**Development Agents and farmers Training Centre: -** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. Between the year 2011 and 2012, the number of farmers training centre was increased from 26 to 26 while the number of Development agents were decreased from 49 to 50 which are three in each kebele with profession of plant science, Animal science or environmental science. These professionals help the farmers in all aspects of agricultural practices such as in crop production animal husbandry and management and environmental protection.

**Table: 3.7. Numbers of Development Agents and FTC 2011-2012**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Framers Training centre | 26 | 26 |
| Number of development agents | 49 | 50 |

**Source**:- Sude District agricultural and Rural Development office

**Livestock health Infrastructure: -** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Even though the district has large livestock population, the livestock infrastructure development is at low stage. Between the year 2011and 2012, the number of animal health facilities was increased to (9) Nine. Likewise, the number of health professional has shown no increment in the year 2011/2012. However, the available health facilities and health profession is the 7 to 9 recommended in the year 2011/2012 number as compared with the livestock population of the district.

**Table: 3.8.Distribution of Sude district Animal Health infrastructure/2011-2012/**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| **Veterinary personnel** | **21** | **21** |
| DVM | 4 | 4 |
| Animal Health Assistance | 17 | 17 |
| Meat inspector | 0 | 0 |
| **Health Infrastructure** | 7 | 9 |
| Clinic /C-Type/ | 3 | 5 |
| Clinic /D-Type | 4 | 4 |

**Source:** - Sude District Agricultural Development office

**Agricultural calendar: -** It is well known that the farmers of the zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio- cultural related ceremonies. The time of performing agricultural activates such as land preparation, planting, weeding and harvesting vary with season depending on Agro climatic Zone.

**Table: 3.9. Agricultural calendar of Sude district**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Types of activities | Meher Season | Belg Season |
| 1 | Land preparation | March-July | October-March |
| 2 | Planting /Sowing/ | Jun – August | March-April |
| 3 | Weeding | July-October | May |
| 4 | Harvesting | October- January | July-August |

Source: - Sude district Agricultural and Rural Development office

**3.1.5. Methods of Soil Conservation and Maintaining Soil Fertility**

**Methods for maintaining soil Fertility: -** There are two ways of maintaining soil fertility in the district. These are the traditional and modern methods. The traditional method includes using of animal dung, Crop rotation, burning soil in small scale / burning/, fallowing and using crop residue while the modern one is the using of artificial fertilizer and organic fertilizer (Compost).

**Methods for soil conservation: -** Contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation are modern way of soil conservation in the district. The following table shows activates done for soil and water conservation. Accordingly, 10,583 km tracing, more than 259 million seedling plantations, 15215 hectare land rehabilitation was done in the year 2012. Moreover, eye brow basins, cut of drains, and check dam, area closure and water ways was done by participating community in all 27 rural farmer associations

**3.1.6. Constraints of Agriculture and Livestock Rearing**

**Crop pest and disease: -** the major crops pests in the district are aphids while the major diseases are rust, smut and others. Weeds and rain fall variation are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and postharvest time. Likewise, though the farmers of the district adopt use of modern herbicides and pesticides, still the loss of production due to crop disease like rust, smut, etc were increasing during the year under consideration. For details see the table below. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems.

**Livestock and poultry diseases:** Black leg, hemorrhagic septicaemia and external, internal parasite and anthrax are the major livestock and poultry disease in the district.

**Table: 3.12.b. Number of animals got health services by type and type of service given 2011-2012**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** | **53,000** | **197,583** |
| Blackleg | 15,200 | 14,280 |
| Hemorrhagic Septicaemia | 12,100 | 9,920 |
| Anthrax | 25,700 | 173,382 |
| **Treatment** | **105,710** | **280,025** |
| External parasites | 54,520 | 143,009 |
| Internal parasites | 50155 | 124,418 |
| Others | 1035 | 12,598 |

**Source:** - Sude District Agricultural Office

As shown in the above, the districts animal health department has been providing vaccination and treatment for **197,583** and **280,025**during the year 2012 so as to improve the productivity and quality of livestock found in the district. .

**3.2 Education**

**Kindergarten:** - According to the data obtained from Educational Office of the district, in the year 2011 and 2012 there were three governmental kindergarten Schools and The number of Enrolment were 82 Male and 74 Female totally 156 Students. and one private kindergarten schools With Enrolment of Male 47 and Female 48 totally 95 Students in the district .

**Primary Schools: -** Between the year 2011 and 2012, the number of primary school was 62 while the number of student enrolled to these schools was decreased from 39,803(45% female )to 38,081 (46.4female%). During the same year, the number of teachers were decreased from 811(43.6% female) and 795(34.8% female) teachers while the number of class- rooms were increased from 576 to 650. Student teacher’s ratio was 54:1 in 2011and increased to 53:1 in 2012 while student class room ratio was improved from 51:1 to 48.5:1 in the between the year 2011 and 2012 which is nears to the standard recommended by Oromia education Office. Regarding student participation rate, the gross participation rate /GPR/ and net enrolment participation rate /NER/ of primary school was 69(43%female)and65%(31%female).During the year 2011 student gross participation rate was 66.5 (47.6% female) while net enrolment rate was 63%(33% female) for the same school level.

**Senior Secondary education /9-12/:-** in the district there is 5 secondary Schools (Kula,Dereba,Alemgena,Semmar and Halila) towns in year 2011. The number of students enrolled to these school was increased from 2415 (34.98% female) to 3076 (37.9%females) students between the year 2011 and 2012. The number of teachers and class rooms with which the schools provide education was also decreased from 83 teachers and 34 classrooms to 81 teachers and 31 classrooms respectively during the indicated years. During the same year the student to teacher ratio was improved from 30.88 to 18.4 while student to class room ratio was also improved from 41 to 39.58 In addition, there was one preparatory school in kulla town. In the year 2012 regarding student participation rate, the gross participation rate /GPR/ was 0.8%.

**Technical and vocational education training:** - there was one TVET school in the district since 2003 that provide training on different fields of study. The number of student enrolled to this school was 160 in 2011and 112 in the year 2012.

**Table: 3.2.1. Number of school by level and Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Kindergarten School** | | | | **Primary School(1-8)** | | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
| 2011 | 3 | 82 | 74 | **156** | 62 | 21,880 | 17,923 | **39,803** |
| 2012 | 3 | 74 | 71 | **145** | 62 | 20,462 | 17,679 | **38,141** |

**Source**: - district education office

**Table: 3.2.2 Number of school by level and Student Enrolled**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Secondary(9-10)** | | | | **Preparatory (11-12)** | | | |
| **No of school** | **Male** | **Female** | **Total** | **No of school** | **Male** | **Female** | **Total** |
| 2011 | 5 | 1345 | 714 | **2059** | 1 | 225 | 131 | **356** |
| 2012 | 5 | 1910 | 1166 | **3076** | 0 | 0 | 0 | **0** |

**Source**: - district education office

**Table: 3.3.3 Number of Teachers by level of education and School**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Level of education** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Primary School(1-8)** | | | | | | |
| **TTI** | 41 | 44 | **85** | 52 | 55 | **107** |
| **DIP** | 328 | 262 | **590** | 336 | 182 | **518** |
| **BA** | 71 | 19 | **90** | 60 | 12 | **72** |
| **Total** | **440** | **325** | **765** | **448** | **249** | **697** |
| **Secondary School(9-12)** | | | | | | |
| **Dip** | 2 | 0 | **2** | 336 | 182 | **518** |
| **BA/BSC** | 70 | 11 | **81** | 60 | 12 | **72** |
| **Total** | **72** | **11** | **83** | **396** | **194** | **590** |

**Education quality: -** The quality of education can be judged from educational qualification of teachers, student to Teacher ratio, student to classroom ratio, student text book ration, etc Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement /diploma level/ to teach grade 5 -8 are 207(23.18%) from the total teachers teaching this level in the year 2012.Actually, depending on the above ratio are not enough to measure educational quality of a district, hence we have to look in to other factors like Teacher Development program TDP, continuous professional development (CPD) program on training, teacher’s dedication /commitment to teach and student commitment to receive what teachers say. The following tables show that teachers which have been trained /CPD/ program and teacher development program /TDP/ in the district. As shown in the above table, of the total student enrolled to primary school, those who promoted to the next grade level was increased from 88% to 89% between the year 2011 and 2012. This indicates that, there is a gradual improvement of quality of education in the district in case of primary school. As remedy to student participation and student performance, drop out of student was increased from 31900 and 57 to 36546 and 26 between the year 2011 and 2012 in primary and secondary school respectively. This figure indicates that, the dropout rate of the district was decreased from 5.8% and7.4 % in the year 2011 to 5.27 and 9.56% in the year 2012 in primary and secondary school respectively.

**3.3 Health**

**Health Institution:** in the district the number of government health institution was 31 and 35 between 2011 and 2012, While the number of health post was also increased to 27, health centre was 7 and One Hospital

**Health personnel: -** the district provides health services by 136 Health personnel in government health institution in the year 2012. By type of profession, the district provides health services by 11health officer, 7 laboratory technicians, 9 pharmacy technicians, 42 nurses and 54 health extension workers.  For more information see the table below.

**Table: 4.2.b Number of Health Institution and personnel by ownership**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution /Health personnel** | **2011** | | **2012** | |
| **GO** | **NGO** | **GO** | **NGO** |
| **Health Institutions** | **34** | **11** | **34** | **10** |
| Health centre | 7 | 0 | 7 | 0 |
| Clinic | 0 | 10 | 0 | 9 |
| Health post | 27 | 0 | 27 | 0 |
| Rural Drug vender | 1 | 0 | 0 | 1 |
| **Health profession** | **121** | **16** | **124** | **17** |
| Health officer | 17 | 0 | 17 | 1 |
| Nurse | 42 | 15 | 42 | 15 |
| Laboratory Technician | 4 | 0 | 7 | 0 |
| Pharmacy Technician | 3 | 1 | 4 | 1 |
| Sanitarian | 0 | 0 | 0 | 0 |
| Health Extension Workers | 58 | 0 | 63 | 0 |

**Source;** District Health Office

**Diseases prevalence including HIV/AIDS:** during the year 2012 there were five VCT centre . The numbers of people tested for HIV IS 3,579 from this 48 positives and one AIDS/HIV patients found in the district. Moreover, in the year 2011 and 2012 during the year under consideration. Currently the prevalence of HIV is at its decreasing rate. So as to decrease the prevalence of diseases like HIV, the district’s health office provide health education to the community through community conservation program.

**Inadequate potable water supply**, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, Poor eating habit and under utilization of health services also play a great role for the existence of different diseases.

**Causes of Morbidity:** According to the data obtained from Sude district health office, the types of highly prevalence disease vary from year to years. Accordingly, the highest prevalent disease in the district was Pneumonia with 20.18% followed by AFI with 16.98 % and Diarrhea Disease with 16.91% in the year 2011 while during the year 2012 the prevalent disease was pneumonia(21.39%) followed by AFI(17.48%) and trauma with (12.32%). This indicates the highest prevalence disease vary from year to year.

**Table: 4.11.bTen top diseases existed in the district 2011-2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **2011** | | | **2012** | | |
| **Type of diseases** | **No of population** | **%** | **Type of Diseases** | **No. of population** | **%** |
| 1 | Pneumonia | 1859 | 22 | Pneumonia | 2588 | 16 |
| 2 | Tonsilitis/Acute Pharngitis un specified) | 1171 | 14 | Dyspepsia ( in ability to swallow) | 2482 | 16 |
| 3 | Typhoid Fever | 1038 | 12 | Typhoid Fever | 2420 | 15 |
| 4 | Respiratory infections( Acute Upper Respiratory infection unspecified ) | 1018 | 12 | Respiratory infections( Acute Upper Respiratory infection unsoesified ) | 1581 | 10 |
| 5 | Diarrhea (Functional diarrhea | 941 | 11 | Diarrhea (Functional diarrhea | 1518 | 10 |
| 6 | Helminthiasis | 537 | 6 | Sevier repersistent | 1209 | 8 |
| 7 | Pain( Pain joint) | 519 | 6 | Arrthitis | 1185 | 8 |
| 8 | Dyspepsia | 501 | 6 | Typhoid | 1129 | 7 |
| 9 | Low back pain | 478 | 6 | Pheumonia | 806 | 5 |
| 10 | Sevier febrile disease | 427 | 5 | Obsertictraum unspecified | 794 | 5 |

**Source:** Sude District Health office

**Harmful traditional practices: -** like any other in the zone, there are many harmful traditional practices that are being widely practiced in Sude district. it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of district. Some of the traditional practices which can be mentioned as a use full practice in the district are Debo, Ikub, Idir, etc.

**Women and Children Issue**

### Women Issue

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was 6895 and 7287 in the year 2011 while their number was increased to 7802 and 7616 in the year 2012. On the other hand, the number of women gets delivery services in the health institution by health professional was 4786 and 6351 in the year 2011 and 2012 while those who attended delivery service by health extension works was 5304 and 5423 in the year 2011and 2012 respectively. Though such improvement was observed, still there were 3 and 2 women attended delivery traditional at their home in the year 2011 and 2012 due to economic problem, lack of access road and lack availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get PWTT2 vaccination increased from 4913 to 7257 between the year 2011 and 2012 while the number of mother get NPWTT2 vaccination was 15,158 and 15,770 during the year under consideration. This indicates that health service provision showing an improvement from time to time. The following table indicates the major vaccination type given to the children.

Like any other developing countries, the rate of growth at which the population of Ethiopia in general and the district in particular is the highest as compared with developed countries due to some cultural value the community have for children, lack of awareness to use family planning service, early marriage, rape, etc. To overcome this problem, the country design family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were increased

from 25,517 in the year 2011 to 27,105 in the year 2012. As a result of this, according to the data obtained from district office indicated the contraceptive prevalence rate of the district was improved from 81% to 89% between the year 2011 and 2012.

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance, they take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock. This indicates the work load and working time of women is heavy as compared with men. However, participation on overall decision making and resource utilization is dominated by men. Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing. On the other hand, as the data obtained from district indicated, the number of women participated as woreda council members was 48 in the year 2011. Moreover, the number of women who are member of district cabinet was 12 and 11 in the year 2011 and 2012.

**Table: - 4.12. Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **Measurement** | **2011** | **2012** |
| 1 | **Access to save delivery service** | Number | 0 | 0 |
|  | Women's used ANC/Antenatal care/services | Number | 6,640 | 8,333 |
|  | Women's used PNC /Postnatal care/services | Number | 5,657 | 6,370 |
|  | Women’s assisted delivery | Number | 4,569 | 5,730 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 1,719 | 2,612 |
|  | Deliveries attended by HEWs | Number | 16 | 6 |
|  | In their home traditionally | Number | 3903 | 450 |
| 2 | **Mother Vaccination** | **Number** | 0 | 0 |
|  | PW TT2 | Number | 5305 | 7,404 |
| 3 | **Family planning condition** | **Number** |  |  |
|  | Modern methods | Number | 24,760 | 38,688 |
|  | Contraceptive prevalence rate | % | 98 | 99 |
| **4** | **Women elected at different level** | **Number** | **0** | **0** |
|  | Member of regional council | number |  |  |

**Source:** - District health and women and children affairs office

Though the government made a lot of efforts to alleviate the prevailing health problem in the district, still there are certain health related problems that affect the health of women in the district. In this regard, the major causes of maternal mortality in the district are eclipse, obstructed labour, pregnancy induced hypertension and abortion. On the other hand, different harmful traditional practice practiced among some group of population in the district affect many women’s. The major harmful traditional practices in the district are abduction, rape, female genital mutilation, early marriage, sexual harassment, etc.

**Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was

increased from 25,193 in the year 2011 to 29,239 in the year 2012 while their number was decreased to 18907 in the year 2012. Though the above figure indicates the number of children get different vaccination, the number of children who get full vaccination was only 5206 and 5319 in the year 2011 and 2012which accounts for 24.33% and 27.21% from total children who get vaccination. In the district the EPI coverage was increased from 86.5% in the year 2011to 88% in the year 2012.

**Table: 4.13. Number of children vaccinate by year and type of vaccination 2011-2012**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 6515 | 7414 |
| Measles | 5742 | 6859 |
| DPT | 6679 | 7532 |
| Polio | 6257 | 7434 |
| **Total** | **25,193** | **29,239** |

**Source**: Sude District health office

On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and for other problem causes more than 781 and 1090 children to be orphan in the year 2011 and 2012.These orphan and vulnerable children and other low income family children who get care and support by charity and civil organization was 17 in the year 2011 and 21 in the year 2012.This does not indicate all of them get holistic support (food, education, health and psycho-social). In addition to this, there were also 498 and 599 children with different types of disability in the district in the year 2011 and 2012. From the total orphan and vulnerable children and disabled children, 53.8% and 56.9%% are female in the year 2011 and 2012.In the district, there were also 1489 and 1620 malnourished children in the year under consideration. Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are malnutrition, pneumonia, Diarrheal, TB, etc. In the district, more than 4812 and 5662 children were affected by one or more than one of the above mentioned and other diseases. On the other hand, the district is one of the districts having an area affected by malaria. Seven rural kebeles of the district are malaria prone areas. In the year 2011 and 2012, 53 and 63 children were affected by malaria and all of them were get treatment in the nearby health facilities.

### Hygiene and Sanitation issue

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result, the number of households having their own toilet was 29451 and 31124 in the year 2011 and 2012 from which only 69% of household uses their own latrine. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, all health centres in the district were access to toilet, dry and liquid waste disposal facilities while all health post are accesses to toilet and dry waste disposal facilities. Regarding potable water supply only one health centre was access to potable water supply. On the other hand, all school in the district

was access to toilet facilities. However, of the total school in the district, only one secondary school is access to potable water supply facilities.

**Table: - 4.14. Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | **Health Centre** | | **Health post** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of health institutions in the district | 5 | 5 | 27 | 27 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 5 | 5 |  |  |
| 3 | Number of health institution access to water supply | 5 | 5 |  |  |
| 4 | Number of health institution access to toilet facilities | 5 | 5 | 26 | 27 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 4 |  |  |

**Source:** - District Health Office

**Table: - 4.15. School access to hygiene and sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Description of activities** | **Primary school** | | **Secondary school** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 62 | 63 | 6 | 6 |
| 2 | Number of school access to water supply | 23 | 31 | 3 | 3 |
| 3 | Number of school having toilet | 62 | 63 | 6 | 6 |

Source : - District Education Office

**3.4. Mineral Resources and Industry**

Mining**: -** like other parts of country in general and the zone in particular, the mineral resources potential of district is not investigated and known. However, some data obtained from office of mineral and energy resource Development indicates that, the district has a high potential of some mineral resources such as sand stone for construction purpose, solar energy, wind energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant mining activity which is rock quarrying and pottery making by local communities in the district.

Industry: Similar to other parts of the Zone, industrial development is at its infant stage in the district .Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. In the district there are 141 Grain mill industries privately owned. There is no any large and medium scale industrial establishment in the district.

**3.5 .Trade Activities and Tourism**

**Trade**: **-** The districts market centres’ of the woreda are Kulla, Derreba and Halila. These three are big markets that have one and three market day in a week. This indicates that trading is one of the economic activities practiced by urban dwellers in the district. Regarding trading items, consumer goods, construction materials, etc are imported to the district market from the central market while agricultural products like,

Cereal crops (Teff, wheat), oil seeds, live animal, skin and hides, etc are purchased at local market and sent to the central market by local traders.

**Major Local Cash Crops**;- The district is the major Local cash crops were Noug, chickpea and sorghum have been cultivated in district. While the productive of the between two years was increased 4,960 to 10,158 1n the year 2011 and 2012 respectively.

**Table 3.13** The numbers of majors local crops in the year 2011&2012

|  |  |  |  |
| --- | --- | --- | --- |
| No | **Description** | **2011** | **2012** |
| 1 | Noug | 380 | 1042 |
| 2 | chickpea | 530 | 2,220 |
| 3 | sorghum | 4050 | 6896 |
| 4 | sugarcane | 0 | 0 |
| 5 | Orange | 0 | 0 |
|  | **Total** | **4,960** | **10,158** |

Source: Sude district Trade office

**Table: 3.14. Number of hides and skin sent to the central market from district**

|  |  |  |  |
| --- | --- | --- | --- |
| ***No*** | **Description** | ***2011*** | ***2012*** |
| 1 | Hides | 10,563 | 3,790 |
| 2 | Skin | 2,642 | 0 |
|  | **Total** | **13,205** | **3,790** |

**Source:** Sude Trade office

As shown in the above table the amount of skin and hides sent to the central market was decreased from 13,205 in the year 2011 to 3790 in the year 2012 which have a significant impact on improving the export potential of the country in general and improving the income of the household. There were different types of traders who engaged on different type of trading activities in the district.

**Tourism and Its amenities:-** Due to lack of promotion and tourist amenities like standard Hotels, Roads and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and the district in particular. Similarly, survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some of the main centers which were identified by culture and tourism office. Some of them are Yeba, Abukoy, battle of Azule, cultural and historical place and Gerbelo forest are the main tourist attraction sites of the district

**Table: 3.15. Name of tourism site in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of tourism site** | **location** | **Distance from District capital** | **Status** |
| Werganbula forest | Ashmira wargenbula | 30km | protected |
| Gere belo forest | Halila Anole | 55km | protected |
| Natural bridge | Cimo Negele | 18km | not protected |
| Dheka forest | Akiiya molota | 67km | protected |
| Milo Oromo | Akiiya molota | 67km | protected |
| Adere forest | Semar semary | 42km | protected |
| Krbeni forest | Semar ulagedy | 58km | protected |

**Source:** Sude district tourism office

**3.6 .finance and Financial institutions**

**Financial Institution*:* -** The availability of various financial institutions like banks and insurance, rural credit and Saving Association play a significant role in the transformation of the economy but, there is few financial institution in the district including two credits and saving association, one Ethiopian Commercial Bankand One Oromia Assoociation Banck Which serves more than 55,462 Peoples in the district

**Annual budget Allocation: -** the annual budget allocated for the district was increasing by 23.87% between the year 2011and 2012. Likewise, from the annual budget allocated for the district, the budget allocated for capital budget was increased from 10.87% to 12.45% between the year 2011 and 2012. Annual budget requirement of districts is covered mainly from two sources: regional government grants and district Inland Revenue.

Regional Government contribution shares the largest amount which accounts for more than 88% of the total annual budget allocated for the districts in the year 2011. However, the share of regional government contribution to the annual budget allocated for the district was decreased to 81.6%. This indicates that the

share of Inland Revenue in annual budget allocate was increasing between the year under consideration. On the other hand, based on the over revenue collected in the previous year 60% of over revenue collected is given to the district as additional budget every year for construction of different infrastructures..

**Table: 3.16. Annual budget allocated for the district /2011-2012/**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Annual Budget Allocated** | | | | **Annual Budget Allocated** | | | |
| **Subsidy from regional government** | **Inland revenue** | **Total** | **Growth Rate /%** | **Recurrent** | **Capital** | **%** | **Total** |
| 2011 | 107,394,659 | 17,613,981 | 125,00,640 | 124.53 | 118,155,902 | 8,878,740 | 13.45 | 127,034,642 |
| 2012 | 116,756,524 | 19,550,560 | 136,307,084 | 148.40 | 129,612,737 | 11,339,069 | 12.87 | 140,951,806 |

**Source**: - Sude District Finance and Economic Development Office

**Revenue: -** Between the 2011 and 2012 the total revenue collected by the district was increased from Ethiopian birr 10,217,272.12 and 12,732,100 birr which is increased by 19.75%. The main sources of revenue in the district are direct tax, indirect tax and non- tax items as Inland Revenue office of the district cumulative annual report.

**Table3.17.Total in land revenue collected in the district from 2011-2012:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **Indirect revenue** | **Non tax revenue** | **Total** |
| 2011 | 8,502747.10 | 511,462.37 | 1,203062.65 | 10,217,272.12 |
| 2012 | 11,008458.90 | 601,921 | 1,121720.01 | 12,732,100 |

Source: - Sude District Inland Revenue Office

**CHAPTER FOUR**

**4. INFRUSTRUCTURAL FACILITIES**

**Roads: -** availability of road is one of the basic infrastructures for development of an area. Between the year 2011and 2012 the length of all weather road was increased from 179.16 km 191.6 km. These result in improvement of road density per area and road density per 1000 of population from 0.18 and 0.20 the year 2011 to 1.28 and 3.92 respectively in the year 2012.

**Table: 4.13 Type of Road in the district 2011-2012**

|  |  |  |
| --- | --- | --- |
| **Types of road** | **2011** | **2012** |
| All weather gravel | 179.16 | 191.6 |
| Dry weather | 16.2 | 16.25 |
| Road density per km2 | 0.18 | 0.20 |
| Density per 1000 population | 1.28 | 3.92 |

**Source**: Sude district road authority

**Telecommunication: -**Modern electronic communication is one of the fast and effective ways of transmitting both business and administrative information especially in areas where road transport system is under developed. However, the district has one wireless telephone with three lines and apparatus in urban areas, 27 peasant associations and 25 government offices are supplied with wireless telephone services. Moreover, most part of the district is supplied with mobile telephone services. Currently the government under goes the construction for mobile telephone services in Kulla , Derreba and Halila town

**Community Radio;-**Sude community Radio station was established on since 2000 in Kule town. The station got license from Ethiopia Broadcasting Authority (EBA) and started broadcasting service in April, 2002. It was a great achievement for the society. FM 103.5 Sude community Radio reaches large audience scattered in vast area, including the neighbouring woreda. Basically it is non–profit media organization and service given by voluntary service providers. As any media has regular program delivered for 6 hour/day and even to radio provide service neighbouring district.

**Post office: -** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has one agent types of postal services in Kulla town.

**Water supply: -** The drinking water supply in the district is at low level. Of the total population of the district only **32.45%** was supplied with potable water supply. The district provides water supply by 34 hand-dug well, 4 deep well and 35 spring development with 2 distribution one bio sand filter and one distribution populations. To overcome the existing problems, by the local and regional government two projects (cimo negele, tulu hofi ) are under construction that benefits more than 7521 populations.

**Table: 4.17. Population supplied with potable water supply and number of scheme by type**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | **Total population of District** | **Population access to pure water supply** | **%** | **Hand dug well** | **Deep well** | **Spring develop ment on spot** | **Spring with distribution** | **Total** |
|  |  |  |  |  |  |  |  |  |
| 2011 | 188,171 | 58227 | 31.9 | 35 | 2 | 21 | 2 | **60** |
| 2012 | 192,877 | 38,855 | 20.15 | 51 | 2 | 27 | 2 | **82** |

**Source:**- Sude district water minerals and energy office

**Energy supply: -** Energy sources can be traditional and modern. The traditional sources of energy are charcoal, animal dung, farm residue, remnants of trees and firewood while the modern energy sources are electricity, biogas, fossil fuel and solar energy etc. All towns of the district supplied with electric power. However, in rural and other urban centres traditional sources of energy are still the dominant source of energy that plays a significant role in decreasing the role of animal dung and crop residues in increasing crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district, in urban area fire wood is the most important energy source followed by crop residues. On the other hand, animal dung is the major energy source in rural area followed by crop residues and fire wood.

**Table: 4.18. Sources of energy by rank for Rural and Urban Area in 2011-2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***No*** | ***Source of Energy Supply*** | ***Rank*** | | | |
| ***Urban*** | | ***Rural*** | |
| **2011** | **2012** | **2011** | **2012** |
| 1 | Animal dung | 3 | 3 | 1 | 1 |
| 2 | Crop residues | 5 | 5 | 2 | 2 |
| 3 | Fire Wood | 2 | 2 | 3 | 3 |
| 4 | Charcoal | 4 | 4 | 5 | 5 |
| 5 | Kerosene | 6 | 6 | 6 | 6 |
| 6 | Electricity | 7 | 7 | 7 | 7 |

**Source:** - Sude district water, mineral and energy office

**Sport**;- There are different types of sport activities in the district like athletics, foot ball volleyball, hours riding etc. To this end, the number of athletics, tens ball and football team organized by district youth and sport office was , 6 2 and 10 respectively. However, in the year 2012, there number of athletics was increased to five while the number of football team was increased to 20. Regarding the sports men, their number vary from year to year due to absence of regular training and lack of sport materials. The major problems in the district were absence of no well organized and standardized sport facilities like stadium.

