

**THE NATIONAL REGIONAL GOVERNMENT OF OROMIYA**

**OROMIYA PLANNING AND DEVELOPMENT COMMISSION**

**PHYSICAL AND SOCIO-ECONOMIC PROFILE OF BORANA ZONE**

**Dec.2022**

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**THE NATIONAL REGIONAL GOVERNMENT OF OROMIYA**

**OROMIYA PLANNING AND DEVELOPMENT COMMISSION**

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# FOREWORD

The 2013 Borana Zone socio- economic profile was conducted by the Planning and Economic development office of the zone by the coordination of data and information group. The main objectives of the study was to make basic information regarding natural features and socio –economic conditions of the zone that serve or stepping ground for planning policy making and research. This data is crucial for designing proper development plan for research activities and decision making . Specifically ,the 2011/2012 socio Economic profile was conducted to provide basic information regarding physical and socio Economic condition of the zone .The purpose of this socio-economic profile is to enhance tourism and economic development, Identifying under used services (or opportunities for shared services, forecasting problem areas, developing local community profiles and better land use planning.

The PEDO would like to acknowledge individuals who contributed in various ways to the successful completion of this socio-economic profile.

The PEDO also extends a special thanks to the data and information groups for overall coordination of the survey. The office also grateful to the tireless efforts of the planning, monitoring and evaluation department staff who hired specifically for survey.

In organizing this document, the serious problems were the absence of reliable data and up to date data and information. The document being the first of its kind gives a general clue about the zone and accordingly could be used as a bench mark for further study about the zone. With great thanks data and information dissemination group are ready to welcome suggestions and comments that may contributed the improvement of our future works.

# 1. Introduction

## 1.1. Background of the zone

Borana zone is among 21 Zones found in Oromia regional state. The establishment of the zone was twice in the history. Firstly, the zone was separated from the former Borana zone (which includes the present Guji Zone and West Guji Zone) and re-established at the end of 1994 E.C by including the present west Guji zone jointly known as Borana zone. Second time, at the end of 2008 E.C the zone established again separated from the highland woreda’s of west Guji zone and left with almost all lowland pastoralist areas. Currently, the zone has thirteen rural pastoralist woreda namely, *Arero, Dhas, Dillo, Dirre, Dubluk, Eelwoye, Gomole, Guchi, Miyo, Moyale, Taltale, Yaballo and Wachile* and one town administration *Yabello* town which has the state function. There are 134 rural kebeles (PA) and 11 town kebeles in the zone; most of the districts haven’t basic services like telephone, water, banking and others. According to the 2009 *Central* ***Statistics Agency* projection there are 534,257 people** living in the zone whereas, male to female ratio is 1:1 and about 10 people are living in 1km2; entirely sparsely populated. This indicates that there is great difference in settlement between districts to districts. About 90% of the populations are living in the rural pastoralist areas of the zone. The zone is found in the southern part of the Oromia region. It shares borderline with west Guji zone to the north, Southern nation, nationalities and people to the west, Somali region to the southeast and to the south an international boundary with Kenya.

The most ethnic group of the zone are inhabited by Oromo people of Borana, Guji and Gabra; the other Burji, Konso and various tribe of nation, nationalities and peoples are also living in the zone. Concerning the livelihood activities, the district and small town dwellers are engaged in small trade while the others employed in different government and non-government organization offices. The life of rural community is mainly depending on pastoral and small rain fed agro-pastoral activity. Erratic rainfall is common in the area that accompanied with drought and desertification which results the death of numerous cattle in almost every year.

The capital of the zone is Yabello town which is located **570 km from the capital city of the country Addis Ababa**. The town is on rapid growth and suitable for different investment activities.

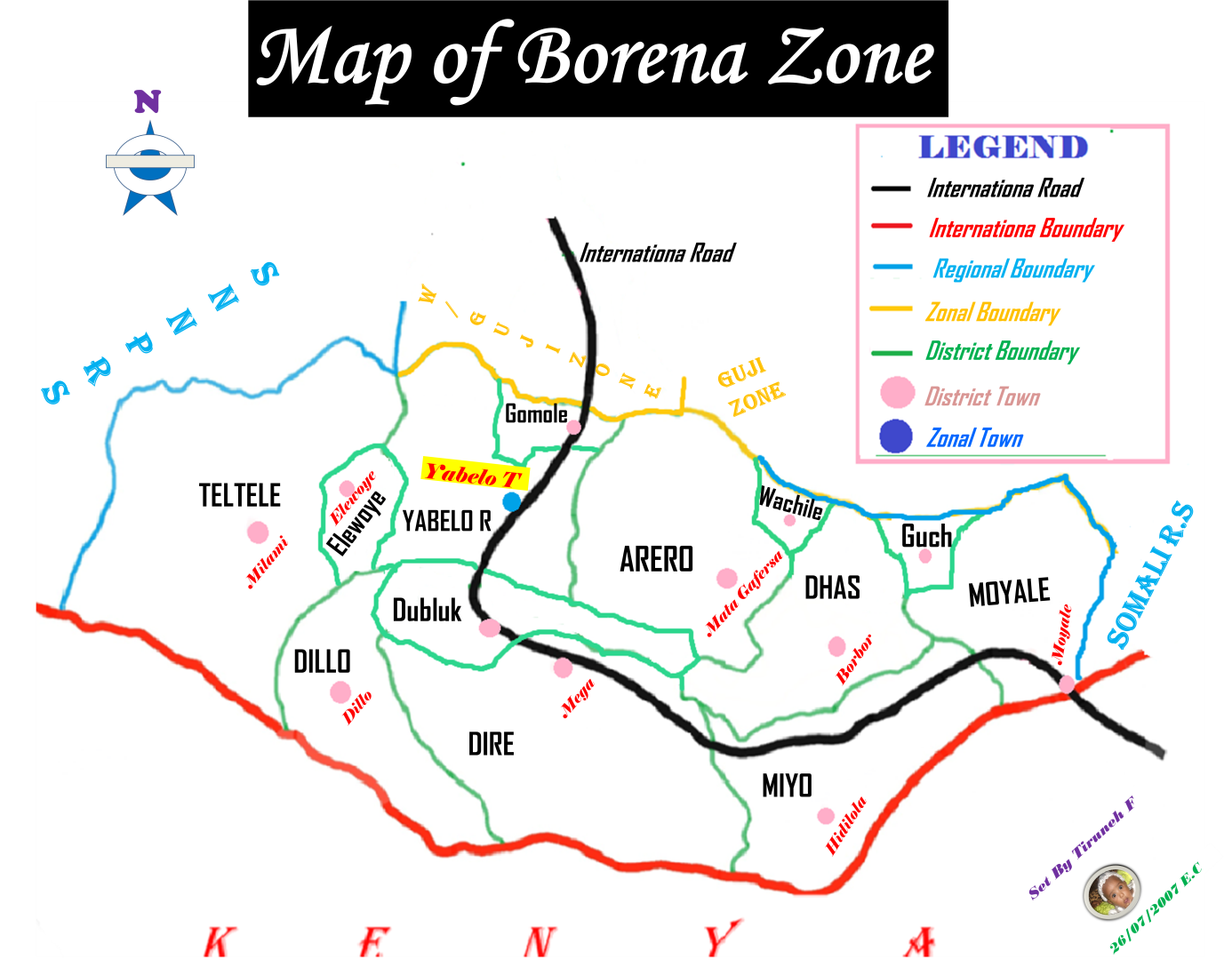
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Figure 1. Borena Zone map

## 1.2. Source of Information

These are primary and secondary sources. Primary source of data for this profile is obtained from the field and where as secondary data is obtained from written documents from government and non-government offices.

# 2. PHYSICAL SETTING

## 2.1. Location

Astronomically, Borena zone is located 30 24’ 20’’ N to 60 36’ 01’’ N latitude and 360 42’ 58’’ Eto 400 46’ 31’’ E longitudes. It is located in the southern part of Oromia regional state. Borena zone shares common boundaries with Guji zone in the east, Somali regional state in south east, southern nation’s nationalities and peoples of southern Ethiopia in the west and one international boundary with Kenya government 521 kms

## 2.2. Area

Borena zone is the first largest zone in Oromia regional state with the total area of **55,711 km2**. It is shares about **10 %** of total land area of oromia national regional state.

## 2.3. Geology of the zone

Borena zone has its oldest rocks of pre-Cambrian origin syntectonic gramitods upper and lower middle protozid (metamorphic) and lower complex (archalan metamorphic) of Precambrian or basement complex rocks origin have been found in several parts of the zone particularly in the Yabello and Mega. Similarly, Mesozoic and Cenozoic deposition have been exposed in Yabello, Dire, Arero and Teltele

## 2.4. Relief, Drainage and Climate

### **2.4.1. Relief**

Borena zone is not a region of great physiographic diversity. It has no very low and very high areas however, very large areas of the zone is altitude below 1500 above sea levels found in the low land areas can be categorized as “Gamojji” with semi-arid climate. These wide areas are found in the south west and eastern parts of the zone this includes Moyale, Dire, Arero and Yabelo.The high lands (over 1500 above sea level) are found in north central and southern parts these in particularly it include Yabello and central parts of Dire. Yabello-Mega plateau; the extension of southern highland which rises to 2000m.

### **2.4.2. Drainage**

There are no rivers and streams that drain widely across Borena zone, only the rivers of Segen which raises somewhere around Burji-Teltele boundary and flow North West wards ending up in Chew Bahir swamp. Apart from this, there are various small traditional ponds/hand dug which are uses as drinkable water reservoir for cattle and community during dry season.

### **2.4.3. Season**

Borana zone have two rain pattern is bimodal type. The ‘ganna’ or rainy season is from February 15 up to May 15 and the ‘Hagaya’ or short rain season is from September 15 up to the end of the month of November

## 2.5. Climatic Classification of the Borana Zone

The climatic classification of Borena zone ranges from hot low land (Gamojji) to cool highland (Badda) and also from semi arid to humid. This classification is based o annual and monthly mean of tempreture and rainfall, seasonal changes of rainfall and type of native vegetation associated with them. There are four climatic type represented in Borena zone.

1. **Hot-Arid climate**: - It is characterized by poor sparse vegetation with mean annual temperature ranging from 270 C to 290 C and mean annual rainfall less than 450mm. Evaporation is 20 or more times in excess of precipitation in same area. It is characterized by strong wind, high temperature, low rainfall and low relative humidity with little cloud cover. This area is barren with little vegetation cover and it includes areas of eastern Moyale district.
2. **Hot semi-Arid climate**: - It forms an intermediate climatic region between Arid and humid climatic region. It prevails over areas of steppe type of vegetation cover. Grasses are short and coarse but edible, during the dry season it is highly palatable. Because of this wild animals and cattle’s during dry season rely largely on the tender fresh grasses found along the water course. This climatic regions has mean annual temperature that varies between 180 C to 270 C with annual mean rainfall of 410-820mm with noticeable variability from year to year. Since evaporation exceeds precipitation, there are no permanent streams. Areas with such kind of climate include western and southern Borena, part of Taltale, Yabello, Moyale, Arero,Wacile and Dirre district.
3. **Tropical Rainy Climate: -** It is a region with distinct dry winter season. The mean temperatures of the cold month are about 180 C and mean annual rainfall is generally between 680-2000mm. Such climate prevails up to an elevation of 1750m amsl. This climate is characterized by tall grasses, but grasses and trees are intermingled. Areas dominated by this climatic condition are district of Dirre, south western Moyale and limited area of Arero.
4. **Warm Temperature Climate:-** such climate is found in areas extending in elevation from 1750-3200m a sea level. It is the areas of heavy rainfall, forests predominant, while in areas of moderate rainfall grass coverage dominate the land cover type. This region includes Yabello and Smaller portions of Dirre and Arero district.

## 2.6. Soil types and Distribution

Borena Zone is endowed with a vast but fragile soil resource where mixed crop-livestock sedentary agriculture is practiced in mid-highland and where Pastoralism is the way of life in lowland. The sub region has a mosaic of soils due to the weather and leaching pattern of the varied parent materials under complex environments. The Agro-ecology of the area is intimately related with the geology of the area.

According to FAO/UNESCO classification, the soil resources of Borena zone are classified into Vertisols, Cambisols, Luvisols, Nitosols, Calcisol, Gypsisol, Paeozems, Ferralsols, Solonetz, and Fluvisoil. They are 10 major soil types in the zone understudy. However, some of these are localized and of too small spatial extents to appear on so small scale soil map. Depending on the factors for formation of the different types of soils, major soil groups inclusive of various soil units are identifiable.The definitions and explanations of the sub-units and major soil groups are as follows.

