



**Adama City Planning and
Development Office**

**Physical and Socio-Economic
Profile of Adama City**

January, 2025

Adama

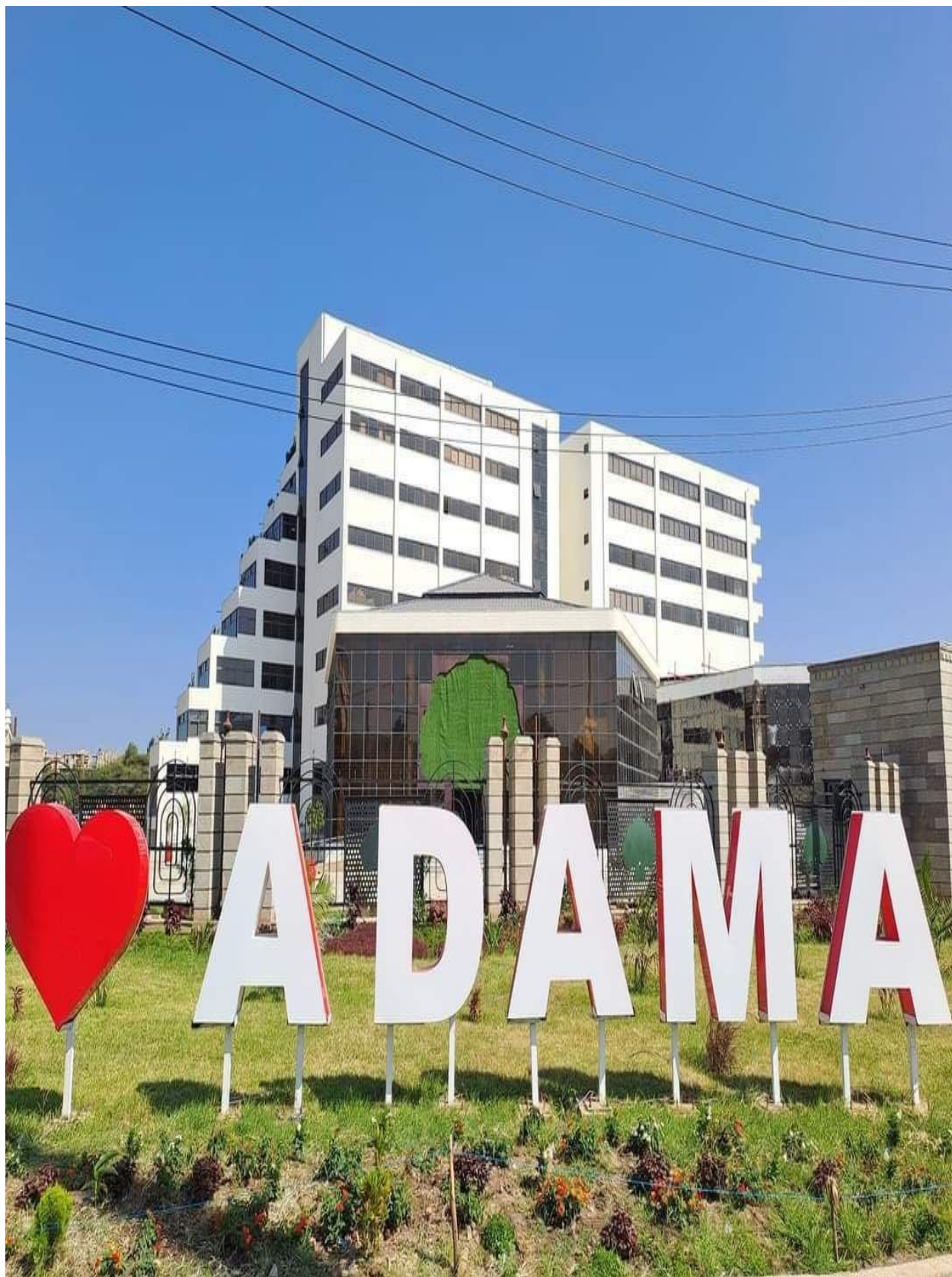




Table of contents

.....	i
Acknowledgements	xii
Acronyms	xiii
Forward	xiv
Message from the Mayor of Adama City Administration	xv
Message from the head of Adama City Planning and Development Office	xvi
Chapter Two	7
2. Physical Background of Adama City	7
2.1 Location	7
Source: The planning office of Adama city administration and internet (2023)	8
2.2 Topography of the City	8
2.3 Drainage	9
2.4 Soil Characteristics	11
2.5. Climatic Conditions	12
2.5.1 Precipitation	12
2.5.1 Wind	13
2.6 Natural Vegetation	15
2.7 Geological Aspect	16
Chapter Three	19
3. Demographic Characteristics of the Population	19
3.1 Population Size of the City	19
3.2. Age Composition	21
3.3 Sex Ratio	22
Source: Population enumeration of Adama City (2023)	23
3.4 Population Growth Rate	23
3.5. Population Dependency Ratio	24
Source: Population enumeration of Adama City (2023)	25
3.6 Ethnic Composition	25
3.7 Religious Composition	26