**Table: 4.16. Types of sports, Number of teams and number of registered sportsmen 2011-2012**

|  |  |  |
| --- | --- | --- |
| **Type of Sport** | **Number of sports Clubs** | |
| **2011** | **2012** |
| Athletics | 6 | 10 |
| Foot ball | 10 | 16 |
| Tennis | 2 | 2 |

**Source:** Sude district sport and youth office

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# CHAPTER FIVE

# 5. DEVELOPMENT ACTIVITIES

## 5.1. On Going Development Projects

The ongoing development activities in the district are carried out by Government, non Government organizations and community participations. The annual budget of the district is divided into recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. Moreover, more than 40% the over plan revenue collected in the previous was used as a capital budget in the district. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gabs in the district. Accordingly, the ongoing development projects were increased from 50 in 2011 to 61 in the year 2012. The major projects during the years under considerations are the following.

**Social Sector Development Projects:** in 2012, in the social sector of the district there were different types of projects constructed by budget obtained from different sources. From these projects three office, two health centre fence, one workshop, two dry later in and one primary school were being constructed by the Non government, community and others contribution of budget.

**Economic Sector Development projects:** in the same budget year in the district there were six spring on spot ,four hand dug well , three spring development, one spring on distribution, were under construction by government, local government and community participation budget.

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## 5.2. Problems of ongoing Development Projects

The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction resources is the major problem during the construction. Besides this the project committee of the district are inconsistent to deal with the problem faced during the construction of the project. Lack of strong coordination on monitoring and evaluation among project committee and other teams and the executive agents of the capital are not very eager to accomplish the projection times. As the result of this, most of the projects are post pond to the next budget year in the district was the main problem.

**CHAPTER SIX**

# 6. PROBLEMS AND POTENTIALITIES

## 6.1. Major problems

**Environmental problem :** soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall which results in to crop production failure uncontrolled hunting in different areas of the district including endemic animals.

**Economic problem:** shortage of farm land high prevalence of crop diseases and pests, shortage of Agriculture inputs and lack of capacity to buy, lack of financial institutions/ Bank saving and credit Association and well organized rural credit service/ acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activates and industries development are the economic development problem of the district.

**Social problem:** rapid population growth and large family size which leads to land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, prevalence of disease, low potable water converge, absence of energy source like electric power supply etc are the major social problems..

## 6.2. Potentialities

**Land resource Potential:** The district has ample of cultivable land in its high land and low land areas of the district. The presence of these amble land with favourable climatic condition causes the district suitable for the production of Varity of crop like linseed, cereals, and pulses. Regarding cash crops and exportable item production, the district has a potential for the production of Chat, Fruit, Coffee, sugar cane etc on the low land areas of the District. Moreover, the district has a potential for livestock production and bee farming. The district has also a potential for the production of skin and hide.

**Tourist attraction site Potential:-** Even though the district is located very far from the central part of the district where infrastructures are not well developed, the district has many tourist attraction potential that can be a source of income for the zone in General and local community in particular if further study are conducted and developed. Some of the tourism potential of the district are Azule and Yeba historical place, Wergen bula forest, gerebelo forest, kerbani natural forest which is the home of wild animal like Minilik Bush back, Lion, Leopards, Columbus Monkey, red fox, etc can be mention as an example.

**Mineral and Energy resources potential:** Regarding minerals and energy resources, the district has high potential mineral and energy resources like construction stones, Natural gas and solar energy.

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# CHAPTER SEVEN

# 7. Conclusion and Recommendation

## 7.1. Conclusion

**Sude** district is found in Arsi Zone which has 27 peasant association and three urban administrative units having total areas of 1167 km2. The district gets its present name from one of the tribe called Sude residing in the area. It has a total population of 187,684 by the year 2012 of which more than 97.71% are living in rural Areas engaged on agricultural activities.

The district has three climate types. The dominant climatic type is cool. It has permanent rivers like Magna, Molleta and Azule that are suitable for irrigation. Bi-modal types of rain fall condition causes the district to produce twice a year. In terms of both area cultivation and production obtained Meher is the largest season.

The district is known by the production of both perennial and annual crops. The major types of annual crops growing in the district are cereals, pulses and oil seeds. From cereal crops wheat and barley are the most widely produced interims of area cultivated and production obtained. In addition, the district is known by the production cash crops like fruit, sugar cane, Chat and etc particularly in its low land areas.

Regarding production and productivity the districts Agricultural and rural development motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can produce intensively using extension package on small land. Agricultural inputs like improved seeds, chemical fertilizers and herbicides and pesticides are distributed by agricultural service cooperatives and other cooperatives to the farmers. However, the amount of chemical fertilizers used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.The district is also known by the livestock rearing and bee keeping. From livestock population cattle, sheep and goats account for about 61.52%, 27.34% and 6.04% respectively in the year 2012.This indicates the district has a potential for the production of exportable item like skin and hides.

Infrastructure development like Road, energy supply, telephone services and postal services are under developed. That is, the district has a road density of 0.188 km per km2, has no electric power supply, no digital and mobile telephone services and only agent postal services in kulla town only. Moreover, the water supply is at its low stage. Of the total population of the district only **32.45%** get potable water supply.

Regarding social service sectors development the district has 63 primary and six secondary schools respectively. The student participation rate (GPR) was 69% for primary and 0.8% for secondary schools while the student to teacher ratio and student to class room ratio was 51:1 and 47.5:1 for primary schools and 18:1 and 39:1 for secondary schools respectively. However, the district has one TVET collage.On the other hand, the district provide health services within five health centre, and twenty seven health posts by 124 health professionals and 58 health extension workers. The ration of population to health profession was 18556:1 for health officers, 3292:1 for nurses, 91353:1 for technicians and 3259:1 for health extension workers during the year 2012. This ratio indicates there is low health coverage in the district.

The district has a potential of 119,397 hectare cultivable land, mineral resource, energy resource and cash crop production potential. In addition, the district has tourist attraction site and wild animal potential.

## 7.2. Recommendation

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, water supply, energy supply and communication facilities are needed. So the concerned body has to develop these facilities.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural and rural development office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover, modern inputs have to supply in sufficient amount and on time to the farmers.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centres (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* Farmer training centres has to be constructed in each peasant association and functional
* So as to improve Livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, Additional health facilities have to be constructed and provide health services.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted.
* To improve the quality of education the current student to teacher ratio and student to classroom ratio of the district is greater than the standard. Hence, additional teacher has to be employed and additional classroom has to be constructed.
* The health coverage of the district is at its low stage. To overcome these problems additional health facilities have to be constructed and additional health personnel has to be employed.
* Since the district has cultivable land and production for cash crop potential, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF TICHO DISTRICT YEAR 2011 AND 2012 E.C**

**CHAPTER-ONE**

**1. INTRODUCTION**

**1.1 Back Ground**

**TENA WOREDA TTicho** District is one of the 27 districts of Arsi zone. Ticho has divided into 13 administrative units of which 11 are Rural Peasant Associations and one urban administrative unit Ticho town is the capital town of the Ticho district. It is located at 250 km from Regional Capital City, Finfinne and 127km from zonal capital town, Asella to the East direction

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Tena district that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps, researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only Ethiopian calendar (E.C) is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year.

This document is compiled from the data collected from the district and zonal sectoral departments, 1999 population and Housing Census report for Oromia region and other related documents available in our office. Lack of accuracy and required data, lack of attention and timely response from the concerned bodies are some of the major problem faced while organizing the document. Moreover, lack of accurate data, lack of professional personnel, well organized and consistence data in different sectors and the like were the main limitation. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district.

This paper has Eight chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

**CHAPTER TWO**

**2. Physical setting and Situation**

**2.1. Location and Area**

**Ticho District** Astronomically, located between 70 22’21’’N - 7037’21’’N Latitude and 390 20’ 03”E – 390 35’ 59”E Longitude. Regarding relative location, the district shares a boundary line with Robe district in the northeast and south east, Digelu-Tijo district in the west and north - west, Shirka district in south -west and south -east direction having the total area of 456.1Km2. It shares 2.17% of the total area of Arsi Zone.

**2.2. Geology, Relief, Drainage, and Climate**

**Geology:** The present land structure indicates that most of the land forms of the district were formed as a result of internal forces like volcanism, folding and faulting acting up on the surface of the earth during Cenozoic era. Most of the northern, western, north western, south western and the central part are covered by Upper Chilalo formation while the Lower Chilalo formation covers the central part of the district extending in the form of narrow belt from south to north east direction. In addition, most of the south east part of the district is covered by Nazeret Series.

**Relief:** The relief structure of the district consists of high mountain range which is the part of Chilalo Galema ranges, undulating high plateau tilted toward rugged low plateau. The altitude of the district ranges between 3500-4000meters in Chilalo Galema Mountain ranges to 1000-1500 meters in low laying plateau areas around Kereyu area.

**Drainage:** Due to its location, the district has high net work of river systems. The major permanent rivers of the district are Hulul, Halkaso, Walkesa, Demensho, Harerge Inamor and Serbona. On the other hand, the major seasonal streams are Hamaraba, Burkasire, and small Streams. Generally, the district has high potential for both **traditional** and **modern irrigation** system which can be used to increase agricultural productivity if they are utilized efficiently.

**Climate:** Due to its altitudinal location, the climatic condition of the district is dominantly moderately cool having a temperature of 15oC-20oC.The remaining ones are Cool and cold having a temperature of 10oC-15oC and less than 10oC respectively. Hence, the dominant type of climatic condition of the district is Moderate cool agro-ecological zone. The mean annual rainfall is 900-1400 mm and the average rainy days are about 150 days in the year. The rainfall pattern is bi-modal, which are short rainy season (Belg from February to May) and summer or long rainy season (Meher from June to September).

**2.3 Land Use, Soil, Vegetation and Wild life**

**Land use:** Land use indicates the classification of the land of an area under different types of socio-economic uses. Types of land use changes from time to time depending on socio-economic change. For instance, the grazing land, natural forest and fallow lands are decreasing from time to time while cultivated, manmade forest and residential lands are increasing. For instance, of the total area of the district, the cultivated land (the lands covered by annual and perennial crops) was increase from 15,613.5hectares **to 18,057.4**hectares in the year 2011and 2012. **12,289.5 to 12,636.5 3324 to** 5420.925.

**Soil:** The major soil types found in the district are Eutric Cambisols, OrthicLuvisols and PellicVertisols. In addition, Litho sols, Eutric Nitosols and Chromic Vertisols are found in few areas of the district. The fertility status of the soil is medium which good for the production of Varity of crops and vegetables.

**Vegetation:** The vegetation types include sub Afro alpine on Chilalo Galema mountain range, different species of Natural forest adjacent to Afro Alpine vegetation and along the bank of major rivers and Shrub land are the major types of vegetation found in the district. There are government protected/public forests like Walkesa Galema ,Inamor , and Hadore forest that covers 15 hectares of land. All of them are manmade forests.The major wild animals of the district includes monkey, Leopard, Fox, war tog, Hyena Tiger ,and different types of birds are found in this forest.

**CHAPTER THREE**

**3. Populations**

**3.1. Population Size**

According to data obtained from **1999census** reports, the population of the district was increasing from 92359 to 94951 between the year 2011 and 2012. From the total population living in the district, only 13% are living in urban areas while the remaining **88.7%** are living in rural areas in the year 2012. This indicates that more than 87% of the population of the district is living in rural area depending on agriculture. Of the total population, females accounted for 48.46% (which is about 50.8% urban and 49.6% for rural).An overall sex ratio of the district was101 male per 100 female (96 male per 100 female in urban and 101 male per 100 female in rural) an average numbers of house hold size was 5 for the district.

**Table: 3.1. Population size of the district by place of residence and sex**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | **Urban** | | | **Rural** | | | **Total** | | |
| Male | Female | **Total** | Male | Female | **Total** | **Male** | **Female** | **Total** |
| 2011 | 5,048 | 5,216 | **10,264** | 41,295 | 40,800 | **82,095** | **46,343** | **46,016** | **92,359** |
| 2012 | 5,259 | 5,434 | **10,693** | 42,382 | 41,875 | **84,258** | **47,642** | **47,309** | **94,951** |

**Source: Projected based on 1999 CSA, Report.**

**3.2 Age and Sex Structure of Population**

The age structure of a population is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district.

According to **1999CSA** population and housing census report indicates, the young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 49%, 50% and 43.% of the total population respectively in the year 2012 The dependency ratio of the district is 115 % (121% for Rural and 71.5% for urban) which indicates 115 people are dependent on 100 economically active populations.

Regarding the sex structure of the population, the overall sex ratio of the district is 101 male per 100 female (97male for 100 female in urban and 101 male for 100 female in rural). This ratio indicates almost thefemale population is equal with male population. An average house hold size is 5.0 for the district (5.1 for rural and 4.3 for urban) based on 1999 census report for Oromia region.

**Table: 3.2.Population size of Rural and Urban by wider age group Classification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age/Sex** | **Male** | **Female** | | **Total** |
| **No** | **No** | **%** | **No** |
| **Rural** | **42382** | **41875** |  | **84257** |
| 0-14 | 21,995 | 21,059 | 49 | 43054 |
| 15-64 | 18,767 | 19,652 | 72.5 | 27105 |
| 65+ | 1,620 | 1,164 | 51.8 | 2246 |
| **Urban** | **5259** | **5434** | **100** | **10693** |
| 0-14 | 1,681 | 1,879 | 52.7 | 3560 |
| 15-64 | 3,422 | 3,361 | 49.5 | 6783 |
| 65+ | 156 | 194 | 55.4 | 350 |
| **Total** | **47641** | **47309** | **100** | **94950** |
| **0-14** | **23676** | **22938** | 49 | **46614** |
| **15-64** | **22189** | **23013** | 50.9 | **45202** |
| **65+** | **1776** | **1358** | 43.3 | **3134** |

**Source**: Computed from 1999 E.C population and Housing census.

**3.3. School Age population**

**School age population** is one of the best indicators for planning and budget preparation of education facilities, health and other facilities. Moreover, to measure the education facility with the help of students to classroom ratio, students’ teachers’ ratio, students’ text-book ratio, and others school age population is crucial. School age population is best indicator to equip school facilities. More over school age population is used to know how much schools are constructed, class-rooms expansion, to sustain education quality; in general it helps us for planning purpose.

**3.4. Population Density and Rural settlement**

Population density indicates population resource relationship for social service, economic and land resources. Regarding population and land resource ratio/relation, the district **crude density** of district was increased from 179.8people per km2 to 186.8 people per km2 between theyears2011 to 2012. Such an increment in population density has a pro amount impact on land resource. Concerning the settlement pattern of the district, the rural parts are characterized by cluster of settlement on its high land areas and scattered settlement on its low land areas.

**CHAPTER** **FOUR**

**4. Economic Condition**

**4.1. Crop Production and Livestock Rearing**

**4.1.1. Crop Production**

Bimodal pattern of the rain rainfall gives a wide opportunity for the district to produce different types of the crops and use the same land twice a year that is for Meher and Belg*.* However, Meher is the largest season in terms of both of cultivated land and crop production.

The major annual crops grown in the district are **Cereals, Pulses and Oil Seeds**. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown ones. In addition, the district is known in producing some cash crops like tomato, onion, oilseeds, sugar cane, linseed, banana Orange and others.

In the Meher season the total land cultivated was increase from 12,290.5 to 12,619 hectares while the production obtained was decrease from 547,506 to 536,803 quintals of production was obtained between the year 2010/2011and 2011/2012. In size of area cultivation and production wheat barley and Tiff are the most important crops produced in the district.

In the Belg season the total land cultivated was increase from 3324 to 5420.925 hectares. Likewise during the same year the total cultivated land was increase from 15,614 **to 18,039** hectares, during the Belg season while the production obtained was increase from **134,146 to 501,454** quintal during this year. Due climate change, rainfall there is a production decrement in the indicated year.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table: 3.1 Area cultivated and production obtained for private peasant holdings by seasons**   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Crop Type** | **2010/2011** | | | | **2011/2012** | | | | | **Meher** | | **Belg Season** | | **Meher** | | **Belg Season** | | | **Area Hac)** | **Prod.(Quint** | **Area(Hac)** | **Prod.(Quit)** | **Area (Hac)** | **Prod.(Quint)** | **Areat(Hac)** | **Pro(quint)** | | | **1.Cereals** |  |  |  |  |  |  |  |  | | Wheat | 5676 | 215688 | 155 | 4093 | 5675 | 167,981 | 175 | 4113 | | Teff | 2097 | 31944 | 65 | 640 | 2212 | 33640 | 1 | 4 | | Barley | 01725 | 57549 | 900 | 22040 | 1923 | 78022 | 2384 | 59625 |  | | | Maize | 1007 | 43324 | 69 | 2455 | 562 | 27742 | 105 | 3054 | | Sorghum | 256 | 16183 | 0 | 0 | 376 | 14664 | 0 | 0 | | **2.Pulses** |  |  |  |  |  |  |  |  | | Horse beans | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 553 | | Field peas | 0 | 0 | 0 | 0 | 0 | 0 | 447 | 10638 | | Lentils | 25 | 382 | 443 | 5570 | 17 | 238 | 0 | 0 | | Haricot beans | 79 | 1396 | 507 | 6588 | 95 | 1624 | 319 | 3580 | | **3.Oilseeds** |  |  |  |  |  |  |  |  | | Linseed | 184 | 1744 | 0 | 0 | 0 | 0 | 0 | 0 | | Neug | 4 | 36 | 0 | 0 | 12 | 96 | 0 | 0 | | **Source**: Tena district Agriculture and Rural Development Office. | | | | | | | | | |

**4.1.2. Livestock, Poultry and Beekeeping**

**Livestock:** - Beside crop production the livelihood of the farmers of the district was depends on agriculture. Accordingly the below data, the livestock population size of the district was increase from 210,072 to 211,626 the year 2011 and 2012. From the livestock population found in the district, cattle, sheep and goats account for about **88**.3 and **88.5%** of the study years total livestock population respectively. The high prevalence of diseases, traditional method of rearing, shortage of the feeds and the like are the major constraints in livestock production in the district. The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Poultry:** -Poultry production is one of the important sources of family income and food in the district. Accordingly, the number of poultry population size was increased from 66**,**231 **to** 75420 between the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 4.5. Distribution of Livestock and poultry (2011 -2012)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | **2011** | **%** | **2012** | **%** |
| **1** | **Live Stock (total)** | **210,072** | **100** | **211,626** | **100** |
|  | Cattle | 92100 | 43.8 | 92160 | 43.5 |
|  | Sheep | 56874 | 27 | 58422 | 27.6 |
|  | Goat | 36601 | 17.42 | 36952 | 17.4 |
|  | Donkey | 11955 | 5.6 | 12625 | 5.96 |
|  | Horses | 11532 | 5.48 | 10525 | 4.97 |
|  | Mules | 1010 | 0.48 | 942 | 0.44 |
| **2** | **Poultry** | **66231** |  | **75420** |  |

Source: Tena District Agriculture and Rural Development Office

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmer family. According to the below data when we compare the three types of beehives, the number modern beehives and the number of participant private holding very low than the rest. Also of beehives using of herbicides and insecticides are the main problems in bee farming.

**Fishery:** there are **no** fish production practices and traditions, even though, fish rearing is as simple as that of poultry production and other livestock rearing.

**4.1.3. Agricultural Inputs and Infrastructures**

**Agricultural Service Cooperatives:** there are **11** Rural Peasant Associations (PAs) in the district. There were 11 General Service cooperative having 6733 member farmers in 2012. However, there was 5 irrigation participant cooperative having **1520** member farmers in the year 2012.Regarding their capital, they have **21,014,302** Ethiopian birr of which more than **48.3%** was operational costs and while **51.7%** are fixed capital in the year **2012**. The cooperatives are also engaged in delivering different services such as agricultural input on credit basis, etc for local peasants.

**Table:4.8. Number of urban credit and saving cooperatives, their capital and member**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** | **No** | **Number of members** | | | **Capital** | | |
| **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Irrigation participant cooperative | 5 | 1325 | 195 | **1520** | 74,567 | 360,865 | 435,432 |
| General service cooperatives | 11 | 5629 | 1104 | **6733** | 10,078,870 | 10,500,000 | 20,578,870 |
| **Total** | **16** | **6954** | **1299** | **8253** | **10,153,437** | **10,860,865** | **21,014,302** |

Source:-Ticho District Cooperative Office

**Fertilizer and Improved Seeds utilization:** Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials. Accordingly, the amount of chemical fertilizer was 14057.50 quintals and 19,134.5 quintals between the years 2011 and 2012.The main reason the rapid increament of fertilizer use was currently farmers use NPS and NPSB that means currently farmers can’t use DAP. However, the amount of improved seeds (of different types) distributed to the farmers was increase from 1940 to 4365during the indicated years. These figures may not Indicate the actual amount of inputs distributed to the farmers as they reach the farmers through different channels such as private and other organizations, for which it is difficult to obtain data.

**Table: 4.2 Amounts of agricultural inputs distribute to farmers by type (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2010/2011** | **2011/2012** |
| **Amount(qt.)** | **Amount(qt.)** |
| **Fertilizers** | **14057.50** | **19,134.5** |
| DAP (qt.) | - | - |
| NPS | 837 | 837 |
| **NPSB** | **9685** | **13852** |
| Urea (qt.) | 3535.5 | 4445.5 |
| **Improved Seeds (qt.)** | **1940** | **4365** |
| Wheat | 1375 | 1899 |
| Barley | 565 | 565 |

**Source**: **Ticho:-** District Agriculture and Rural Development Office.

**Livestock health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. Accordingly there was One C-type and four D-type clinic in 2011 and 2012 while the number of health personnel working in the district was decreased from 13 to 12, between the year 2011 and 2012.

As a result of these the ratio of animal population to health facilities was improved from 57,409 **:** 1 in the year 2012, while the ratio of population to health personnel was  **95,682**:1 for veterinary Doctor and **57,409 :1** for animal health assistance. The above interpretation shows or indicates that there is a need for additional health professional in the district.

**Table: 4.6. Distribution of Animal Health infrastructure (2011-2012)**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| **Veterinary Personnel** | **13** | **12** |
| Veterinary Doctor | 3 | 3 |
| Animal Health Assistance | 7 | 5 |
| Animal health Technician | 3 | 4 |
| Meat inspector | - | - |
| **Health Infrastructure** | **5** | **5** |
| Clinic (C-Type) | 1 | 1 |
| Clinic (D-Type) | 4 | 4 |

**Source:** Tena District Livestock Development and marketing Agency.

**Development Agents and Farmers Training Centers (DA$FTC):** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. The farmers training centers (FTCs) was **11** while the number of development agents was **34** since 2012 who engaged on supporting the farmers in all aspect of agricultural practices such as in crop production, animal husbandry and management and environmental protection. These three development agents are assigned in each PA with profession of plant science, Animal science and Environmental protection.

**Table: 3.4. Number of Development Agents and FTC (2011- 2012**)

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of Farmers Training Centers(FTCs) | 11 | 11 |
| Number of Development Agents(DAs) | 45 | 34 |
| Number of beneficiaries | 11,311 | 9,219 |

**Source**: Ticho District Agriculture and Rural Development Office

**Agricultural Calendar:** It is well known that the farmers of the zone are not busy throughout the year since agricultural activities are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on Agro-climatic Zone and types of crops cultivated.

In some districts these activities are started earlier while in other districts they started later. Agricultural calendar of Ticho district is shown in table below. The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary depending on the season of cultivation (Maher and Belg), the type of Agro-Climatic Zone and types of crops cultivated in the district.

**Table: 3.3 Agricultural Calendar of the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of activities** | **Meher Season** | **Belg Season** |
| 1 | Land preparation | March15-June15 | January-April 15 |
| 2 | Planting (Sowing) | June15-July 30 | April 15-March 20 |
| 3 | Weeding | August – September | April 1-Apirl 30 |
| 4 | Harvesting | December-February 30 | June 30-July 30 |

Source: Tena district Agriculture and Rural Development Office.

**4.1.4. Methods of Maintaining Soil Fertility and Soil Conservation**

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the Zone particularly in the district. These are the Traditional and modern methods. The Traditional method includes; using of animal dung, crop rotation, burning soil in small scale, fallowing and using crop residue while the modern one is the using of artificial fertilizer and compost (organic fertilizers).

**Methods for Soil Conservation:** Contour plaguing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation are modern way of soil conservation in the distric. Making plantation and etc.

**4.1.5. Constraints of Agriculture**

**Households Affected by Drought:-**There was 7440 and 2500 peoples affected by drought in both 2011 and 2012, for this case federal and regional governments support them

.**Table 3.6 Number of household affected by drought and amount of aid**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **No of HH affected by drought** | **Type of support in amount** | | | **Name of org. give support** |
| **Cereal(ku)** | **Supplementary food in (ku)** | **Oil (kun)** |
| 2011 | 7440 | 4464 | 290 | 133.92 | Motumma Fed fi Naannoo |
| 2012 | 2500 | 1872 | - | 22.5 | Motumma Fed fi Naannoo |

**Crop Pests and disease:** The major crops pests in the district are Aphids, American bollworm, stock bolas, army worm, orange dog. Rust, smut downy mild, powdery and mildew are the major diseases. Weeds and rain fall variation increase or decrease are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production both before and post-harvest time. To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc.

**Table 3.7 Types of crop disease and area affected in hec**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Types of disease and pests** | **2011** | | **2012** | |
| **Area affected (hec)** | **Estimated loss of production (Kun)** | **Area affected (hec)** | **Estimated loss of production (Kun)** |
| Rain fall Variation | 0 | 0 | **565** | **11,038** |

**Livestock and Poultry Diseases:** - Blackleg, Hemorrhagic Septicemia, New castle, Anthrax lymphatic diseases and Anthrax – FMD, Ribs, African horse sickness ,dehydration ,Mist sites are the major livestock and poultry disease in the district. To overcome these diseases, the districts animal health department has been providing different type of animal health services and treatments to improve the productivity and quality of livestock found in the district. As shown in the table below, the number of livestock get vaccination in both 2011 and 2012 are increased from **208,418** to **217,327**. While the treatment given for different diseases were decreased from **226,132 to 136,928** between the year 2011 and 2012.

**Table: 3.7. Number of Animals got health services by type and type of service given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** | **208,418** | **217,327** |
| Blackleg | 16373 | 16523 |
| Hemorrhagic Septicemia | 21243 | 25325 |
| Anthrax | 19877 | 21211 |
| Others | 150,925 | 154,268 |
| **Treatment** | **226,132** | **136,928** |
| External Parasites | 99,775 | 102362 |
| Internal Parasites | 106,388 | 11,341 |
| Castration | 1,705 | 1,857 |
| Others | 18,264 | 21,368 |

Source: Tena District Agriculture and Rural Development Office

**4.2. Mineral Resources and Industry**

**Mining: -** Like other parts of country in general and the Zone in particular, the mineral resources potential of the district is not investigated and known. However, some data obtained from office of Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resources such as sandstone for construction purpose, solar Energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there is insignificant rock quarrying, by local communities in the district.

**Industry:-** Similar to other parts of the Zone, industrial development is at its **infant** stage in the district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. All of them are food processing and privately owned. There are also no medium and large scale industrial establishments in the district.

**4.3. Trade Activities and Tourism**

**Trade:-** even if trading is one of the economic activities urban dweller engaged on, the number of traders who have licensed was decrease from 865 to 808 between the year 2011 and 2012 and numbers trader renewed their license was also increase from 645 to 668 between in the year 2011 to 2012. However, the number of traders who applied for license was decreasing. As far as trade items were considered, most of the traders in the district purchased crops, fruit and vegetables, skin and hides from the local market and send to the central market. Moreover, livestock and poultry were also sent to the central market. Regarding tradable items and cash crops production activities, the district is known in the production of linseeds, Negus, rape seeds, Onion, sugar cane, different types of Vegetables, fruits etc. In addition, the district is known by exportable items like hides and skins.