1. **Cambisols are** sub-divided into eutric cambisols and vertic cambisols. These soils, in general, have a Cambic B horizon. Eutric cambisols are mainly occurring in limestone areas, while vertic cambisols have vertic properties. Most Cambisols have little agricultural value, as they are occurred on slopes, are often shallow or have many stones or rock outcrops. Cambisols that are deep and not stony are good for agriculture. Cheromic combisols and Eutric Cambisol occur almost in all districts of our Borena zone. On the other hand, Calcaric Combisol occure in smaller portions of **Taltale and Dirre district**.
2. **Luvisols are** sub-divided into chromic luvisols and vertic luvisols. Chromic luvisols have a strong brown or red B horizon and occure in central Borena part of **Yabello** district. Luvisols are formed in zone of relatively pronounced wet and dry season. Luvisols also form unique characteristic unit from recent alluvial deposits and often annually being replenished by fresh deposits. They do not occur in semi-arid areas and deserts.
3. **Vertisols: -** Itmostly occurred on broad nearly flat to undulating topography, which often lack integrated natural drainage networks. These soils swell to become very plastic and cohesive; and when dry, shrink with deep and wide crack. Vertisol is Sub-divided into pellic vertsols and chromic vertsols. They occur throughout in most part of the zone in all spectrums of parent materials except in arid climate and evaporite. In areas intensively cultivated areas, vertisols are intensively cultivated to cereals and pulses, while in areas of relatively lowland with moisture constraint and seasonal floods they are used for livestock grazing. It covers most areas of districts of the zone understudy including part of **Taltale, Yabello and Dirre district.**
4. **Calcisol:-** It have either a calcic horzon, or a petrocalcic horizon or concentration of soft powdery lime with 125cm of the surface. It also classified as Haplic and Petric Calcisols. Haplic calcisols lack an argic B horizon and petrocalcic horizon. Petric calcisol have a petrocalcic horizon. Haplic Calcisols occur in large part of **Taltale, Dirre and Moyale districts of Borena zone**. On the other hand Petric calcisols occur in **Moyale district**.
5. **Gypsisole:** - It has a gypsic or a petrogypsic horizon or both within 125cm depth and do not have a diagnostic horizon other than orchic A horizon. Haplic gypsisol lack an argic B horizon, while petric Gypsols have a petrogypsic horizon. Petrogypsic occur in **Taltale district Boren zone around chew Bahir**.
6. **Phaeozems:-** are classified in to Aplic and Luvic phaeozems. They are soil with a molic **A horizon**. They are characterized by dark colored humus and bass rich top soil containing calcium carbonate. In the zone they are mainly shallow and stony and Occure on the higher uncultivated steep slops. Accordingly, this is areas used for livestock’s grazing. Luvic Phaeozem have an argillic **B horizon**. Has most of them are sodeic their agricultural values is limited and mostly found in localized areas of **Dirre, Miyo and Moyale** districts of Borena Zone.
7. **Ferralsols:-** It is strongly weathered soils of tropical regions, which consist mainly of caolinite, quarts and hydrated oxides have low bass exchange capacity. They are sub divided in to plinthic Humic, Acric Rhodic, Xanitic and Orthic. Among them only Rhodic Ferralsols are found in **south east moyale** district of the zone.
8. **Solonetz:-** is a soil type having a nitric horizon from different type of solonetz, only estagnic solonetz are found in **south western Taltale** district of Borena zone.
9. **Fluvisols: -** it is developed in recent alluvial deposits of revere plains, deltas, former lakes and coastal areas. Its soil condition are highly variable, i.e in arid areas many soils are slain. Eutric Fluvisols are non-calcareous and have a bass saturations of 50%. In general Fluvisols are good for agriculture and oftaine intensively used. Eutric Fluvisols occur in smaller portions of **Taltale Districts of Borena Zone**. Besides, Calcaric Fluvisols which contain calcaric materials are localized only in **southern Taltale district**.

## 2.7. Vegetation and wildlife

### **2.7.1. Vegetation**

#### **2.7.1.1. Major types of Natural vegetation**

High forest, broad leafed forests, wood land, bush and shrub land, grass land and plantations trees are found in the zone. The high forest sub-classification of upland dry evergreen (juniperus procera) forest which is known as Forest of Borena is found on the southern escarpment and hills of the zone between 1500 and 2000 m.a.s.l Arero, Mega and Yabello forests are included within this category.

**Climatic Climax Natural Vegetation**

Climatic climax vegetation is natural vegetation that would develop in the absence of human influence and reflects the optimal vegetation of an area as determined by environment condition only. The following descriptions of the climatic climax vegetation of Borena, therefore attempt to show the vegetation that should have developed if the destruction of vegetation by man had not taken place in the zone.

1. **Woodland and Savannah Region**

This region extend from lower to higher elevations ranging from 400 to 2000m with mean annual rainfall varying from as low as 250mm to over 1300mm. It consists of three types of woodland and savanna. These are mixed deciduous woodland and savanna, **juniperus woodland** and **savanna** and **various type of acacia woodland and savanna.**

1. **Junipers woodland and savanna**:

This type of forest found at higher altitude which ranges from 1400-2100 meter a.s.l. and with mean annual rainfall of 550 to 875mm. It is confined to Yabello, and Arero district of the zone.

1. **Acacia woodland and savanna**:

This region occupies varied environments. It is found at elevation of ranging from as low as 250 to as high as 2200 m.a.s.l. and mean annual precipitation of 300 to 875mm. Acacia woodland and savanna region is found in the larger areas of the zone including in districts of Moyale, Taltal, Arero, Dirre , Dillo, Dhas, Miyo and Yabello.

1. **The Grassland Region**:

This climatic climax region considered as the grassland climatic climax where the dominant vegetation of various species of grass is found within the woodlands and savanna lands at lower elevations with generally drier conditions. It occupies extensive areas of the zone including Moyale, Taltal, Arero, Dirre , Dillo, Dhas, Miyo and Yabello.

1. **The steppe Region**:

This region occupies altitude of up to 1400m with mean annual rainfall of up to 500mm. It is characterized by scattered thorny deciduous shrubs and short acacia, with small leaves, less than 4m high and usually resin or gum bearing and aromatic. It includes areas of Dhas, Yabello, Arero, Moyale and Dirre district.

**Natural and man-made forests**

Large Portion of Borena zone is believed as have been covered by forest in the past. These days due to increasing human interference, their coverage is decreasing from time to time. Despite this interference same Pocket areas of forest cover are still found in different parts of the low lands. There are protected government forests partly planted by man and partly natural. These forest areas include forest in Arero and forest in Yabello.

It is worth mentioning that these forests are constantly under destruction illegally. The illegal deforestation activities include forest clearing for expansion of farm land, local lumber production, fire wood and charcoal production.

Table 1. Forest in Borena zone

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Name of forests** | **Location district** | **Natural** | **Man made** | **Hectare** |
|  | Arero-Yabello forests | Arero-Yabello | Natural | DNA | DNA |

**Source:** Borena zone Agriculture and Rural Development office

### **2.7.2. Wildlife and Agro – Climatic Of the Zone**

**Borena National Park**

**Borena national park** (BNP) designated as national park on june 2013 embracing 5 block: Yabelo , Sarite, Dire Dida Soda , Magado , Gamado Mountain for its exceptional potentials of bird life and home of different mammalian species. Of the blocks, Yabelo is known as a wildlife sanctuary as of 1986 when it was primarily established for the purpose of conserving Swayne’s Hartebeest that currently extinct locally.

**Description of the Destinations Location and Area**

Borena National Park (BNP) is situated in the southern part of Ethiopia at distance of 560 (yabelo) to 770 (gamado mount) km from Addis Ababa and covers a total area of 3,731 km2 surface area.

**Agro – Climate**

The altitude range between 900-2000m a.s.l and the rain type is bimodal, and the longest rainy season is from mid-March to June and the shortest showery rain season from mid-September to November with an average annual rainfall variation from 500mm in lowland area to more than 700mm in the highland areas. The daily peak temperature rises from December to February varying from 36 0c to 39 0c.

**Vegetation cover**

The vegetation of the BNP is associated with altitudinal climate of dry **“Weyna Dega**”. The southern range is lowland semi arid bush and savannah grassland and associated with rare canopies of dense forests suitable for many mammals and birds. The most common vegetation types are savanna woodland dominated by various species of thorny acacia within the altitude range of 1800-2000 m a.s.l. There is a declining forest of *Juniper procera* outside the park areas*.* The grassland mostly has Termites heaps which also demand conservation measure as it decreases the grassland area (Fig 2.2).



Fig. 2.7.2 Termites heaps destruction of the vegetation in Bake area

#### **2.7.2.1. Major types of wildlife**

Wildlife is one of the most important natural resources which Borena zone is endowed with. The diverse climate and topography of the zone has provided arrange of natural environments supporting a wide variety of fauna and flora. About 30 species of mammals and more than 300 species of bird life has been recorded in the park. BNP is an interesting ornithological region being a home to 64% of the Somali-masai bird biome assemblage and habitat to critically endangered birds and mammal species.

Bird species habitat in BNP are Ethiopian Bush Crow, White-tailed Swallow, Ostrich, Archer’s grey-wing, little spotted wood pecker , Grey-headed Silver-bill and little tawny Pipit,Somali Sparrow, Star-spotted nightjar and so on.

Some of a remarkable mammal species found in the park includes :- Gravy’s Zebra, Grant’s gazelle, Gerenuk, bias Oryx, Greater kudu, lesser kudu, Cheetah, Leopard, Lion and so on.



**Plains Zebra/ Burchell’s Zebra White Tailed Swallow Ethiopia Bush Crow Prince Ruspoli’s Turaco Ostrich**

Fig. 2.3 Some Wildlife of Borena National Park

(Source: Yabello Wildlife Sanctuary and OFWE Brochure, 2021)

However as the case in other parts of the region the numbers of wild creatures has been decreasing mainly due to the destruction of natural vegetation which is their natural habitat and uncontrolled hunting.

**Other Attraction around Borena National Park (BNP)**

1. **Historical and Cultural Heritages Site**

An existence of historical and cultural heritage in Borana national Park known as **Arda Jila** a place where a ceremony/festival for adoring their God has been practiced. This interesting unique experience are connected with Gada Oromo administration system and Borana is where this ceremony is taking place, inscribed manuscript on the top of Walmel mountain and indigenous culture maintained till today.

1. **Boke Soda /El-Soda/**

**Boke soda** in Afan Oromo dialect mean a natural salt water pond. The natural salt water pond is a creator Lake where thousands of Borana and neighboring pastoralist communities get salt for cattle’s fattening and consumption. From the top to creator lake is about 3 km and it is where everybody experience true adventure while ascending and descending steep slop and in very hot temperature for about 2 to 3 hrs.



**Visitors Activities**

Guest activities is plain game seeing and photographing mammals, watching birdlife, viewing interesting landform and experiencing host communities indigenous culture.

#### **2.7.2.2. Reserved Areas**

In fact, there were measures taken by the government to conserve the wild animals. Among these measures the formation of Borena zone controlled hunting areas; the Yabello wildlife sanctuaries (presently, Borena national park) and wildlife reserves are mentioned. However it demands much effort to enhance sustainability in these wildlife conservations areas.

# 3. Socio Economic Profile

## 3.1. Population

According to 2002 population and housing census result projected total population of Borena zone for in 2012 E.C. it comprises 89.2% of total population while urban population was comprises 10.8 % of total for detail , see the table below.