3.8 Vital Statistics Registrations	28
CHAPTER FOUR	29
4. ADMINISTRATIVE SYSTEM	29
4.1 Organizational Set-up of Adama City Administration	29
4.2 Human Resource Development	33
4.3 Smart Adama Initiative	34
CHAPTER FIVE	38
5. SOCIO-ECONOMIC SITUATION OF THE CITY	38
5.1. Urban Economy	38
5.1.1 Land Use Pattern	39
5.1.2 Housing Condition	42
5.1.2 Trade	45
5. 1. 4 Industries	47
5.1.5 Investment Opportunities	49
5.1.6 Hotels and tourism	51
5.1.7 Urban Agriculture	55
5.1.8 Consumer Cooperatives	63
5.1.9. Saving and Credit Associations	64
5.2. Financial Institutions	66
5.2. 1. Banking and Insurance Services	66
5.2.2 Insurance Companies	68
5.2.3. Micro-Finance Institutes	69
5.3. Access to Economic Infrastructures in the City	71
5.3.1. Road Infrastructure Networks	72
5.4. Community Participation in City Development Endeavors	76
5.5. Rail Way	78
5.6 Access to State-Owned Utilities	79
5.11.3.1 Power Supply Service	80

Bar Graph 6:- The number of electric service customers in Adama City from (2011EC-2016EC) .	82
<i>Source: Ethiopian Electric utility Adama District office (2024)</i>	82
5.7. Access to Potable Water Supply Service	82
5.8. Telecom Service	85
5.9. Postal Services	86
5.10. Mobility and Transport	87
5.11. Cattle Slaughtering House	89
5.12. Solid and Liquid Waste Elimination	91
5.13. Access to Sanitation	94
5.14. Developing and Managing Green Area Activities	95
5.15. Sport Facilities	100
5.16. Micro and Small Enterprises	102
5.17. Productive Safety Net Program	105
CHAPTER SIX	108
6. SOCIAL SECURITY AND JUSTICE	108
6.1. Social Justice	108
6.1.1 Crime and Law Enforcement	108
6.2 Social Security	111
CHAPTER SEVEN	113
7. SOCIAL SERVICE DEVELOPMENT	113
7.1 Education Service	113
7.1.1 General Education	113
Source: Planning and Development Commission of Oromia (GIS Team) (2024)	118
7.1.2 Education Quality and Efficiency Indicators	118
7.1.4 Private Colleges and Universities in Adama City	122
7.1.5 Adama Science and Technology University	122
7.2 Health Service	123

7.2.1 Health Facilities and Health Personnel	123
7.2.2 Family Planning	128
CHAPTER EIGHT	129
8. REVENUE COLLECTION AND EXPENDITURE	129
8.1 Revenue Collection	129
8.2 Expenditure	132
Conclusion	134
List of References	135

List of Tables

Table 1: Forest area coverage of Adama City.....	15
Table 2: The size of population and households of Adama City by sub-city (2016 A.E.C).....	18
Table 3: The size of population and households by district administration (2016 A.E.C).....	18
Table 4: Age composition by sex type.....	19
Table 5: Sex Ratio and Population Size by district administration.....	21
Table 6: The dependency ratio of the population by 2015 A.E.C.....	23
Table 7: Percentage of Ethnic Groups in Adama City.....	24
Table 8: The vital statistics registration of Adama City by year 2015 and 2016.....	26
Table 9: The No. of Contractual and Temporary Employees.....	32
Table 10: The size of public housings in the city.....	41
Table 11: The major industries found in Adama city.....	41
Table 12: No. of investment projects, Land delivered, capital invested & employment opportunities created in the City.....	48
Table 13: The number of halls, cinema halls & their holding capacity in Adama.....	50
Table 14: Total land cultivated & production of main season/Meher/by farmer holdings.....	55
Table 15: Agricultural extension service of Adama City.....	55
Table 16: Distribution & Utilization of Agricultural inputs.....	56
Table 17: Types of livestock in the city.....	57

Table 18: Number of dairy cows, production of milk and number of participants.....	57
Table 19: Number of Poultry by Type, Total Egg Production and Number of Participants.....	58
Table 20: Livestock veterinary services.....	58
Table 21: Honey products & the number of Honey Beehives.....	58
Table 22: Types of cooperatives & the number of cooperative members in Adama City.....	61
Table 23: Capital accumulation by cooperatives.....	62
Table 24: The number of Financial Institutions (Banks) in the city.....	63
Table 25: Number of Insurance Companies in the city.....	66
Table 26: Number of Saving and Credit Associations.....	68
Table 27: Type of Road and length in Adama City.....	72
Table 28: The number of electric service customers in Adama City.....	78
Table 29: Water production, supply, demand & per capita consumption.....	81
Table 31: Postal services delivered.....	83
Table 32: Mileage Matrix.....	86
Table 33: Number and type of Public Transport Vehicles in Adama City.....	86
Table 34: The number of animals slaughtered in municipal slaughter house.....	87
Table 35: The city's solid waste generated and disposed.....	90
Table 36: The amount of liquid wastes generated and disposed.....	90
Table 37: A progressive growth of Urban Greenery development.....	96
Table 38: No. of sport clubs, registered sports men by sport type, coaches and referees by type of sport.....	99
Table 39: Jobs created in micro and small-scale development.....	102
Table 40: No. of beneficiaries benefited from food security and livelihood support works.....	103
Table 41: Kindergarten (KG) Schools, Enrolment and SAP.....	111
Table 42: Number of Primary Schools by Ownership and Cycle.....	112
Table 43: Number of secondary schools by ownership.....	112
Table 44: Regular Student Enrolment in Primary Schools.....	113
Table 45: Regular Enrolment in Secondary Government and Non-Government Schools.....	114
Table 46: Number of Detained Primary and Secondary School Students.....	114
Table 47: Performance in University Entrance Examination	115
Table 48: No. of Teachers in primary & secondary Schools in Adama City.....	115