**Table: 3.10. Number of Hides and skin sent to the central market from district.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Type of License** | **2011** | **2012** |
| 1 | Licensed | 865 | 808 |
| 2 | Licenses given (New) | 220 | 140 |
| 3 | Licenses renewed | 645 | 668 |

**Source:** Ticho District Inland Revenue Office

**Cash Crops and Exportable Items production**

There are different types of cash crops and exportable items produced in the districts. Moreover, there are a high potential of cash crops like Vegetable, root crop, linseed, onion, sugarcane and etc.

**Tourism and Its Amenities:-** Due to lack of promotion and tourist amenities like standard Hotels, Roads, Lack of enough electric power and other social infrastructures, tourism economy is not yet developed in the Arsi Zone in general and Ticho district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism Office. These are Ahmarapa, Gamo Hasan Usman, Hajii shale Mosque are the main religious tourist attraction sites, of the district. All of them are under develop

**4.4. Finance and Financial Institutions**

**Financial Institutions:** The availability of various financial institutions like banks and Insurance, Rural Credit and Saving Associations and the like play a significant role in the transformation of the economy of the district., there is one government financial institution(commercial bank of Ethiopia),one cooperative bank of Oromia and two rural credit and saving association namely WLQO and MEKLIT. The bank and these associations benefited the surrounding community by providing credit.

**Annual Budget allocation:** Annual budget requirement of the district is covered mainly from two sources regional government grants and district Inland Revenue. Regional government contribution shares the largest amount which accounts for more than 85% of the total annual budget allocated for the districts. This indicates how far the current Inland Revenue share of the annual budget allocated for the districts is low.

The total budget allocated for the district was increasing from 94,325,742 **to**105,619,102 between in the year 2011 and 2012. Ethiopian Birr in the year 2012 showing an increment by 11.97 %. Moreover, more than 80% of the total over revenue collected in the previous year was given as additional budget every year so that the district utilized for capital budget of basic infrastructure development.

**Table: 3.13. Annual budgets allocated for the District**

|  |  |  |
| --- | --- | --- |
| Year | Annual Budget Allocated | Growth Rate (%) |
| 2011 | 94,325,742 | 14.5 |
| 2012 | 105,619,102 | 11.97 |

Source: Tena District Finance and Economic Development Office

**Revenue:-** between the year 2011 and 2012, the total revenue collected by district was increased from Birr **12,976,830.63** to **17,582,988** respectively, indicate **4,606,157.37** birr increment. The main sources of revenue in the district are Direct tax, indirect tax and non- tax items as Inland Revenue Office of the district cumulative annual report of both year shows.

**Table: 3.14. Total Inland Revenue collected in the district by type of revenue source**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | | **Indirect revenue** | **Non-Tax revenue** | | **Total** |
| 2011 | 10,538,693.19 | 1,630,917.05 | | | 807,220.39 | **12,976,830.63** |
| 2012 | 15,603,305 | 1,029,683 | | | 950,000 | **17,582,988** |

Source: Tena District Inland Revenue Office

**CHAPTER** **FIVE**

**5. Social Services and Infrastructures Condition**

**5.1. Education**

**Kindergarten:-**According to the data obtained from statistical abstract of the district, there was two non government kindergarten school in 2011while the number of children enrolled to these school that was 44 in the year 2012.One of the main problems related with kindergarten school is lack of clear management system & children’s which lives in the rural area cannot get this opportunity, So this is the main problem.

**Primary Schools(1-8):-** The number of primary schools (1-8) was 31 between in the year 2011 & 2012 ,This indicates that there is no numerical change between two years, while the number of students enrolled to this level of school was 17201 students in the year 2012 with an increment of male students. During the same year, the number of teachers at this level was has no numerical change that is 405 while the numbers of class-rooms were decrease from 370 to 336 in the year 2012. As quality indicators, the Student to teacher’s ratio was on average improved increase from 1:44: 1 to 1:42 while student to class-room ratio was on average improved from 1:48:to 1:52 Regarding student participation rate, the gross participation rate (GPR) and net enrollment participation rate (NER) of primary school was -0.4 % ( 47% female) and 100 % (47 % female) during 2012 respectively. (total enrolment in 17201)

**Senior Secondary education (9-12) -** In the district there is two Senior Secondary (9-10) and one preparatory school ,while the number of student was decrease from 1656 to 1975 students between the year 2011 and 2012. The number of teachers who teach at this level was decrease from 84 and 82 while class-rooms were increased from 30 to 37 during the indicated years. Hence, the student to teacher ratio and student to class room ratio were improved from 20 : 1 to 24:1 and 55:1 and 53 : 1 respectively between the year 2011 and 2012.Regarding student participation rate, the gross participation rate (GPR) and net enrollment participation rate (NER) of senior secondary school (9-112) was 44% (41.76% female), 100 (42%female)during in the year 2012 .(total enrolment in 2012=1975)

**TVET:** There is one governmental technical (**TVT**) school in the district.

**Table: 5.1. Number of Primary School (1-8) and Secondary (9-12) with Student Enrolled 2011-2012)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **level of school** | **2011** | | | | **2012** | | | |  |
| **No of School** | **Male** | **Female** | **Total** | **No of Sch** | **Male** | **Female** | **Total** |
| **Government** |  |  |  |  |  |  |  |  |
| **Primary(1-8)** | 31 | 9383 | 8271 | **17,654** | 31 | 9089 | 8112 | **17201** |
| **Secondary (9-12)** | 2 | 896 | 664 | **1560** | 2 | 1136 | 839 | **1975** |

Source: Tena District Education Office

**Education Quality:** The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (Diploma level) to teach at this level were 278 from the total teachers teaching this level in the 2012. Actually, only depending on the above ratios are not enough to measure educational quality of a district. Hence, we have to look into other factors mainly teacher Development Program (TDP), Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say. Hence, Education office of the district is expected to do more to improve the quality of education by increasing the needed variables of education qualification

**Table: 5.2. Number of Teachers by level of education and School (2011-2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Education **level** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **No of teachers in Primary (1-8)** | **266** | **125** | **381** | **273** | **132** | **405** |
| Grade12 and below | 0 | 4 | 4 | 0 | 0 | 0 |
| TTI | 21 | 13 | 24 | 26 | 21 | 47 |
| Dip | 178 | 96 | 274 | 179 | 99 | 278 |
| BA/BSc | 67 | 12 | 79 | 68 | 12 | 80 |
| Secondary School (9-12) | **52** | **12** | **64** | **57** | **14** | **71** |
| Diploma | 0 | 0 | 0 | 1 | 0 | 1 |
| BA/BSc | 52 | 12 | 64 | 56 | 14 | 70 |

Source: Ticho District Education Offic

**5.2. Health**

**Health Institution:** Due to strong effort made by district health office the number of health facilities was fifteen (15) in the year 2011 and 2012.The **estimation** of the total population in Ticho woreda was around **85,500** in the year of **2012.** The ratio of population to Health Center and health post was **21,375:1** and 7773 :1 respectively which indicates good health coverage of the district as compared with WHOM standard (25000, 10000 and 5000 respectively).

**Health Personnel:** the number of health professionals was increase from **74 to78** between the year 2011 and 2012.By types of profession, The ratio of population to health personnel was 17100 :1 for health officer,2375 :1 for nurses, 8550:1 for technicians and 3717:1 for health extension

**Table: 5.3. Number of health Institution and Personnel by ownership (2011-2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** | **15** | **5** | **15** | **7** |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 5 | 0 | 6 |
| Health Post | 11 | 0 | 11 | 0 |
| Rural Drug Vender | 0 | 0 | 0 | 1 |
| **Health Profession** | **74** | **12** | **78** | **11** |
| Health Officer | 8 | 1 | 5 | 1 |
| Nurse | 37 | 11 | 36 | 9 |
| Health Assistance | 0 | 1 | 2 | 0 |
| Laboratory Technician | 4 | 0 | 4 | 0 |
| Pharmacy Technician | 5 | 0 | 6 | 1 |
| Sanitarian | 1 | 0 | 2 | 0 |
| Health Extension Workers | 19 | 0 | 23 | 0 |

**Maternal and Child Care**

As the country health policy in general, the region and the zone specifically the districts have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension services house to house services like family planning, awareness creation on environmental health protection, personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Totally there were 23 health workers in the district.

In addition, the district health office provides different type of treatment and children and mothers vaccination to improve the health coverage of the district. The following table indicates the major vaccination type given to the children. For instance the number of children vaccinated was increase from **13,944 to to14, 385** between in the year 2011 and 2012.

**Table: 5.4. Number of children vaccinated by year and type of vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | **2011** | **2012** |
| BCG | 3013 | 3254 |
| Measles | 2825 | 2906 |
| DPT | 6341 | 6800 |
| Polio | 2765 | 1425 |
| Total | **13944** | **14385** |

Source: Tena district health office

**Diseases prevalence including HIV/AIDS:** since 2012, there were four **VCT** (Voluntary Counseling Testing) centers. The number of the people tasted HIV/AIDS increase from 1254 to 1325 in the year 2011 and 2012 respectively ,this shows peoples eager to free from HIVAIDS and they tries to save their selves to be free their and the people with HIV positive was increase from 4 to 6 in the year 2011 and 2012 respectively.

|  |  |  |
| --- | --- | --- |
| **Activity** | **2011** | **2012** |
| No of VCT center | 4 | 4 |
| No of people tasted | 1254 | 1325 |
| HIV/AIDS positive | 4 | 6 |
| No of HIV/IDS patient(ART) | 82 | 91 |

**Source:** Tena District Health office

Moreover, inadequate potable water supply, malnutrition and low awareness for improved environmental sanitation account for low health status in the district. In addition, poor eating habit and under utilization of health services Consumption of the fruit and vegetable by minimizing fat food also play a great role for the existence of different diseases.

**Causes of Morbidity:-** According to the data obtained from the district’s health Office indicated, the highest prevalent disease in the district was :-Pneumonia diseases with (**18**.2% of the total) followed by URTI illness with (**13**.8% of the total), and Diaheria (**13** % of the total) from high to low rank respectively in the year 2012

**Table: 5.5.Ten top diseases existed in the district in the year (2011-2012)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **2011** | | | **2012** | | |
|  | **Type of disease** | **No of population** | **%** | **Types of Diseases** | **No. Patient treated** | **%** |
| 1 | Pneumonia | 1028 | 23.5 | Pneumonia | 1008 | 18.2 |
| 2 | URT | 642 | 14.7 | Typhoid fever | 765 | 13.8 |
| 3 | Trauma | 710 | 16 | Diarrhea | 722 | 13 |
| 4 | AFI | 504 | 11.55 | Dyspepsia | 648 | 11.7 |
| 5 | Diarrhea | 540 | 12 | Tons lights | 597 | 10.8 |
| 6 | Dyspepsia | 241 | 5.5 | Respiratory infection | 566 | 10.25 |
| 7 | UTI | 194 | 4.4 | UTI | 495 | 5.3 |
| 8 | Healmenthiesis | 192 | 4.4 | Mali gnatneoplasim | 289 | 5.2 |
| 9 | Diarrheawith dehydration | 140 | 3 | Diarrheawith dehydration | 242 | 4.3 |
| 10 | Skin disease | 171 | 3.9 | Healmenthiesis | 232 | 4.2 |
| **Total** |  | 4362 |  |  | 5521 |  |

Source: Tena District Health Offic

**Harmful Traditional Practices**: Like the Zone as a whole, there are many harmful traditional practices that are being widely practiced in the district. Among these, raping, abduction, Dhala*,* female circumcision, Over Geber, marriage under age etc. can be mentioned as an example. But they are decreasing from time to time because awareness creation by the health extension workers in the community. However, it should not be forgotten that there are many useful traditional practices that should be appreciated and are being used by the people of the district. Ikub, Debo, Idir etc are some of the useful traditional practices.

**5.3. Sport**

The district was suitable for different types of sport activities like foot-ball, Volleyball and Athletics. Accordingly, however, it has not well-organized and standardized sport facilities like stadium, gymnasium, youth center and others.

**Table: 5.6. Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **No of team** | **member** | **No team** | **member** |
| World taekwondo | 1 | 41 | 1 | 78 |

**5.4. Basic Infrastructure Condition Roads:**

Tena district is found 127 km away from zonal capital Asella and 250 km from Regional Capital city, Finfinne. It has 103.15 km length of gravel road (all weather) and 56.5 km of dry weather road. This gives an average road density (for all weather roads) of km 0.1 per 1000 km2 and 0.05 km per 1000 people in the year 2012.In The Main and a major problem in Ticho district in whole there is no comfortable road transport bridge in woreda

|  |  |  |
| --- | --- | --- |
| Types of raod( km) | 2011 | 2012 |
| Aspalat | 0 | 0 |
| All weather gravel | 84 | 103.15 |
| Dry weather road | 50 | 56.5 |
| All weather raod density per 1000km2 | 0.05 | 0.1 |
| Density per 1000 of population (km) | 0.025 | 0.05 |

**Telecommunication:** one of the fast and effective ways of transmitting both business and administrative information, especially in areas where road transport system is under developed. Urban areas of the district has supplied with digital type of telecommunication. On the other hand, most rural areas of the district has supplied with wireless type of telephone services. Currently, mobile telephone services overall areas of the district.

**Post Office:** Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has no any type of postal service in Ticho kella town until the end year of 2012

**Network Service: -** Network Service is one of the another means of communication that plays a significant role in transmitting information and message, in both urban and rural areas where other means communication is under developed. But in Ticho town accesses to Network Service started from the mid of 2002

**FM radio broadcast service: -** FM was one of the special means of communication that plays a significant role in transmitting information and message .**But** in the district all in all there is **no** any types **FM radio broad cast** service.

**Water supply:** potable water coverage of the district is very low. According to data obtained from Ticho district Water Resource Office, the number of population access to potable water supply was increased from 38867 (46.99% of the total) in the year 2011 to 42411 (49.77% of the total) in the year 2012is supplied with potable water. Regarding potable water schemes, the number of spring development was 36 the total number of schemes was also 36 between the year 2011 and 2012.

**Table: 5.7. Total population supplied with potable water supply and number of schemes**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Total population of the district** | **Population supplied with potable water supply** | **%** | **No of schemes** | | |
| **Spring** | **No of distribution scheme** | **Total** |
| 2011 | **82,697** | **38867** | **46.99** | **36** | **0** | **36** |
| 2012 | **85,200** | **42411** | **49.77** | **36** | **0** | **36** |

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are Charcoal, animal dung, farm residue and fire wood while the modern energy sources are electricity, biogas, fossil fuel and solar energy. Ticho and kelaTowns and three rural kebeles are supplied with electric power. Ticho town is access to Electric power starting from the mid of 2002.

On the other hand the rest parts of the rural areas have no electric services. However, in rural and other urban centers traditional sources of energy( fire wood, crop residue, animal dung ,charcoal) are still the dominant form of energy for cooking and other purposes that plays a significant role in decreasing the role of animal dung and crop residues in natural fertilizer to increase crop production and productivity. It also has high contribution in accelerating the deforestation rate of the district. In urban area, charcoal is the most important energy source followed by firewood, electricity, crop residues and animal dung. On the other hand, fire wood is the major energy source in rural area followed by crop residue, animal dung and kerosene. There is no any fuel filling station in the district.

**Table: 5.8. Sources of domestic energy supply.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 4 |
| 2 | Fire wood | 1 | 1 |
| 3 | Animal Dung | 3 | 2 |
| 4 | Crop Residue | 5 | 3 |
| 5 | Kerosene | 4 | 5 |
| 6 | Electricity | 6 | 6 |

Source: Tina district Agriculture and Rural Development Office

**CHAPTER SIX**

**6. DEVELOPMENT ACTIVITIES**

**6.1. On Going Development Projects**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the years under consideration are the following.

**Private investment: -** Until this document paper is prepared there are no any private investors in the district.

**6.2. Problems of ongoing Development Projects**

The major ongoing development projects includes poor construction quality, Inaccessibility of the lack of capacity by contractor, market problem (inflation), resistance of the people to accept the project, dalliance in decision of bid documents and Mobilization of construction is the major problem during the construction.

The major problem of ongoing project in Ticho district Azazera and Korobta kebele irrigation .It cannot properly use for agricultural, and also there is the probelm of potable water supply in the majority of rural area, many peoples of the district are at risk.

**CHAPTER SEVEN**

**7. PROBLEMS AND POTENTIALITIES**

**7.1. Major Problems**

**Environmental problem:-** Soil degradation due to over cultivation, overgrazing and rapid deforestation  rate and low soil and water conservation practice on the other hand, variability of rain faill season  which results into Crops,Vegitable and fruit  production fail , uncontrolled hunting and is the main problem for disappear the wild animal of the district.

**Economic Problem:** Shortage of farm land High prevalence of crop diseases & pests, Shortage of Agricultural inputs & lack of capacity to buy, lack of Financial Institutions , acute shortage of grazing land which leads to over utilization of the same land for a long period of time, lack of Private investment and NGO opportunity activities and industries development.

**Social service problem:** rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, **HIV/AIDS** prevalence, high dropout rate, low Potable Water coverage, low electric power supply.

**7.2. Potentialities**

**Land resource:** - due to favorable climatic condition of the district there is amble land potentials used for agricultural activities. Especially the district has many tributaries and rivers used for both traditional and modern irrigation. According to the data obtained from the districts agriculture and rural development office there are 3011.5hectares of potentially irrigated land in the district in 2012.

**Tourist attraction site:** - the topographic situation of the district is attractive for tourist attraction. In addition to these in the district there are both manmade and natural tourist attraction site. From the man made tourist attraction site Hasen Usman Building which is traditional religious place, Haji Shale Mosque, Hameraba natural cave, Galema forest,Alelu foresr,Aware forest,Laduma forest, and its different wild animals,Vivers like Dimensho,Hulul, Inamor Hararge,Sarbona, and mountains like :- Galama mountain,She/Nagawo mountain H/shale mountain and Caves likeSH/Husein cave,Sof are the main tourist attraction site of the district.

**Forest resources:** - the district has a great potential of Domestic natural forest like Tid, Zigba,Weyira Tikur inchet, bahirzaf,koso, and the like that can be used for different types of carpentry products. According to the data obtained from the districts agriculture and rural development office there is 82.5 **km2** of natural forests in the district in 2012.

**Investment opportunities:** - the district has a potential of investment opportunities if investment promotion is done. The climate condition of the district is suitable for producing different types of cash crop production and livestock rearing, fattening, trading ,Industry and others. But it needs an investigation by the investment office and other concerned bodies.

**Labor resources: -** in the district there are many skilled and unskilled labor resources

**Investment opportunities:** - the district has a potential of investment opportunities if investment promotion is done. The climate condition of the district is suitable for producing different types of cash crop production and livestock rearing, fattening, trading ,Industry and others. But it needs an investigation by the investment office and other concerned bodies.

**CHAPTER EIGHT**

**8. Conclusions and Recommendation**

**8. 1. Conclusions**

**Ticho** district is one of the 26 administrative districts of Arsi Zone. It has a total area of 456.1km2.Ticho has divided into 13 kebeles of which 11 are Rural Peasant Associations and two urban administrative units. Ticho town is the capital town of the district. It is located at 250 km from Regional Capital City, Finfinne and 127 km from zonal capital town, Asella Town to East direction. The district has estimated total population of 85,200 ,from the total population the number of male was 44304 with covers (52%) and the numbers of female was 40896 with coverage of (48%) in the year 2012. In which more than 88% of the population was living in the rural areas.

The topographic features of the district that ranges from high mountain ranges of Chilalo-Galema ranges to undulating high plateau and low laying areas in the Wabe gorge causes the district to experience cool to moderately warm climatic condition. Such a variation in climatic condition causes the district to experience the maximum rain fall on its high land areas and minimum rainfall in its low land areas.

The district has suitable climatic condition and cultivable land for producing different types of crops(Creal,puples and oil) in both Maher and Belg but more in Maher seasons.Inadditionthedistrict has a great potential of irrigation activities, in this year therewas5319.5 Hec Lands cultivated for irrigation by participation of 3450farmers and, there is 664,697Kun. Products produce. From the crops produced in the district Teff, wheat, Barley and pulses are the most widely grown types of crops especially in the meher season. The average production obtained was showing an increment.

So as to improve agricultural production and productivity, a lot has been done by agricultural development office with the help of **three** development agents assigned in each kebeles. As the data obtained from Agricultural promotion office indicated, the amount of chemical fertilizer was showing a **increment** between the years under consideration while the amount of improved seed was showing increment between under consideration year. The reason behind the increment in chemical fertilizer to the farmers was due to the farmers use other channel to get chemical fertilizers (**e.g. NPS and NPSB)** Moreover, with the help of development agents, the district provides training for the farmers in all aspect of agricultural practices such as in crop production, animal husbandry and management and environmental protection. However, as compared with the number of Keble ,the. In the same year there were 34 development agents in the district in 2012

Regarding production and productivity the districts Agricultural office motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can use Agricultural inputs like improved seeds, chemical fertilizers, herbicides and pesticides to produce intensively as well as how to protect the environment. Agricultural inputs are distributed by agricultural service cooperatives to the farmers. As the data obtained from cooperative promotion office indicated, the amount of chemical fertilizer was showing a decline between the years under consideration while the amount of improved seed was showing an increment. The reason behind the decline in chemical fertilizer to the farmers was due to the farmers use other channel to get chemical fertilizers, that Moreover, with the help of development agents, the district provides training for the farmers in all aspect of agricultural practices such as in crop production, animal husbandry and management and environmental protection. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-Cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

On the other hand, suitable topographic condition and availability of many rivers causes the district to have high potential for somewhat both modern and traditional irrigation. This reality brings most low land areas of the district along Wabe River basing are being under irrigation. Moreover, most of the river and streams descended from Galema massif were used for traditional irrigation by the farmers. For the production of different crops like fruit, sugar cane, vegetables, chat, etc were cultivated by the farmers.

The district has a potential for livestock rearing and poultry keeping. However, despite of the fact that the number of livestock population was increasing, the benefit that the farmers of the district is less due to traditional method of rearing and inadequate animal feeds. Moreover, even though bee keeping and fishery activities are one of the sources of additional income and food respectively for the farmers, the farmers of the district were not engage on these sectors of economy. Hence, they would have to be participating on these economic activities by using their maximum effort and available resources and opportunities in their localities.

Infrastructure developments like **Aspalt** Road, Enough electric power supply, educational centers like collages FM radio transmission ,Youth center ,stadium, well organized sport club team and Postal Service are not in the district , most rural areas of the district are access to wireless type while one town are access to digital types of telephone service. Moreover, Mobile type of telecommunication is being under construction in the capital town of the district which benefited the surrounding rural kebeles. The district has a road density of **103**.15km length of gravel road (all weather), **56**.5 km of dry weather road. This gives an average road density (for all weather roads) of 0.**05** km per 1000 km2 and **0.1** m per 1000 people in the year 2012

So as to achieve universal primary education coverage, the district provides education in 34 primary schools in each rural kebeles for more than 50% females students. The number of female student was slightly decreased in the year 2012. As quality indicators, the Student to teacher’s ratio was on average improved from 47: 1 to 47:1 while student to class-room ratio was on average improved from 50:1 to 82:1.

Like-wise the district has also two secondary school (9-12). A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. Not only this but also the number of health professionals working in the health facilities were increasing. Likewise, as one can be seen from the ratio of population to health personnel, there was a need for additional health personnel in the district to ensure quality health service delivery. The ratio of population to Health Center &health post was 21,300:1, 7745:1, respectively in the year 2012 which indicates low health coverage of the district as compared with WHOM standard (25000, 10000 and 5000 respectively).

**8.2. Recommendation**

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organizations as well as the surrounding community has to perform the following activities:-

* The district has a potential of investment opportunities if investment promotion so concerned bodies make promote the potential of the district .Infrastructure like:- Asphalt and coble stone road which connect with Zonal capital city and neighbor district was a major problem of the district , there is not enough electric energy power supply there is no any type of industries that work electric power supply , there is not nay investments activities in district ,there is not youth center ,also there is not stadium for sport activities are needed. So the concerned body has to develop these facilities. Moreover, financial institution has to be established.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, Strengthening rural agricultural institutions such as Farmer training centers (**FTC**), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements. Irrigation was one of essential and important things for development of agro process in the countries, but in the district farmers awareness regarding about irrigation was infant stage. So the district irrigation development office must be give training regarding about modern irrigation for farmer.
* The activities done for ensuring education coverage and improving the quality of education were good. However, the number of student enrolled to these schools was increase. Hence, district should be expected to do more on the awareness creation and improving the enrollment ratio from all the concerned bodies. Moreover, changes have been observed on quality indicators in the district so as to improve the quality of education in the district. In the future the district would be expected to do more on factors that improve the quality of education,
* The animal health infrastructures coverage and the number of animal health personnel were at its low stage. Hence, the district would be expected to construct additional animal health facilities and employing additional animal health professionals to improve the quality of livestock population, The potable water coverage of the district still now its low stage, still now in rural areas population uses river water as potable water. So it is expected to construct additional schemes and maintain the existing one,
* The health coverage of the district is very low when it is compared to the WHO standard so it is expected to do more in both construction of additional health institutions and employing additional health professionalism both in live stock and human health coverage man power is not enough, So concerned body must fulfill man power .The estimation of Ticho werada population size was 85200, But there is **no Hospital** accessed. Government must fulfill this facilities for the district
* Since the district has cultivable land Cereal, pulses and cash crop production potential, the local and regional government by visiting these productions has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.
* Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall season which results into Crops,Vegitable and fruit  production fall , uncontrolled hunting is the main problem for disappear the wild animal of the district. So Governments and other concerned bodies find the solution, UN less otherwise it’s very hard.
* Rapid population growth and large family size which results land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, deforestation , are locally problem ,In our district those problems more refelect.There for the Government and other concerned bodies should give attention and solve these problems.

**FM radio broadcast service: -** FM was one of the special means of communication that plays a significant role. But in Ticho district there is no any FM radio transmission. Please concerned bodies should give more attention to solve this problem.

**CHAPTER ONE**

**1. INTRODUCTIO**

**Back Ground;-** Tiyo district is one of the administrative units of 26 districts of Arsi Zone. Tiyo has 21 administrative units of which 18 are Peasant Associations (PAs) while three are urban administrative units. Asella town the capital town of Arsii is surrounded by peasant associations of Tiyo district. Which is located at 175km far from regional capital City, Finfinne.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of Tiyodistrict that reflects the existing situation, development problems and potentials of the district to be used by Government and Non-Governmental organization to identify development gaps by using researchers, and the like.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are **12** months of **30** days each with an addition of a short period often referred to as **pagume**, which has six days for three consecutive years and five days on the Two year.

This document is compiled from the data collected from the sectorial departments of Tiyo District and 1999 population and Housing Census report for Oromia region and other related document available in our office. Lack of accuracy and required data, lack of attention and untimely response from the concerned bodies are some of the major problem faced while organizing the document. Even if it has these limitations, the document is very useful to show the physical and Socio-economic condition of the district.

This document has seven chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, sixth and seventh chapter deals with social services and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.

# CHAPTER TWO

# 2 PHYSICAL SETTINGLOCATION AND AREA

Location;-Tiyo is one of the administrative units of Arsi Zone. Absolutely, the district is located between 7028’36’’N-7045’40’’ Latitude and 39025’00’’E-39051’09’’E Longitude. Regarding relative location, it shares a boundary line with Hetosa district in the north, north east and east, Digelu-Tijo District in the south, south east, east and south west, Munessa district in the south west and Zeway Dugda district in the west, north west and north direction.

Area of The district has a total area of 647.4 km2 which accounts for 3.082% of the total area of the Zone.