Table 2. Borena zone population Number

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year (E.C) | Urban + Rural | | | Urban | | | Rural | | |
| **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| 2011 | 270,965 | 268,057 | 539,022 | 30,497 | 27,701 | 58,198 | 240,468 | 240,356 | 480,824 |
| 2012 | 278,946 | 275,897 | 554,843 | 31,773 | 28,861 | 60,634 | 247,173 | 247,173 | 494,209 |

Source:-Oromia Planning & Development Commission

## 3.2. Agricultural

### **3.2.1. Crop Production**

Land is the basic agricultural resource in which the society depends up on for crop production. In addition the contribution of labor, capital and input to the agricultural production were high. Estimates of area and production of major crops for private peasant holding of Maher season

1. Table 3. Land Cultivated and Estimates of area( in ha) & production (in Qt) of Major crops for private peasant holdings by seasons( maher& Belg)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Major crops | Cultivated Land by seaon (Maher /Ganna/ | | Cultivated Land byseaon (Belg /Haggaya/ | | Productivites in Maher(Ganna)Kun. | | Productivites in Belg(Haggayya)Kun. | |
| 2011 EFY | 2012 EFY | 2011 EFY | 2012 EFY | 2011 EFY | 2012 EFY | 2011 EFY | 2012 EFY |
| 1 | Maize | DNA | 22,529 | 20604.2 | 441 | DNA | 35389 | 69188 | 3320 |
| 2 | Sorghum | DNA | 4303.74 | 4110 | DNA | DNA | 42786 | 16440 | DNA |
| 3 | Harcout been | 2313 | 25511 | 17574.9 | 565 | 11102 | 331872 | 89596 | 4625 |
| 4 | Teff | 280 | 19690 | 7239 | 157 | 1008 | 187282 | 73937 | 408 |
| 5 | Wheat | 105 | 5010 | 2022.0 | DNA | 504 | 10989 | 10441 | DNA |

Source;- Agricultural Development Office

### **3.2.2. Input Utilizations**

Application of modern input in production process has been positive influence to ward agricultural production. One means of measuring productivity of crop production is efficiency of input utilization in appropriate ways. The common modern inputs used in Borena Zone are fertilizers, improved seeds, which are listed in below table.

Table 4. Borena Zone the Amounts & types of fertilizers, improved seeds, pesticides & herbicides distributed to farmers & number of farmers utilizing by type & by sex

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Type of items | Amount (kun) | Number of farmers Utilized in 2011 | | | Number of farmers Utilized in 2012 | | | |
| M | F | Tot | M | F | Tot |  |
| 1 | Fertilizer (urea) Distributed in the District | 463 | 16 | 2 | 18 | 770 | 82 | 852 |  |
| 2 | Fertilizer(DAP) Distributed in the District | 1,527 | 211 | 16 | 227 | 2403 | 267 | 2670 |  |
| 3 | Improved seed Distributed in the District | 914 | 2205 | 173 | 2378 | 2258 | 202 | 2460 |  |
| 5 | Pesticides Distributed in the District | DNA | DNA | DNA | DNA | DNA | DNA | DNA |  |
| 6 | Herbicides distributed in the District | 265 | DNA | DNA | DNA | 370 | 28 | 398 |  |

Source;- Agricultural Development Office

### **3.2.1. Development Agent**

According to Borena Zone the contribution of development agent to ward agricultural development is significant. By taking in to consideration Borena Zone have the following development agent during the past years.

Table 5. Borena Zone Extension Service Coverage in the year 2011 and 2012 E.C

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Number of Development Agent | Number of farmer Served | DA/FS |
| 2011 | 644 | 196,201 | 1:385 |
| 2012 | 709 | DNA | DNA |

Source;- Agricultural Development Office

### **3.2.3. Land Use and Land Cover**

Land utilization is one of the principle ways to measure the performance of agricultural production. As land is one of the most important natural resource provided by nature for man’s aid, utilizing without any effect increase the output generate from it. This is true for Borena Zone. So, the land use and cover of Borena Zone is as we show on the table

Table 6. Land use and land cover of Borena zone in the year 2012 E.C

|  |  |  |
| --- | --- | --- |
| Proposed Land Use | Recommended Management | Land Size in Hectars |
| Area Suitable For Cattle and Sheep Production After Bush Clearing | Bush Clearing | **830,084.63** |
| Area Suitable For Goat and Camel production After Bush Thinning | Bush Thinning | **514,428.54** |
| Built Up Buffer | \_\_\_ | **4,700.39** |
| Currently Suitable For Cattle and Sheep Production Without Intervention | Currently Suitable | **483,153.38** |
| Currently Suitable For Goat and Camel Without Intervention | Currently Suitable | **247,944.39** |
| Protective Forestry | Area Closure | **80,404.66** |
| Perennial Marsh | \_\_\_\_ | **5,895.48** |
| Perenial Crop Cultivation | \_\_\_ | **3.38** |
| Built-Up Area | \_\_\_ | **1333.368** |
| Forest | \_\_\_\_\_ | **6,392.02** |
| Protected Forestry | Area Closure | **20,248.66** |
| River Buffer Zone | Area Closure | **8,820.23** |
| Area Suitable For Cattle Production After Bush Clearing | Bush Clearing | **510,12.718** |
| Area Suitable For Goat Production After Bush Thinning | Bush Thinning | **510,779.21** |
| Currently Suitable For Cattle Production | \_\_\_ | **14,713.98** |
| Currently Suitable For Irrigated Coffee | Irrigation | **3,479.20** |
| Marginally Suitable For Teff Production | \_\_\_ | **56,444.01** |
| Built Up Areas Buffer Zone | Settlement Buffer Zone | **7,436.00** |
| Area Suitable For Cattle and Sheep Production | Improved Grass Variety | **520.595** |
| Currently Suitable For Goat and Camel Production |  | **8.625** |
| Currently Suitable For Teff Production | Improved Grass Variety | **6205.737** |
| Suitable For Cattle and Sheep After Land Reclamation | Land Reclamation | **33,471.68** |
| Currently Suitable For Citrus,Groundnut, pepper &Shallot By Irrigation | Irrigation Scheme | **195,132.81** |
| Lava | \_\_\_ | **16,695.43** |
| Water Body | Water Body | **11,780.40** |
| Marginally Suitable For Lowland Maize | \_\_\_ | **7548.206** |
| Moderatly Suitable For Haricot Bean Production | \_\_\_ | **5,775.58** |
| Currently Suitable Area For Cattle and Sheep Production | Currently Suitable | **145.963** |
| Currently Suitable For Irrigated Shallot,Potato,Sweet-potato, Mango, Banana, Groundnut, Sesame | Irrigation | **0.027** |
| Area Suitable For Goat and Camel After Land Reclamation | Land Reclamation | **59.568** |
| Area Suitable For Cattle Production After Land Reclamation | Land Reclamation | **667.231** |
| Forage Production | \_\_\_\_ | **4,139.03** |
|  |  | **3,078,412.41** |
|  |  |  |

Source;- Borena Zone Land Use Resources

### **3.2.4. Agricultural Calendar**

Borena Zone has two cropping season known as belg and Meher for short and long rain season respectively. The belg land preparation usually starts in September and plantation usually starts October with the short season crop. Whereas the meher season land preparation start in February is the main plantation season throughout the zonal district.

Table 7. Borena Zone Agricultural Calender of belg and Meher season

|  |  |  |
| --- | --- | --- |
| Activity | Belg | Meher |
| Land Preparation | Sep | Feb-march |
| Plantig | Oct | Apr |
| Weeding | Mid-Oct | Apr- last |
| Flowering | Last November | June |
| Maturing | Dec | July |
| Harvesting | Dec last | July |

Source;- Agricultural Development Office

### **3.2.5. Major Crop Pest**

In Borena Zone the major crop pest are ABW (African ball worm), American Ball Worm, which highly affected the cereals.

Table 8. Borena Zone major crop pest with affected crop in year 2011 and 2012 E.C

|  |  |
| --- | --- |
| Major crop disease | Crops affected |
| American ball worn | Maize ,Haricot ,bean ,green, gram |
| Arm Worm | Sorghum & Teff , Maize wheat |
| Stock borer | Maize &Sorghum |
| Fungal disease | Cereal pulses and fruits |
| Rust | Cereal pulses |
| Black smut | Teff, maize , barley ,sorghum and etc |

Source;- Agricultural Development Office

### **3.2.6. Irrigation**

Irrigation is the artificial watering with regard to cultivated land. It could be said to be a process of artificial supplying water to soil for raising crops increasing where to total rain fall is either insufficient time.

Farmers engaged in, area irrigated and the amount of crops produced by types, and type of irrigation scale (small, medium and Large scale)

Number of farmers’ engaged in activity of irrigation Practices

**Male 6669 Female 2281 Total 8950**

**Area/Hectare 1004.59 In small scale irrigation.**

**Amount of crops produced by Type.**

Table 9. Borena Zone Production and land Cultivated of irrigation

|  |  |  |  |
| --- | --- | --- | --- |
| No | Crop Type | Unit | Amount |
| 1 | Tomato | Kuntal | 5027.75 |
| 2 | Onion | Kuntal | 925.5 |
| 3 | Carrot | Kuntal | 264 |
| 4 | Beet root | Kuntal | 254.5 |
| 5 | Pepper | Kuntal | 829.5 |
| 6 | Haed-cabbage | Kuntal | 437 |
| 7 | Cabbage | Kuntal | 15330.25 |
| 8 | Maize | Kuntal | 3498 |
| 9 | Sorghum | Kuntal | 1278 |

Source; - Agricultural Development Office

Table 10, NGOs found in the zone/District including their functions.

|  |  |  |
| --- | --- | --- |
| No | Name of NGOs working in Agriculture | Working type/function/ |
| 1 | CIFA | Watershed and procurement of seeds |
| 2 | HEKS | Watershed management |
| 3 | AFD | Watershed and procurement of seeds |
| 4 | Helvetia’s | procurement of seeds |
| 5 | Hundee grassroots | procurement of seeds |

### **3.2.7. Service co-operatives**

In Borena zone, cooperative is very important in changing the livelihood life of pastoralist community. Accordingly, in the zone there were 534 cooperative associations and 4 unions in 2012 E.C. In the same year the number of member of cooperative association were 39,066 their capital was 118,754,057 for cooperative association and 20,107,690 for unions.

Table 11. Types of cooperatives in 2012 E.C

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Types of Cooperative Associations | No. Cooperative | Members | | | Equity of cooperatives | | | Capita |
| **Male** | **Female** | **Total** | **Variable** | **fixed** | **Total** |
| 1 | Agriculture | 196 | 4501 | 5626 | 10127 | 24094857 | 12180780 | 36275637 |  |
| 2 | Saving and credit | 318 | 9716 | 18153 | 27869 | 68,116,836 | 10,077,864 | 78,194,700 |  |
| 3 | Consumer coop. | 20 | 655 | 415 | 1070 | 4,097,066 | 186,653 | 4,283,719 |  |
| Total | | 534 | 14872 | 24194 | 39066 | 963,308,759 | 22,445,297 | 118,754,057 |  |

Source :- Borena zone Cooperative Office

Table 12. Types of union in Borena zone 2012 E.C

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Types of Cooperative Associations | No. Cooperative | Members | | | Equity of cooperatives | | | | Capita |
| **Male** | **Female** | **Total** | **Variable** | **fixed** | **Total** | |
| 1 | Horsiise Bula Gadaa | 9 | 883 | 368 | 1,251 | 8,209,828 | 2,788,701 | 10,998,530 | 10,998,530 | | |
| 2 | Odaa Rooba | 15 | 602 | 1913 | 2515 | 3,956,686 | 1,029,900 | 4,986,586 | 4,986,586. | | |
| 3 | Milkii | 22 | 265 | 757 | 1,022 | 797,761.35 | 1,648,688.65 | 2,446,450 | 2,446,450 | | |
| 4 | Hangasu Roobaa | 18 | 149 | 1,207 | 1,356 | 1,676,124 | - | 1,676,124 | 1,676,124 | | |
| Total | | 56 | 1,809 | 2,752 | 4561 | 14,640,399.35 | 5,467,289.65 | 20,107,690.0 | 20,107,690.00 | | |

Source :- Borena zone Cooperative Office

### **3.2.8. Major Problems of Agriculture**

As already indicated in the document shortage of fertile farm land, unreliability in the amount and distribution of rain fall, high deforestation, low expansion of extension services, shortage and untimely available modern agricultural inputs and shortage of growing seasons and different kinds of army worms such as apes, birds (Girisa) and stalk borer are major problems of agriculture in Borena zone

### **3.2.9. Food Aids and Situation of Drought**

Borena zone is one of pastoralist zone of which community depends on rearing of livestock and agriculture. There is rain fed agriculture practice in the zone little irrigation practice is found in few wereda’s of the zone. In the zone the rainfall condition was not sufficient for livestock rearing and agriculture. So, most of the time the communities are vulnerable to drought at different time, this indicates that the community depends on food aid. Different type’s grain was distributed at different time to the communities. The data obtained from Borena zone disaster prevention office report indicates, the relief was distributed in different round for people affected by drought the types of grain distributed were edible oil, pulses and CSB.