Table 49: The Trends of Enrollment Rate of students in Adama City.....	115
Table 50: The number of Vocational Trainees by Level and Sex.....	116
Table 51: The number of Vocational Trainees by Level and Sex.....	118
Table 52: The number of health personnel deployed in public health institutes.....	122
Table 53: The number of health facilities & Institutions in Adama City.....	123
Table 54: Women and Children Health Service Delivery in Adama City.....	124
Table 55: Conveys the summary of basic health status indicators.....	124
Table 56: The Ten Top Diseases in Adama.....	125
Table 57: Revenue Collection Trends of Adama City.....	128
Table 58: Subsidies and grants the city received	130
Table 59: Number of NGOs Operating in the city.....	131

Tables of Maps

Map 1: Location map of Adama City.....	8
Map 2: The contour map of Adama city.....	9
Map 3: A relief pattern map of Adama city.....	10
Map 4: Soil description map of Adama.....	11
Map 5: Administrative divisions of the city.....	29
Map 6: Spatial distribution of banks in the city.....	65
Map 7: The spatial distribution of water supply service infrastructure in the city.....	82
Map 8: The spatial distribution of schools in the city in 2016 A.E.C.....	112
Map 9: The spatial distribution of secondary schools in the city.....	113
Map 10: The spatial distribution of colleges in the city.....	119
Map 11: The spatial distribution of health institutions in the city.....	123

Table of Graphs

Line Graph 1: Graphic presentation of Annual rainfall in the past 10 years.....	12
Line Graph 2: Graphic presentation of average annual maximum and minimum temperature.....	13
Line Graph 3: Number of permanent civil servants in Adama city administration.....	31
Bar Graph 1: The number of traders in the city.....	43
Bar Graph 2: The size of land cultivated in hectare and the products harvested in quintal.....	56
Bar Graph 3: Type of Road and length in Adama City.....	72
Bar Graph 4: Community participation in Birr in areas of participation.....	75
Bar Graph 5: Drink water coverage of the city.....	80
Bar Graph 6: Criminal and Civil cases of the Higher Court of Adama City.....	108
Bar Graph 7: Number of tax payers in Adama City.....	129
Line Graph 4: Municipal and state budget expenditure.....	130

Table of Pie Charts

Pie Chart 1: Age composition.....	20
Pie Chart 2: The number of the followers of different religions in Adama City	25
Pie Chart 3: The summary of Adama City General Land Use Categories.....	38
Pie Chart 4: Major industries found in Adama city (2016 E.C).....	46

Acknowledgements

It should be borne in mind that the fundamental tenet of preparing this biennial socio-economic profile of Adama city in a condensed manner is to compile reliable and up-to-date data on environmental, economic and social development of Adama city flawlessly and avail them to data users, public organizations, non-governmental organizations, researchers, investors and so on.

It is quite sure that publication of this city profile which is labeled as the mirror of the city and showcases the true picture of the city unambiguously would not have been reached final stage devoid of staunch moral support and the involvements of various entities.

At the time of undertaking this profile preparation the unflinching willingness and complicity of anonymous people and organizations in eliciting data and information starting from the inception of this paper till the end deserves big thanks for their collaboration those have enabled the co-authors to finish this work as we started with confidence.

We wish to acknowledge and thank individuals graciously partook in the provision of the necessary ideal data on different variable in the city feverishly and have contributed towards the successful completion of this profile which gives us mental gratification using this wonderful opportunity.

Jundi Ede'o & Reshid Kedir

Acronyms

A.E.C-According to Ethiopian Calendar

AI-Artificial Intelligence

ASTU-Adama Science and Technology University

CCTV-Closed-Circuit Television

GDP- Gross Domestic Product

GHG-Green House gas

GHGE-Greenhouse Gas Emission

ICT-Information communication Technology

INSA-Intelligence Network Service Authority

LAN-Local Area Network

MCH-Mother Children Health

NGO- None-Governmental Organizations

NUGIS-National Urban Green Infrastructure Standard

PPP- Public Private Partnership

PSR-Pupil to Section Ratio

PTR-Pupil to Teacher Ratio

SAP-School Age Population

TVET- Technical and Vocational Education Training

UPSNP-Urban Productive Safety Net Program

VAT- Value Added Tax

Forward

Before moving to deep deliberations about the socio-economic status of the city with a wide range of evidences, demystifying the importance of accurate data collection and organization is imperative. At the present time, it is important to underscore that making more complex decisions and evidence-based appropriate public policy and strategic plan is ridiculous, unless reliable and up-to-date data of different variables are gathered and consolidated before embarking on any thorough development endeavor and designing thoughtful planning.