## Relief, drainage, Geology and Climate

**Geology:** The present surface rock distribution, the land configuration and other features of the district was formed during different period of Cenozoic era as a result of both internal and external forces acting up on the earth surface. Accordingly, Deformation covers extensively from south western part to the northern and north western part of the district. Nazeret series formation covers some of the southern and south eastern part of the district while Alluvion and Lacustrine deposits cover the western part of the district. Moreover, some of the central and eastern part was covered by Lower part Chilalo formation while few pocket areas of the north eastern part was covered by upper part Chilalo formation.

**Relief: -** the relief structure of the district consists of mountain ranges which is the parts of Chilalo Galema mountain range, high undulating plateau dissected by large and small stream of the district, flat topped low plateau on the high land and low laying plain areas in the rift valley. The altitude of the district ranges between 4100 meters located in Chilalo Mountain to less than 1500 m in the rift valley region.

**Drainage: -** the presence of large mountain like Chilalo Mountain made the district to have high net work of river systems. The major permanent rivers of the district are Ketar, kulumsa, Gonde, Dosha, Walkesa, Bilaalo and Kombolcha. On the other hand, the major seasonal streams are lokicha, Warechitu, Elana and others. Generally, the district has high potential for both traditional and modern irrigation system which can be used to increase agricultural production if they are utilized efficiently

**Climate: -** Due to its altitudinal location the climatic condition of the district is moderately cool having a temperature of 150C-200C.The remaining ones are cool and cold having a temperature of 100C-150C and less than 100C respectively. The dominant type of climatic condition of the district is moderately cool agro- ecological zone. The mean annual rainfall is ranging between 0 mm-255.8 mm and the average rainy days are more than 185 days in the year. The rainfall pattern is bi-modal, which are short rainy season (Belg from February to May ) and summer or long rainy season (Maher from June to August)

## Soil, Vegetation and Wild life

The major types of soil found in the district are Pellic Verti soils, Orthic Luvi soils, Chromic Luvi soils and Mollic Andosoils. Moreover, Eutric Nitosoils and Vertic Cambisoils are found in few area of the district. The fertility status of the district was medium to good that are suitable for cultivation of different variety of crops.

Regarding vegetation covers Afro alpine, sub-Afro alpine, natural forest (both broad leaf and thin leaf), Gallery forest, different species of Accacia, bushes and shrubs are the main vegetation types of the district. Moreover, there are also manmade government protected forests in the district.

The major wild animals like Leopard, bushbuck, Columbus Monkey, Mountain Nyala, Red fox, Rabbit, etc are mentioned as an example.

# CHAPTER THREE

# 3. Socio-Economic Conditions

# 3.1 Population Size

According to the projection made from 1999 CSA report, the population of the district was increased from 120,585 to 123,927 between the year 2011 and 2012 From the total population of the district, only 8.88 % &9 % are living in urban areas while more than 91.2%&91 was living at rural areas in the year 2011&2012; This indicates that more peoples are living in rural areas depending on agricultural activities. When we see Regarding to sex ,from the total population of the district females account for 49.97% .

**Table: 3.1.1 Population distribution by urban, rural and sex for the district.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Rural** | | | **Urban** | | | | **Total** | | | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | | **Male** | | **Female** | | **Total** |
| 2011 | 55,286 | 54,587 | 109,873 | 5073 | 5639 | **10712** | | **60,358** | | **60,226** | | **120,585** |
| 2012 | 56742 | 56,025 | 112,767 | 5,285 | 5825 | **11,160** | **62,027** | | **61,900** | | **123,927** | |

Source: Projection made from 1999 CSA report

# Age –Sex Distribution;- The age structure of a population is important for planning different social and economic sector development activities and also for determining the productive and economically inactive population of the district.

Based on 1999 CSA population and housing census the number of population in 2011 was indicated as follows. The young age population (0-14), productive age population (15-64) and old age population (65+) accounts for 46.8%, 49.6% and 3.1%in 2011 & (46.7),(50)&(3.11)of the total population respectively in the year 2010 . Based on area of residence, young age population (0-14), productive age population (15-64) and old age population (65+) account for 51.09%, 45.59% and3.3% for rural areas and 33.33%, 63.38% and 3.27% for urban area respectively. The dependency ratio of the district is 54.4% for Rural and 36.61% for urban) which indicates 53 people are dependent on 100 economically active populations.

As far as the sex structure of population was considered, of the total population of the district the female population accounts for more than 49.9% which is nearly equal with that of the counterpart male population.

Regarding the sex structure of the population, the overall sex ratio of the district is 100 male per 100 female both in urban& Rural areas . This ratio indicates that the number of male & female residences in both rural & urban is almost equal.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table: 3.1.2.1 Population size by wider age group Classification of the year 2011** | | | | |
| **Year/Sex** | **Male** | **Female** | | **Total** | |
| **No** | **%** | **No** | |
| **Rural** | **55285** | **54587** | **49.68** | **109872** | |
| 0-14 | 27220 | 26044 | 48.89 | 5326 | |
| 15-64 | 26061 | 27110 | 50.9 | 53165 | |
| 65+ | 2005 | 1438 | 41.77 | 3443 | |
| **Urban** | **5073** | **5639** | **52.63** | **10712** | |
| 0-14 | 1449 | 1742 | 54.63 | 3191 | |
| 15-64 | 2952 | 3712 | 51.34 | 6067 | |
| 65+ | 137 | 180 | 57.38 | 317 | |
| **Total Rural + Urban** | **60359** | **60221** |  | **120585** | |
| 0-14 | **28669** | **27786** |  | **56455** | |
| 15-64 | **29013** | **30817** |  | **59829** | |
| 65+ | **2143** | **1618** |  | **3761** | |
| Source: 1999 CSA population and Housing census report | | | | |

## Population Density and rural settlement;- Population density indicates population resource relationship for social service, economic and resources. Regarding population land resource ratio/ relation, the district had a crude density of 186.26 in the Year 2011 & 191.42 persons per km2 in 2012. Concerning the settlement pattern of the district, the rural parts are characterized by group settlement in the high land areas while scattered settlement in the low land areas. Even though the population number is high the farmers produce sufficient crops during the maher & belg Season as well as based on traditional &modern Irrigation

## School age population;-School age population is one of the best indicators for planning and budget preparation of education, health and other social services facilities. Moreover, school age population is important for planning the number of students enrolled to school every year. As shown in below table, the number of school age population of the district was decrease from 23278 0students to 22535 students between the years 2011 & 2012. These groups of population account for 19.30 %in the year 2011 & 18.18 % in2012 from the total population of the district .so that the concerned bodies in the district should have to mobilize the society to increase the enrolment ratio, as well as construction of schools & expansion of other school facilities that create favorable school environment which in turn improve the quality of education in the district.

**Table: 3.1.4.1 Projected School Age Population of Tiyo Wereda**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |  |
| **Rural** | | | | | | |
| 4\_6 | 28 | 18 | 46 | 32 | 24 | 56 |
| 7\_14 | 10659 | 9277 | 19936 | 10463 | 9081 | 19544 |
| 15\_18 | 1091 | 828 | 1919 | 1075 | 811 | 1886 |
| Total | 11778 | 10123 | 21901 | 11570 | 9916 | 21486 |
| **Urban** | | | | | | |
| 4\_6 | 11 | 12 | 23 | 0 | 0 | 0 |
| 7\_14 | 147 | 155 | 302 | 1 | 3 | 4 |
| 15\_18 | 577 | 475 | 1052 | 573 | 472 | 4 |
| Total | 735 | 642 | 1377 | 574 | 475 | 1049 |
| **Total** | | | | | | |
| 4\_6 | 39 | 30 | 69 | 32 | 24 | 56 |
| 7\_14 | 10806 | 9432 | 20238 | 10464 | 9084 | 19548 |
| 15\_18 | 1668 | 1303 | 2971 | 1648 | 1283 | 2931 |
| Total | 12513 | 10765 | 23278 | 12144 | 10391 | 22535 |

Source: Tiyo Wereda Education Office

**3.2 Agriculture**

**Agriculture Cooperatives:** There were 18 peasant Associations (PAS) in the district with 15,184 cooperative members in the year 2011 Which are 5 milk and milk product producers, Irrigation participant cooperatives, 18 General service(Multi-purpose) cooperatives, 21 Saving and credit cooperatives, 3 Consumer cooperatives and 8 Mineral and Mineral product cooperatives with 244,0,9584,5185 ,171 and 0 member farmers consecutively. Regarding their capital, they have 29235 operational and 1475428.25 .fixed capital in the year 2007 but when we see the number of some cooperative members in the year 2008 it was decreasing from that of 2007 but their operational& fixed capital was increasing. See the tables below

**Table: 3.2.1.1. Number of urban credit and Saving cooperatives, their capital and member (year 20112012)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Milk and milk Product producer | 5 | 190 | 54 | 244 | 13023 | 16212 | 29235 |
| General service (Multi-Purpose cooperative | 18 | 7071 | 2513 | 9584 | 11868829 | 1433696 | 13302525 |
| Saving and credit coop | 21 | 4026 | 1159 | 5185 | 1251648.83 | 992315 | 2243964.7 |
| Consumer cooperative | 3 | 129 | 42 | 171 | 204,915 | 8346.9 | 213262 |

Source: Source: Tiyo District Cooperative Office

**Table: 3.2.1.2. Number of urban credit and Saving cooperatives, their capital and member (year 2012)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Activity/Cooperatives** |  | **Number of members** | | | **Capital** | | |
| **No** | **Male** | **Female** | **Total** | **Operational** | **Fixed** | **Total** |
| Milk and milk Product producer | 5 | 190 | 54 | 244 | 13023 | 16212 | 29235 |
| Irrigation participant cooperative | 6 | 746 | 32 | 778 | 631113 | 18586 | 649701 |
| General service (Multi-Purpose cooperative | 18 | 6977 | 1569 | 8546 | 3163399 | 620661 | 3784060 |
| Saving and credit coop | 18 | 3438 | 1097 | 4535 | 271304 | 4229767 | 4501072 |
| Consumers | 3 | 127 | 9 | 146 | 648372.1 | 2326 | 650698.06 |

Source: Tiyo District Cooperative Office

**Peoples affected by droughts;** In Tiyo District there are 18 kebeles in which farmers were seteled. In this kebeles there are 13606 male and 3184 female house hold farmers . These house hold farmers & other residents produce sufficient crops but sometimes due to climatic change some peoples of the district were affected by drought for instance in 2011 EC, 9553 peoples were affected by drought & supported by government. for more information see the table below.

**Table 3.2.2.1 Population affected by drought&support given.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Population affected by drought | | Aid/support given | | |
| Male | Female | Food in(kg) | Oil in(Lit) | Supplimentaryfood in kg |
| 2011 | 4719 | 4875 | 8634 | 258.8 | 1194 |
| 2012 | 0 | 0 | 0 | 0 | 0 |

**Land Resources by use;-** An area of Tiyo District was 647.4 km2 out of these land most of it was used for cultivation & grazing. The rest are used for other purpose. For more information See the table below.

**Table 3.2.3.1. Land use**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| District | Area(km2) | Status of land use in(km2) | | | |
| Cultivable | Forest land | Grazing land | For other purpose |
| Tiyo | 647.4 | 217.73 | 20.19 | 96.83 | 312.65 |

## **Crop Production**

Bimodal pattern of the rainfall gives a wide opportunity for the district to produce different types of crops and use the same land twice a year that is for Maher and Belg. However, Maher is the largest season in terms of both of cultivated land crop production.

The major annual crops grown in the district are Cereals, Pulses and Oil Seeds. From cereal crops Barley, Teff, Wheat and Maize are the most widely grown ones. In addition, the district is known in producing some cash crops like Tomato, Onion, and Oilseeds.

In the Maher season of 2011/2012 the total cultivated land of the district was 21750 hectares which was by 51 hectares from that of 2009/2010. But the total production obtained was increased from 984851 quintals to 994612 quintals in the year 2009/2010 .when we see some crops of the year 2009/2010 as a sample; wheat is produced 59 quintals,Maize 58 and barley is produced 40 quintals per hectare. These are the most productive crops while Teff is 14 quintals per hectare is the least productive crop. In general wheat and barley are the most important crops produced in the district.

As xiyoo district was cultivated during Belg season in the year 2011/2012 is 130 per hectar .but no land was cultivated during belb season 2011/2012.

## **Table: 3.2.4.1. Area Cultivated and Production Obtained for Private Peasant Holdings by Seasons**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Crop Type** | 2010/2011 | | 2011/2012 | |
| **Meher Season** | | **Meher Season** | |
|  | **Area Cult (Hac)** | **Prod. (Qut)** |  |  |
| **Cereals** | **18593** | **133,894** | 18779.5 | 634343 |
| Wheat | **11012** | **615874** | 11040 | 537357 |
| Teff | **1050** | **18672** | 1269.5 | 33031 |
| Barley | **5942.5** | **245770** | 5778 | 24625 |
| Maize | **522** | **28590** | 567 | 34350 |
| Oats | **13** | **455** | 25 | 1280 |
| Sorghum | **53.5** | **28590** | 100 | 3700 |
| **Pulses** | **80** | **1426** | 2020.5 | 52849 |
| Horse beans |  |  | 1941.5 | 50719 |
| Lentils | **20** | **240** | 3 | 54 |
| Haricot beans | **60** | **1186** | 76 | 2076 |
| **Oilseeds** | **44.5** | **632** | 42.75 | 580.5 |
| Linseed | **34.5** | **552** | 42.75 | 580.5 |
| Neug | **10** | **80** | 0 | 0 |
| **Grand total** | **18717.5** | **136,584** | 20,842.75 | 687,772.5 |

**Fertilizers and Improved Seeds Utilization:**

Fertilizers, improved seeds, herbicides and insecticides are very essential agricultural inputs to improve crop production and productivity, to meet rapid increase of demand for food and industrial raw materials.

Accordingly, the amount of chemical fertilizer distributed to farmers was increased from 2211.5 quintals in the year 2011 to43430 quintals in the year 2012. During the same year the amount of different types of improved seeds was 576.5 quintals in 2011 & 8666 quintals in the year 2012 and the amount of herbicide and pesticide also vary from year to year from 1901.5 to 13334 in the indicated year.

**Table: 3.2.4.2.1 Amounts of Agricultural Inputs Distributed to Farmers by type**

|  |  |  |
| --- | --- | --- |
| **Type of input** | **2010/2011** | **2011/2012** |
| **Amount (qt.)** |  |
| **Fertilizers** | **2211.5** | **46430** |
| DAP (qt.) | 0 |  |
| NPS | 837 | 40700 |
| Urea (qt.) | 1374.5 | 5730 |
| **Improved seeds (qt.)** | **576.5** | **8666** |
| Wheat | 0 | 6200 |
| Barley | 0 | 2300 |
| Teff | 11.5 | 94 |
| Maize | 565 | 72 |
| Vegetable seeds | 0 | 0 |
| Kan biro |  | 0 |
| **Pesticides &Herbicides** | **1901.5** | **13334** |
| Pesticides(powder)(qt) | 0 | 871 |
| Pesticides (Liquid)(Lit) | 0 | 12463 |
| Herbicides (lit) | 1901.5 | 0 |

Methods of Soil Conservation and Maintaining Soil Fertility

**Methods for maintaining Soil fertility:** There are two ways of maintaining soil fertility in the zone particularly in the district. These are the Traditional and modern methods. The Traditional method includes using of animal dung, crop rotation, following and using crop residues while the modern one is using of artificial fertilizers and compost (organic fertilizers).

**Methods for soil conservation:** contour ploughing and cultivation is a traditional way while cut off drain, check dam construction, terrace construction, mixing cultivation and a forestation are modern way of soil conservation in the district.

**Agricultural Calendar:** It is well known that most of the farmers of the District are not busy throughout the year since agricultural activities rather than a few irrigational areas are seasonal based. As a result, during some seasons of the year they are too busy while during some seasons they are an idle. Even during busy season, some farmers do not fully engage in farm activities due to some socio-cultural related ceremonies

The time of performing agricultural activities such as land preparation, planting, weeding and harvesting vary with season depending on agro-climatic zone and types of crops cultivated. In some district these activities are started earlier while in others districts they started later. See the table below.

**Table: 3.2.5.1 Agricultural Calendar of the District**.

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | Types of activities | **Maher Season** | **Belg Season** |
| 1 | Land preparation | March-June | February-April |
| 2 | Planting (Sowing) | June-August | March-April |
| 3 | Weeding | July-September | April-May |
| 4 | Harvesting | September-January | July-August |

Source: Tiyo District Agriculture and Rural Development Office

**Farm oxen per house hold;-** as far as the method of farming is considered most of the farmers of the district relay on traditional method of farming using oxen rather than mechanized way of farming(using tractors). This indicates that the number of farmers having oxen determine the agricultural production in the district. Based on the data obtained from the statistical abstract of the district, from the total farmers in the district, the number of farmers who have oxen accounts for 99.8% of the total farmer’s in the district.

**Table: 3.26.1. Number of farm oxen per +h0ousehold and farmers with farm ox.**

|  |  |  |  |
| --- | --- | --- | --- |
| **In The Year2011** | | **2012** | |
| **Number of oxen in pair** | **Number of farmers** | **Number of oxen in pair** | **Number of farmers** |
| ½ | 7599 | 1/2 | 8599 |
| 1 | 2512 | 1 | 3512 |
| 1&1/2 | 1041 | 1&1/2 | 2041 |
| 2 | 1041 | 2 | 2041 |
| 2-3 | 653 | 2-3 | 753 |
| >3 | 653 | >3 | 753 |

**Irrigation:** There is more than 4000 hectares of potentially irrigable land in the district. In the year 2011 1280 hectors of land was cultivated by traditional irrigation & 757 hectors of land was cultivated with modern &pump irrigation. In general the production obtained in this year was 799,642 kuntals of different cops & benefited 5857 farmers. On the other hand, in the year 2012 the traditional irrigation land was 1180 hectors In addition to these 1121 hectors of land were cultivated with modern irrigation(including Pump) and all hectors of land were covered by annual crops and the production obtained were 1,252,332 kuntals and benefited 4540 farmers.

**Development agents and Farmers Training Centers:** They are one of the most important agricultural infrastructures that play an important role in improving agricultural production and productivity. In the year 2011 and 2012 the number of farmers training centers (FTCs) was 18 in number & the number of Development agents were 39 in the year 2011 & 40 in the year 2012 which are more than three in each PA with profession of plant science, Animal science & Environmental protection including supervisors these development agents help the farmers in all aspects of agricultural practices such as in crop production, animal husbandry, management and environmental protection. On the other hand the number of farmers that received extension service were 16790 in the indicated years.

**Table: 3.2.8.1 Number of Development agents and FTC (2011-2012**)

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | **2012** |
| Number of farmers Training Center | 18 | 18 |
| Number of Development agents | 39 | 39 |
| Number of beneficiaries | 13,752 | 16,790 |

Source: Tiyo District Agriculture and Rural Development Office

Constraints of Agriculture

**Crop pests and Disease:** the major crops pests in the district are Aphids while the major diseases are rust, smut and others. Weeds and rain fall variation (increase or decrease) are also the major constraint in crop production in the district. They have a great contribution in decreasing volume of production of crops.

To overcome these problems, the farmers are advised to use disease resistant variety of seeds, hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems, etc

Livestock Poultry Production &Beekeeping

**Livestock:** Tiyo district is famous in livestock resources. Cattle, sheep, goats, horses, mules and donkeys are the major livestock population found in the district. in the year 2011 the number of livestock population was 390,142 & it was increased to 568941 in the year 2012. From the livestock population of the year 2012 found in the district; cattle, sheep and goat account for more than 90.9 %. The high prevalence of diseases, traditional method of rearing, shortage of feeding and the like are the major constraints in livestock production in the district.

The major types of animal feeds in the district are forage and crop residues, which are limited in nutritional values.

**Poultry:** Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population was decrease from 74150 to 93550 between the year 2011 and 2012. However, the prevalence of disease and low productivity due to traditional method of rearing is the major constraints.

**Table: 3.2.10.1. Distribution of Livestock and Poultry 2011-2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of Livestock** | 2011 | % | 2012 | % |
| **1** | Live Stock **(total)** | **390142** | **81** | **568,941** | **85.9** |
|  | Cattle | 173779 | 44.5 | 189,954 | 33.40 |
|  | Sheep | 90894 | 23.3 | 182,859 | 32.14 |
|  | Goat | 16117 | 4.1 | 19,878 | 3.5 |
|  | Donkey | 23742 | 6.1 | 62,742 | 11.02 |
|  | Horses | 10833 | 2.8 | 12,358 | 2.17 |
|  | Mules | 627 | 0.2 | 7600 | 1.33 |
| **2** | **Poultry** | 74150 | **19** | 93550 | **14.1** |

Source: - Tiyo District Animal Health and marketing development agency

**Major Livestock Diseases:;** Black leg, Hemorrhagic septicemia, Anthrax, Chronic Respiratory diseases , external and internal parasites, and lymphatic diseases are the major livestock and poultry diseases in the district. To overcome these diseases, the districts animal health department has been providing different types of animal health services and treatments to improve the productivity and quality of livestock found in the district. The following table shows the type of vaccination and treatment given to the livestock during the indicated years.

**Table: 3.2. 10.2 Numbers of Animals Got Health Services by type and type of Service Given**

|  |  |  |
| --- | --- | --- |
| **Type of service** | **2011** | **2012** |
| **Vaccination** |  |  |
| Black leg | 26100 | 28100 |
| Hemorrhagic Septicemia | 0 | 0 |
| Anthrax | 53500 | 54500 |
| Others | 306000 | 316000 |
| **Treatment** |  |  |
| External parasites | 172346 | 182346 |
| Internal parasites | 194714 | 204714 |
| Operation | 218 | 318 |
| Others treatment | 39979 | 40979 |

Source: Tiyo Animal Health &marketing Development Agency

**Livestock Health Infrastructure:** Availability of animal health infrastructure is very important to improve animal productivity and control animal diseases. During the year 2011&2012 there were one B-type one C- type &four D type clinics with 21 animal health Assistance in 2011 & 21 animal Health assistance in the year 2012 respectively. The ratio of livestock population to all health personnel was 14449.7 in 2011 & 16,255.45 during the year of 2012 . So that it indicates that there is low health coverage in the district.

**Table: 3.2.10.3 Distribution of Tiyo District Animal Health Infrastructure**

|  |  |  |
| --- | --- | --- |
| **Description** | **2011** | 2012 |
| **Veterinary Personnel** | **27** | **35** |
| DVM(Doctor of Veterinary medicine) | 2 | 2 |
| BVS | 4 | 12 |
| Animal health Assistance | 21 | 21 |
| **Health Infrastructure** | **6** | **6** |
| Clinic(B,)type | 1 | 1 |
| Clinic(C,)type | 1 | 1 |
| Clinic(D,)type | 4 | 4 |

Source: Tiyo District Animal Health &marketing Development Agency

**Bee-keeping activities:** Bee-keeping farming is another source of cash income for farmers. In the district there were 8903 traditional, 2655 inter mediate and 1064 modern bee hives in the year 2011 .On the other hand there were 9003 traditional, 3655 intermediate & 1264 modern bee hives respectively when we see these two years, Using bee hives was increased in 2012 when we compare to that of 2011 . but not enough So that the concerning bodies should have to work with farmers. But in other way using of herbicides and insecticides for another farm were the main problem in bee farming.

**3.3** Mining and Industry

**Mining:** Like other parts of the country in general and the zone in particular, the mineral resources potential of Tiyo district is not investigated and known. However, some data obtained from office of Mineral and Energy Resource Development indicates that, the district has a high potential of some mineral resources such as sedimentary rock, sand, scoria, pumice, best like for construction purpose, Solar Energy, Wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these mineral resources. However, there are insignificant rock quarrying& pottery making activities by local communities in the district.

**Industry:** Similar to other parts of the Zone, industrial development is at its infant stage in Tiyo district. Their number is very small and is dominated by small-scale industries. At the same time they had small capital and able to generate job opportunities for small number of employees. There is also medium scale industrial such as malt factory, Gonde and Chilalo grain mills factory established in the district. There were also about 60 grain mills respectively that provides a job opportunity for several labor forces. Regarding Edible Oil there were three permanently licensed small-scale industries, but that data was not tangible & found on the ground.

**3.4 Education**

**Kindergarten:** According to the data obtained from Statistical Abstract of the district, there was six kindergarten schools with 8 female teachers in 2011 &5 kindergarten schools with 13 female teachers in2012 . while the number of children enrolled in those kindergarten schools was 650 In the year2011 &678 in the year 2012. This shows that the number of kindergarten in the district is very small so that the educational biro of the district must work more on the improvement and expansion of pre-school education.

**Table 3.4.1 Kindergarten schools**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Years** | **No of schools** | **Enrollment** | | | **Type of ownership** |
| **Male** | **Female** | **Total** |
| 2011 | 6 | 341 | 309 | **650** | Non- government |
| 2012 | 5 | 325 | 353 | **678** | Non- government |

Source: Tiyo District Education Office

**Primary Schools:** As a result of efforts made by the district education office, the number of government primary school was 47 in the year 2011&2012 while the number of students enrolled to these schools was decreased from 22410 to 22134 during the indicated years On the other hand the number of teachers who teach at this level was increased from 627 to 685 .When we see the number of students the participation of female students was decreased from 48.29% .to 47.9 % While the Student to teacher’s ratio was improved from 1:36 to 1:33

**Senior Secondary Education (9-12):** The number of Senior Secondary school(9-10) In the district was Four in the year 2011 &2012. The number of student enrolled to these schools were increased from 1448to 1787 but as seen from table below the participation of female students in these schools was dicreased from 40.74% in 2011 to 39.39 %in 2012 EC.Likewise during the same year, the number of teachers teach at this level was increased from 97 to 100 & The average student to teacher ratio was 15:1 in2011 &17:1 in the year2012 so it shows that there is a large number of teachers in the district.

**Table: 3.4.2 Number of Kindergarten, Primary and Secondary School (1-8) with Student Enrolled**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Types of description** | **Government** | | | **Non-Government** |
| **Primary (1-8)** | **Senior Secondary (9-10)** | **Preparatory(11-12)** | **Kindergarten School** |
| 2011 | **No of School** | **47** | **4** | **1** | **6** |
| Male | 11,692 | 969 | 94 | 341 |
| Female | 10,382 | 649 | 51 | 309 |
| **Total** | 22074 | 1618 | 145 | 650 |
| 2012 | **No of School** | **47** | **4** | **2** | **5** |
| Male | 11,356 | 873 | 240 | 327 |
| Female | 9,848 | 654 | 131 | 353 |
| **Total** | 21204 | 1527 | 371 | 678 |

**Table 3.4.3 Number of student enrolled, Dropped out and detained**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade 1-8** | | | | | | | | | |
| **Year** | **Enrolment** | | | **Dropped out** | | | **Detained** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 11692 | 10382 | 22074 | 154 | 84 | 238 | 132 | 60 | 192 |
| 2012 | 11358 | 9848 | 21204 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Grade 9-10** | | | | | | | | | |
| 2011 | 969 | 649 | 1618 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012 | 873 | 654 | 1527 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Grade11-12** | | | | | | | | | |
| 2011 | 94 | 51 | 145 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012 | 240 | 131 | 371 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Tiyo District Education Office

**TVET:** There were no any government and non-government technical and vocational education schools in the district until the year 2011&2012.

**Education Quality: -** The quality of education can be judged from educational qualification of teachers, students- teacher ratio, student-class ratio, student-text book ratio, etc. Accordingly, from total primary school teachers, those who full fill the minimum qualification requirement (diploma level) to teach grade 5-8 are 177 ( 60 %) &that of Degree Level is 116 ( 40%)&in2011 &the number of teachers who teach at Diploma level in 2012 are 175 ( 56.45 %)&Degree level are 135 (43.54 %) from the total teachers teaching at this level so when we see the Student Teachers ratio it is in 32:1 in the year2009 &28:1 in the year2010. this shows that there are many teachers in the district. Actually the above ratios are not enough to measure educational quality of a district. Hence we have to look into other factors mainly Teacher Development program (TDP). Continuous professional development program, teachers’ dedication/commitment to teach and students’ commitment to receive what teachers say. As far as the number of teacher by level of school are concerned, according to the professional Standard set by Oromia education office (TTI for 1-4, Diploma 5-8 and Degree and above for secondary school),

However, the number of Degree teachers was also decrease from 71 to 80 in secondary schools (9-10) between the year 2011 & 2012 Such an improvement of the professional level of teachers plays a significant role in improving the quality of education.