Table 12. **Borena Zone Relief Distribution Report for the year 2011 and 2012**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S/n | Name of Woreda | No of Benefiaries | | | Relief distributed | | | | Distribution round |
| Male | Femel | Total | Wheat | Oil | Pulse | CSB |
| 1 | Arero | 11250 | 13750 | 25000 | 8218.65 | 137.33 | 248.5 | 173.2 | 1-6 round |
| 2 | Dhas | 8100 | 9900 | 18000 | 9217.5 | 223 | 166.5 | 282.55 | 1-6 round |
| 3 | Moyale | 10750 | 14250 | 25000 | 11156.75 | 264.3 | 159.5 | 374.5 | 1-6 round |
| 4 | Dirre | 6750 | 8250 | 15000 | 5047 | 151.62 | 46.7 | 112 | 1-6 round |
| 5 | Taltale | 11625 | 13375 | 25000 | 7569.1 | 214.53 | 157.3 | 223.89 | 1-6 round |
| 6 | Guchi | 9325 | 10675 | 20000 | 8874 | 270 | 300 | 314 | 1-6 round |
| 7 | Elwaye | 13501 | 16499 | 30000 | 8415.25 | 129.3 | 212.5 | 175.94 | 1-6 round |
| 8 | Dillo | 8550 | 10450 | 19000 | 7878.5 | 215.13 | 196.49 | 244.25 | 1-6 round |
| 9 | Dubuluq | 8100 | 9900 | 18000 | 5605 | 105.38 | 0 | 143 | 1-6 round |
| 10 | Gomole | 15750 | 14250 | 30000 | 11938.8 | 268.5 | 312 | 224 | 1-6 round |
| 11 | Yaballo | 11175 | 13825 | 25000 | 9791.8 | 300.61 | 0 | 259.25 | 1-6 round |
| 12 | Miyo | 8799 | 11201 | 20000 | 7975.15 | 203.64 | 0 | 75.25 | 1-6 round |
| 13 | Wachile | 6645 | 8355 | 15000 | 5476.15 | 114.84 | 119 | 172 | 1-6 round |
|  |  | **130320** | **154680** | **285000** | **107164** | **2598** | **1918** | **2773.8** |  |

Source: Zone disaster prevention and preparedness office.

### **3.2.10. Livestock Population**

Borena zone has very large livestock and poultry resource. Livestock rearing has played an important in the life of zonal population. So, the total number of livestock population of the zone are indicated below.

**Table 13. Borena Zone number of livestock, poultry and bee hives distribution**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Types and number of livestock in Borana zone Based on woreda , year 2011** | | | | | | | | | | | | | |
| **No.** | **Zonea** | **Unit** | **Types $ No.of livestock based on woredas,2011 E.C** | | | | | | | | **Types of bee hives** | | |
| **Cattle** | **Goats** | **Sheep** | **Camel** | **Donkey** | **Mule** | **Horse** | **Chicken** | **Traditional hive** | **Transional hive** | **Modern hive** |
|  | Total |  | 1,416,180 | 1,262,782 | 776,870 | 237,205 | 102,767 | 4,433 | 1,841 | 306,057 | 42961 | 831 | 1093 |

Source: - Borena zone livestock Office

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Table 14: Number of livestock and poultry by private holding year 2012*** | | | | | | | |  |
| **Zone** | **Cattle** | **Goats** | **Sheep** | **Horses** | **Mules** | **Donkeys** | **Camels** | **Poultry** |
| **Total** | **2,019,416** | **1,923,695** | **429,013** | **2,094** | **5,092** | **110,114** | **305,284** | **452,630** |

Source: - Borena zone livestock Office

### **3.2.11. Livestock Disease**

Disease has numerous negative impact on productivity of the livestock. i.e. death of animals, loss of weights, slow down growth, poor fertility performance, decrease in physical power and the like. There have been many ways of fighting against disease and among these, vaccination and treatment are the major ones. There are different disease that affect live stock population in Borena zone. The major diseases which affect livestock are indicated below.

Table 15. Borena zone Major Animal’s Disease

|  |  |  |
| --- | --- | --- |
| No. | Type of Animals | Type of Disease |
| 1. | Bovine (Cattle) | Contagious Bovine Pleuro Pneumonia(CBPP) |
| Foot and Mouth Disease (FMD) |
| Lampyn skin disease (LSD) |
| Internal Parasite |
| External Parasite |
| Bovine Pasterollosis |
| 2. | Ovine,Ca(sheep,goat) | Contagious CaprinePleuro Pneumonia |
| Peste Des Petites Ruminantes (PPR) |
| Coenurus Cerebrals |
| Mange,Intranl Parasite |
| 3. | Equine (Horse,donkey,mule) | Intranl Parasite |
| African Horse Sickness  Glanders  External Parasite |
| 4. | Poultry | Newcastle disease  Gumbaro  Foal Pox |
| 5. | Camels | Unknown Camel Disease  Traypanasoma  Camel Pox  Pasterollosis  Endo Parasite  External Parasite |
| 6. | Bees | Nosema  Chalk Brood |

Source: - Borena zone livestock Office

### **3.2.12. Veterinary Infrastructure**

To care livestock population from different disease are the major economic importance for the region as well as for the zone.

Table 15. Borena Zone Veterinary Service, Personnel and treatment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2011 E.C | | Total | 2012 E.C | | Total |
| Clinic Type C | **Clinic Type D** | **Clinic Type C** | **Clinic Type D** |
| 12 | 110 | 122 | 12 | 122 | 134 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | DVM | AHA | BVS | AHT | CAHWS |
| 2011 | **16** | **205** | **34** | **22** | **305** |
| 2012 | **19** | **205** | **34** | **22** | **305** |

Source: - Borena zone livestock Office

## 3.3. Mining and Industry

### **3.3.1. Mining Resources**

Minerals are natural occurring organic and inorganic substances with a definite chemical and physical composition. The occurrences of these minerals are associated with the distribution of various types of rocks. The geological back ground of Borena zone has provided favorable conditions for the occurrence of variety of minerals. Hence according to some geological studies so far made various types of minerals have been found in district of the zone such us **Dire, Arero, Dillo Yabelo, Taltale, Dhas.** The minerals deposits of this zone which can be sub divided in to metallic minerals, non metallic minerals and gemstone includes nickel, cobalt, rare metals (columbines tantalite), kaolin, feldspar and quartz, talc, graphite muscovite, asbestos, lime stone, gypsums, olivine and garnet. This mineral is not much exploited except same studies.

Table 16. Distribution of Minerals in Borena Zone

**Mineral potential in Borana Zone**

1. **Metalic minerals**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Name of  mineral | Woreda | Kebele | Specific area | Source of data | Reserve  potential | Comercial use |
| 1 | Copper/  malachite | Arero | Horoto | Qarsa qeramsa | Arero ,s Deski mineral office | Not explored detail | For industrial imput,used as ore of Irone |
| 2 | Copper/  malachite | Wacile | Weeb | Haara Duuba DuubaLiiban | Borana zone mineral exploration team | Not explored detail | For industrial imput,used as ore of copper |
| 3 | Malakayiti | Taltalle | Ibsa | Bonbon | Borana zone mineral exploration team | Not explored detail | For industrial imput,used as ore of copper |
| 4 | Malakayiti | Guchii | irdari | Gubba adii | Borana zone mineral exploration team | Not explored detail | For industrial imput,used as ore of copper |
| 5 | Irone | Elwaye | Hiddii | xinniqaa | Borana zone mineral exploration team | Not explored detail | Ued for industrial imput.used as ore of irone |
| 6 | Irone | Yaballo | Areeri | Carii arburoo | Borana zone mineral exploration team | Not explored detail | Ued for industrial imput.used as ore of irone and production of elecric |
| 7 | Tantalum | Dhaas | Dhaas | Eeltokkocha | Borana zone mineral exploration team | Not explored detail | Used for production of metals |
| 8 | Gold | Arero | Hirmaye | Qorii | Arero ,s Deski mineral office | Not explored detail | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 9 | Gold | moyale | Dambi camee | Dako | Borana zone mineral exploration team | Not explored detail | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 10 | Gold | Gomole | Harboro | Oogale | Borana zone mineral exploration team | Not explored detail | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 11 | Gold | Gomole | Dhadacha qufa | Bunyata | Borana zone mineral exploration team | Not explored detail | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 12 | Malakayit/  copper | wacile | weeb | Teesso cabbii | Wacile Deski mineral office | Area coverage  1.25 hektar  But reserve not detail explored | Used as ore of copper,gem and ornamental stone and raw material for glass industry |
| 13 | Malakayit/  copper | waccile | Hara jaarte | Soraa dheera | Wacile Deski mineral office | Area coverage  1.5hektar But reserve not detail explored | Used as ore of copper,gem and ornamental stone and raw material for glass industry |
| 14 | Imerald/  copper | wacile | Garbi | H/ibreen | Wacile Deski mineral office | Area coverage  0.89hektar  But reserve not detail explored | Used as ore of copper,gem and ornamental stone and raw material for glass industry |
| 15 | Malakayit/  copper | waccile | Weeb | Kobe manka | Wacile Deski mineral office | Area coverage  1.5hektar But reserve not detail explored | Used as ore of copper,gem and ornamental stone and raw material for glass industry |
| 16 | malakayit | Arero | Horooto | Dhaka barricha | Arero Deski mineral office | Area coverage  0.77hektar  But reserve not detail explored | Used as ore of copper,gem and ornamental stone and raw material for glass industry |
| 17 | Sookoo/ Gold | Arero | madari | Algee | Arero ,s Deski mineral office | Area coverage  0.947hektar  But reserve not detail explored | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 18 | Sookoo/ Gold | Arero | Hirmaye | Qolaansa | Arero ,s Deski mineral office | Area coverage  0.9hektar  But reserve not detail explored | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 19 | Sookoo/ Gold | Arero | Hirmaye | Boore | Arero ,s Deski mineral office | Area coverage  0.8hektar  But reserve not detail explored | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |
| 20 | Sookoo/  Gold | Arero | Hirmaye | siltaacho | Arero ,s Deski mineral office | Area coverage  1.5208hekta  But reserve not detail explored | Used For jewelry  ,ornaments ,medals ,medicine and dentistry |

Source: - Borena zone Minral Office

1. **CONSTRUCTION ROCK & MINERALS (Dhagaaf Albuudota ijaarsa))**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Name of  mineral | Woreda | Kebele | Specific area | Source of Data | Reserve potential | Comercial use |
| 1 | **Basalt** | Dirre | madhacho | Karaa sooda | Borana Zone  Mineral exploration Team | Not explored detail | Construction,  Coblestone  anda  Dimensionston |
| 2 | **Basalt** | Gomole | Keela qufa | Malka bal,oo | Borana Zone  Mineral exploration Team | Area coverage  2.7hektar  butNot explored detail | Construction,  Coblestone.  Dimensionston |
| 3 | **Basalt** | Arero | Horoto | Qarsaa Lolaa | Arero Deski mineral office | Not explored detail | Construction,  Coblestone.  Dimensionston |
| Haroo Diimtu | Dhagaa Lubbuu Adii | Arero Deski mineral office |  |
| Guutoo | Bokdha | Arero Deski mineral office | Not explored detail | Construction |
| 4 | **Dhagaa Gurach**  **(basalt)** | Dhas | Dhas | Urgeessa Dabasich | Dhas Deski mineral office | Not explored detail | Construction |
| Hidha Arbii | Dhas Deski mineral office | Not explored detail | Construction |
| 5 | **basalt)** | Dhas | Gaayo | Dhagaa Teessoo | Dhas Deski mineral office | Not explored detail | Construction |
| Borbori | Lafa Dha,a | Dhas Deski mineral office | Not explored detail | Construction |
| 6 | **basalt** | Dillo | Ciratte | Hara Arbaa | Dillo mineral office | Not explored detail | Construction |
| 7 | **basalt** | Dire | Madhacho | Booqee China | Dire Deski mineral office | Not explored detail | Construction |
| 8 | **Basalt** | elwaye | Eelwayye  Badiya | BuleeGoola | elwaye Deski  mineral office | Not explored detail | Construction |
| 9 | **Basalt** | Gomole | suruphaa | Qorkee | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 10 | **pumice** | Dirree | kulaa | kulaa | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 11 | **scoria** | Dirree | Madhacho | madhacho | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 12 | **Granite** | dilloo | Bisikaa | Bisikaa | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 13 | **Granite** | Dubluqi | Qarsa Dambi | Qarsa Dambi | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 14 | **Granite** | Dubluqi | Doofii | Doofii | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 15 | **Granite** | Dubluqi | laafto | Gaara warsesa | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 16 | **Granite** | yaballo | dharito | muyate | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 17 | **scoria** | Dillo | cirratte | Doole Diida | Borana Zone  Mineral exploration Team | Not explored detail | Construction |
| 18 | **mansa** | Aanaa hundaa | Gandoota  hundaa | All Desk mineral office | from all  Woreda desk office | Not explored detail | Construction |
| 19 | **scoria** | Elwaye | Dildila | Arbora | Elwaye Deski mineral office | Not explored detail | Used for construction purpose |