Based on this belief, is entrusted with the collection and relaying of accurate, accessible, reliable, and timely information and data that show spatial distribution of facilities in the city for making in-depth decision and better conclusions in all levels of decision-making and proper allocation of scarce public resources

The office publishes city profile at the interval of every two years since 2016. At this specific juncture, the 8th edition of city profile that provides a bird's eye view of the socio-economic condition of the city is prepared to by Adama city plan and development office of Adama city administration enthusiastically in order to furnish naked facts and figures on wide arrays of issues about the city for planning for the current and forthcoming years in a clear manner.

For the sake of the esteemed readers' convenience, the body of the profile is organized in logical sequence and divided into several chapters and subsections, charts, figures and tables those portraying the economic, social and demographic information of the city eloquently.

In a nutshell, Adama city plan and development office of Adama city administration deemed that this up-to-dated profile of Adama City is very helpful for policy makers, the residents of the city, potential investors, academic researchers, development partners, community-based organization, government entities, civic organizations and so forth invariably. Enjoy reading the profile of Adama City that attests an appropriate panoramic view of changes in the city development and depicts the overall visual map of the city.



Message from the Mayor of Adama City Administration

In the first place, I earnestly want to express my earnest gratitude to those entities involved in the current Adama city profile preparation at this historic moment when the 5th anniversary of prosperity party is marked on behalf of Adama city administration and my own. Since it was first born in 1916, Adama city has been in the track of continuous socio-economic development though much remains to be done.

Nowadays, the growth and development trajectory of the city which is a beacon of hope in the country has gained enormous importance. As we all know, countless efforts were made by the present-day city administration leadership to make the vision of the city come true, expedite the growth and development of the city, build and transform the image of the city in the country and beyond and create inclusive, safe, resilient and sustainable city.

In the meantime, developmental initiatives including smart Adama initiative, urban agriculture initiative, summer irrigation wheat cultivation initiative and corridor development initiative and green legacy initiative with the spirit of invincible enthusiasms have taken high priority at this moment in the city. These people-centered initiatives and tenacious efforts vise-a vise the previous period are made deprived of leaving no stone unturned to make the city preferable to investment, residence, trade and industry, bequeath smart city to the upcoming generation and create a suitable city to its residents, transform lives and attract investment. In so doing, the city is has made momentous changes in economic, social, and political spheres in unprecedented manner which are not windfall gains.

More importantly, the preparation of this profile of Adama is vital in providing valuable data and information showcasing the socio-economic development scenario the city has so far registered. Seizing this opportunity, I desperately reiterate call on potential private sector and business community who have a stake in city development agenda to get a wonderful return on your investment and harness the unleashed potential the city endowed with by making Adama your ultimate and viable choice.

Hailu Jelde

Mayor of Adama City Administration



Message from the head of Adama City Planning and Development Office

Above all, I am too glad to express my earnest happiness to deliver this short message on behalf of the planning and city development office of Adama City Administration and me employing this peculiar chance and special moment. In its wider perspective, the government entails to provide high quality and unbiased information on arrays of issues impeccably as much detail as possible.

These entire situations call for meticulous data collection on different variables, data compilation and dissemination in an understandable way to set priorities, arrive at an apt strategy and forecast growth in urban populations and urban land. Since the city is the source of statistical information from various sources, the planning office has been publishing physical and Socio-economic profiles of the city in every two years since 2016 in a continuous basis.

At this definite point, the impetus for the publication of this edition that provides a glimpse picture of the city and covers a wide variety of statistics accompanied with maps, graphs, diagrams and charts with optimism was to c. provide reliable, optimal and important data for city development and research and disseminate valuable information on the available opportunities, constrictions and options to the stakeholders, funders and collaborator who seek facts and figures from the city administration.

The main sources of data used for the preparation of the 2015 and 2016 E.C, socio-economic profiles are different sectorial offices of Adama City Administration and many federal offices operating in the city. The preparation of this vital profile with passion and dedication would never have been possible devoid of the contribution of numerous offices and individuals who involved in data provision deprived of exhibiting laxity. In this particular juncture, with the deepest gratitude I would like to extend my utmost appreciation to diverse offices those enthusiastically provided us relevant ideal data as well as the producers of this edition for their precious time devotion and unreserved commitment for which I can never find a word to convey.

Finally, I am literally indebted to the producers of the 8th socioeconomic profile of Adama city for displaying steadfastness during the preparation of this indispensable profile on behalf of Adama city plan and development office and my own.

Adugna Bedada

Head of Adama City Planning and Development Office

CHAPTER ONE

1. HISTORICAL BACK GROUND

This chapter attempts to trace briefly the historical trajectory of Adama City those can only give some flashlights about the city without a glitch to provide the readers with a general overview of the city in a concise manner and reflect current conditions at a glimpse in this piece. It is obvious that Ethiopia which is endowed with diverse biodiversity and climatic zones is made up of natural beauty including inaccessible mountainous terrains, precipitous bluffs, abyss, drowned valleys and admirable ridges of mountains, thick forest and awe-inspiring perennial rivers, among other.