On the other hand, the achievement level of students is also one of the indicators of the quality of education, for instance out of 292 male and 219 female students of grade 10 who sat for national examination in the year 2011 only 60.61 male and 61.18 female was promoted to preparatory schools

in the same way out of 404 male& 289 female students of Grade 10 who sat for National examination in the Year 2012 only 92 male(22.27 %) & 51Female(17.27 %) students are promoted to preparatory Schools This. indicates that less number of students were promoted to Preparatory School therefore the district Educational Office should have to work more on educational quality. For details see the tables below.

**Table 3.4.4Number of student enrolled, Dropped out and detained**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade 1-8** | | | | | | | | | | | | |
| **Year** | **Enrolment** | | | | **Dropped out** | | | | **Detained** | | | |
| **Male** | | **Female** | **Total** | **Male** | | **Female** | **Total** | **Male** | | **Female** | **Total** |
| **2011** | 11584 | | 10823 | 22410 | 355 | | 341 | 696 | 11229 | | 10482 | 21711 |
| **2012** | 11614 | | 10692 | 22306 | 525 | | 625 | 1150 | 355 | | 354 | 703 |
| **Grade 9-10** | | | | | | | | | | | | |
| **2011** | | 809 | 569 | 1378 | 99 | 31 | | 130 | 710 | 538 | | 1248 |
| **2012** | | 982 | 646 | 1628 | 29 | 49 | | 78 | 63 | 21 | | 84 |
| **Grade11-12** | | | | | | | | | | | | |
| **2011** | | 49 | 21 | 70 | 0 | 1 | | 1 | 49 | 20 | | 69 |
| **2012** | | 101 | 58 | 159 | 0 | 0 | | 0 | 0 | 0 | | 0 |

Source: Tiyo District Education Office

**Table:3.3.5 Number of student sat for national examination and promoted to preparatory**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Number of student sat for national exam** | | | **Number of student promoted to preparatory** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 154 | 84 | 238 | 132 | 60 | 192 |
| 2012 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Tiyo District Education Office

**Table:3.4.6 Number of Teachers by level of education and School(2011-2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Type of Schools | **2011** | | | **2012** | | |
|  | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **No of teachers in primary(1-8**) | | **377** | **170** | **547** | **491** | **372** | **858** |
| Gradae 12 &below | | 33 | 27 | **60** | 17 | 8 | **25** |
| TTI | | 33 | 13 | **65** | 35 | 39 | **69** |
| Dip | | 194 | 117 | **371** | 304 | 232 | **536** |
| BA | | 117 | 13 | **130** | 135 | 91 | **226** |
| MA | | 0 | 0 | **0** | 0 | 2 | **2** |
| **Secondary School(9-12)** | | **76** | **21** | **97** | **119** | **22** | **141** |
| Diploma | | 1 | 0 | **1** | 7 | 1 | **8** |
| BA/BSC | | 69 | 20 | **89** | 88 | 20 | **108** |
| MA | | 6 | 1 | **7** | 24 | 1 | **25** |
| NonGovernment | | 0 | 0 | **0** | 0 | 0 | **0** |

Source: Tiyo District Education Office

## 3.5 Health

**Health Institution:** Regarding the government health facilities there were 4 health center and 18 health posts in the district in the year 2011 and 2012 . On the other hand, the number of non-government clinics were 7 &7 during the indicated years. The ratio of population to health center and health post was 30146 and 6700 respectively in the year 2011 & 30982 and 6885 in the year 2012 which indicates almost good health coverage as compared with WHO standard (25,000 and 5,000 respectively).

**Health personnel:** Between the year 2011 and 2012, the number of Government health professionals were Increased from 123 to 126 which have significant impact in improving the health service quality and delivery For instance when we see the number of health workers of the year 2012 by type of profession, there were 11 health officer, 52 nurses, 37 laboratory technician, 8 Pharmacist, 8 sanitarian and 34 health extension workers in governmental health institutions . This gives the ratio of population to health professional as follows. The ratio of population to health officer is 10963:1 in 2011 & 11,266:1 in 2012, Population to nurses 2,319:1 in 2011 &1967:1 in 2012 and ratio of Poplation to health extension workers were 3259:1 in2011 & 3645:1 in2012. This indicates that there is a need for additional health professionals. For more information see the table below

**Table 3.5.1Number of health Institution and personnel by ownership (2011-2012)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Institution/Health Personnel** | **2011** | | **2012** | |
| **Gov** | **Non-Gov** | **Gov** | **Non-Gov** |
| **Health Institution** | **22** | **12** |  |  |
| Health Center | 4 | 0 | 4 | 0 |
| Clinic | 0 | 7 | 0 | 7 |
| Health post | 18 | 0 | 18 | 0 |
| Rural Drug Vender | 0 | 1 | 0 | 1 |
| **Health profession** | **123** | **19** | **126** | **12** |
| Health officer | 11 | 3 | 11 | 3 |
| Nurse | 52 | 6 | 63 | 6 |
| Health Assistance | 0 | 0 | 0 | 0 |
| Laboratory Technician | 37 | 0 | 37 | . |
| Pharmacy | 8 | 1 | 9 | 1 |
| Sanitarian | 8 | 0 | 8 | 0 |
| Health Extension Workers | 37 | 0 | 35 | 0 |

Source: Tiyo District Health Office

**Causes of Morbidity:** The cause of illness might be lack of sufficient variety food ,un clean environment & other cases. According to the data obtained from Tiyo district health Office, the highest prevalent disease in 2011 &2012 in the district was Acute febrile (18.12 %) &(16.6%)followed by Acute Upper respiratory infections with 17.97 %& 18 % and Typhoid fever with 9.73 % & 11.23%respectively from the total population of the district in the year 2011 &2012.

The data in the table below indicates that the most prevalent disease vary from year to year due to different cases in the district. For more information see the table below.

**Table 3.5.2Top Ten Diseases Existed in the district**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | 2011 | | | 2012 | | |  |
| **Type of diseases** | **No. of population** | **%** | **Type of diseases** | **No. of population** | **%** |  |
| 1 | Acute febrile illness(AFI) | 2150 | 18.12 | AFI | 1595 | 16.6 |  |
| 2 | Acute upper respiratory infection | 1319 | 17.91 | AURI | 1735 | 18 |  |
| 3 | Typhoid fever | 1198 | 16.32 | Pneumonia | 1466 | 15.2 |
| 4 | Pneumonia | 1002 | 0.92 | Diarrhoea(non –blood | 807 | 0.72 |  |
| 5 | Single spontaneous delivery | 625 | 8.51 | Single spontaneous delivery | 3532 | 28.8 |
| 6 | Dyspepsia | 400 | 5.45 | Trauma/ Injur | 481 | 4.99 |  |
| 7 | Helminthiasis | 390 | 5.31 | Dyspepsia | 478 | 4.96 |  |
| 8 | Urinary tract infection | 323 | 4.40 | Urinary tract infection | 402 | 4.17 |
| 9 | Infection of skin &Subcutaneous tissue | 309 | 4.21 | Urinary tract infection(UTI) | 397 | 4.12 |  |
| 10 | Diarrhoea (non –blood | 732 | 9.97 | Disease of Skeletal &connective tissue | 811 | 8.42 |  |

Source: Tiyo District Health office

**Harmful Traditional Practices:** There are many harmful traditional procedures that are being widely practiced in the district in the previous years. Even so these harmful practices are decreasing Among these sometimes there is raping, Buta, Dhala, female circumcision, Gebara, etc can be mentioned as an example. Now a day these all procedures are decreasing from time to time, since the health extension policy helps to give enough training for farmers households by the help of health extension workers.

## **Children and Women Socio-economic Indicators**

### Women Issue

**Women health condition and related problems**

As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. They use model family graduation to scaling up best practices and the services for all farmers household and farmers family members .This helps them to increase the health extension services in the district. To this end, two health extension workers were assigned for each peasant associations.

Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities. As a result, the number of women gets antenatal and postnatal service was3378 and 2871 in the year 2011 while the number of women get Antenatal care was increasing to 3715 and the post natal care was increasing 4281 in the year 2012 On the other hand, the number of women get delivery service in the health institution by health professional were 3715 in 2011 and 34281 in the year 2012 . Even though such improvement was observed, still there were some women attended traditional delivery service at their home due to economic problem, lack of access in road and lack of availability of health facilities at nearby.

In addition, the district health office provides different type of vaccination to mothers so as to improve the health coverage of the district. The available data shows the number of mothers get different type of vaccination was increasing from time to time. On the other hand like any other developing countries, the growth rate of population of Ethiopia in general and that of Tiyo district in particular there was lack of awareness to use family planning service, early Marriage, rape, etc. To overcome these problems, the District tries to apply family planning policy and strategy so as to decrease population growth through expansion of family planning services. To this end, the district health office provides awareness creation service so that women in reproductive age can use different contraceptive methods. For instance, the numbers of reproductive age women who use different contraceptive methods were decreased from 26486 in the year 2011 to 21677 in the year 2012

Women’s are the key actors of development by participating on different economic activities. They handle major duties and take more hours on work as compared with their counterpart men both at home and outside of home. For instance women at the rular take time on activities like food preparation, child care, home care, fetching of water, fuel collection, farming, harvesting and rearing of cattle while the major duties of men’s are farming, harvesting and rearing of livestock.

This indicates that the work load is heavy and the working time of women is long as compared with men. However, participation on overall decision making and resource utilization is almost dominated by men.

Even though the reality reveals there were domination of men and gender in balance, currently the government induced policy that promote women participation on political, economic and social aspects. In this aspect, currently the number of women participation in education, political nomination and other social affairs was increasing.

On the other hand, as the data obtained from district indicates that, the number of women participated as woreda council members were 28 in the year 2011 &2012.however, the number of women who are member of woreda cabinet were 16 in both years .When we compare to male members the number of females at woreda council were 44.4% &26.6% at wereda cabinet thus it shows that the participation of women were small so that the concerning bodies should have to improve for the future..

**Table: 3.5.6 Women’s socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Types of activities/indicator** | **measurement** | 2011 | 2012 |
| 1 | **Access to save delivery service** | Number |  |  |
|  | Women's used ANC/Antenatal care/services | Number | 3378 | 2871 |
|  | Women's used PNC /Postnatal care/services | Number | 3715 | 4281 |
|  | Women’s assisted delivery | Number | 3715 | 4281 |
|  | Deliveries with in health institution( attended by skilled birth attendant) | Number | 2614 | 2927 |
|  | Deliveries attended by HEWs | Number | - | - |
|  | In their home traditionally | Number | - | -- |
| 2 | **Mother Vaccination** |  |  |  |
|  | PW TT2 | Number | 3474 |  |
|  | NPW TT2 | Number | 5122 |  |
| 3 | **Family planning condition** |  |  |  |
|  | Modern methods. | Number | 24945 | 22820 |
| **4** | **Women elected at different level** |  |  |  |
|  | Member of regional council | Number | 1 | 1 |
|  | Member of woreda council | Number | 63 | 63 |
|  | Member of woreda cabinet | Number |  |  |

**Children issue**

**Children health condition and health problems**

To protect children from different diseases different type of vaccination was given for the children by government. As shown in the table below the number of children get vaccination for different disease was decrease from 15482 in the year 2009 to 14814 in the year 2012.

**Table: 3.5.7 Number of Children Vaccinated by year and Type of Vaccination**

|  |  |  |
| --- | --- | --- |
| **Type of Vaccination** | 2011 | 2012 |
| BCG | 4315 | 3835 |
| Measles | 3680 | 3508 |
| DPT | 4133 | 4117 |
| Full vaccination | 3354 | 3354 |
| **Total** | 15482 | 14814 |

Source: Tiyo District Health Office

## On the other hand, loss of parent due to HIV/AIDS prevalence, divorce, accident, natural disaster and other diseases causes some children to be orphan and vulnerable children and other low income family. Despite of the fact that the district health office provides vaccination and treatment, still there were different types of disease that affect the health of children in the district. Some of the major diseases that are the causes of infant and child mortality in the district are Sepsis, Preterm, Tetanus and infection of skin.

**Table:3.5.8 Children socio economic indicators in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Types of activities/indicator | measurement | 2011 | 2012 |
| 1 | Number of Orphan and Vulnerable children | 0 | 0 | 140 |
|  | Male | Number | 0 | 0 |
|  | Female | Number | 0 | 0 |
| 2 | Full immunization | Number | 0 | 0 |
| 3 | Child disease and causes of death | Number | 0 | 0 |
|  | Malaria prone area | Number of kebele | 7 | 7 |
|  | Children affected by Malaria | Number | 5 | 8 |
|  | Children treated for malaria | Number | 5 | 8 |
|  | Children died due to malaria | Number | 0 | 0 |
|  | Children born with HIV/AIDS | Number | 0 | 0 |
|  | Children Died due to HIV/AIDS | Number | 0 | 0 |
|  | ITN (Insecticide Treated Nate)Coverage | % | 55 | 100 |

Source: District Health Office

**Hygiene and Sanitation issue**

One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result there are a lot of households having their own toilet As a result of this, the health condition of the community was improving through time in the district.

Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions. As the data obtained from district health office indicated, no health centers in the district were access to full improved sanitation facilities while 75% of Health centers have an access of water supply & 100% of health centers , health posts & schools in the district have an access to toilet facilities. However, from the total school in the district only 25% have an access to potable water supply facilities in the year 2011 & 2012.

**Table: 3.5.9 Health Facilities Access to hygiene and Sanitation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | **Health Centre** | **Health post** | **Health Centre** | **Health post** |
| **2011** | | **2012** | |
| 1 | Number of health institutions in the district | 4 | 18 | 4 | 18 |
| 2 | Number of health institution access to improved sanitation facilities(full sanitation) | 3 | 2 | 4 | 2 |
| 3 | Number of health institution access to water supply | 4 | 0 | 4 | 0 |
| 4 | Number of health institution access to toilet facilities | 4 | 18 | 4 | 18 |
| 5 | Number of Health institution access to dry waste disposal facilities | 4 | 18 | 4 | 18 |
| 6 | Number of Health institution access to liquid waste disposal facilities | 4 | 0 | 4 | 0 |

Source: - District Health Office

**Table: 3.5.10 School access to hygiene and sanitation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SN | **Description of activities** | **Primary school** | | **Secondary school** | | **Preparatory School** | |
| **2011** | **2012** | **2011** | **2012** | **2011** | **2012** |
| 1 | Number of school in district | 47 | 47 | 4 | 4 | 1 | 1 |
| 2 | Number of school access to water supply | 13 | 15 | 2 | 2 | 1 | 1 |
| 3 | Number of school having toilet | 38 | 47 | 4 | 4 | 1 | 1 |

Source: - District Education Office

3.6 Finance and Financial Institutions

**Annual budget allocation**;- of districts is covered mainly from two sources(From Regional Government Grant& from the district inland revenue) so that in the year 2011 the regional government grant was ( 127727363Bir) in 2011 &( 133697639Bir) in 2012 and the district in land revenue was ( 22021928 birr)in2011 &(29,050,984Bir) in 2012 which indicates that the Regional government contribution shares the large amount which accounts for more than 81.63 %in 2011 & more than 78.37 % in 2012 from the total annual budget allocated for the district but it is clear that the annual budget allocated from the regional government is not sufficient.

**Table: 3.6.1. Annual Budgets Allocated for the District**

|  |  |  |
| --- | --- | --- |
| **Year** | **Annual Budget Allocated** | **Growth Rate (%)** |
| 2011 | 127727363 | 15.6 |
| 2012 | 133697639 | 4.7 |

Source: Tiyo District Finance and Economic Development Office

**Revenue:** In the years 2011 and 2012, the district collected total revenue of Ethiopian birr 22021928 and 29050,984 respectively and it indicates that there is an increment of 7,029056 birr or 31.9 %between the two years. The main sources of revenue in the district are Direct tax, Indirect tax and Non-tax items as it was indicated from our Wereda Inland Revenue Office. As the district cumulative annual report of both years’ shows, in the year 2011 &2012 the highest share comes from direct revenue source for more information see the table below.

**Table: 3.6.2. Total in land revenue collected in the district by type of revenue source**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Direct revenue** | **%** | **Indirect revenue** | **%** | **Non-Tax revenue** | **%** | **Total** |
| 2011 | 22,021,928 | 90.06 | 2,428,427 | 9.94 | 0 | 0 | 24,450,355 |
| 2012 | 29,050,984 | 92.84 | 2,241,347 | 7.16 | 0 | 0 | 31,292,331 |

Source: Tiyo District Inland Revenue Office

**Financial Institution:** The availability of various financial institutions like banks, Insurance, Rural credit and Saving Association play a significant role in the transformation of the economy in the district. There is olmost no financial institutions such as Micro finance institutions, insurance &others but there is one bank that starts its service at ketar genet(Golja) town in the year 2006. However, the District get some service from the surrounding institutions found in Asella town.

**Table: 3.6.3 Rural Credit and number of beneficiaries**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Rural Credit Association** | **Name of beneficiary associations** | 2011 | | | 2012 | | |
| **Number of Beneficiaries** | | | **Number of Beneficiaries** | | |
| OSSC |  | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| “ | Misoma cafee | 34 | 1 | 35 | - | - | - |
| ‘ | Abichuu | 20 | 0 | 20 | - | - | - |
| “ | Daanddii gudinaa | 20 | 0 | 20 | - | - | - |
| “ | Waanzaa | 12 | 8 | 20 | - | - | - |
| “ | Birhaanuu fi Ermiyaas | 2 | 0 | 2 | - | - | - |
| “ | Lamilam Omisha Dhagaa | 10 | 0 | 10 | - | - | - |
| “ | Malkaa Balloo | 6 | 4 | 10 | - | - | - |
| “ | Makuriyaa,Abinatii fi Mubaarak | 3 | 0 | 3 | - | - | - |
| “ | Jibriil Sulxaanii fi Haashiim | 3 | 0 | 3 | - | - | - |
| “ | Warkaa silingoo | 7 | 3 | 10 | - | - | - |
| “ | Abaayinah fi Xurunash | 1 | 1 | 2 | - | - | - |
| “ | Yaailaw fi Kamaal | 2 | 0 | 2 | - | - | - |
| “ | Yasuf fi Abdulkariim | 2 | 0 | 2 | - | - | - |
| “ | Taganyii fi Baredduu | 1 | 1 | 2 | - | - | - |
| “ | Sulxaan,Jibriil fi Ibraahiim | 3 | 0 | 3 | - | - | - |
| “ | Maammee,Furnoo fi Kaasaahuun | 2 | 1 | 3 | - | - | - |
| “ | Aadaam,Zayidaa fi Hiriyoota | 10 | 5 | 15 | - | - | - |
| “ | Idigat basiraa | 10 | 0 | 10 | - | - | - |
| “ | Kaaba caakkaa | 4 | 0 | 4 | - | - | - |
| “ | Ashiim,Huseeni fi Hiriyyoota | 19 | 5 | 24 | - | - | - |
| “ | Siraa Lalawix | 7 | 3 | 10 | - | - | - |
| “ | Goraa walkessaa | 11 | 2 | 13 | - | - | - |
| “ | Kalloo Magarsaa | 34 | 2 | 36 | - | - | - |
| “ | Madda caffee | 6 | 1 | 7 | - | - | - |
| “ | Ishetuu,Hirnaa fi Hiryyota | 6 | 1 | 7 | - | - | - |
| “ | Haayilee,Nuniyaati fi Hiriyyota | 1 | 1 | 2 | - | - | - |
| “ | Dirribaa fi asinaaqach | 5 | 0 | 5 | - | - | - |
| “ | Abbaayinah,Fitsumi fi Maariqos | 11 | 0 | 11 | - | - | - |
| “ | Adda jabboo | 12 | 0 | 12 | - | - | - |
| “ | Odaa | 2 | 2 | 4 | - | - | - |
| “ | Leencoo,Robaa fi hiriyyota | 1 | 1 | 2 | - | - | - |
| “ | Muluu fi Mikaa;el | 2 | 2 | 4 | - | - | - |
| “ | Getaahuni fi Gosaa | 3 | 0 | 3 | - | - | - |
| “ | Asalafach,Asinaaqach fi Sintaayahu | 11 | 1 | 12 | - | - | - |
| “ | Mudhii Dhaqaboo | 1 | 1 | 2 | - | - | - |
| “ | Imabeeti fi Addisalam | 3 | 3 | 6 | - | - | - |
| “ | Jamaal,Ayyubaa fi Retimaatoo | 3 | 3 | 6 | - | - | - |
| “ | Urjii | 18 | 7 | 25 | - | - | - |
| “ | Qaama midhamtoota | 18 | 7 | 25 | - | - | - |
| “ | Sabilaa fi Daawiit | 1 | 1 | 2 | - | - | - |
| “ | Madinaa fi Bariisoo | 1 | 1 | 2 | - | - | - |
| “ | Tsigee fi Zagaya | 1 | 1 | 2 | - | - | - |
| “ | Torban Ushoo | 10 | 0 | 10 | - | - | - |
| “ | Takkalinyii fi Alamiganaa | 1 | 1 | 2 | - | - | - |
| “ | Addis Gannat | 4 | 6 | 10 | - | - | - |
| “ | Addis Firee | 7 | 3 | 10 | - | - | - |
| “ | Huseeni fi Kadijaa | 10 | 0 | 10 | - | - | - |
| “ | Taaddaluu fi Wandimmuu | 1 | 1 | 2 | - | - | - |
| “ | Masaratii fi Abaraash | 1 | 1 | 2 | - | - | - |
| “ | Qarree lelle | 8 | 2 | 10 | - | - | - |
| “ | Abdii jireenyaa | 7 | 3 | 10 | - | - | - |
| “ | Ma’azaa,Abbayinashi fi Hiriyyoota | 1 | 2 | 3 | - | - | - |
| “ | Asaffaa fi Beezaa | 1 | 1 | 2 | - | - | - |
| “ | Burqaa Bagajjoo | 11 | 0 | 11 | - | - | - |
| “ | Ayyaanoo fi Masarat | 1 | 1 | 2 | - | - | - |
| “ | Darasa fi Firehiywat | 1 | 2 | 3 | - | - | - |
| “ | Gupisa | 40 | 0 | 40 | - | - | - |
| “ | Mahaammad,Abbaba,Tizitaa fi Ayyuu 1 | 2 | 2 | 4 | - | - | - |
| “ | Gadaa omisha Dhagaa | - | - | - | 8 | 2 | 10 |
|  | Addis TasfaaOmisha midhaanii |  |  |  | 20 | 0 | 20 |
| “ | Arifata Gudinaa | \_ | \_ | \_ | 12 | 0 | 12 |
| “ | Robaa leencoo fi Hiriyoota | \_ | \_ | \_ | 2 | 3 | 5 |
| “ | Ashabir,Ayyalachii fi Hiryoota | - | - | - | 2 | 1 | 3 |
| “ | Getahuun,Yohaanisii fi Hiriyyota | - | - | - | 3 | 0 | 3 |
| “ | Dajanee fi Dajanee | - | - | - | 2 | 0 | 2 |
| “ | Fiqaaduu fi Daadhii | - | - | - | 2 | 0 | 2 |
| “ | Habiib,Nabiyuu fi Hiryoota | - | - | - | 4 | 0 | 4 |
| “ | Daawiit Dajanee fi Mussaa | - | - | - | 3 | 0 | 3 |
| “ | Aliyii Ra’isaa fi Sulxaan | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Gorfuu,Dirribaa fi Hiriyyiota | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Mallasa,Yetimwarq fi Hiriyyoota | \_ | \_ | \_ | 3 | 1 | 4 |
| “ | Lammii fi Tsaggaayee | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Shaalaqaa Birhaanuu fi Naardoos | \_ | \_ | \_ | 1 | 3 | 4 |
| “ | Xaahiir Mahaammadii fi hiriyoota | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Misooma Burqaa | \_ | \_ | \_ | 0 | 15 | 15 |
| “ | Marshaa,A/salaam ,Haajjii fi Jibriil | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Wubaalam fi Makuriyaa | \_ | \_ | \_ | 1 | 1 | 2 |
| “ | Takkaalinyii fi Yaalamsaw | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Wnadwasani fi Antanah | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Yizilaq, Balaxaa fi Hiriyoota | \_ | \_ | \_ | 3 | 0 | 3 |
| “ | Tamaam, A/Haamaan fi Hiriyyoota | \_ | \_ | \_ | 3 | 1 | 3 |
| “ | Simbbirroo | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | IMX Dhunfaa Tasfaayee | \_ | \_ | \_ | 0 | 12 | 12 |
| “ | Zagayyaa fi Taamiraat | \_ | \_ | \_ | 1 | 0 | 1 |
| “ | IMX Dhunfaa Sulxaan | \_ | \_ | \_ | 1 | 0 | 1 |
| “ | Qarroo | \_ | \_ | \_ | 1 | 0 | 1 |
| “ | Urjii Dhakaa Abdii Kabdilloo | \_ | \_ | \_ | 13 | 0 | 13 |
| “ | Gannat Omisha Dhakaa | \_ | \_ | \_ | 5 | 5 | 10 |
| “ | Adimaasuu fi Ballaxaa | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Ballaxa,Baqalachii fi Masarat | \_ | \_ | \_ | 1 | 2 | 3 |
| “ | Gannat | \_ | \_ | \_ | 10 | 0 | 10 |
| “ | IMX dhunfaa Borjaa | \_ | \_ | \_ | 1 | 0 | 1 |
| “ | Laga Gondee | \_ | \_ | \_ | 20 | 0 | 20 |
| “ | Tsagaayee,Abbaayinashhi fi Getaachaw | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Daaniel,ASagadach Ijaarsa Waligalaa | \_ | \_ | \_ | 1 | 1 | 2 |
| “ | Dugdaa Tafaasas | \_ | \_ | \_ | 12 | 1 | 13 |
| “ | Haawwii guddinaa | \_ | \_ | \_ | 14 | 1 | 15 |
| “ | Milkii Omisha Midhaanii | \_ | \_ | \_ | 9 | 4 | 13 |
| “ | Gutaa fi Gannanaa | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Siraaj, Huseen,Sumayyaa fi hiriyyota | \_ | \_ | \_ | 3 | 1 | 4 |
| “ | Huseen,Mahaammadii fi Zabiibaa | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Warquu fi Malaakuu | \_ | \_ | \_ | 1 | 1 | 2 |
| “ | Abbaayinash,Sofiyanas | \_ | \_ | \_ | 2 | 2 | 4 |
| “ | Taamiraat,Buzaayahu fi hiriyyoota | \_ | \_ | \_ | 3 | 1 | 4 |
| “ | Eliyaas fi Indashaaw | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Addis Ra’iyi | \_ | \_ | \_ | 37 | 14 | 51 |
| “ | Madda Shaalaa Cabettii | \_ | \_ | \_ | 65 | 15 | 80 |
| “ | Aleltuu | \_ | \_ | \_ | 10 | 0 | 10 |
| “ | Odaa waliigalaa | \_ | \_ | \_ | 20 | 2 | 22 |
| “ | W/Gamtaa Tulluu cabbie | \_ | \_ | \_ | 91 | 14 | 105 |
| “ | Qollaa Baarii | \_ | \_ | \_ | 44 | 13 | 57 |
| “ | Yaveed, Katamaa fi Wubaalam | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Darajjaa, Teewodirosii fi Jiituu | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Mahaamad,Abbaba,Tizitaa fi Aayyuu | \_ | \_ | \_ | 2 | 2 | 4 |
| “ | W/Qarqaaraa Leelle | \_ | \_ | \_ | 8 | 2 | 10 |
| “ | Dubartoota Tasfaa birhaan Goondee | \_ | \_ | \_ | 0 | 10 | 10 |
| “ | Baatii Omiisha Dhagaa | \_ | \_ | \_ | 10 | 0 | 10 |
| “ | Laga Gondee Omiisha Dhagaa | \_ | \_ | \_ | 12 | 0 | 12 |
| “ | Abbulee fi Beezaa | \_ | \_ | \_ | 1 | 1 | 2 |
| “ | Jamaalii fi Zubeyidaa | \_ | \_ | \_ | 1 | 1 | 2 |
| “ | Maqidas,Masaratii fi Hiriyyoota | \_ | \_ | \_ | 1 | 2 | 3 |
| “ | Massalaa fi sisaay | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Ifaa | \_ | \_ | \_ | 10 | 10 | 20 |
| “ | Caffaa | \_ | \_ | \_ | 10 | 10 | 20 |
| “ | Bakkalcha | \_ | \_ | \_ | 15 | 17 | 32 |
| “ | Nuurii fi Umar | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Warqinahi fi Maartaa | \_ | \_ | \_ | 2 | 2 | 4 |
| “ | Daddassaa fi Kokobee | \_ | \_ | \_ | 1 | 2 | 3 |
| “ | Allaxilii fi Mubaarak | \_ | \_ | \_ | 3 | 0 | 3 |
| “ | Misiraa fi Baayyush | \_ | \_ | \_ | 1 | 2 | 3 |
| “ | Gannatii fi Masarat | \_ | \_ | \_ | 3 | 2 | 5 |
| “ | Odaa | \_ | \_ | \_ | 15 | 0 | 15 |
| “ | Sayifuu fiGetaanah | \_ | \_ | \_ | 3 | 0 | 3 |
| “ | Antanahii fi Illeenii | \_ | \_ | \_ | 4 | 0 | 4 |
| “ | Maarisheet,Etseganatii fi Damoozee | \_ | \_ | \_ | 3 | 2 | 5 |
| “ | Walta’ii | \_ | \_ | \_ | 9 | 6 | 15 |
| “ | Marshaa,Sinidduu fi Gabaayinash | \_ | \_ | \_ | 2 | 2 | 4 |
| “ | Taasawii fi Maahidar | \_ | \_ | \_ | 2 | 2 | 4 |
| “ | Abbittii fi Amaan | \_ | \_ | \_ | 2 | 1 | 3 |
| “ | Abdii fi kadiir | \_ | \_ | \_ | 6 | 1 | 7 |
| “ | Dammaqaa fi Asinaaqach | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Ragaasaa fi Salamoon | \_ | \_ | \_ | 2 | 0 | 2 |
| “ | Haajjii,Zubeyidaa fi Jamaal | \_ | \_ | \_ | 1 | 2 | 3 |
| “ | Asiraat, Zarihuunii fi makonniin | \_ | \_ | \_ | 3 | 0 | 3 |
| “ | Faaxumaa, Haabiibi fi Dirree | \_ | \_ | \_ | 1 | 2 | 3 |
| **“** | **Daraaraa Omiisha Dhakaa** | **\_** | **\_** | **\_** | **12** | **0** | **12** |
| **Total** |  | **435** | **94** | **529** | **625** | **203** | **828** |

Source: small-scale enterprise office

**CHAPTER FOUR**

**4. Infrastructural and Social Facilities**

**Roads:** the district has All weathers road which are 165.64 km gravel road, 23km Asphalt Road &30.9 km of dry weather road .