Source: - Borena zone Minral Office

1. **Albuudota Industrii/ industrial minerals**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Name of  mineral | Woreda | Kebele | Specific area | Source of Data | Reserve  Potential | Comercial use |
| 1 | Peeridooti/  Olivine | Dirre | Roomso | Gaara Abba  Gumee | Borana Zone  Mineral exploration Team | Potential  reserved | input of industry.used for jewelry pourpose |
| 2 | Peridote/  olivine | Dillo | cirratte | Goofa laalu | Borana Zone  Mineral exploration Team | Not explored detail | input of industry.used for jewelry pourpose |
| 3 | mica | Dillo | Cirratte | Bulee Qallo | Borana Zone  Mineral exploration Team | Not explored detail | input of industry.used as book and exercise book,as decoration |
| 4 | Graphite | Moyale | Dambi camee | Gaara gadamsa | Borana Zone  Mineral exploration Team | Not explored detail | Used as pencil,paints,used as lubricate |
| 5 | Drusy Quart | Arero | Alloona | Bulee harsogido | Borana Zone  Mineral exploration Team | Not explored detail | Important raw materials of glass industry,to produce jewelry |
| 6 | Drusy Quart | Gomole | Harboro | Oogale | Borana Zone  Mineral exploration Team | Not explored detail | Important raw materials of glass industry,to produce jewelry |
| 7 | chalcedon | Arero | Qaawa | Kukuba cake | Borana Zone  Mineral exploration Team | Not explored detail | Used as sheekila  Or Glass production |
| 8 | citriin | Taltalle | Dibbe Gaaya | Carii looko |  | Not explored detail | Input of glass industry |
| 9 | Quartz crystal | Taltalle | Dibbe Gaaya | Arkeena  Bubbisa | Borana Zone  Mineral exploration Team | Not explored detail | Important raw materials of glass industry,to produce jewelry |
| 10 | kiraasofer | Dhaas | Dhaas | Gaara  Hara Gudda | Borana Zone  Mineral exploration Team | Not explored detail | Used for input of industry |
| 11 | mica | Dirre | Roomso | Roomso | Dire Deski mineral office | Not explored detail | input of industry.used as book and exercise book,as decoration |
| 12 | kirasofayer | Moyale | Mormora | Gaara Qarsoo | Borana Zone  Mineral exploration Team | Not explored detail | Used forRaw material of Gem indusry |
| 13 | Industrial quartz | Elwaye | Saaba | Bulee  maalata | Borana Zone  Mineral exploration Team | Not explored detail | Important raw materials of glass industry,to produce jewelry |

Source: - Borena zone Minral Office

**D.Gem minerals**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Name of  mineral | Woreda | Kebele | Specific area | Source of Data | Reserve  Potential | Comercial use |
| 1 | Amazonite | Yaabalo | Areeri | Gaara olka,a | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 2 | Amazonite | Taltale | Dargee Dhaabaa | Kubii | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 3 | Amazonite | waccile | wallensu | dusee | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 4 | Amazonite | Miyo | Bokku Badiya | Gaara Bokosa | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 5 | Aquamarin | yabalo | Dikaale | Gubbaa dikaale | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 6 | Emerald | Gomole | Bildiim | Bildiim | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 7 | Emerald | waccile | weeb | Dogogo | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 8 | Aquamarin | Dirree | Roomso | Karaa jirmaa | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 9 | Blue safayer | Eelwaye | Carii Ruufayi | Ruufayi | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 10 | Garnet | Moyale | Dambii Haraa | Tulluu Gaala | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 11 | Green Garnet | waccile | weeb | Funnan  Hoowwichoo | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 12 | aquamarin | Taltalle | Dargee | Hoofaa | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 13 | imerald | Arero | hirmaye | Eela Odaa | Arero Deski mineral office | Not explored detail | Used for  Jewelry purpose |
| 14 | Green Garnet | Dillo | cirratte | Goofa laalu | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 15 | Red Garnet | Dhas | Teesso Qallo | Hiddaa | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |
| 16 | Green tourmaline | miyo | Hidha  Babo | Dhaka  Roba | Borana Zone  Mineral exploration Team | Not explored detail | Used for  Jewelry purpose |

Source: - Borena zone Minral Office

### **3.3.2. Industry**

Industry is a key to economic development and cultural change in the economy. Borena zone is at low level or infant almost there is small scale industry in the zone. Mostly

#### **3.3.2.1. Number of Small Scale Industry**

The number of small scale industries in Borana zone is fluctuates through time (increase and decrease) because of at some interval time the owner terminate their industry. The main reason for the termination of industry is the increasing of raw material cost and low demand of the product in the market.

***Table - 16* Number of Micro and Small Scale Enterprise by type, year \_2012**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Zone/District | Industry | Service | Manufacturing | Agriculture | Construction | Trade | Minerals | Others | Total |  |
| Ida'ama |  | **140** | **55** | **252** | **79** | **420** | **102** | **153** | **1201** | Total |

Source: - Borena zone Industry & Enterprise De”t

***Table 17 Number of medium and large scale industries by type & ownerships* year \_2012**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Type of industry | Private | Public | Total | Foreign | Domestic | District/Zone |
| Number of industries by ownerships | | | | |
|  |  | Private | Public | Total | Foreign | Domestic |  |
| Dirree | Galtee Ijaarsaa | 1 |  | 1 |  | √ |  |
| M/Yaaballo | Muka fi sibilaa |  | 3 | 3 |  | √ |  |

Source: - Borena zone Industry & Enterprise De”t

## 

## 3.4. Infrastructure and Social Facilities

### **3.4.1. Transport**

**Table 18. Distribution of roads by types in Borena zone in 2012E.C**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| length of road by KM | | | | |
| All weather roads | | | **Dry weather road** | **total** |
| Asphalt | Gravel | coblestone |  |  |
| 555.7 | 2022.32 | 3.27 | 842 | 3423.29 |

Source: - Borena zone Rode Authority

### **3.4.2. Communication**

**Telecommunication services**

Regarding telecommunication accessibility, in all woreda’s of the zone there is network availability from fixed line to mobile network but the land line services is limited to the woreda’s having telecommunication center. The detail information about telecommunication service is not available.

### **3.4.3 Water and Energy**

#### **3.4.3.1 Water**

Pond, Well (motorized), Tape water (Bore hole fitted with hand pump) and Spring are the major sources of drinking water in rural areas of Borena Zone respectively. Similarly, in Urban areas Well (motorized) and spring are the major sources of drinking water in the Borena zone. About 41.97% of total rural population of Borena zone supplied with potable water and **50.87%** total urban of populations of Borena zone supplied with potable water. Generally, as a Borena Zone about **43.90%** of populations are supplied with potable water (upto 2012 E.C).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 19.Summary of Borena Zone schemes which are Functional (up to 2012 E.C) | | | | | | | | |
| Name of schemes | Deep well motorized | Shallow well motorized | Gravity spring | Motorized spring | Spring on spot | HDW fitted hand pump | Shallow well fitted with hand pump | Shallow well fitted with solar pump |
| Number of Functional | **111** | **-** | **11** | **-** | **5** | **23** | **198** | **5** |
| Total | **353 schemes** | | | | | | | |

Source:-Borena Zone Water & Energy Resource Development Office

While, as a Borena Zone upto now about 353 schemes are functional and 107 schemes are non-functional. But these data are not always constant; it changes time to time either increase or decrease.

Source:-Borena Zone Water & Energy Resource Development Office&Woreda Abstract

**Table 20 -In Borena Zone Source of drinking water of urban & rural areas**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Urban area | | Rural area | |
| Source of drinking water | % of population served | Source of drinking water | % of population served |
| 1 | Well (motorized) | 80.50 | Pond | 48 |
| 2 | Spring | 15.50 | Tape water (bore hole fitted with hand pump) | 32 |
| 3 |  |  | Well (motorized) | 15 |
| 4 |  |  | Spring | 5 |

Source:-Borena Zone Water & Energy Resource Development Office

**Table 21 -According to Borena Zone potable water coverage at the year 2011& 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Urban area | | | Rural area | | |
| Total population | Population supplied with potable water | Percentage of population supplied with potable water | Total population | Population supplied with potable water | Percentage of population supplied with potable water |
| 2011 E.C | 178,665 | 84,693 | 47.40 | 580,703 | 194,144 | 33.43 |
| 2012 E.C | 164,956 | 83,922 | 50.87 | 594,412 | 249,495 | 41.97 |

Source:-Borena Zone Water & Energy Resource Development Office

**1.2 Sources of Domestic Energy Supply**

As sources of domestic energy supply in general fire wood, animals dung, crop residues, charcoal and kerosene are major sources of domestic energy supply in the zone. In ranks the **rural** areas uses fire wood, charcoal, crop residue ,Kerosene and electricity are major sources of domestic energy supply respectively. Similarly, in **urban** areas electricity, charcoal, fire wood and kerosene are major sources of domestic energy supply respectively. Number of **towns** of the zonal having electric supply by sources of hydro-14, diesel-1 (Mil-lami)and biogas-0 and Number of **villages** of the zonal having electric supply by sources of hydro-24, diesel-**0** and biogas-0.

**Table 22 - In Borena Zone urban & rural population energy supply**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | Urban area | | Rural area | |
| Source of energy | % of population consumed | Source of energy | % of population consumed |
| 1 | Charcoal | 42 | Fire wood | 70 |
| 2 | Fire wood | 24.6 | Solar | 10 |
| 3 | Solar | 23 | Charcoal | 8 |
| 4 | Electricity | 8.4 | Crop residue | 5 |
| 5 | Kerosene | 2 | Electricity | 4 |
| 6 |  |  | Kerosene | 3 |

Source:-Borena Zone Water & Energy Resource Development Office

**Note:-** There is no town/kebele used solar as a community but in case of electricity there are many people’s used solar at house hold and institutions like schools, health’s,…

**Table 22 -In Borena Zone the number of towns with source of electric supply in the year 2011 & 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Number of towns | Number of town having electricity | Number of town people | Source of electric supply | | |
| **Hydro** | **Diesel** | **Biogas** |
| 2011 E.C | 13 | 8 | 131,687 | 6 | 2 | - |
| 2012 E.C | 18 | 15 | 45,000 | 15 | - | - |

Source:-Borena Zone Water & Energy Resource Development Office

**Table 23 -In Borena Zone the number of rural with source of electric supply in the year 2011& 2012**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Number of rural kebele | Number of rural having electricity | Number of rural people | Source of electric supply | | |
| **Hydro** | **Diesel** | **Biogas** |
| 2011 E.C | 134 | 20 | 38,000 | 20 | - | - |
| 2012 E.C | 134 | 31 | 39,448 | 31 | - | - |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 24 Woreda’s with Electrified & Non Electrified by population | | | | | | | | | | |
| S/No | **Woreda** | **Kebeles** | **Both Towns & Village total** | **Total population of Woreda** | **Non Electrified** | | **Electrified** | | **Both Electrified & Non Electrified by population** | |
| **Town** | **Village** | **Town** | **Village** | **towns/villages**  **Population** | **% with respect to town/village population** |
| 1 | Arero | 15 | 119 | 98,468 | - | 117 | 1 |  | 6,000 | 6.1 |
| 2 | Dhas | 11 | 48 | 98,243 | - | 46 | 1 |  | 4500 | 4.6 |
| 3 | Dilo | 10 | 98 | 68,540 | - | 98 | 0 |  | 0 | 0.0 |
| 4 | Dire | 7 | 41 | 96,897 |  | 26 | 1 | 7 | 28,438 | 29.3 |
| 5 | Dubuluk | 12 | 30 | 64,792 |  | 28 | 1 | - | 3,196 | 4.9 |
| 6 | El-Waye | 10 | 21 | 71,864 |  | 20 | 1 | 0 | 0 | 0 |
| 7 | Guchi | 19 | 30 | 64,576 | 0 | 0 | 0 | 0 | 1,215 | 1.9 |
| 8 | Miyo | 12 | 173 | 99,121 |  | 160 | 1 | 7 | 8,328 | 8.4 |
| 9 | Moyale | 13 | 49 | 82,125 |  | 37 |  | 4 | 8,890 | 13.9 |
| 10 | Gomole | 13 | 14 | 67,587 |  | 12 | 1 |  | 5,797 | 8.6 |
| 11 | Taltale | 21 | 47 | 101,631 |  | 45 | 1 |  | 6,672 | 6.6 |
| 12 | Wacile | 7 | 16 | 74,875 |  | 15 | 1 |  | 0 | 0 |
| 13 | Yabelo | 13 | 26 | 98,800 |  | 15 | - | 5 | 7,300 | 10.6 |
| 14 | Yabelo Town | 2 | 1 | 61,869 |  | 0 | 2 | - | 19,662 | 65.5 |
| 15 | Moyale Town | 2 | 1 | 61,169 |  | 0 | 2 | - | 37,404 | 78.7 |
| Total | | **165** | **716** | **1,210,557** | **0** | **619** | **13** | **23** | 137,402 | **12.4** |

**Source:-**Borena Zone Water and Energy Resource Development Office

**Fuel station**

Regarding the fuel stations center, only few stations were available in Borana zone in 2011/2012. The fuel stations found in the zone are Total stations, TOTAL, Yetebaberut, TAF,ODA,Oil Libya and NOC station (national oil corporation). This is only close to the asphalt road and still there is the shortage of fuel station in many districts. The remotest woreda like Dillo, Dhas, Miyo, Elaweya,Taltale,Arero,Wachile & Guchi they don’t have fuel station.