The country was isolated from the rest of the world by inaccessible terrains, perennial rivers, precipitous gorges, valleys and ridges of mountains, before diverse transport networks including all-weather roads and railway line put in place in the country by the regimes came to power one after another. When we examine the establishment of Adama City which has convenient location in the country and has the potential to grow into a vibrant, healthy, economically thriving city, the stretched railway from Djibouti to Addis Ababa was essentially attributes for the formation of the city. The railway was built by French between 1897 and 1917 during the rule of Emperor Menelik II who was a passionate road builder in the empire.

Adama's history began when the railway line reached the locality where Adama situated at the start of twenty century. As a matter of coincidence, Adama City traces its commencement to the advent of a meter gauge diesel Franco-Ethiopian rail way line that built in the country where there was no modern transport infrastructure and the movement of people and freights from place to place was extremely difficult. As history tells us, the city which serves as an outlet to the eastern part of the country and provides a wide range of services to its denizens and its hinterlands came into existence in 1916 along the railway line linking Addis Ababa to Djibouti. It began is it growth trajectory as a railway depot beneath Kechema ridge. Initially, the city was perched on the foot of Kechema ridge during its formation.

Later on, the sphere of influence of the city which is known in the country for well-coming and friendly culture, increased from time to time. These made the city more attractive for people and economic activity.

The city began to attract people from domestic and the Arab and Indian origins and embraced diverse economic and social infrastructures and large inhabitants in the course of time. In due course of time, the city had developed steadily from a rail way station into a large city and began to expand based on the existing development trend of the city to accommodate the new residents with different backgrounds and grew considerably into a hub of industries, public administration and trade center.

During the reign of emperor, the Arabs and Indians used to run much of the import businesses and owned substantial property in the city which offers various advantages for trade, before extensive expulsion of them was made with the change of the regime in 1974 and the economic decline occurred during the term of the Dergue regime of (1974-1991).

As far as municipal status is concerned, Adama City was granted legal personality/status which is an important milestone in the history of the city by the proclamation 74/45 (Negarit Gazeta) during the reign of emperor Hailesillase in 1945, after 29 years of its existence. Since it acquired legal personality in 1945, Adama municipal service office takes a lion's share in the provision of broad range of basic economic and social services and accessing infrastructure and service to the residents of the city.

During imperial era Adama city was the seat of Adama District and *Yerer Na kerayu Awraja*. After the constitution drafted by the Dergue regime the city was ratified and the people's republic of Ethiopia was established, the city was promoted to the seat of East Showa Administrative Region that later changed to East Showa Administrative Zone, after the fall of Dergue in 1991.

Later on in years 1999-2002, the city had acquired a special administrative zone status based on its population size, geographical advantages, location, size, resources, accessibility, economic potential for growth and development; among other things those have made the city a commercial hub. The then executive body of the city administration that incorporated city appointee, deputy appointee and the secretary were directly assigned by regional state of Oromia in years 1999-2002.

Since August 2000, Adama has been the seat of the Regional State Council and capital of the Regional State of Oromia for short period of time. After proclamation 65/95 (Megeleta Oromia)

was enacted in 2003 by the regional government of Oromia based on national urban development policy direction, the city administration has become more polarized.

Since then, the newly installed organizational set-ups of the city government is bifurcated into two which is composing (municipal and state functions), as the city government has a monopoly over public services in the city and dual responsibility of providing state functions (all branches of government structure) and municipal services.

In similar manner, the city was promoted to the first-grade status city having a status of self-urban administration status with administrative, political and fiscal powers in the affairs of the city administration by 65/2003 proclamation (Megeleta Oromia). As far as etymology is concerned, the word Adama was come from the Afan Oromo word Adami meaning cactus which was the then predominant trees abundantly found in the area where the city was established at the threshold of development. Oromo ethnic group forms the largest group in in the population of Ethiopia and the 3rd biggest nation in Africa.

The precursor name of Adama City was coined the Biblical name ‘Nazareth’ by Emperor Hailesillase. No doubt, the era of the emperor is remembered by strong nexus with the clergy of Ethiopian Orthodox church, chauvinism, land grab, rampant favoritism, offering derogatory connotations, economic and political coercions, forcible expropriation in the country that threatened the lives and livelihoods of the Oromo people in multiple ways.

In the meantime, the regime and its henchmen were deliberately embarked on fostering Christianization and Amharanization processes as a means of maintaining territorial integrity of the country. Furthermore, flagrant changing of individuals, places, tribes, wildlife, rivers and mountains bearing Oromo names to replace them by Amhara names and Biblical words in Oromia by the time to foster the use of one language, culture and the so-called national dress and food and bring demographic transformation. After the country entered new chapter, Adama city regained back its original name Adama in 1992 which was praised by the Oromo people with diverse views.

No stone was left unturned to make Oromia and its people a docile milk cow to be milked and impoverish them. One of the pretexts for the eruption of the 1974’s popular revolution with the

motto of 'land to the tiller' was the oppressive landholding system in Oromia and the other regions in the south which are the main sources of Ethiopian economy.

The end of the 44 oppression years that inflicted atrocity and forced many landless tenants to escape to towns opened a new chapter in the country's history. The Oromo people along with other down-trodden nationalities were played irreplaceable role in the struggle against the oppressed regime by time.