**Telecommunication:** one of the fast and effective ways of transmitting of both business and administrative activities is using telecommunication so that the district has supplied with wireless in rural, digital and mobile type of telephone in most urban and rural kebeles.

**Post Office:** Postal service is one of the means of communications that plays a significant role in transmitting information especially in rural areas where other means of communication is under developed. However, the district has only one Agent type of postal services.

**Water supply:** potable water coverage of the district is very low. According to data obtained from Tiyo Water Resource Office from the total population of the district 49 % was supplied with potable water that means from the total rural population 47.60 %and from the total population of urban population 58.4% are supplied with potable water.

## Regarding potable water schemes, there were 1hand-dug well, 21 spring water, 7 distribution schemes and 4 deep wells in the year 2012.

**Energy Supply:** Energy sources can be traditional or modern. The traditional sources of energy are animal dung, farm residue firewood and charcoal while the modern energy sources are electricity, biogas, fossil fuel and solar energy. All towns of Tiyo district have supplied with hydro electricity power. In addition, about 44.4 % of the rural areas of the district have supplied with hydro electric power at list for light purpose during the year 2012.

**Table: 4.1. Sources of domestic energy supply for the district.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of Energy Supply** | **Rank** | |
| **Urban** | **Rural** |
| 1 | Charcoal | 2 | 4 |
| 2 | Fire wood | 1 | 1 |
| 3 | Animal Dung | 6 | 3 |
| 4 | Crop Residue | 3 | 2 |
| 5 | Kerosene | 4 | 5 |
| 6 | Electricity | 5 | 6 |

Source: Tiyo district Agricultural Development Office.

**Trade Tourism and Sports**

**Trade:** since the district is nearest to the big towns and relatively it has good infrastructural development there is high trade activities in the district. However, there were no reliable data about number of traders who have license and regarding tradable items and cash crops production activities. The district is known in the production of cereals, pulses, etc.

**Table 4.2 Number of licenses given and renewed.**

|  |  |  |  |
| --- | --- | --- | --- |
| No |  | 2011 | 2012 |
| 1 | Licensed | 1511 | 1576 |
| 2 | Applied for license | 388 | 388 |
| 3 | Licenses given (**New**) | 388 | 388 |
| 4 | Licenses renewed | 1188 | 1188 |

Source: - Tiyo District office of Trade

**Tourism and its Amenities:** due to lack of promotion and tourist amenities like standard Hotels, roads and other social infrastructures, tourism economy is not yet developed in Arsi Zone in general and Tiyo district in particular. Similarly, meaningful survey and study are not conducted to assess tourist attraction sites potential of the area. However, there are some main centers which were identified by culture and tourism office like Chilalo Mountain, Red Fox and the natural and manmade tourist attraction sites are the main tourist attraction sites in the district.

## **Sport;-** The district has different types of sport activities like foot-ball Volley-volley Athletics& others. However, it has no well-organized and standardized sport facilities in the district.

**Table: 4.3 Sport Clubs and members in the district**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of club(team)** | **Member** | **Number of club(team)** | **Member** |
| Foot-ball | 125 | 3125 | 125 | 3125 |
| Volleyball | 1 | 30 | 1 | 30 |
| Tec undo | 0 | 0 | 0 | 0 |
| Athletics | 1 | 80 | 1 | 80 |
| Tennis | 1 | 28 | 1 | 28 |
| Scout | 0 | 0 | 0 | 0 |
| Others(Cultural sport) | 0 | 0 | 0 | 0 |

Source: Tiyo districts youth and sport office

## 

## Chapter Five

## 5. Development Activities

## 5.1 On Going Development Projects

The ongoing major development activities in the district are carried out by government, non-government and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the year under consideration are the following.

## **5.2. Problems of ongoing Development projects**

The major problems of ongoing development projects are Poor construction quality, inaccessibility of the site, lack of capacity by contractor, dalliance in decision of bid documents and mobilization of Construction are the major problems during the construction

**Chapter 6**

**6.** **Problems and Potentialities**

**6.1 Major Problems**

**Environmental Problems:** Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability of rain fall are the cases for crop production failure but now days some of these problems are on the way of decreasing.

**Economic Problems:** Shortage of farm land high prevalence of crop diseases and pests, Shortage of Agricultural inputs and lack of capacity to buy, lack of financial Institutions (well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development are some of the problems in the district.

**Social Service Problems:** rapid population growth and large family size ,land fragmentation, unemployment, low productivity, under utilization of health institution and education facilities, under developed transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence, high dropout rate, low potable water coverage &low electric power supply are the problems seen in the district..

## 6.2 Potentialities

The district has cultivable land potential suitable for cultivation of different crops & there are different row materials which are used for building. It has also a potential for livestock production. Moreover, the district has tourism attraction potential like Chilalo Mountain with its different wild animals, rivers &waterfalls.

# 

# CHAPTER SEVEN

# 7. Conclusions and Recommendation

7.1 Conclusions

Tiyo district is one of the 27 administrative districts of Arsi Zone. It has a total area of 647.4 km2 which is 3% of the area of the Zone. It has 18 Rural Peasant Associations and 3 urban administrative units which are surrounding Asella town which is the capital town of Arsi zone. The district has a total population of 123,927 in the year 2012. From these populations more than 91.23% of the population was living in rural areas.

The district has suitable climatic condition ranging from cool to moderately warm and cultivable land potential for producing different types of crops in both Meher and Belg seasons. Meher is the largest season in terms of both of cultivated land crop production.

The major annual crops grown in the district are Cereals, Pulses and Oil Seeds. From cereal crops Maize, Wheat and barley are the most widely grown ones and the most productive crops in the district. In addition, the district is known in producing some cash crops like Tomato, Onion, potato, etc using irrigation.So as to improve productivity of land per hectare, the farmers of the district use chemical fertilizers and improved seeds. However, the amount of fertilizers and improved seed used by the farmers was increased from576.5 to 8666 between the year 2001/2012. The district has 18 farmers training centers in the indicated years which cover one farmers training center in each rural kebeles.

The district has high potential for livestock rearing however; the farmers of the district were not benefited from this sector of economy due to traditional way of rearing. Furthermore, the health service coverage of the district is very low that means the average animal population to health facilities (The ratio of veterinary to Animals) was 1:14,257 in the year 2011 & 1:19210 in 2012

Regarding education process in the district so as to achieve universal primary education coverage, the district provides education in 47 primary schools, 4 Secondary schools & one Preparatory School for 24093 students. On the other handas seen from the table the participation of female students in secondary level was decreasing from 42.07% in 2007 to 41.61% in the year 2012. Likewise during the same year, the number of teachers teach at this level was increased from73 to 85 so the average student to teacher ratio was 16:1

However, there were no technical and vocational education schools. A lot has been done by the district education office to improve the quality of education during the year under consideration as one can see from some of the indicators of quality of education performance.

There was an improvement in health service delivery in the district since the number of health facilities was increasing through time in the district. Not only this but also the number of health professionals working in the health facilities were increasing. This leads to better health coverage as compared with WHO standard and other districts. However, as one can be seen from the ratio of population to health personnel, there was a need for additional health personnel in the district to ensure quality health service delivery.

The water supply coverage of the district is 48% in the year 2012 which indicates the needs to construct additional water supply scheme to increase the current potable water coverage of the district. That means, 17%of the rural population and 56.% of the urban population of the district were supplied With potable water in the indicated years.

On the other hand electric power coverage is 26.3% in the year 2012. Concerning telecommunication, most part of the district was supplied with mobile telephone service. Regarding financial institutions the district has no sufficient financial institutions except one Bank in katar town & few rural credits and saving association which are giving survice by moving from Asalla town. The district have relatively well developed transportation net work since it is found nearby Asella towon which is the capital city of Arsi zone.

On the other hand, the district has large irrigable land resources potential. As a result, the district is highly suitable to produce both warm and cool climate resistance crops and cash crops using both rain fall and irrigation. Moreover, the district has high potential for livestock rearing and bee keeping activities and tourism attraction sites like Chilalo Mountain, Ketar waterfall, etc.

## **7.2 Recommendation**

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organizations as well as the surrounding community has to perform the following activities:

* Social and economic infrastructures development like rural road, telephone, water supply, electricity supply and others are less developed in the district. Therefore, the concerned bodies should have to mobilize the society & improve the indicated infrastructures.
* There were farmers training center & Development Agents in each rural kebeles of the district. Even though there are Development agents in each kebele & it is expected that they give practical training for the farmers to increase the productivity, but it is obvious that it is not as expected. So that the concerning bodies must work more to improve the productivity of the farmers.
* The gross enrollment ratio in the senior secondary school is very low and it should be expected that the concerned bodies have to do more on awareness creation to increase the enrollment ratio & to improve educational quality as well .
* The animal health infrastructures and number of animal health personnel are at low stage. So it is expected to construct additional animal health clinics and employing additional animal health professionals to improve the quality of livestock population, Moreover, so as to benefit from this sector of economy, the farmers have to be focus on the quality rather than quantity.
* The potable water coverage of the district is relatively at low status. so it is expected to construct additional water supply scheme and maintain the existing schemes,
* The health coverage of the district is very good when it is compared to the WHO standard .However, to improve the health service in the future the concerning body will be expected to employing additional health professionals
* The district has cultivable land and tourism attraction site potential. So the regional government as well as the district has to invite investors to invest in the district.
* So as to maintain, the environment awareness creation was play a significant role in changing the surrounding environment& it is obivious that there is some change regarding this issue but it is not sufficient so that every one shuld have to participate on protection of environment &use the limited resource wisely.

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF ZEWAY DUGDA DISTRICT YEAR 2011 AND 2012 E.C**

**Chapter One**

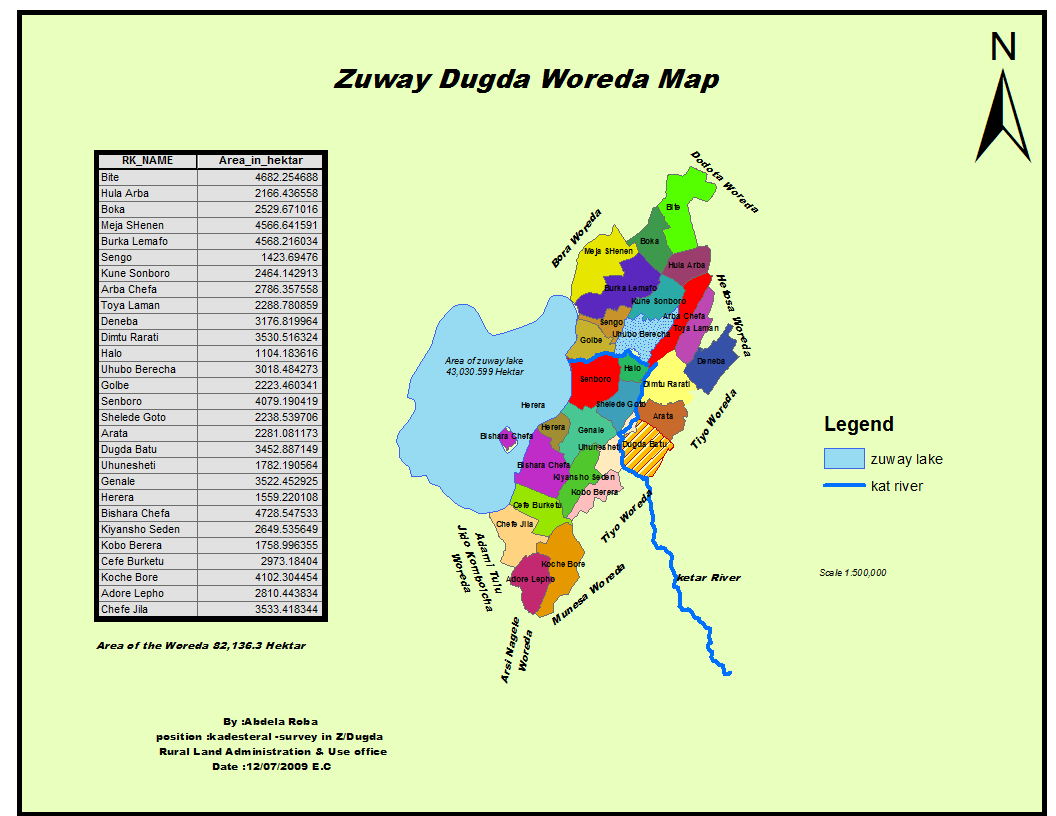
**1. Introduction**

**Back Ground Of;-**Zuway-Dugda is one of the 27 districts of Arsi Zone. The historical name of the district is derived from Lake Zuway found in the western Border of the district. The district has 30 administrative units of which 28 are rural Peasant Associations and two are urban administrative. **Ogolcho** is the capital town of the district which is located at **222** km from Regional Capital City Finfinne and 47 km from Zonal capital **Asella** Town.

The objective of preparing this profile is to create scientifically organized physical and socio economic data base of the district that reflects the existing situation, development problems and potentials of the district to be used by Government, non-Governmental and other organization to identify development gaps, researchers, and the like.

The data used to organize this document is collected from the district governmental Offices, Statistical Abstract of previous years and other related documents available in the Finance and Economic Development office. The Problem faced during preparation of this document, absence of reliable data, absence of well organized and consistent data in government and other organization. The main objectives of this document are to present compiled information concerning physical and socio-economic condition of the district and its development constraints.

Different organizations can use different calendar year. Consequently, in this document, only **Ethiopian calendar (E.C)** is used. In Ethiopian year, there are 12 months of 30 days each with an addition of a short period often referred to as pegume, which has five days for three consecutive years and six days on the fourth year. This paper has **five** chapters. The first chapter deals with physical features like location, relief, drainage, soil, vegetation and wild life. The second chapter focused on population size and distribution, the third chapter deals with economic condition while the fourth, fifth, with social service and infrastructure condition, Development Activities, Problems and potentiality, and Conclusion and Recommendation respectively.Source of information (government and other offices from where information were obtained); The main sources of data used for the preparation of the document are district Health, Education, Natural Water Resource Development, Finance and Economic Development, as well as the documents available in o **Map** of the District-- showing districts and their capital towns



The document covers almost the data and activities of the period 2019-2020, and all the years are according to the Gregorian calendar. However, due to lack of reliable and consistent data, the document is not complete and comprehensive enough. Even though it has these limitations, it could be a valuable source of reference to fulfill the data gap found in the district.

This study would involve the collection of data from secondary source through documentary observation. The data obtained from districts. Agricultural and rural development office, land and Environmental office, Health office of the districts, Education office of the districts and other written document.

The general objective of this document is

* To assess the **physical and socio – economic profile of Zuwey-Dugda**  district in 2011 & 2012 E.C.
* To identify the physical and socio – economic profile of the District.
* To alleviate the problems on agricultural output and other water users.
* Plan, organize, direct and control the human financial, material and other resources of the district.

Limitation of the study. From the binging of the service analysis to the end we filed so many problems from their problems some of them are listed below.

* Shortage of finance.
* Willingness of some respondents to give a correct answer from some sector.
* Shortage of reference book that has been written on the back ground of the District.
* Unwillingness of some sectors to give the data and information.

Limitation of this profile; - While Among a number of problems faced during collecting the data.

1. In adequacy of statistical data that are collected and documented from the district.

2. Unwillingness of some sectors to give the data and information.

3. Lack of finance and other constraint to collect and complain the necessary data for this study.

**Chapter Two**

**2. Physical Setting Location and Area**

* 1. **Location And Area:-**

**Zuway-Dugda:-** Is One Of The Administrative Units Of Arsi Zone. Astronomically, It Is Located Between **7027’00’n**-**8000’34’’n** Latitude and **38045’00’’e**-**39003’13’’e** Longitude. Relatively, The District Share A Boundary Line With Tiyo District In The South, East And South East, Munessa District In The South West, Hetosa- District In East, Dodota District In The North And North East And East Shewa Zone In The North, North West, West And South West Direction.

**Area:-**Total Area (Km2) Of The District:- The District Has A Total Area Of **1247** Km2 .

**Geology:** All The Present Land Form Of The District Was Formed When The Great East African Rift Valley Formed During Cainozoic Era As A Result Of Fracturing Of Land. The Present Surface Rocks Were Formed As A Result Of External Forces Mostly Erosion. Except Few Areas In The North Central, North Western And South Western Part Of The District Which Is Covered By Rhyolitic Volcanic Centre, Most Part Of The District Was Covered By Alluvial And Lacustrine Deposits During Quaternary Period.

* 1. **Relief, Drainage and Climate.**

**Relief:-**The Relief Structure Of The District Is Dominated By Low Laying Plain Areas Except Few Areas Dissected By Small Hill And Gorges Of Galley Erosion. The Altitude Of The District Ranges Between 1,619m To 2,380m Above The Sea Level. The Lowest Place Is Found In The Coastal Areas Of Lake -Zuway While The Highest Place Is Located On The Gachenan Mountain (2,380m). Major Mountains, Plateaus & Hills (If Possible With Their Heights), Plains, Valleys, Lowest and Highest Elevations, Etc.

|  |  |  |
| --- | --- | --- |
| **No** | **Major Mountains** | **Heights Elevations** |
| 1 | Dimtuu | 1905 |
| 2 | Ammachoo | 2070 |
| 3 | Gaachenaan | 2200 |
| 4 | Barrichaa | 1866 |
| 5 | Dheeraa | 1900 |
| 6 | Gannaalee | 1972 |
| 7 | Re’ee | 1978 |
| 8 | Saqaala | 2000 |
| 9 | Jimaa | 2082 |
| 10 | Gorraa’a | 2018 |
| 11 | Diimaa | 1910 |
| 12 | plateaus | na |
| 13 | hills | na |

**Drainage: -** Due to its location, the district has the major permanent rivers like Ketar and Chufa rivers. Major rivers, natural and artificial lakes and ponds. The district has potential for both traditional and modern irrigation particularly along Ketar river basin which can be used to increase agricultural productivity if utilized efficiently.

**Major uses of rivers & lakes**.

|  |  |  |
| --- | --- | --- |
| No | major rivers | Major uses |
| 1 | Natural lakes | Fiishery,Transportation,Irrigation,For Drink And Recreation |
| 2 | artificial lakes | 0 |
| 3 | Ponds | 0 |

**Season: Major rainy seasons including their duration in months. On the other hand, the major seasonal** streams are summer, spring, winter, and Autmen.

|  |  |  |  |
| --- | --- | --- | --- |
| **Summer /Kiramti/** | **Autumn /maker/** | **Winter/baga/** | **Spring /belg/** |
| **June** | **September** | **December** | **March** |
| **July** | **October** | **January** | **April** |
| **August** | **November** | **February** | **May** |

**Climate:-**Agro-climatic or traditional thermal zones of the zone by their altitudinal ranges and areal coverage, average annual temperatures & rainfalls. Due to its altitudinal location, the climatic condition of the district is moderately warm which have a temperature of 20oC-25oC. Hence, the climatic condition of the district is moderately warm agro-ecological zone. The mean annual rainfall is 800-1000mm and the average rainy days are about 150 days in the year. The district receive rain fall during Meher /summer or long rainy season.

**Thermal district classification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Altitude | Annual mean temp | Description | | Area (%) |
| Conventional | Afan Oromo |
| 74100-81500 | 10.8-31 |  | Gammojji | 89.65 |
|  |  |  | Badda Daree | 10.35 |

**Soils: -**Major soil types and their suitability for agriculture. According to FAO/UNESCO classification, the soil resources of Z/Dugda are classified into Sand-Loam, Sand-soil,and Sand, with the rest being composed of Sand-Loam (85%); Sand-soil (10%), sand soil (5%) and swamps and marsh rocks, stones and sand. They are 3 major soil types in the district. The major types of soil found in the district are Chromic Luvisols, MollicAndosols and Vitric Andosols. In addition, DystricNitosols, EutricFluvisols and OrthicAcrisols are found in pocket areas of the district.

|  |  |  |
| --- | --- | --- |
| No | Major soil types | Their suitability for agriculture |
| 1 | Sand-Loam | Very Suitability for Agriculture |
| 2 | Sand-soil | For Suitable for constriction |
| 3 | Sand | For making pots |

**2.3 Vegetation and Wildlife (2011 & 2012 E.C)**

**Vegetation; -** Regarding the vegetation cover different species of Acacia and bushes and shrubs are the major vegetation type in the district. Major types of natural vegetation (forest, woodland, river side, Shrub& bush land, and savanna) and their approximate areal coverage in hectares.

|  |  |  |  |
| --- | --- | --- | --- |
| No | Major types of natural vegetation | Areal coverage in hectares |  |
| 1 | Forest | 4071.5 |
| 2 | Woodland | 0 |
| 3 | River | 22056 |
| 4 | Shrub | 1650 |
| 5 | bush land | 0 |
| 6 | Savanna | 0 |

Major natural and man-made forests protected by the government, cooperatives, and other organizations (if any with their area coverage in hectares) by names and locations.

**Forests:-**  provide many social, economic, and environmental benefits. In addition to timber and paper products, forests provide wildlife habitat and recreational opportunities, prevent soil erosion and flooding, help provide clean air and water, and contain tremendous biodiversity. Forests are also an important defense against global climate change. Through the process of photosynthesis, forests produce life-giving oxygen and consume huge amounts of carbon dioxide, the atmospheric chemical most responsible for global warming. By decreasing the amount of carbon dioxide in the atmosphere, forests may reduce the effects of global warming. However, huge areas of the richest forests in the world have been cleared for wood fuel, timber products, agriculture, and livestock. These forests are rapidly disappearing.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Major Natural forests | Major man-made forests | government | cooperatives | organizations | Area in hectares |
| 1 | Gaachannan |  | X |  |  | 407 |
| 2 | Warabbee |  | X |  |  | 305 |

**Wildlife.** The district has different types of wild life ranging from small sized to big mammals. Hyena, Fox, Monkey, Jackal, Rabbit, Tiger, Boar, Hippopotamus, Ape, Leopard

Reserved areas for wildlife conservation (parks, Game Reserves and Sanctuaries, if any) by names, area, and locations. The diverse climate and topographic phenomenon have provided a wide range of natural environments, which form favorable habitat for a formation of wide variety of fauna and flora in East Arsi zone in general and Z/Dugdaa in particular.

However, due to uncontrolled hunting and destruction of their natural habitat as a result of rapid population growth and related human activities, there is rapid decrease of wildlife in size, species and distribution. The purpose of hunting is to get social prestige or recognition, however, which is reduced to some extent today. Some of the wild animals are hunted because they are harm to domestic animals, crops.

|  |  |  |  |
| --- | --- | --- | --- |
| No | Reserved areas for wildlife | Area in hectares | Locations(bakka itti Argamu) |
| 1 | Parks | 0 | 0 |
| 2 | Game Reserves | 0 | 0 |
| 3 | Sanctuaries, | 0 | 0 |

**Chapter Three**

**3. Socio-Economic Condition**

* 1. **Population:-**

Based on the1999 Census, project total population of the districts by broad age categories & by sex for **2011and 2012 E.C .**According to the data obtained from CSA population and housing report, the total population of the district increase from **145,471** to **149,417** showing an increment by **3,946** between the years 2011 to 2012. In the year 2011, from the total population of the district, only 5% are living in urban areas. This indicates that more than 95% of the total population of the district is living in rural area depending on agriculture. Of the total population, in the district females population accounted for 50% in the year 2010.

**Table: - 3.1 .population distribution by urban, rural and sex for the district.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Area** | **Rural** | | | **Urban** | | | **Total** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **2011** | 69,031 | 69,042 | **138,074** | 3,797 | 3,600 | **7,397** | 72,828 | 72,642 | **145,471** |
| **2012** | 70,850 | 70,861 | **141,711** | 3,956 | 3,751 | **7,707** | 74,806 | 74,612 | **149,417** |

**Source:** Projected based on 1994 CSA report of Oromia

**Population size** by urban and rural, by sex and wider age group classification- /young (0-14), economically independent (15-64) and old age (64 and above).

**The age structure** of a population is important for planning different social and economic sector development activities and also for determining the productive and economically in active population of the district. However, there is no reliable data on age structure of population. According to 1999 CSA population and ho**using census report indicates. T**he young age population (0-14), productive age population (15-64) and old age population (65+) accounts for **33**%, **45.6**% and **21.3**% of the total population respectively in the year 20**11**. **T**he young age population (0-14), productive age population (15-64) and old age population (65+) accounts for **33**%, **45**% and **21.3**% of the total population respectively in the year 20**12**.