### **3.4.4. Education**

Education enable individuals and society to make all rounded participatory in the development process by acquiring knowledge, ability, skills and attitudinal changes. Education also enable society to identify harmful tradition and replaces them by useful ones, and helps to improve ,changes, as well as develop and conserve their environment for the purpose of all rounded development by diffusing science and technology in to society .

#### **3.4.4.1. Kindergarten**

The major purpose of Kindergarten school is to sharp child by teaching about the benefit of education and to become successful in the next step of educational level .

Table -25 . Kindergarten Number and Enrolment by sex and types of ownership (gov’t,private and non-government) in 20011/2012 E.C

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Owner of the school | | Total | Number of the student | | Total |
| Government | Private | male | Female |
| 2011 | 12 | 18 | 30 | 2288 | 5938 | 8226 |
| 2012 | 10 | 21 | 31 | 7101 | 6593 | 13,694 |

Source :- Borena zone Edu. Office

#### **3.4.4.2. School Distribution**

Educational system comprises both formal and informal sectors. Formal education includes primary and secondary education . according to the available data in 2011/2012 E.C ther were 388 and 420 primary first and second cycle schools , 32 senior secondary school respectively.

Table- 26. Number of schools by levels and ownership for year2011 and 2012

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Type ownership | Number of school by level | | | |
| 1-8 | | 9-12 |  |
| 2011 | Government | 394 | | 32 |  |
| Privet | 18 | | 0 |  |
| Total | 412 | | 32 |  |
| 2012 | Government |  | 402 | 32 |  |
| Privet |  | 18 | 0 |  |
| Total |  | 420 | 32 |  |

Source :- Borena zone Edu. Office

#### **3.4.4.3 Student Enrollment**

According to the data obtained from Borana zone education office from 2011 and 2012 E.C the education enrollment increase from time to time in governmental school in both sex.

Table 27. Number of schools by levels, enrollment, dropout, detained and ownership Year

2011 and 2012 E.C

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Level of school | ownership | Number of student enrolled | | Number of student dropout | | Total | Number of student detained | | |
| Male | Female | Male | Female |  | Mele | Female | Total |
| 2011 E.C | 1-4 | Government | 43,485 | 45,638 | 158 | 144 | 302 | 40 | 41 | 81 |
| Privet | 1556 | 1537 | 55 | 35 | 90 | 12 | 10 | 22 |
| 5-8 | Government | 52,212 | 20,743 | 66 | 79 | 145 | 17 | 18 | 35 |
| Privet | 733 | 654 | 30 | 18 | 48 | 8 | 6 | 14 |
| 1-8 | Government | 95697 | 66381 | 224 | 223 | 447 | 57 | 59 | 116 |
| Privet | 2289 | 2191 | 85 | 53 | 138 | 20 | 16 | 36 |
| 9-12 | Government | 2123 | 1985 | 6 | 5 | 11 | 4 | 2 | 6 |
|  | privet |  |  |  |  |  |  |  |  |
| 1-12 | Goverment | 97820 | 68366 | 230 | 228 | 458 | 61 | 61 | 122 |
| privet |  |  |  |  |  |  |  |  |
| 2012 E.C | 1-4 | Government | 39,406 | 35352 | 102 | 112 | 214 | 20 | 15 | 35 |
| Privet | 1932 | 1920 | 23 | 15 | 38 | 8 | 5 | 13 |
| 5-8 | Government | 16392 | 14,304 | 50 | 35 | 85 | 18 | 10 | 28 |
| Privet | 1013 | 882 | 14 | 6 | 20 | 4 | 2 | 6 |
| 1-8 | Government | 4501 | 3663 | 152 | 147 | 299 | 38 | 25 | 63 |
| Privet | 2945 | 2805 | 37 | 21 | 58 | 12 | 7 | 19 |
| 9-12 | Government | 2558 | 2004 | 8 | 5 | 13 | 4 | 3 | 7 |
| Privet |  |  |  |  |  |  | | |

Source :- Borena zone Edu. Office

#### **3.4.4.4. Student Participation Rate**

Beside student teachers ratio, student section ratio, average school size and students participation rate are important indicator in examining the expansion of the system. Therefore, gross enrollment ratio is defined as the portion of the total student in particular level of school expressed as a percentage of the population of corresponding school age for primary education first cycle and second cycle, secondary education and preparatory education respectively.

Table 28. Participation Rate (GER+NER) for year 2011 and2012

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Level of school | GER | | | | NER | | | |
| Male | Female | Total | GPI | Male | Female | Total | GPI |
| 2011 | 1-4 | 129.3 | 110.8 | 120.2 | 0.77 | 90.0 | 84.2 | 70.2 | 0.42 |
| 5-8 | 31.8 | 33.4 | 32.6 | 1.02 | 21.5 | 20.3 | 20.9 | 1.02 |
| 9-10 | 15.4 | 12.0 | 12.5 | 0.75 | 7.7 | 3.4 | 7.2 | 0.54 |
| 11-12 | 7.9 | 6.4 | 7.2 | 0.81 | 3.2 | 2.2 | 2.3 | 1.02 |
| 2012 | 1-4 | 131.5 | 115.3 | 122.5 | 0.78 | 94.5 | 78.2 | 80.7 | 0.82 |
| 5-8 | 34.7 | 33.7 | 34.7 | 1.00 | 23.20 | 24.02 | 23.59 | 1.06 |
| 9-10 | 20.3 | 18.3 | 19.3 | 0.90 | 8.0 | 6.4 | 7.2 | 1.08 |
| 11-12 | 10.4 | 7.7 | 9.1 | 0.78 | 5.1 | 4.4 | 4.8 | 0.87 |

#### **3.4.4.5 Adult Education Enrollment**

In Borana Zone during the past 2011 and 2012 E.C the enrollment of adult education student is shown fluctuated trenda because of drop out. This is due to burden of work. As the data shown on the table respectively.

Table 29. Adult Education Enrollment by sex and level year 2011 and 2012 E.C

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Number of 1st Enrolment student | | | Number of 2nd Enrolment student | | | Number of 3rd Enrolment student | | | center |
| Male | Femal | total | Male | Female | total | Male | Female | total |
| 2011 E.C | 1021 | 651 | 1662 | 779 | 512 | 1292 | 464 | 363 | 827 | 562 |
| 2012 E.C | 5316 | 4485 | 9801 | 3225 | 2317 | 5542 | 1286 | 867 | 2153 | 415 |

Source :- Borena zone Edu. Office

#### **3.4.4.6. Students sat for National Examination**

According to the new curriculum of Ethiopain education system there is three hierarchy of examination. The first is grade eight , the second is grade ten and the third is grade twelve. In 2011 and 2012 E.C number of student sat for examination above 96% of the sudent was promoted to the next class respectively.

Table -30. Students sat for National Examination for year 2011 and 2012 E.C

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Types of examination | Number of student Sat For Examination | | | Number of Student Promoted Examination | | | % |
| M | F | Total | M | F | T |
| 2011 E.C | Grade 8th | 2593 | 2206 | 4799 | 2445 | 2016 | 4461 | 93.0 |
| EGSCE(10TH) | 1666 | 1538 | 3204 | 1593 | 1489 | 3082 | 96.2 |
| EHIEE (1212) | 854 | 600 | 1454 | 606 | 459 | 1065 | 7.2 |
| 20102E.C | Grade 8th | 2874 | 2234 | 5108 | 2703 | 2169 | 4872 | 95.4 |
| EHIEE (1212) | 1228 | 916 | 2144 |  |  |  |  |

Source :- Borena zone Edu. Office .

#### **3.4.4.7. Qualification of Primary, Secondary and Preparatory Teachers**

Among the significant factors required for improving the quality of education, the major one are qualification and experience of teachers and as well as methods of teaching is mentioned. In this regard in Borana zone the majority of primary education teachers qualification are certificates and diploma holders and in senior secondary school there are relatively good and qualified teachers(degree and masters ).

Table - 30. Number of primary, secondary and preparatory Teachers by levels of education and sex 2011 /20112 E.C

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Qualification | 1-8 | | | 9-12 | | |
| Male | female | Total | Male | femal | Total |
| 2011 E.C | Certificate & Below | 566 | 182 | 748 | - | - | - |
| Diploma | 1500 | 677 | 2177 | 29 | 5 | 34 |
| Degree | 127 | 39 | 166 | 543 | 54 | 597 |
| MA | 3 | 0 | 3 | 30 | 0 | 30 |
| Level (3 ,4) | 0 | 0 | 0 | 3 | 2 | 5 |
| Total | 2196 | 898 | 3094 | 605 | 61 | 666 |
| 2012 E.C | Certificate | 449 | 158 | 607 | 0 | 0 | 0 |
| Diploma | 1644 | 718 | 2362 | 31 | 7 | 38 |
| Degree | 167 | 52 | 219 | 542 | 61 | 603 |
| MA | 0 | 0 | 0 | 27 | 3 | 30 |
| Level (3 ,4) | 0 | 0 | 0 | 4 | 1 | 5 |
| Total | 2260 | 928 | 3188 | 604 | 72 | 676 |

Source :- Borena zone Edu. Office 2013 E.C

Table 31 . Student to class, teachers and text book ratios by level of school for year 2011 and2012

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Level of school | Student to class | Student to teachers | Student to books |
| 2011 E.C | 1-4 | 1 to 45 | 1 to 60 | 1 to 1 |
| 5-8 | 1 to 35 | 1 to 50 | 1 to 1 |
| 1-8 | 1 to 40 | 1 to 55 | 1 to 2 |
| 9-10 | 1 to 55 | 1 to 20 | 1 to 1 |
| 11-12 | 1 to 40 | 1 to 17 | 1 to 1 |
| 20102E.C | 1-6 | 1 to 39 | 1 to 43 | 1 to 3 |
| 7-8 | 1 to 35 | 1 to 10 | 1 to 3 |
| 1-8 | 1 to 38 | 1 to 33 | 1 to 3 |
| 9-12 | 1 to 50 | 1 to 18 | 1 to 1 |
|  |  |  |  |

Source :- Borena zone Edu. Office 2011 E.C

Table-32. Coverage of ICT Education by level of school for year2011 and2012 E.C

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Level of school | Total school | Plasma | Radio | Computer |
| 2011 E.C | 1-8 | 394 | 0 | 445 |  |
| 9-10 | 32 | 70 | 0 | 16(computer lab) |
| 11-12 | 9 | 135 | 0 |  |
| 2012.E.C | 1-8 | 402 | 0 | 815 |  |
| 9-12 | 32 | 135 | 0 |  |
|  |  |  |  |  |

Source :- Borena zone Edu. Office 2013 E.C

#### **3.4.4.8 The main reason why students leave the school**

1. Disease
2. Family shingles (transfer)
3. Family influence
4. Economic problem
5. Digging of work
6. School distance
7. Environmental problem, Early Marriage