After decades of oppression by the tyrant regime ousted and the church, the 1975's rural land reform and urban land and extra housing nationalization those were made by the proclamation No. 31/75 (Negarit Gazeta) and 47/75 (Negarit Gazeta) respectively. Rural land reform proclamation 31/1975 (Negarit Gazeta) that transferred all rural land to the hand of the state to solve the agonies of tenants and halt evictions of tenants by the land lords, eliminate the yoke of exploitation, extricate crop sharing of (tithe, 1/2 and 1/3) between the land lords and the tenants, end up meandering court-to-court seeking justice over land disputes.

In the same token, proclamation 47/1975 (Negarit Gazeta) that put all urban land and extra houses in the hands of the state to achieve diverse interests of the regime, resolve the urban problems from its root, implement fair and equitable distribution of the economic development gains and give permanent solution for deep seated problems in urban areas. Deprived of any aggrandizement, these proclamations were upturned appalling situations hard to bear once and for all in bud in the region and terminated oppressive relations between landlords and the landless tenants.

These land reforms by great political decisions were made to relieve the ills of urban dwellers leading despondent life, achieve political gain and popular support, build new order on the socialist principles and lay foundation to socialist system of production and distribution, despite the misguided economic policy, political showdown and the protracted war in the country plunged the country into economic weakening. Subsequently the modification of administrative institutional framework of the then existing towns administration was made by proclamation.

According to proclamation of No. 104/76 (Negarit Gazeta) of urban dwellers associations and municipalities in 1976, Adama was administered by the organizational set-up of the then central urban dwellers association (*a xaqalay ye ketema newariwoch mahber*). The administrative

system of Adama city was subdivided into 20 Genda and three higher (*keftenya*) during the Dergue period.

After the fall of the defunct wanton regime rode to power on the horseback of the 1974 and plunged the country into political and economic paralyses, tenacious endeavors were made in the country with a view to avert civil wars, pave new way to nation building and correct the outstanding preceding nation building process challenges via fostering inclusive governance, promoting common interest, building national consensus regardless of leaving no one behind and strengthening unity and brotherhood/ sorority among citizens in respectful way.

During the dictator Dergue regime that deposed the king, the bizarre policy pursued by the brutal Dergue regime threatened the national economy and paralyzed the growth and development of the country. As the country afflicted by conflict and protracted war, the growth and development of Adama was extremely decelerated and dwarfed with the nationalization of urban land and extra house and production and distribution firms in the country by the then Marxist-Leninist regime inspired by Marxism and Leninism.

The change of the system by rebellions in 1991 once and for all kindled a flicker of expectations in Ethiopia that plunged into economic and political paralyze. After the fall of the military regime, the country began to pursue the trajectory of free market economic policy to lift the country from quagmire of poverty in short span of time. As a result, Ethiopia had witnessed rapid economic growth underpinned by public-sector-led development.

A new dawn after 17 years created favorable condition to the economic development of the country. Following the economic policy shift from a command to free market economic system, the growth and development of the city that undermined in the bygone Dergue era was started to resume and revived. The city began to enter few chapters, after the country divorced from the principle and the trajectory of socialist economic development. Eventually, the city which is obviously taken as a convenient place to thrive and live has shown significant surge in physical area, population and economic aspects over the past century.

As a microcosm of the national situation, the fall of the belligerent regime and its erroneous policy opened a ray of hopes for Adama city and its denizens hopping for better future. As naked

facts and figures display, the portfolio of the city has been changed and the city showcased diverse economic and social development in row compared to the previous times.

Adama with good reputations became a flourishing site for industry plants, Industry Park, banks, insurance companies, several education and health facilities, luxury hotels, restaurants, leisure facilities and sites, shopping malls and public gathering halls in the city because of its ideal location in the main transport corridor in the country and salubrious climate, the existence modern means of transport and communication, schools, water and power supply, hospitals, modern business firms in the city.

At this junction of history, the present-day Adama equipped with basic infrastructure, Aba Geda auditorium, Adama Industry Park, adequate power and water supply, Adama Science and Technology University and other colleges, ICT infrastructure, TV and radio stations and reliable transportation to give a decent quality of life to its residents.

Adama which is fastest-growing city and connected with the busiest road in the country with Addis Ababa and four roads lead out of the city has become a noted epicenter of growth and transformation. At present, according to the Proclamation No. 250/2015 that upgraded the status of the city which is labeled as ‘The Pearl of the Rift Valley’ to Regeopolis City in the country, Adama City Government is organized into 33 sectorial offices, 6 sub-cities and 19 districts.

In a nutshell, the ongoing corridor initiative fosters the provision of spacious roads, the installation of fountains, pleasant breathtaking places, pedestrians’ roads, and green areas, bicycle pathways that lengthen the time tourists spend in the city, beautify the city, make the mobility of different entities seamless and safe and enhance the health of the residents.

Chapter Two

2. Physical Background of Adama City

In the hitherto section, efforts were made to presents the snapshots of historical background of Adama city and obtain a good understanding about the historical development of the city in the first place explicitly. Since an unknown period, it is apparent that there are interactions and linear linkage between people and their environments that possessed diverse natural resources which are termed as cultural appraisal in their struggle for survival. Moreover, physical environment have the potential to pose both opportunities and challenges for development that takes shape by a particular local context, may facilitate or inhibit growth and development and deteriorate the quality of environment and human health.