**Population size by wider age group Classification of the year 1999 projection for 2011-2012.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year/Sex** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Rural** | **69031** | **69042** | **138074** | **70850** | **70861** | **141711** |
| 0-14 | **23264** | 22407 | **45671** | 23877 | 22998 | **46875** |
| 15-64 | 30344 | 32688 | **63032** | 31141 | 33549 | **64690** |
| 65+ | 15423 | 13947 | **29371** | 15832 | 14314 | **30146** |
| **Urban** | **3797** | **3600** | **7397** | **3958** | **3751** | **7707** |
| 0-14 | 1253 | 1149 | **2402** | 1306 | 1190 | **2496** |
| 15-64 | 1662 | 1692 | **3354** | 1729 | 1756 | **3485** |
| 65+ | 882 | 759 | **1641** | 923 | 805 | **1726** |
| **Total Rural + Urban** | **72828** | **72642** | **145471** | **74806** | **74612** | **149417** |
| **0-14** | **24517** | **23556** | **48073** | **25184** | **24188** | **49372** |
| **15-64** | **32006** | **34380** | **66386** | **32870** | **35305** | **68175** |
| **65+** | **16305** | **14706** | **31012** | **16752** | **15119** | **31870** |
|  |  |  |  |  |  |  |

**Source:** 1999 CSA population & Housing census report**.**

Average family size by urban and rural separately **School age population** (<7, 7-14 primary school, 15-18 secondary school).School Age Population increase from 2011 to 2012 by 189.From total population 49.2, total population 49.2% female respectively.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| **Rural** |  |  |  |  |  |  |
| <7 | 7550 | 7184 | **14734** | 7746 | 7373 | **15119** |
| 7\_14 | 15714 | 15223 | **30937** | 16129 | 15625 | **31754** |
| 15\_18 | 5967 | 5970 | **11937** | 6126 | 6128 | **12254** |
| **Total** | **29231** | **28377** | **57608** | **30001** | **29126** | **59127** |
| **Urban** |  |  |  |  |  |  |
| <7 | 403 | 365 | **768** | 421 | 380 | **801** |
| 7\_14 | 850 | 784 | **1634** | 885 | 817 | **1702** |
| 15\_18 | 326 | 310 | **636** | 340 | 323 | **663** |
| **Total** | **1579** | **1459** | **3038** | **1646** | **1520** | **3166** |
| **Rural + Urban** |  |  |  |  |  |  |
| **<7** | **7953** | **7549** | **15502** | **8167** | **7753** | **15920** |
| **7\_14** | **16564** | **16007** | **32571** | **17014** | **16442** | **33456** |
| **15\_18** | **6293** | **6280** | **12573** | **6466** | **6451** | **12917** |
| **Total** | **30810** | **29836** | **60646** | **31647** | **30646** | **62293** |

**Population density (**crude and agricultural density) of the district. Indicates population resource relationship for social service, economic and land resources. Regarding populating and resource ratio relation. This increment in population density indicates that population pressure on land has been increasing. Concerning the settlement pattern of the district, the rural parts are characterized by scattered type of settlement.

* 1. **Agriculture**

**Farmers Associations:-**

**The primary** role that agricultural plays in a country **political**, **economic** and **social stability** makes measures of agricultural production extremely sensitive. Being it is the primary activity in the district where above 95% of the population engaged in various agricultural activities and generate their income for house hold consumption to sustain their livelihood more over GDP its contribution above all the sector is Believed to the main source of capital to accumulated for the process of establishing the future industrialized Oromia. Which again shows the determinant role played sector to bring about sustainable Economic development for the district in the year to come. The district agriculture have been suffered for a years from the use of traditional farm implements and subsistence farming system as well as Limited use of modern inputs that resulted to the sector’s poor performance .

**Service Cooperatives by their members, sex and family size.**System of economic action and business enterprise, characterized by the absence of the profit motive and involving, as its primary function, the distribution of goods and services Traditionally, it is a movement of consumers who unite on the basis of their mutual interest in reducing living expenses and benefiting from the ownership and control of production facilities and of accommodations shared by all. Some cooperatives, however, serve the interests of people functioning as producers, not as consumers. Producers' cooperatives include associations of workers who cooperatively own and operate factories or farms. Producers also form associations for the purposes of economically purchasing supplies and of profitably marketing their produce. Such associations have been important elements of the cooperative movement in the district especially among farmers. Should social changes result from the operation of consumer or producer cooperatives, they are usually regarded as by-products of an economic motivation.

Table 3.2 **Amounts of relief distributed to drought affected people by types and sex in the 2011 and 2012 E.C**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Year** | **Amounts of relief** | **People affected by drought** | | |
| Male | Female | Total |
| 1 | 2011 | Fafaa ,oil ,Maize, Wheat | 4835 | 4867 | 9672 |
| 2 | 2012 | Fafaa,oil,Maize, Wheat | 9335 | 10163 | 19502 |
|  | Total |  | **14170** | **15030** | **29174** |

**Crop production:-**

**Table 3.3 Estimates of area in (Hek.) and production in (kunt.) of major crops for private peasant holdings by season (Maher and belg)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **2011/2012** | |  | |
| **Meher** | | **Beleg** | |
| **2011** | **Area (hek)** | **Production /kun/** | **Area (hek)** | **Area /kun/** |
| ***Teff*** | 5063 | 42616 | 0 | 0 |
| Maize | 13570 | 411587 | 0 | 0 |
| Hercot beer | 507 | 9126 | 0 | 0 |
| Sourghum | 810 | 24300 | 0 | 0 |
| **2012** | **Meher** |  | **Beleg** |  |
| Maize | 14065 | 425953.5 | 0 | 0 |
| Sourgum | 510 | 28450 | 0 | 0 |
| Teff | 5093 | 34123.1 | 0 | 0 |
| Harcot-been | 500 | 5500 | 0 | 0 |
| Wheat | 9518 | 34123.5 | 0 | 0 |

Source:-

**Improved seed:-**Is defined as crop variety, which gives significantly higher yield, better quality and/or better benefit compared to traditional varieties of seeds, and usually produced by the Ethiopian Seed Enterprise (ESE) in Ethiopian

**Fertilizer** Refers to anything added to the soil intended to increase the amount of plant nutrients available for crop growth. Usually fertilizer are divided into two parts, Natural and commercial Examples of natural fertilizers are farmyard manure and wood ashes while commercial fertilizer are DAP(Di–Ammonium phosphate) and UREA(Ammonium Nitrate.

**Pesticides:-**Pesticides are chemicals useful for the mitigation, control or elimination of pests which are troublesome or harmful to crop. Insecticides and fungicides are all considered as pesticides

The data of fertilizer, pesticides and herbicides presented in the following table do not reflect the actual amount utilized by the farmers of the zone, because some farmers might buy from private traders. The given data represents only amount distributed by district cooperative and agricultural office

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Fertilizers in quintals** | **Year** | | | | | |
| **2011** | | **2012** | | **Total** | |
| **Belg.** | **Maher.** | **Belg.** | **Maher** | **Belg.** | **Maher** |
| NPS (in quintals) | 0 | 378 | 0 | 0 | 0 | 378 |
| DAP (in Quintals) | 0 | 5215.5 | 0 | 9455 | 0 | 14670.5 |
| Maize /Qun/ :- | 0 | 2189.5 | 0 | 1499.5 | 0 | 3689 |
| **Farmer utilized fertilizers** |  |  | |  | |  |
| Male | 0 | 8725 | 0 | 9345 | 0 | 18070 |
| Female | 0 | 625 | 0 | 636 | 0 | 1261 |
| Total | 0 | 9350 | 0 | 9981 | 0 | 19331 |
| **Farmers utilized maize improved seeds** |  |  | |  | |  |
| Male | 0 | 9276 | 0 | 10305 | 0 | 19581 |
| Female  Female | 0 | 86 | 0 | 1691 | 0 | 1777 |
| Total | 0 | 10136 | 0 | 11996 | 0 | 22132 |

Source:-

**List methods of maintain soil fertility.** The older method of increasing the organic content of the soil is the use of such fertilizers as manure and compost. Fallowing of soil with animal wastes has been practiced for many thousands of years and serves as a source of various complex organic compounds that are important in the growth of plants. Compost, which usually consists of mixtures of dead vegetable and animal matter, has a purpose similar to that of manure and is often treated with chemical fertilizers to increase its effectiveness. Soils may be naturally fertile or may be naturally rather than infertile and unproductive. There are indigenous techniques of maintaining Soil fertility by local farmers among the techniques Crop rotation, animals dung and fallowing land. Compost Application, Plant Residual, Green manuring ,Chemical fertilizer, Animal Dungs, Application Crop Rotation, Crop protection, Fallow Mixed cropping [maize with recoat been], Using compost, Using animal manure Using fertilizer

**List methods of Soil Conservation (traditional or modern);** The **Traditional method** of increasing the organic content of the soil is the use of such fertilizers as manure and compost. Fallowing of soil with animal wastes has been practiced for many thousands of years and serves as a source of various complex organic compounds that are important in the growth of plants. Compost, which usually consists of mixtures of dead vegetable and animal matter. Seedling plantation, Area clustered, Soil bund, stone bund, stone and soil bund, Constructing in necessary area. Terrace construction, Check dam construction and land rehabilitation.

The **Modern Method** of Soils conservation are contour plough and making upper plot running water aversion ditch but Soil bund making, planting trees, terracing and planting grass Strips in Supply plots are categorizing to modern method of Soil Conservation techniques Using plant residues, manure, crop rotation, and fallowing land. Fertilizer in common way to maintaining Soil fertility in each district. Growth hormones, and antibiotics Organic Fertilizers derived from plants, animal wastes, and minerals Agricultural calendar (land preparation, planting (sowing), weeding and harvesting by Maher and belg. seasons.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Crop type** | **Land Preparation time** | **Planting (Sowing) time** | **Weeding time** | **Flowering**  **Time** | **Maturity**  **Time** | **Harvesting time** |
| Maize | March 15 | April 30-May 15 | June30-August 30 | August28-Sept.10 | Sept.30 | Nev 15-Dec.15 |
| Wheat | May 15 | Jun 28 –July 8 | July30-Aug.30 | Sept.15 | Oct.8 | Oct.15-30 |
| Teff | May 30-Jun 15 | July 15-August 8 | August 30 | Sept.18 | Oct.30 | Nov.30 |
| Harcot been | Ma y 15 | June28-July 8 | July 30-August 30 | Sept.15 | Oct.15 | Nov.30 |
| Sourghum | March 15 | April 30- May 15 | June 30 –August 30 | August 28- Sept.10 | Nev.15 – Dec 15 | Nov.15 –Dec 15 |

Source:-

**Average number of farm oxen per HH and percentage of farmers with 0, 1/2, 1, 2, 3 etc .farm Ox (oxen) in the district.**

|  |  |  |
| --- | --- | --- |
| **No** | **Average No of oxen per HH** | **percentage of farmers** |
| 1 | 0-oxen | 25 |
| 2 | ½ - oxen | 0 |
| 3 | 1-oxen | 32 |
| 4 | 2-oxen | 28 |
| 5 | 3-oxen | 10 |
| 6 | 4 and above | 5 |

Source:-

**Average farm land holding size /HH in [Hect] and percentages of farmers land holding 1/2, 1, 11/2, 2, 21/2, 3 and above [Hect]**

|  |  |  |
| --- | --- | --- |
| No | Average farm land /HH | Percentage |
| 1 | 0.5 | 30 |
| 2 | 1 | 26 |
| 3 | 1.5 | 25 |
| 4 | 2 | 10 |
| 5 | 2.5 | 5 |
| 6 | 3 | 2.5 |
| 7 | 3 and above | 1.5 |

Source:-

Major crops and pests such as army warmth, locusts, birds, appes, etc. and diseases found in the district. **Crop pests: -** Army Worm, Locust, Qualia Bird, Monkey and Apes. **Crops diseases: -** Rust, Vires and Smut.

**Irrigation (traditional or modern**)

* **Traditional irrigation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Irrigation type:** | **Year** | | | |
| **Small Scale** | **2011** | | **2012** |
| No of farmers engaged: |  | 650 | | 785 |
| Area in hectare: |  | 410 | | 135 |
| Types of crops: |  | Onion,Paper Cabbege | | Onion,Paper Cabbege |
| **Irrigation type:** | **medium scale** |  | |  |
| No of farmers engaged: | 0 | 0 | | 0 |
| Area in hectare: | 0 | 0 | | 0 |
| Types of crops: | 0 | 0 | | 0 |
| **Irrigation type:** | **large scale** | |  |  |
| No of farmers engaged: | 0 | | 0 | 0 |
| Area in hectare: | 0 | | 0 | 0 |
| Types of crops: | 0 | | 0 | 0 |

Source:-

* **modern irrigation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Irrigation type:** | **Year** | | |
| **Small Scale** | **2011** | **2012** |
| No of farmers engaged: |  | 680 | 657 |
| Area in hectare: |  | 168 | 134 |
| Types of crops: |  | Onion,Paper Cabbege,Cale | Onion,PaperCabbege, Cale, Head Cabbege & Potato |
| **Irrigation type:** | **medium scale** |  |  |

Source:

**List NGOs found in the district including their functions SNP**=Vegetable Production, Rift **Valley** = Soil and Water Conservation, Seedling Production in the nursery.**CDA= Aid vulnerable children financially, Build home for women’s have not husband. Fulfill materials for vulnerable children, Catholic=** works on cooperative members and construction of different kinds of storages for rural cooperativesIn put supply for farmers /seed and fertilizer/, Build hand wash water facilities in the primary school,Build roof catchments in the primary school.**Numbers of development agents in the district**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Department | Male | Female | Total | remark |
| 1 | Plant science | 19 | 3 | 22 |  |
| 2 | Natural resource | 18 | 5 | 23 |  |
| 3 | Animal science | 20 | 3 | 23 |  |
| 4 | Animal health | 4 | 0 | 4 |  |
| 5 | Cooperatives | 22 | 3 | 25 |  |
| Total | |  |  |  |  |

**Livestock, poultry & beekeeping**

**Livestock:-** The rural lively hold is highly depends on animal husbandry and crop production mostly interrelated or (Supports to each other) most farming activities (Plowing, crashing and transporting) are done by means of livestock in the district. The district have different livestock population. The major’s livestock’s feeds in the district are grazing land, crop residual, and bush browning. There is gradual declining of pastureland and currently reaching to the maximum level particularly due to the expansion of farm land.

***Number of cattle sheep, goats, mules, horses, acxes and camels, found in the district.***

|  |  |  |
| --- | --- | --- |
| **Types of livestock’s** | **2011** | **2012** |
| Cattle | 130,964 | 137,512 |
| Goats | 44,400 | 46,620 |
| Sheep | 26,800 | 28,140 |
| Horse | 4,689 | 4,923 |
| Mules | 1,875 | 1,969 |
| Donkeys/*acxes* | 12,192 | 12,801 |
| Camels | 0 | 0 |
| Poultry | 63,788 | 66,977 |
| **Beehives** | | |
| Traditional | 2,675 | 2,808 |
| Modern | 350 | 367 |
| Transition | 1,357 | 1,424 |

**Major livestock disease:-**The major animal diseases in the districts according to their occurrence and distribution from the most frequent to the least includes Black leg, Hemorrhagic, Septicemia , Anthrax, internal parasites ,external parasites and African horse sickness are common disease in the districts. To reduce the prevalence of such diseases different vaccination and treatments at different sites of the district

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2011** | **Anthrax** | **Black leg** | **LSD** | **Bovine Pasteur lose** | **Sheep Pox** | **AHS** |
| **2012** | **PPR** | **LSD** | **Sheep Pox** | **New castle Disease** | **Anthrax** | **Bovine pasteurolosu** |

**Availability of animal health institution by type.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Type A** | **Type B** | **Type C** | **Type D** |
| **2011** |  |  | **7** | **3** |
| **2012** |  |  | **7** | **3** |

Source: -

**Numbers of veterinary personnel/doctor of veterinary medicine [DVM], animal healthy assistance.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **DVM** | **Healthy assistance** | **Total** |
| **2011** | **4** | **23** | **27** |
| **2012** | **4** | **23** | **27** |

**Poultry:-**Poultry production is one of the important sources of family income and food in the district. Accordingly, the poultry population in the district was increased from **63788** to **66977** between the year 2011 and 2012. The prevalence of disease and low productivity due to traditional method of rearing is the major reason for decrease in poultry population.

**Beekeeping.** Bee-keeping farming is another source of income for farmer family. The farmers of the district traditional beehives Increase from **2675 to 2808 in 2011.** Transitional beehives Increase **1357 to 1424 in 2012** and modern beehives 350 to 367 in the year 2011. However, rapid deforestation rate and lack of enough moisture due to shortage of rainfall, herbicides and insecticides are the main problems in bee farming.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Traditional | Transitional | Modern behave | Total |
| **2011** | 2675 | 1357 | 350 | 4382 |
| **2012** | 2808 | 1424 | 367 | 4599 |

**Factors affecting livestock rearing, poultry and beekeeping in the district.** Feed Shortage**,** Health Problem Disease Occurrence, Climate Fluctuations, Agro-Chemicals

* 1. **Mining**

Major types of minerals known and available in the district and their current uses. Like other parts of the Zone, the mineral resources potential of the district is not investigated and known yet. However, some data obtained from office of Water, Mineral and Energy resource Development indicates that, the district has a high potential of some mineral resource such as sand Stone and Gypsum for construction purpose, solar energy, wind Energy and Biogas for alternative energy resource. Yet the district does not start to utilize these minerals resources. However, there are insignificant rock quarrying, sand stone, pottery making mining activities by local communities in the district.

|  |  |  |
| --- | --- | --- |
| No | Types of minerals | Their current uses |
| 1 | Cirracha Adii | Construction |
| 2 | Dhagaa Gurrachaa | Construction |
| 3 | Kaayoliini | Ceramic |
| 4 | Komichee | Bloket |
| 5 | Iskooriyaa | Bloket |
| 6 | Dhagaa Gurrachaa | Construction |
| 7 | Kaayoliini | Ceramic |

Number and types of registered small scale industry by type of ownership**:-**

|  |  |  |
| --- | --- | --- |
| **No.** | Types of small scale Industry | Type of ownership |
| **1** | Manufacture of Structural Clay | **Cooperative** |
| **2** | Processing &Casting of iron metal &Non Ferrous Metals | **“” “”** |
| **3** | Wooden &Metal Work | **“” “”** |
| **4** | Wooden Products | **“” “”** |
| **5** | Bakery Products | **“” “”** |

List the number of small, medium and large scale manufacturing industries in the district by types of ownership [government, private and cooperation including their workers and capital separately]:-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Types of small scale industry | Type of ownership | Their workers | *Capital* |
| 1 | Manufacture of Structural Clay | Cooperative | 15 | 20,000 |
| 2 | Processing &Casting of iron metal &Non Ferrous Metals | “” “” | 2 | 50,000 |
| 3 | Wooden &Metal Work | “” “” | 12 | 225,000 |
| 4 | Wooden Products | “” “” | 4 | 45,000 |
| 5 | Bakery Products | “” “” | 7 | 87,000 |
|  |

* 1. **Education.**

**Kindergarten:-**numbers and enrolment by sex and type of owner ship [Government, Private and NGOs] in 2011 &2012 E.C. According to the data obtained from statistical abstract of the district, in the year 2012, there were Three non gov’t and kindergarten schools with six teachers (male 6, Female 3) and 480 students (Male180, Female 165).One of the main problems related with kindergarten school is lack of clear management system.

**Primary Schools:** the number of primary school was increased from 54 to 54 while the number of student enrolled to school was increased from 32465 (45.38% are female) to 32874 (45.3% female) between the year 2011 and 2012.

**Senior Secondary education (9-12)** – In the district there were seven secondary (9-12) schools located four in rural and three in urban.

|  |  |  |  |
| --- | --- | --- | --- |
| **No.of School by level** | **2011** | **2012** | **Ownership** |
| 1-8 | 54 | 54 | Gov.nt |
| 9-12 | 6 | 6 |
| Technical Vocational | 0 | 0 |
| 1-8 | 1 |  | Non-Gov.nt |
| 9-12 | 1 |  |

**Total Number of Enrolled ,Dropped Out and detaind Stundents by level of School, Sex, and types of Ownership.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of**  **Schools** | **Total Number of Enrolled** | | | | | | **Ownership** |
| **2011** | | | **2012** | | |
| Male | Female | Total | Male | Female | Total | Gov’t |
| 1-8 | 17732 | 14733 | 32465 | 17982 | 14892 | 32874 |  |
| 9-12 | 1959 | 1113 | 3072 | 2286 | 1207 | 3493 |  |
| Total | 19691 | 15846 | 35537 | 20268 | 16099 | 36367 |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of**  **Schools** | **Total Number of Enrolled** | | | | | | **Ownership** |
| **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Non-Gov’t** |
| 1-8 | 199 | 211 | 410 | 200 | 210 | 410 |  |
| 9-12 | 45 | 53 | 98 | 37 | 47 | 84 |  |
| Total | 244 | 264 | 508 | 237 | 257 | 494 |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Level Schools** | **Number of Dropped Out** | | | | | | Ownership |
| **2011** | | | **2012** | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 1-8 | 1845 | 1739 | 3584 | 1772 | 1324 | 3096 | Gov’t |
| 9-12 | 214 | 66 | 283 | 182 | 74 | 256 |  |
| Total | 2062 | 1805 | 3867 | 1954 | 1398 | 3352 |  |

**Total Number of Detained**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of Schools** | **2011** | | | **2012** | | | **Ownership** |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 1-8 | 1132 | 1053 | 2185 | 1395 | 1218 | 2613 | Gov’t |
| 9-12 | 193 | 187 | 380 | 172 | 125 | 297 |  |
| **Total** | **1325** | **1240** | **2565** | **1567** | **1343** | **2910** |  |

**Number of students sat for national Examination (GSCE) and promoted for preparatory by sex, and Ownership.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **year** | **promoted for preparatory** | | | Ownership |
|  | **Male** | **Female** | **Total** | Gov’t |
| **2011** | **378** | **192** | **570** |  |
| **2012** | **0** | **0** | **0** |  |
| **Total** | **378** | **192** | **570** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| year | promoted for preparatory | | | Ownership |
|  | Male | Female | Total | Non-Gov’t |
| 2011 | 25 | 26 | 51 |  |
| 2012 | 0 | 0 | 0 |  |
| Total | 25 | 26 | 51 |  |

**Number of students sat University Entrance and promoted for degrees by sex and ownership.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **year** | **promoted for Degrees** | | | Ownership |
|  | **Male** | **Female** | **Total** | Gov’t |
| **2011** | **39** | **20** | **59** |  |
| **2012** | **0** | **0** | **0** |  |
| **Total** | **39** | **20** | **59** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **year** | **promoted for Degrees** | | | Ownership |
|  | **Male** | **Female** | **Total** | Non-Gov’t |
| **2011** | **0** | **0** | **0** |  |
| **2012** | **0** | **0** | **0** |  |
| **Total** | **0** | **0** | **0** |  |

**Number 0f Adult Education Center and participation by sex**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **year** | **No. Adult center** | **Male** | **female** | **total** |
| **2011** | **13** | **612** | **525** | **1137** |
| **2012** | **20** | **342** | **800** | **1142** |
| **Total** | **36** | **954** | **1325** | **2279** |

**Number of preparatory and technical schools including number of teachers by sex ,level education and sex.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **year** | **No. of preparatory** | **male** | **female** | **total** |
| **2011** | **1** | **12** | **0** | **12** |
| **2012** | **0** | **0** | **0** | **0** |
| **Total** | **1** | **12** | **0** | **12** |

**Number of Teachers by levels of schools (1-8)(9-12)& Vocational by sex level of education and types schools Ownership.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Level of schools** | **2011** | | | | | | | | **2012** | | | | | | | |
| **male** | | | | **Female** | | | | **Male 735** | | | | **Female** | | | |
| **TTI** | **Dip** | **Deg** | **MA** | **TTI** | **Dip** | **Deg** | **MA** | **TTI** | **Dip** | **Deg** | **MA** | **TTI** | **Dip** | **Deg** | **MA** |
| **1-8** | **51** | **320** | **8** | **0** | **24** | **155** | **0** | **0** | **66** | **398** | **68** | **0** | **35** | **157** | **11** | **0** |
| **9-12** | **0** | **4** | **105** | **8** | **0** | **3** | **17** | **1** | **0** | **7** | **107** | **10** | **0** | **4** | **14** | **1** |

* 1. **Health**

**Health Institution:** there were six Health centre and 31 Health post during the year 2012. This indicates high health coverage in the district as compared with WHO standard (25,000 and 5,000) respectively.

**Health personnel:** the number of health personnel was increased from 63 to 135 between the year 2011 and 2012. By types of profession, the district provides health services by six health officers, 50 nurses, one health assistances, 5 laboratory technicians, 8 pharmacy, 1 sanitarian technician and 57 health extension workers.

**Number of Institution by ownership (gov't, NGO, private, organization).**

|  |  |  |
| --- | --- | --- |
| **Health Institutions** | **2011** | **2012** |
| Health center | 6 | 6 |
| Private clinic | 14 | 16 |
| Rural drug Vander | 1 | 1 |
| Health post | 31 | 31 |
| Pharmacy | 6 | 6 |
| malaria controlling center | 0 | 0 |
| drug shops | 1 | 2 |
| Health center accessible for water service | 5 | 5 |
| Health center accessible for electricity | 5 | 5 |
| Health center accessible for telephone | 6 | 6 |
| **Health professionals** |  |  |
| BSC. Nurses | 7 | 8 |
| Midwifery | 10 | 12 |
| Health officer | 12 | 11 |
| Laboratory technician | 7 | 7 |
| Sanitarian technician | 1 | 1 |
| Pharmacist | 1 | 2 |
| Druggist | 8 | 8 |
| Environmental health | 0 | 0 |
| Health Assistant | 0 | 0 |
| Diploma nurse | 41 | 42 |
| Health extension workers | 57 | 57 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No .** | **Medical personnel** | **Number of medical person** | | | | | |
| **2011** | | | **2012** | | |
| **Gov.t** | **private** | **Non gov’t** | **Gov’t** | **private** | **Non gov’t** |
| 1 | Doctors | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | General medical practitioner | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Health officer | 12 | 0 | 0 | 11 | 0 | 0 |
| 4 | Nurse (BSC) | 7 | 2 | 0 | 8 | 2 | 0 |
| 5 | Nurse(diploma/level IV) | 41 | 26 | 1 | 42 | 26 | 1 |
| 6 | Midwifes (BSC) | 2 | 0 | 0 | 4 | 0 | 0 |
| 7 | Midwifes(diploma/level IV) | 8 | 0 | 0 | 8 | 0 | 0 |
| 8 | Environmental health (BSC) | 1 | 0 | 0 | 0 | 0 | 0 |
| 9 | Environmental health (diploma) | 1 | 0 | 0 | 1 | 0 | 0 |
| 10 | Pharmacists | 1 | 0 | 0 | 2 | 0 | 0 |
| 11 | Druggist | 8 | 3 | 0 | 8 | 3 | 0 |
| 12 | Lab. technologist (BSC) | 1 | 0 | 0 | 1 | 0 | 0 |
| 13 | Laboratory technician | 6 | 2 | 0 | 6 | 2 | 0 |
| 14 | Ophthalmic nurse | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | Health information technician | 5 | 0 | 0 | 5 | 0 | 0 |
| 16 | Health assistants | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | Health Extension worker | 57 | 0 | 0 | 57 | 0 | 0 |
| 18 | Other (supporting staff administration and finance | 76 | 8 | 0 | 70 | 14 | 0 |

**The First ten top diseases at Z/ Dugda district in 2011/2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Top ten Disease in 2011 | No | Top ten Disease in 2012 | | |
| 1 | Severe febrile diseases | 2721 | 1 | Pneumonia | 3269 |
| 2 | Acute Upper Resperatory Infection | 2343 | 2 | Respiratory infection | 3236 |
| 3 | Pneumonia | 1449 | 3 | Diarrhea | 2999 |
| 4 | Diarrhea | 1132 | 4 | Severefebrile infection | 1788 |
| 5 | Scabies | 898 | 5 | Bacterial Pneumonia | 1731 |
| 6 | Typhoid fever | 667 | 6 | Typhoid fever | 1689 |
| 7 | Pandamic influenza | 491 | 7 | Dyspesia | 1044 |
| 8 | Dyspesia | 408 | 8 | Typhus fever | 730 |
| 9 | Baterial Pneumonia | 373 | 9 | Urinary tract infection | 729 |
| 10 | Subcutaneuse tissue | 341 | 10 | Common Cold | 628 |

**Health coverage of the District.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2011** | | **2012** | |
| **Facilities** | **No** | **Coverage%** | **No** | **Coverage%** |
| District hospital | 0 | 0 | 0 | 0 |
| Health center | 6 | 100 | 6 | 100 |
| Private clinic | 14 | 100 | 16 | 100 |
| Rural drug Vander | 1 | 100 | 1 | 100 |
| Health post | 31 | 100 | 31 | 100 |
| Pharmacy | 6 | 100 | 6 | 100 |
| Health center accessible for water service | 5 | 83 | 5 | 83 |
| Health center accessible for electricity | 5 | 83 | 5 | 83 |
| Health center accessible for telephone | 6 | 100 | 6 | 100 |
| Health professionals | 166 | 67 | 161 | 65 |

**Children and Women Socio- Economic Indicators**

**Women Issue Indicators:-**

**Women Issue:-** As the country health policy in general, the region and the zone specifically the district have been followed pre-prevalence diseases control policy. With this manner, the district with the help of health extension workers it provides different type of health extension service house to house like family planning, awareness creation on environmental health protection. Personal hygiene and sanitation, toilet construction, refuse disposal built etc. they use model family graduation to scaling up best practices and the services for all farmers household and farmers family members. This helps them to increase the health extension services in the district. To this end, two health extensions workers were assigned for each peasant associations. Accordingly, as the data obtained from district health office indicated, the delivery service given for pregnant women was being improved due to massive awareness creation among the communities on Family planning,

Focas, ANC, Skill Delivery Service and PMTCT.