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| * + 1. Health Institutions   Table-32. Health Institutions by types and ownership and their man power | | | | | | | |
|  | **Health Facilities** | | | | | | |
|  | **GOV't** | | | | **Private HF** | | |
| **HP** | **HC+WorHo** | **Hospital** | | **Private HF** | | |
| **General** | **Primary** | **Primary Clinic** | **Medi.Clini** | **Phar/Drug store** |
| Total No of H/Facilities | **175** | **44** | **1** | **2** | **52** | **11** | **11** |
| No of Beds |  | 132 | 152 | 120 | 52 | 22 | 0 |
| No of Doctors |  | 0 | 16 | 10 | 0 | 1 | 0 |
| No of Nurses |  | 306 | 64 | 42 | 99 | 23 | 0 |
| No of Health Assistants |  | 0 | 0 | 0 | 2 | 0 | 0 |
| No of Health Officers |  | 128 | 4 | 3 | 1 | 10 | 0 |
| No of Laboratory&X-ray Technicians |  | 39 | 15 | 6 | 0 | 1 | 0 |
| No of Environmental Health |  | 21 | 1 | 0 | 0 | 0 | 0 |
| No of Community Health Workers |  | 0 | 0 | 0 | 0 | 0 | 0 |
| No of Pharmacists+Drugists |  | 69 | 16 | 3 | 0 | 0 | 11 |
| No of HEWs | **602** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Source of Information =Borena Zonal Human Resource | | | | |  |  |  |

Source :- Borena zone **Health**. Office 2013 E.C

* + - 1. **Women Issue Indicators**
         1. Maternal mortality ratio =412/100,000

Source of Information EDHS 2016

* + - * 1. List out the 5 top causes for maternal death

Table-33 **The 5 top causes for maternal death(15-64 yrs) in 2011 EFY**

|  |  |  |
| --- | --- | --- |
| S/No | Diseases | Number of deaths |
| 1 | Giardiasis (Giardiasis [lambliasis]) | 16 |
| 2 | Typhoid Fever (due to Salmonella typhi) | 13 |
| 3 | Diarrhea (Shigellosis due to Shigella dysenteriae) | 7 |
| 4 | Tuberculosis (Tuberculosis of lung confirmed by sputum microscopy with or without culture) | 3 |
| 5 | Hypertension | 2 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  |  |  | | --- | --- | --- | | Table – 34 5 top causes for maternal death(15-64yrs) in 2012 EFY | | | | S/No | **Diseases** | **Number of deaths** | | 1 | Respiratory Infection (Acute upper respiratory infection unspecified) | 56 | | 2 | Dyspepsia (Inability To Swallow) | 37 | | 3 | Pneumonia (Pneumonia unspecified) | 23 | | 4 | Tonsillitis (Acute pharyngitis unspecified) | 12 | | 5 | Diarrhea (Functional diarrhea) | 10 | |  |  |  | |  | **N.B. Source of Information DHIS-2 Report** | | |

* + - * 1. Prevention of mother-to-child transmission of HIV/AIDS
* Number of HIV positive Pregnant women who received ART to reduce the risk of mother to child transmission during ANC, L&D and PNC for the first time in 2011 EFY=75
* Number of HIV positive Pregnant women who received ART to reduce the risk of mother to child transmission during ANC, L&D and PNC for the first time in 2012 EFY=61
* **N.B. Source of Information DHIS-2 Report**

1. **Women who have been tested for HIV/AIDS**

* Number of pregnant women tested and know their HIV result during pregnancy, labor & delivery and postpartum period of 2011= 24,629
* Number of pregnant women tested and know their HIV result during pregnancy, labor & delivery and postpartum period of 2012= 27,829
* **N.B. Source of Information DHIS-2 Report**

1. The percentage of maternal mortality attributable to AIDS=0
2. The percentage of under-five mortality attributed to AIDS=0
   * + - 1. Number of women used family planning services (Contraceptive prevalence)
3. Modern methods

* Number of women used family planning services in 2011=49,115
* Number of women used family planning services in 2012=64,354
* **N.B. Source of Information DHIS-2 Report**

1. Number of Women who gave birth before age 18, in 2011=619

* Number of Women who gave birth before age 18, in 2012=704
* **N.B. Source of Information DHIS-2 Report**

1. Access to safe delivery (mid wife) for non-complicated delivery

* In 2011 EFY=45%
* In 2012 EFY=52%
* **N.B. Source of Information DHIS-2 Report**

1. Number of women’s used ANC-1 /antenatal care/ services in 2011=30,609

Number of women’s used ANC-1 /antenatal care/ services in 2012=34,395

**N.B. Source of Information DHIS-2 Report**

1. Number of women’s used PNC /postnatal care/services in 2011=18,515

* Number of women’s used PNC /postnatal care/services in 2012=23,017
* **N.B. Source of Information DHIS-2 Report**

1. Assisted delivery by
   1. Number of Delivery assisted by Health professional in 2011=11,695

* Number of Delivery assisted by Health professional in 2012=13,714
  1. In their home traditionally
     + - 1. Total fertility rate /rural, urban/
         2. Health facilities access to improved water supply, in 2011=14.8%, in 2012=15.7%

**N.B. Source of Information WASH Department of Borena ZHD**

1. № of hospitals (Zonal/district), health centers, clinics, health post, etc. those have improved water supply, in 2011= 33, in 2012=35
   * + - 1. Health infrastructure access to improved sanitation facilities, in 2011=79%, in 2012= 82%

**N.B. Source of Information WASH Department of Borena ZHD**

1. № of hospitals (Zonal/district), health centers, clinics, health post, etc. those have improved sanitation facilities in 2011=190, in 2012=193

**N.B. Source of Information WASH Department of Borena ZHD**

* + - 1. **Children Issues Indicators**
         1. Infant mortality rate
  + Under 1 years old / neo-natal mortality rate/ (deaths per 1,000 live births) in sex, in 2011=105 and in 2012=46
  + Under 5 years old (deaths per 1,000 live births) in sex,
  + Coverage of EPI under One in 2011=90% and in 2012=83%
    - * 1. List out the 5 top reasons those increase infant mortality rate,
* **Table-35 The 5 top reasons those increase infant mortality rate in 2011**

|  |  |  |
| --- | --- | --- |
| S/No | Disease | Number of Cases |
| 1 | Diarrhea (Shigellosis due to Shigella dysenteriae) | 10 |
| 2 | NDA |  |
| 3 | NDA |  |
| 4 | NDA |  |
| 5 | NDA |  |

**Table-36 The 5 top reasons those increase infant mortality rate in 2012**

|  |  |  |
| --- | --- | --- |
| S/No | Disease | Number of Cases |
| 1 | Pneumonia (Bacterial pneumonia unspecified) | 30 |
| 2 | Respiratory Infection (Acute upper respiratory infection unspecified) | 23 |
| 3 | Diarrhea (Functional diarrhea) | 19 |
| 4 |  |  |
| 5 |  |  |

**N.B. Source of Information DHIS2.30 Report**

### **3.4.6. Finance**

Regarding financial data attempts have made to obtain information regarding financial transactions in the zone. The total state revenue collected from zone and district was 47,104,047.95 in 2011 and the municipal revenue was 159,630,114.9 in 2012 EC.

Table 37. Revenue withn different years in its type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Types of Revenue | 2011 | 2012 | Total |
| 1 | State revenue | 176,360,125.64 | 187,915,437.89 | **364,275,563.53** |
| 2 | Municipal revenue | 29710653.2 | 24,468,152.97 | **54,178,806.17** |
|  | **Total** | 206,070,,778.84 | **212,283,590.86** | **418,354,369.70** |

Source: - Borana Zone Finsnce & Economy Dev”t Office In 2011/2012 EC.

#### **3.4.6.1. Bank and insurances**

As to the financial institutions there were government branches in 2011/2012 E.C particularly in the capital towns of Yabello and Moyale , Dirre , Dubluk and other privet banks are available

Table 38. Types of Bank in Borena zone by ownership.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | year | Types of Bank | Ownership | | |
| Gov’t | Private | Cooperative |
| 1 | 2011/2012 | CBE, Awash,Oromia Coop,Oromia Int, Abesiniya, dashin, Dev’t bank,NIB,United | 10 | 14 | 1 |

Source: Borena Zone socio-economic survey

### **3.4.7. Trade, sport and tourism**

#### **3.4.7.1. Trade and Market activities**

1. **Trade Activities**

Borena zone is known for its livestock production. The main livestock products such as animals’ hides and skins are exported to the national market and even to Kenya through illegal way Trade is defined as the flow of goods and services across international land borders within a reach of duly defined area. It has two varieties-**formal and informal**. The former refers to trade in goods or services which is carried out by legally registered traders and fulfills all legal requirements of the trading countries while the later refers to movement of goods in which all or part of the trading activity is unrecorded or unrecognized by the government, and without adherence to procedural requirements of all formal institutions. The formal trade is classified in to two: large scale formal trade and small scale formal trade. Our Zone has a legal framework for the formal small scale trade which is often referred to as petty periphery trade.

1. **Market Development Activities**

The livestock marketing system in our Zone is founded upon a complex trading chain involving producers, intermediaries, traders and numerous other market participants. Animals move from bush, primary and secondary markets along key trading routes and corridors to terminal and export markets. This trading network spans ,Beyond major secondary livestock market hubs such as Moyale Woreda (moyale), Dubuluq Woreda(dubuluq), YabaloWoreda (Haro-Bake), Taltale (Milemi), Arero Woreda (mata Gefersa) ,Elowaye woreda (elowaye),Dhas Woeda(borbor), Dilo Woreda (dilo) Gomole woreda Surupha the cross-border livestock trade is an integral part of life among communities living in remote pastoral areas. While proximity to the border can provide important benefits to adjacent communities, particularly in terms of drought coping mechanisms, communities can enjoy these benefits only during periods of peace.

Table 39. **Functional Market Place In Borena Zone**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number of market place In Borena Zone | | | |
| Bush Market | Primary market | 2dry market | Total |
| 2011 E.C | 5 | 5 | 8 | 18 |
| 2012 E.C | 7 | 6 | 8 | 21 |

Source: Borana Zone Trade and Market dev’t office

Table 40. Cash crops Supplied to Borena Zone markets

|  |  |  |  |
| --- | --- | --- | --- |
| Sn | Type of Crops | 2011 E.C | 2012 E.C |
| 1 | Maize | 9953.6 | 198,95 |
| 2 | Sorghum | 2048.2 | 58,91 |
| 3 | Haricot bean | 2047.3 | 100.49 |
| 4 | Teff | 5373.6 | 75,39 |
| 5 | Wheat | 876.8 | 2416 |

Source: Borana Zone Trade and Market dev’t office

Table 41. Livestock Supplied to central markets and feedlots from Borena Zone

|  |  |  |  |
| --- | --- | --- | --- |
| Sn | Type of Livestock | 2011 E.C | 2012 E.C |
| 1 | Cattle | 83,986 | 35420 |
| 2 | Goat | 151,154 | 9050 |
| 3 | Sheep | 65,551 | 7970 |
| 4 | Camel | 10,674 | 1904 |

Source: Borana Zone Trade and Market dev’t office

**Market chain management issues**

* + Livestock market linkage
    - Producers – Broker/Local traders/Local feedlots - Traders – Abattoirs or Exporters
  + Livestock and livestock products value chain
    - Fattening/Feedlot/
    - Meat
    - Milk(Producers - Raw Milk Collectors – Distributers(Add value) – Consumers)
    - Butter
    - Honey
  + Crops value chain management
    - Crop Producers - Collectors – Traders(Add value) – Retailers - Consumers

**Major Constraint of Market Chain Management Issues**

* + Poor awareness of business and marketing concept and lack of marketing experience
  + Absence of organized Livestock product Traders Association
  + Presence of non-value adding brokers and their negative impact on the marketing processes.
  + Lack of livestock product collectors and supply need (esp. Hide and skin).
  + Lack of effective and sustainable livestock and livestock product market out-lets
  + Lack of access to well organized marketing system
  + Long chain of livestock marketing channel and unsustainable marketing chains.
  + Poor marketing infrastructure development and market services.
  + Poor marketing information system
  + The livestock marketing of the area is constrained by weak husbandry and sanitary control system There is a lack of market oriented production system in the areas due to weak livestock and livestock product market extension services

#### **3.4.7.2. Sport and Youth activities**

The levels of sport activity in Borena Zone at lower stage and the the youth develop their skills and performance at school level. Out of schools the majority districts youth have trained any kinds of sport activity everywhere. At Borana zone level there is one medium standard stadium at Yabelo Town. In the zone there is no well-organized any kind of sport club. The existing club trained only when there is competition. The major sport activity in the zone is Athletics, Football, Valley ball, Table tennis and cultural sport.

#### **3.4.7.3 Tourism**

Borena zone has several cultural and historical tourist attraction centers such as Gumi Goyo (Dire), ArdaJile (Miyo), Galma Debayu (Areor and Yabelo), Hot spring (Taltale ), traditional wells (Arero, Dire, Miyo, Moyale and Yabelo) However, the tourist attraction centers in the zone are so many but it was not clearly identify and developed to the tourists attractions. In addition to this, there 1 loges, and 2 motels in the zone and a number of hotel, restaurant and pensions which are good accommodations for tourists.