In this sense, the practical reasons for having adequate environmental knowledge at all levels of decision-making in economic, social, and political spheres and thorough understanding about the environment we rely on in multiple ways is to seize and unlock opportunities for economic growth and development, plan for tomorrow by taking into account the local circumstances, mitigate potential and actual environmental threats and adverse effects in bud by taking contextual situations into account.

With this conviction, this chapter briefly discusses the physical background of Adama City for a better understanding of the particular spatial setting of the city; realizing city's potential, responding to the existing challenges we have to tackle and taking up opportunities immediately.

2.1 Location

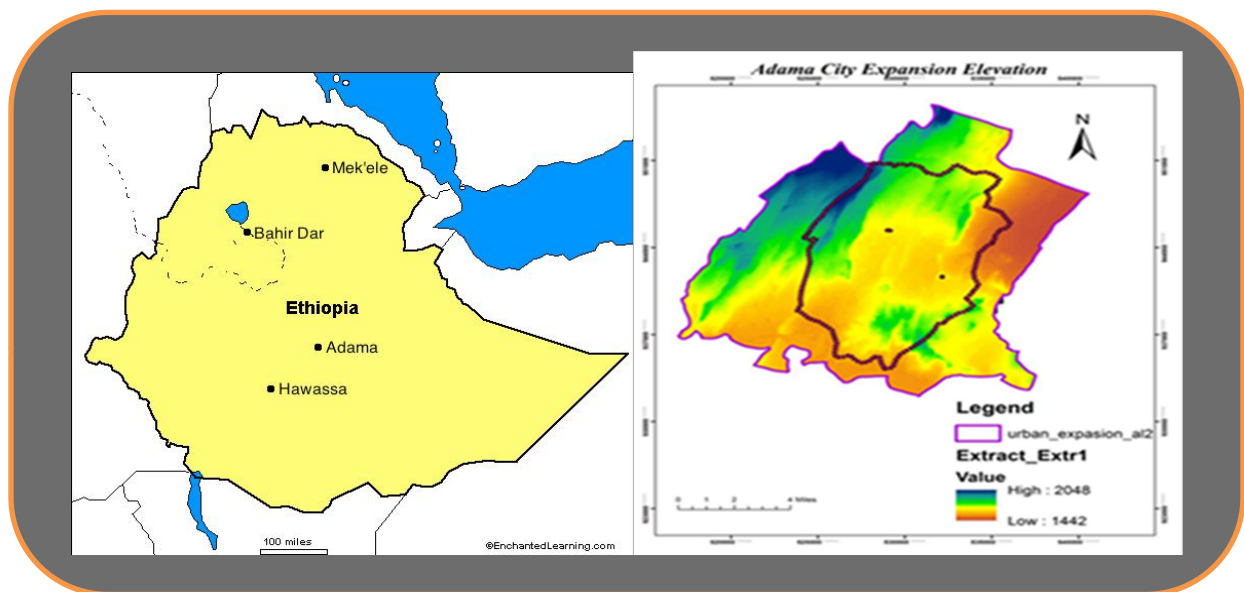
To begin with, location of a place is expressed in relative and absolute locations. Relative location is stated in relation to other geographic features while the absolute location is expressed as a geographical extent, in terms of latitudes and longitudes. As far as vicinal location is concerned, Adama city with its good position on the railway and the busiest road in the country is situated at one only hour away by expressway from Addis Ababa which is a distribution point for imported goods and now serving as a blood vein of the country.

It is located in East Showa zone which has the greatest economic importance in the country. Adama city is bounded to the east and north, to the south and to the west by Adama District, Dodota District and Lume District respectively.

Astronomically, Adama City stretches from 8° 33" to 8° 36" North Latitude and 39° 11' 57" to 39° 21' 15" Longitudes, before it expanded to proximate towns like Awash Melkasa and Wonji bordering the city to the Southeast and southwest respectively and they coalesced into the city's catchment area in 2023. Adama with an area of 54,301 hectares is divided into 6 sub-cities and 19 district administrations.

Adama city is relatively a compact city with similar north-south and east-west dimensions. Equitable compactness of the city is essential to create a compact built area and reduce the costs of fuel, vehicular travel and mobility time and the length of infrastructure networks.

Map 1: Location of Adama City



Source: The land management office of Adama city administration and internet (2023)