**Maternal mortality Ratio:-** In the case of Z/Dugdaa, there is no data on maternal mortality Ratio (MMR) between the year 2011/2012

|  |  |  |
| --- | --- | --- |
| Year | 2011 | 2012 |
| Prevention of mother –to- child transmission of HIV/AIDS | 2 | 1 |

Number of women used family planning services (contraceptive -prevalence)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Activities | 2011 | 2012 |
| 1 | Traditional methods | 0 | 0 |
| 2 | Modern methods | 18847 | 22424 |
| 3 | Other ( specified) | 556 | 651 |
| 4 | All methods | 19403 | 23075 |

Access to safe delivery for non-complicated delivery.

|  |  |  |  |
| --- | --- | --- | --- |
| No | Access to safe delivery (mid wife) for non- complicated delivery | 2011 | 2012 |
| 1 | Number of women’s used ANC antenatal care/service | 6707 | 5262 |
| 2 | Number of women’s used PNC postal care/services | 2989 | 4686 |
| 3 | Assisted Delivery by health professional | 2869 | 2812 |
| 4 | Assisted Delivery by in their home traditionally | 0 | 0 |

**Health infrastructure access to improved Sanitation facilities.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Type of Health Facilities** | **NO** | **Access to Improved Sanitation facilities.** |
| **2** | **Health Centers** | **6** | **0** |
| **3** | **Clinics** | **0** | **0** |
| **4** | **Health Post** | **31** | **0** |

**Children Issue Indicators**

**Large number of orphan & vulnerable children by age and Sex.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Age** | **2011** | | | **2012** | | |
| **Sex** | | | **Sex** | | |
| **m** | **f** | **total** | **m** | **F** | **Total** |
| 1. **Orphan** |  | 427 | 604 | 1031 | 585 | 659 | 1244 |
| 2. **Vulnerable children** |  | 287 | 345 | 632 | 309 | 382 | 691 |

**Disabled Children in The district**. There is about 150 disabled Children (70 M and 80 F) in the district. In 2011 E.C & 2012 E.C The age distribution of disabled children is described in the following table

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age** | **Disabled Eye** | | | **Disabled Eye** | | **Disabled Hand.** | | | **Disabled Leg** | |
| **Sex** | **2011** | **2012** | **2011** | **2012** | | **2011** | **2012** | **2011** | **2012** |
| **0-8** | **M** | 2 | 5 | 3 | 5 | | 0 | 6 | 1 | 3 |
| **F** | 0 | 3 | 1 | 7 | | 1 | 5 | 1 | 2 |
| **Total** | **2** | **8** | **4** | **12** | | **1** | **11** | **2** | **5** |
| **9-15** | **M** | 2 | 4 | 2 | 9 | | 1 | 3 | 0 | 4 |
| **F** | 1 | 3 | 3 | 5 | | 3 | 6 | 2 | 2 |
| **Total** | **3** | **7** | **5** | **14** | | **4** | **9** | **2** | **6** |
| **16-18** | **M** | 1 | 4 | 3 | 4 | | 0 | 3 | 0 | 5 |
| **F** | 2 | 4 | 2 | 9 | | 0 | 4 | 2 | 2 |
| **Total** | **3** | **8** | **5** | **13** | | **0** | **7** | **2** | **7** |

**Total number of malnourished children by age & Sex.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age** | **2011** | | | **2012** | | |
| **Male** | **female** | **Total** | **Male** | **Female** | **Total** |
| **0-8** | 2592 | 2679 | **5271** | 2330 | 2589 | **4919** |

**Number of Accessed to in proved water supply in the district.;-** One of the components of primary health service policy is personal hygiene and sanitation. For proper implementation of this policy, the district health office provides awareness creation training for the community by health extension workers. As a result of this, the health condition of the community was improving through time in the district. Moreover, due to continuous health education and awareness creation sessions, the toilet utilization and personal hygiene and sanitation condition was improved in the school compound and health institutions.

As the data obtained from district health office indicated, all health centers and all health posts in the district were access to toilet, dry and liquid waste disposal facilities in the year 2012. Regarding potable water supply all health centers was access to potable water supply. On the other hand, 54 primary and all secondary schools in the district have access to toilet facilities. the total school in the district.

**School accessed to improved sanitation facilities ( toilet, etc)**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Activities** | **Year** | |
| **2011** | **2012** |
| **Kindergarten** | **3** | **3** |
| **primary school** | **54** | **54** |
| **secondary school** | **7** | **7** |

**CHAPTER FOUR**

**4. INFRUSTRUCTURE AND SOCIAL FACILITIES**

**4.1 Transportation and communication**

**Means of transportation in the District including their numbers**

|  |  |  |
| --- | --- | --- |
| Year | Types of transportation | Number of their |
| 2011 | Bajaj | 3 |
| Cart | 500 |
| Car | 25 |
| Bus | 0 |
| 2012 | Bajaj | 5 |
| Cart | 550 |
| Car | 30 |
| Bus | 0 |

**Road - length of dry and all weather roads [asphalt, Gravel, rural, etc] in [km] *separately.***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | ***District road*** | | | | | | |
| Asphalt Road | Gravel Road | Rural Road | Total | All weather | Dry weather | Total |
| 2011 | 0 | 39.5 | 8.6 | 48.1 | 56.6 | 8.5 | 65.1 |
| 2012 | 0 | 39.5 | 8.5 | 48 | 48 | 0 | 48 |

**Telecommunication:** - One of the fast and effective ways of transmitting both business and administrative information, Two Urban areas and 20 rural peasant association of the district has supplied with wireless type of telecommunication. On the other hand, 21 rural peasant association of the district has supplied with mobile network coverage.

**Post Office-**Postal service is one of the means of communication that plays a significant role in transmitting information and message, especially in rural areas where other means of communication is under developed. Accordingly, the district has one agent type of postal services in Ogolcho town

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Name | Numbers of post office | | |
|  | Post office | Rented | Not Rented | Total |
| 2011 |  | 15 | 55 | 70 |
| 2012 |  | 20 | 60 | 80 |

**Water and Energy Supply: -** potable water coverage of the district is good as compared to other district. According to data obtained from the district’s Water Resource Office, of the total rural population of the district 97187 (66.81%) was supplied with potable water in the year 2011. During the same year, about 7397 (65%) of urban population was supplied with potable water. Regarding potable water schemes, there were one spring development, 193 hand-dug wells and 33 deep well and 450 shallow well water schemes that provide drinking water to the community in the year as by urban and rural.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Source of drinking water** | **Rank** | **Rural** | **Urban** |
| 2011 | Pond | 5th |  |  |
| Well | 1th |  |  |
| Spring | 3th |  |  |
| River | 4th |  |  |
| Tap water | 2th |  |  |

**Source:**

|  |  |  |  |
| --- | --- | --- | --- |
| Source of domestic energy supply | Rank | Rural | Urban |
| Fire wood | 2th |  |  |
| Crop residue | 4th |  |  |
| Dung | 5th |  |  |
| Charcoal | 3th |  |  |
| Kerosene | 6th |  |  |
| Electricity | 1st |  |  |

**4.2 Social Security**

**Social Security,** public programs designed to provide income and services to individuals in the event of retirement, sickness, disability, death, or unemployment. In particular, it refers to the social insurance portion of that act, which uses contributions made by workers and employers to provide income to people and their families during retirement or in the case of involuntary unemployment, disability, or death.

Unemployment is one of the indicators of social security in a country. In the district, as in the region in general, unemployment is mainly urban problem, which is caused by rapid rural-urban migration. It is motivated mainly by the migrants’ expectation to get better economic opportunity in urban area due to lack of information regarding the real situation exists in urban area of the zone in general and district in particular. which in turn increases social in securities and problem. Given the lack of reliable information on unemployment statistics and the size of district informal economy it is impossible to quantify precisely the level of youth unemployment in the district the youth unemployment rate in the district is systematically higher for the population whole year to year.

**Number of registered unemployed person by sex and level of education and employed person by type of occupation, sex and level of education.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Year** | | **No-of registered unemployed persons** | | | **Sex** | | | | | | **Number of registered unemployed person by sex and level of education** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Level of education attended** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No of educated person** | | | | | | **1-8** | | | | | | **9-10** | | | | | | | | **Degree** | | | | | | **collage** | | | | | | | **TVET** | | | | | | | **Uneducated** | | | | | | |
| **M** | | | **F** | | | **M** | | | **F** | | **T** | **M** | | **F** | | **T** | | **M** | | **F** | | | **T** | | | **M** | | **F** | | **T** | | **M** | **F** | | | **T** | | | **M** | | **F** | | **T** | | | **M** | | | **F** | **T** | | |
| 1 | 2011 | | 3241 | | | 2186 | | | 1055 | | | 2142 | | | 951 | | 3023 | 514 | | 301 | | 815 | | 645 | | 405 | | | 1040 | | | 208 | | 81 | | 289 | | 200 | 89 | | | 289 | | | 575 | | 75 | | 640 | | | 44 | | 104 | | 148 | | |
| 2 | 2012 | | 2756 | | | 1866 | | | 890 | | | 1754 | | | 850 | | 2604 | 718 | | 281 | | 999 | | 602 | | 310 | | | 918 | | | 118 | | 113 | | 231 | | 241 | 71 | | | 912 | | | 75 | | 80 | | 155 | | | 112 | | 35 | | 147 | | |
| **Total** | | | **5997** | | | **5997** | | | **4952** | | | **1945** | | | **3896** | | **1801** | **5697** | | **1232** | | **582** | | **1814** | | **1247** | | | **715** | | | **1958** | | **326** | | **194** | | **520** | **316** | | | **160** | | | **1201** | | **650** | | **155** | | | **795** | | **156** | | **139** | | |
| **Number of employed person by type of occupation, sex and level of education** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No** | **Year** | **No-of registered employed persons** | | | | | | | | **Types of occupation** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Agriculture** | | | | | | | | **Trade** | | | | | | | **Gon’t** | | | | | | | | **NGO** | | | | | | | **Mining** | | | | | | | | | | **Construction** | | | | | | | | |
| 1 |  | **M** | | **F** | | | | | | **M** | | | **F** | | | **T** | | **M** | | | **F** | | **T** | | **M** | | | **F** | | | **T** | | **M** | | | **F** | | **T** | | **M** | | | **F** | | | | **T** | | | **M** | | | **F** | | | | **T** | |
|  | 2011 | 141 | | 152 | | | 293 | | | 25 | | | 37 | | | 62 | | 21 | | | 27 | | 48 | | 7 | | | 2 | | | 9 | | 21 | | | 7 | | 28 | | 38 | | | 71 | | | | 109 | | | 29 | | | 7 | | | | 36 | |
| 2 | 2012 | 161 | | 164 | | | 325 | | | 40 | | | 45 | | | 85 | | 12 | | | 26 | | 38 | | 5 | | | 3 | | | 8 | | 15 | | | 2 | | 17 | | 62 | | | 78 | | | | 140 | | | 27 | | | 10 | | | | 37 | |
| Total | |  | | 302 | | | 316 | | | 618 | | | 65 | | | 82 | | 147 | | | 33 | | 53 | | 86 | | | 12 | | | 5 | | 17 | | | 37 | | 9 | | 45 | | | | | | | 100 | | | 149 | | | 249 | | | | 56 | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No** | **Year** | | **Sex** | | |  | | **Number of employed person by sex and level of education** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Level of education** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Degree** | | | | | | | | | **Collage** | | | | | | **TVET** | | | | | | | **1-8** | | | | | | | **9-10** | | | | | | | **educated** | | | | | | | **Uneducated** | | | | | | | |
|  | | | **M** | | **F** |  | | **M** | | | **F** | | | **T** | | | **M** | | **F** | | **T** | | **M** | | **F** | | **T** | | | **M** | | | **F** | | **T** | | **M** | | **F** | | **T** | | | **M** | | **F** | | **T** | | | **M** | | | | **F** | | | **T** |
| 1 | **2011** | | 2841 | | 1521 | | | 764 | | | 304 | | | 1068 | | | 842 | | 691 | | 1433 | | 1132 | | 431 | | 1563 | | | 41 | | | 31 | | 72 | | 52 | | 41 | | 93 | | | 2831 | | 1498 | | 4329 | | | 10 | | | 23 | | | | 33 |
| 2 | **2012** | | 2861 | | 1532 | | | 784 | | | 322 | | | 1126 | | | 824 | | 640 | | 1464 | | 1174 | | 445 | | 1619 | | | 38 | | | 56 | | 94 | | 34 | | 58 | | 92 | | | 2554 | | 1506 | | 4360 | | | 7 | | | 20 | | | | 27 |

Number of criminal recorded by types and civil cases lodged, decided and pending in the district.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Criminal | Lodge | Decided | Pending |
| 2011 |  | 204 | 167 | 21 |
| Civil cases | Lodge | Decided | Pending |
|  | 0 | 0 | 0 |
| 2012 | Criminal | Lodge | Decided | Pending |
|  | 254 | 217 | 37 |
| Civil cases | Lodge | Decided | Pending |
|  | 0 | 0 | 0 |

**4.4 Finance**

**Financial Institution:** The availability of various financial institutions like banks and Insurance, Rural credit and Saving Association play a significant role in the transformation the economy of the district. The district has one commercial bank of Ethiopia, Cooperative Bank of Oromia and Oromia Saving and Credit micro financial institution. metememen Saving and Credit micro financial institution that provide loan and saving for Ethiopian catholic church social development co-coordinating office of meki NGO beneficiaries in the year 2010.

**Annual Budget allocation**: Annual budget requirement of districts is covered mainly from two sources: regional government grants and district in land revenue. Regional government contribution shares the largest amount which accounts for more than 85.% of the total annual budget allocated for the district in the year 2012. This indicated show far the In land Revenue share of the annual budget allocated for the districts is low.

Between the year 2011 and 2012 the total budget allocated for the district was increased from **120,359,260.03** to **143,888,358.08** birr. According to the data obtained from finance and Economic Development office, the budget allocated for the district showing an increasing trend from year to year.

**Revenues collected;-**  Total revenue collected by the district was increased from 16,102,264.92 to 17,574,881.14 between the year 2011 and 2012. showing an increment by 1472616.22 birr .The main sources of revenue in the district are Direct tax, indirect tax and non-tax items. According to the data obtained from the district Revenue authority of cumulative annual report indicated, In the year 2012, the share of direct revenue from the total revenue collected is the largest which 85.0% from the total revenue collected.

|  |  |  |
| --- | --- | --- |
| **Types of revenues** | **Year** | |
| **2011E.C** | **2012E.C** |
| Tax revenues | *14,902,451.98* | *14,955,928* |
| Non Tax Revenues | *1,200,112.94* | ***1,340,246*** |
| Total | *16,102,264.92* | ***17,574,881.14*** |

**Total expenditure of the district in [2011 &2012 E.C]**

|  |  |  |
| --- | --- | --- |
| *Types of*  expenditure | *Year* | |
| *2011E.C* | *2012E.C* |
| Administrative and General Services | *24,083,342.55* | *27463160* |
| Social services | *26,349,274.11* | *33677440* |
| Economic services | 69,926,643.37 | *82747758* |
| Total expenditure | 120,359,260.03 | ***143,888,358*** |

**Number of banks and insurance companies [organization] by types of bank and ownership.**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Types of Banks** | **Number of banks** | **Ownership** |
| **1** | **Commersial Bank of ethiopia** | **1** | **Gov’t** |
| **2** | **Cooperatives Bank of Oromia** | **1** | **Pv’ts** |

**Total expenditure (Budget) of the district in [2011 &2012 E.C]**

|  |  |  |
| --- | --- | --- |
| *Types of*  Budget | *Year* | |
| *2011 E.C* | *2012 E.C* |
| Administrative and General Services | *24,083,342.55* | *27463160* |
| Social services | *26,349,274.11* | *33677440* |
| Economic services | 69,926,643.37 | *82747758* |
| **Total Budget** | 120,359,260.03 | ***143,888,358*** |

**Availability of rural saving and credit Associations in the district by types and member sizes by sex.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Member size** | **Year** | | **Total** |
| **2011** | **2012** |
| **Number of rural saving and credit organizations** | **2** | **2** | **2** |

**4.5 Trade, Tourism and Sports.**

**Trade:**  farm activities like trade, carpentry, handcrafts, pottery, etc are not yet developed especially in the rural areas of the district. Trading activity is mostly carried out in urban areas. Hence trading is an economic activity for the majority of urban population.

**Tourism.** Is smokeless industry comprising a number of tangible and intangible components? The tangible elements include transport systems such as air rail, water and new space, hospitality services accommodation foods and beverages, tours souvenir related services such as banking, insurance and safety and security. The intangible elements include rest, relaxation and different experience.

**Number of major hotels, restaurants, bars, beds, in the district.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Hotel** | **Restaurant** | **Bars** | **Beds** |
| **2011** | **4** | **33** | **0** | **1** |
| **2012** | **5** | **35** | **0** | **1** |

**Sport:-**The district has different types of sport activities like Foot ball, Volleyball and others. However; there was no well-organized and standardized sport facility like stadium, gymnasium, youth centers, etc there is one mini stadium in the district and 1 footballs, 1 volley ball and 5 taekwondo and boxes club with 24, 10 and 100 sport teams respectively in the year 2012.

**Types of sport activities and facilities in the district by types:-**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Club or Team** | **2011** | | **2012** | |
| **Number of club** | **Sports men** | **Number of club** | **Sports men** |
| Foot Ball | 1 | 24 | 1 | 24 |
| Table Tennis | 1 | 10 | 1 | 10 |
| World Taekwondo | 5 | 100 | 5 | 100 |

Source: ZewayDugda districts youth and sport office.

**Chapter Five**

**5. Development Activities**

The ongoing major development activities in the district are carried out by Government, non-governmental organizations and community participations. The annual budget of the district is divided in to recurrent and capital budget. The capital budget is directly used for construction of different types of development projects. It is expected that the total budget used for development projects are increasing from time to time so as to full fill the development gaps in the district. Accordingly, the ongoing development projects during the years under consideration are the following.

**On going project in the district**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Type of project2011/2012** | **Number of projects** | **Source of budget** |
| 1 | Water Scheme liner | 3 | Government |
| 2 | skim Irrigation | 1 | Government |
| 3 | Road Construction | 1 | Government |
| 4 | Finishing school construction | 2 | Government |
| 5 | Finishing DA House Construction | 2 | Government |
| 6 | Finishing of Road | 3 | Government |

Source: - ZewayDugda District Finance and Economic Development Office.

**Chapter Six**

**6 .Problems And Potentialities**

**6.1 Problems**

**Economic conditions**- such as shortage of farmland, grazing land, agricultural inputs. etc.Shortage of farm land High prevalence of crop diseases & pests, Shortage of Agricultural inputs & lack of capacity to buy, inadequate Financial Institutions (Bank Saving and Credit Association and well organized rural credit services), acute shortage of grazing land which leads to over utilization of the same land for a long period of time, low investment activities and industries development.

**Social Conditions-**such as shortage of schools, health institutions, unemployment, transportation, communication. Rapid population growth and large family size which land fragmentation, unemployment, low productivity, under utilization of education facilities, underdeveloped transportation and communication facilities, high prevalence of harm full traditional practices, HIV/AIDS prevalence. High dropout rate &, low electric power supply.

**Environmental-conditions-**such as variability in the amount and distribution of rainfall, deforestation, soil erosion, occurrence of frost.

Soil degradation due to over cultivation, overgrazing and rapid deforestation rate and low soil and water conservation practice on the other hand, variability or rain fall which results into crop production failure, uncontrolled hunting**.**

* 1. **Potentialities**

**Agricultural Resources:-**Availability of cultivable land, irrigable land,fertility of the soil, livestock rearing, mining, fishing, tourism, etc.Temperature, altitude, length of growing period, moisture availability, flood hazard, degradation hazard, toxicity, rooting condition and workability, and pests and diseases are some of the major ones that determine the potentiality of the land for any crop production. Climatic change leads to annual or seasonal changes in water availability, which directly should change agricultural productivity. Moisture available is determined factor that determine the potentiality of land for rain fed agriculture and it is measured by the length of growing period. Length of growing period is directly related to altitude.

Soil erosion generally refers to detachment and transports of soil material by water, wind are the major factors of erosion. Natural erosion is not detrimental to man’s well being and is wholly beyond his control. Contrary to this , continued deforestation and the disturbance of nature has resulted in land degradation depletion and top soil and loss of invaluable wildlife which endangers the very insistence of the population by decreasing the production of the land , the availability of the fuel wood, loss of bio – diversity , change of the micro climate.

**Major natural resources endowment: -** water resources, mineral resources, forests, etc.Water logging affects plant growing in both agriculture and natural environmental by limiting diffusion of oxygen to plant roots. Excessive soil wetness considerably hinders agriculture be impeding tillage.

Natural, historical and cultural tourist attraction sites and investment potential areas existing in the district**.** Ziwey-lake is attraction of turist for zuwey-dugda district and Sof-Umare, Abba-Dheera and mountain in the ziwey Lakes are natural tourist attraction in zuwey-dugda district.

* 1. **Existing Situation of the District**

According to the data obtained from CSA population and housing report, the total population of the district increase from **145,471** to **149,417** showing an increment by **3,946** between the years 2011 to 2012. with an area of **1247**  square kilometer (km2).

The rapid economic growth in **Zuwey-dugda** district during the past year is very visible in the district. One of the most visible changes of the last years is the high level of school enrollments, construction of school, FTC. Construct of road by Governmental and contribution of community budget in the district, increases Political participation of women and young in the district, increased Women equal responsibility in Economy.

The conducted a pilot studies on successful female and male entrepreneurs in **Zuwey-dugda** district .By now in the district there are 28 kebeles and 2 sub-City and the following infrastructure are existing in the district such as 55 primary school, 7 secondary school, 31 health post, 6 health center, 27 FTC,in district

**Chapter Seven**

**7. Conclusion and Reccommendaion**

* 1. **Conclusion**

**Zeway-Dugda** district is found in Arsi Zone which has 28 peasant association and two urban administrative unit having total areas of 1,247km2. The district gets its present name from Lake Zeway found in the western Border of the district. It has a total population of 149417 by the year 2012 of which more than 96% are living in rural Areas engaged on agricultural activities. The district has only one climate type. Meher is the largest season is the only season for production of crops. It has permanent rivers like Ketar that are suitable for irrigation

The district is known by the production of both annual crops. The major types of annual crops growing in the district are cereals, pulses and oil seeds. From cereal crops wheat, and maize are the most widely produced interms of area cultivated and production obtained. In addition, the district is known by the production cash crops like sugar cane, vegetables, and other root crops.

Regarding production and productivity the districts Agricultural and rural development motivate the farmer to use agricultural inputs and modern farming system. To do so, three development agents are assigned to train farmers so that they can produce intensively using extension package on small land. Agricultural inputs like improved seeds, chemical fertilizers and herbicides and pesticides are distributed by agricultural service cooperatives and other cooperatives to the farmers. However, the amount of chemical fertilizers used per hectare of land is too low. Moreover, the farmers of the district are not busy throughout the year. Even during busy season, most farmers do not fully engage in farming activities due to some socio-cultural related factors. Anyhow, the effect of socio-economic factors on living standard of the community of the district needs further investigation.

The district is also known by the livestock rearing, Fishery and bee keeping. From livestock population cattle, sheep and goats account for more than 92% in the year 2012.This indicates the district has a potential for the production of exportable item like skin and hides. Infrastructure development like R*o*ad, energy supply, telephone services and postal services are under developed. That is, the districts has a road density of 0.1341 km per km2 for all weather roads and 0.01km per km2 for dry weather road,has no electric power supply except Ogolcho, Arata,kiyansho,halo,natile,kochebore,kiyansho and sanbaro and chafe Jila, no digital telephone services except Ogolcho and has only agent postal services in Ogolcho town.

Moreover, the water supply coverage is good as compared to other district. Of the total population of the district more than 65% get potable water supply.

Regarding social service sectors development the district has 55 primary and seven (7) secondary schools respectively. The student participation rate (GPR) was 100% for primary and 40% for secondary schools while the student to teacher ratio and student to class room ratio was 46:1 and 60:1 for primary schools and 29:1 and 68:1 for secondary schools respectively. The district has 7 secondary school.

On the other hand, health services delivery in the district was improved due to additional health facilities were constructed in the district. Moreover, the number of health personnel was also increased which result in improvement of population to health personnel ratio.

The district has a potential of cultivable land, mineral resource like sand stone, solar energy resource and cash crop production potential. In addition, the district has underground water potential used for irrigation, livestock rearing and poultry production potentials.

* 1. **Recommendation:-**

To overcome the existing social and economic problems prevailing in the district the regional government, local government, Non-governmental organization as well as the surrounding community has to perform the following activities:

* Infrastructure development like road, water supply, energy supply and communication facilities are needed. So the concerned body has to develop these facilities.
* To increase agricultural production and productivity modern input utilization, modern way of farming has to be used by the farmers. Hence, the agricultural and rural development office should have to create awareness among the farmers on how to use modern way of farming and input utilization. Moreover, modern inputs have to supply in sufficient amount and on time to the farmers.
* To overcome the effect of crop pest and diseases, the farmers have to use disease resistant variety of seeds and hand weeding rather than herbicides, irrigation through using rain fall water harvesting and river diversion systems,
* Strengthening rural agricultural institutions such as Farmer training centres (FTC), farmer service cooperative cooperatives and rural credit services in order to facilitate farmer’s access to modern agricultural input like extension service, fertilizers, improved seeds and farm implements.
* So as to improve Livestock production and increase its share in the international market high quality breed has to be distributed to the farmers and the farmers have to focus on quality rather than quantity. Moreover, Additional health facilities have to be constructed and provide health services.
* The district has potential of mineral resource and tourist attraction site. In order to benefit from these potentials scientific survey should have to be conducted
* Since the district has cultivable land, cash crop production for, Fishery activity, livestock rearing, animal fattening and poultry production potentials, the local and regional government has to invite investor to invest in the district.
* To maintain environment as it is awareness creation has to be done on how to use available resource wisely and motivate farmers to use modern inputs like compost on their farms so as to maintain soil fertility.
* The usage of fertilizer is fluctuating from year to year due to price escalation so government has to train and familiarize the farmer on how to prepare and use organic compost and other natural organic fertilizer