Table 42 **Agarsiiftuu Ragaawwaan Iddoowwaan Hawwata Turizimiifi Dhaabbilee**

**Aadaafi Turizimii Waajjira Aadaafi Turizimii Godina Booranaa**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Lak | Maqaa Dhaabbilee Aadaafi Turizimii | Baayyinna | Ragaawwaan Bara 2013 Qabnuun | Ragaawwaan Kun Aanaalee 8 Walitti Qindaa’ee |
| 1 | Hoteelota | 59 | “ |  |
| 2 | Peensiyoonota | 53 | “ |  |
| 3 | Baariifi Reestoraantota | 164 | “ |  |
| 4 | Mana Cirree/Kaafteriyaa | 38 | “ |  |

**Source:-** Borena zone culture and tourism office.

**Tourism attraction center in Borena zone**

Table - 43. **Known Natural tourist attraction Borana zone**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Types of tourism attraction** | **Name of attraction** | Specific location | | **Distance** | | |
| **District** | **Kebele** | **From district** | **From zone** | **From Adis Ababa** |
| **Boke – Soda ( Crater Lake)** | Booqee Kulaa | Dirree | Soodda | 39km | 105km | 684km |
| Booqee madhacho | Dirree | Madhachoo | 17 | 88km | 657km |
| Booqee soodda | Dirree | Soodda | 28km | 98km | 668km |
| Booqee magaado | Dirree | Magaadoo | 28km | 128km | 703km |
| Booqee Dilloo | Dilloo | M/Dilloo | 1km | 157km | 732km |
| Booqee goorayi | Dilloo | Goorrayi | 17km | 173km | 748km |
| **Forests** | Bada Gaammaduu | Dirree |  | 42km | 142km |  |
| Baddaa obdaa | Yaaballoo | - |  |  |  |
| Baddaa Areeroo | Areeroo | - | 3km | 103km | 678km |
| **Wildlife and Birds (endemic)** | Turakoo Ruspooli | Areeroo | - |  |  |  |
| Bush crow | Yaaballoo,Areeoo,Taltalle | - |  |  |  |
| White tailed swallow | Yaaballoo | Dharriito,Diida yaaballoo fi Diida haraa |  |  |  |
| Borana National Park | Yaaballo,Taltalle,Dirree fi Areero | Gandoota aanalee hedduu |  |  |  |
| Grave Zebraa | Taltallee | Saaritee | 78km | 52km | 627km |
| Xabalaa calbii | Taltallee | Waata Wondoo | 90km | 190km | 760km |
| Haroo kasoo fi Daawwee | Dhaas | Mataa Arbaa | 22km | 177km | 752km |
| Bishaan Ho’aa | Dilloo | Hoboqii | 80.5km | 236.5km | 806.5km |
| **Mountains** | Gaara Aaboo | Miyoo | Dukkallee |  |  |  |
| Gaara Qanjibboo | Dhaas | Mataa Arbaa | 22km | 177km | 752km |
| Gaara Qancaroo | Dilloo | Qancaroo | 40km | 116km | 691km |
| Tarbee waalmalii | Dirree | HarooressaSamaroo | 3km | 97km | 672km |
| Gaara Oobdaa | Yaaballoo | Oobdaa | 15km | 15km | 590km |
| Bulee Siiquu | Yaaballo | Danbalaa sadeen | 45km | 45km | 620km |
| **Diida** | Diida Arbaalla | Taltallee | Saarite | 78km | 52km | 627km |
| Diida Mana waaqaa | Dhaas | Dhaas | 38km | 117km | 692km |
| **Cave and Handcraft** | Holqaa Jiloo Qocaa | Dirree | HaroresaSamaro |  |  |  |
| Holqaa Zawudee | Areeroo | Hirmaayyee | 32km | 132km | 702km |
| Holqaa Garbaa Sookkaa | Taltallee | Hatusee | 9km | 109km | 684km |
| Dhakaa Barruu | Yaaballoo | Doofii | 20km | 598km |  |
| Holqaa Foroole | Dirree | Magaado |  |  |  |
| Holqaa Allaattii | Dilloo | Cirratte | 12km | 168km | 743km |
|  | Dhakaa Qakee | Magaala Yaaballo | 02 |  |  |  |

**Source:-** Borena zone culture and tourism office.

**Man Made Tourist Attraction In Borana Zone**

Man made heritages is one of the knwon tourist attraction in Borana zone. It refer the indigenous knowledge and cultures of the people. Known Man made tourist attrction are TULA (Eela) and Sodu.

**Eelaa (Tulaa) Dubuluqi**  **Daawwitii Borborii(soodduwwan)**



Table 44. **Man Made Tourist Attraction In Borana Zone**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Types of tourist attraction** | **Name of Attraction** | Specific location | | **Distance** | | |
| **District** | **Kebele** | From District | From Zone | From Adis Ababa |
| **Eelaa (Tulaa)** | **Eelaa** Gaayo | Dhaasi | Gaayo | 38km | 117km | 692km |
| **Eelaa** Goorilee | Dhaasi |  |  |  |  |
| **Eelaa** Aanolee | Dhaasi |  |  |  |  |
| **Eelaa** Irdari | Dhaasi |  |  |  |  |
| **Eelaa** Dubuluqii | Dirree | Dubuluqii | 35km | 70KM | 645km |
| **Eelaa** Meelbana | Dirree | Melbanaa |  |  |  |
| **Eelaa** Weebi | Areeroo | Weebi |  |  |  |
| **Eelaa** Dhaas | Dhaasi | Dhaas |  |  |  |
| **Eelaa** Goofaa fi Layee | Mooyalee |  |  |  |  |
| Soodu | **Sooddu** Dhaddiimii | Yaaballoo | Daddimii | 35km | 35km | 540km |
| Daawwitii Borborii | Borborii | Borbori | 4km | 169km | 730km |

**Source:-** Borena zone culture and tourism office.

### **3.4.8. Investment**

In Borena zone there are a smallest amount of private investment escalation, the small extent investment activities are found in **Yabelo Town, Yabelo** **district, Dire District, Dubluk district, Ele-woye district, Moyale Town** and **Moyale** **district.** Borena zone investment movement was started in **1998.** Between **1999-2012** Government strategies and policies towards investment attracts different investors to the zone to invest in various area. In those years, **Agriculture 6, Service 42 and Industry 6 Total of 54** investors was registered and show their interest to invest in the zone. Out of those registered investors **54** has got investment license. Generally, in the zone 54 investment project was made a **95,323 hect.** **Land 54** of them registered **175,035,570.267 million** capitals in their name. This investment project creates job opportunity for **380 permanent** staff and **1061 contract** staff

Table-45. Investment activities in Borana Zone 2011-2012 E.C

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year |  | Sector | Number of investor |  | Total Capital |  | Land prepared in HK | Job opportunity | |
| **Permanent** | **Temporary** |
| 2011/2012 |  | Agriculture | 6 |  | 175,035,570.00 |  | 95323 | 380 | 1061 |
|  | Service | 42 |  |  |  |  |  |  |
|  |  |  |
| Industry | 6 |  |  |  |  |  |  |
|  | Total | 54 |

Source :- Borena Zone Investment office 2012 E.C

### **3.4.9. Development Activities**

#### **3.4.9.1. Activities of NGO’s in Borena Zone**

There are a Total of 35 Ngo’s in Boren zone, out of these 25 are International accounting for (65%) and 13 are Local that accounting for (35%) These NGOs have been implementing 86 projects in zonal area, the Local NGOs with 38 projects (44% of total) and the International ones conduct 48(56%) of all NGOs projects on-going in the area. The total fund they were used to implement these projects was over **1,239,125,635.186** ETB, even though much of this total budget has been spending within two and three years.

Table-46. NGOs Budget allocation

|  |  |  |  |
| --- | --- | --- | --- |
| Category of NGOs | No. of NGOs | No of Project | Budget Allocated |
| International | 25 | 48 | **1,004,281,594.496** |
| Local | 13 | 38 | 234,844,040.69 |
| Total | **38** | **86** | **1,239,125,635.186** |

Source:-Zone NGO coordination unit

#### **3.4.9.2. Distribution of NGOs**

##### **3.4.9.2.1. Distribution by Field office**

Based on their field office the distributions of NGOs are not equal within the zone woredas. All the operational NGOs are based its set in 11 woredas of the Zone, while the rest 2 woredas does not have NGOs field office (but have NGOs’ intervention) based in their capital Town. Even if they made their base in 11 woredas, they are operational in almost all woredas of the zone having their projects in one or more than one district of the zone. The Wachile and Guchi Districts/Weredas are those with no NGOs field office.

##### **3.4.9.2.2.** [**Distributions by Woreda of Intervention**](file:///C:\Users\NGOs%20Matrix%20(Autosaved)1.docx)

* By basing their set in one District, most of the NGOs are operating their project in one or more than one district of the zone.
* CARE has been intervening in 8 distracts by holding a lion share and ACF in CIFA, HELVITAS and GAA in 5 districts.

##### **3.4.9.2.3. Distributions by Project/Intervention type/Sector**

* As of sector distribution, the integrated projects are 52(75%) of the total projects that included 2 and above sectors, mainly focusing on Pastoralist issues and emergency
* The second highest projects are projects working on Health (8)
* There is also a single sector project like Education and water (8) projects

Table -47. Distributions by Project/Intervention type/Sector

|  |  |  |
| --- | --- | --- |
| Sector of Intervention | Number Of NGOs | Major Activities |
| 1, Integrated | 62 | Includes two or more than two sectors (Livestock, Education, Water, Relief, health, Development, emergency and etc….) |
| 3, Health | 10 | FP and RH, Nutrition,, provision of health services |
| 4, Education and Water | 16 | Provision of Hostel service, ABE, constructions |

Source;-Zone NGO coordination unit

##### **3.4.9.2.4. Appraisal and Approval of NGOs project**

In the year 2017/18 about 19 Project documents were submitted to our office for appraisal. All documents have been apprized with collaboration of Line Departments in consideration with the district development priorities, all of them have been apprised and the project documents have been signed (39,600,211 birr, 70,122 Beneficiaries)

**Major problem of ongoing governmental and non-governmental project and program**

* + - Shortage of skilled man power
    - High turnover of workers
    - Lack of budget and logistics (transportation facilities)
    - Lack of office material (computer, fax, photocopy, etc)
    - Poor infrastructure and communication facilities
    - Scattered settlement pattern of the community
    - Long distance of the peasant associations from the center of district and zonal capital city
    - Lack of training
    - Recurrent drought
    - Increasing of destitution and poverty
    - Degradation of natural resources
    - Lack of awareness on the policy and procedure at all level
    - Lack of rehabilitation program after the emergency (restocking, provision of farm input)
    - Tribal conflicts
    - Less commitment of some experts and workers
    - Lack of clear policy of pastorals and pastoral extension
    - limitation of research on the pastorals
    - Low educational coverage and high illiteracy rate
    - Low health coverage
    - Livestock diseases
    - Crop pest
    - Fluctuation of livestock market
    - Increment of construction materials and others price

# 4. Problems and potentialities

## 4.1. Problems

Some of the major problems are stated as follows.

**Economic conditions**

* No shortage of farm land and grazing land.
* There is a shortage of inputs especially fertilizers in high land and selected seeds (Variety) both in high land and low land (kola) districts.

**Environmental conditions**

* There is a problem in variability and distribution of rainfall in both seasons (main rain season and small rain seasons)
* Deforestation, soil erosion area problems in this zone
* Drought is a common and main problem in the zone.
* Shortage of water resources in kola districts.

**GAPS that need intervention in the Zone**

* Natural resource management
* Range land Management (Bush clearing, rangeland reclamation and so on )
* Water, Sanitation & hygiene
* Water schemes Rehabilitation and development
* Pond Rehabilitation, de siltation and new excavation
* Education (informal) Schools building/Blocks maintenance and Expansion of existing schools
* Livelihood (Income generation activities like establishment and strengthen of different type cooperatives and IGGS)
* Livestock health & marketing 4.2. Potentialities

**Availability of cultivable land**

* A good availability of cultivable land, if water is available for irrigation soil is too fertile.
* A land is good for livestock rearing and there are also minerals for mining

**Natural resources**

* Major natural resources endowment
* Very rich in mineral resource
* There are forests in high land

**Tourism and investment opportunities**

* Natural, historical and cultural tourism and investment attraction resource centers are available
* Especially birds only found in Ethiopia are found in Arero district