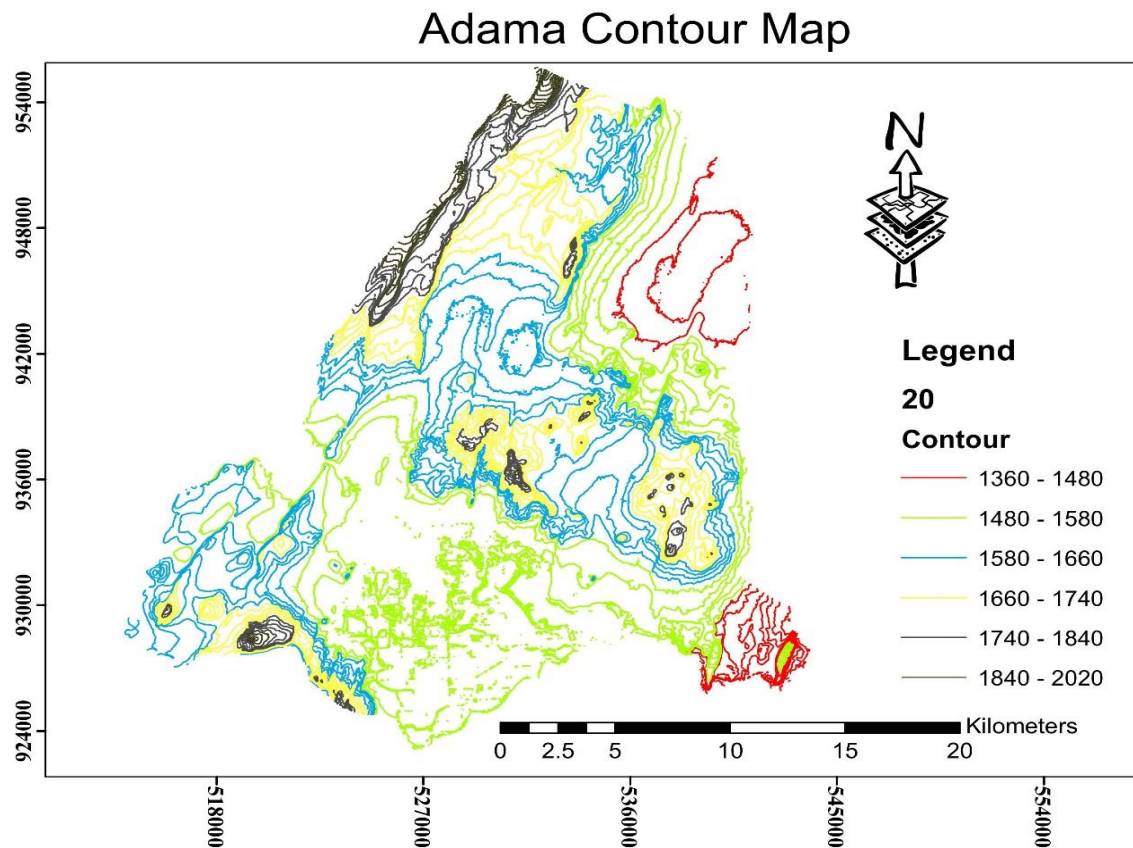
2.2 Topography of the City

It is conspicuous that topography affects land use, human activities and settlement. The topography of an area is taken into consideration during selection of sites for urban settlements. In this regard, much of Adama's terrain in the heart of the city is dominated by plain and flat topography.

The heart of the city is poorly drained and the city beset with problems of flooding during rainy season, although the city is besieged by the rugged and steep landscapes in exciting hillside neighborhoods of the city that limit the spatial expansion of the city to some extents and pose

erosion and sedimentation problems during rainy seasons in densely populated neighborhoods of the city. The altitude of the city which has a concave or bowl shape is situated at the height ranging from 1442 to 2048 meters elevation contour. The city lies at the average elevation of 1,745 meters.

Map 2:- The contour map of Adama city



Source: The planning office of Adama city administration (2023)

2.3 Drainage

The rain water that has fallen on an urbanized area entails drainage. The drainage of Adama runs from north to south due to the pattern of city's surface configuration that appears in aerial photos or satellite images and offer spectacular scenery overlooking the city and unforgettable view of the city to the visitors of the city.

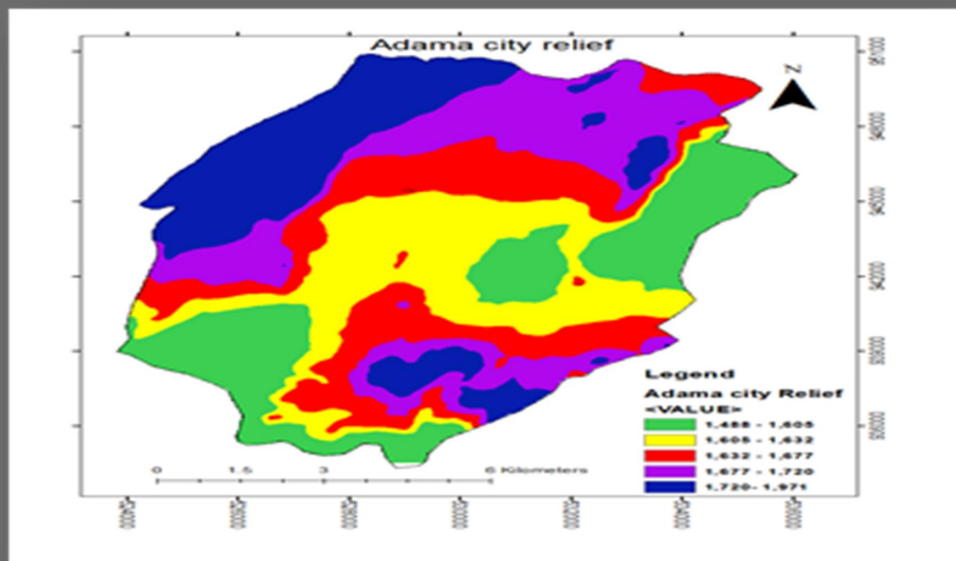
Different gullies those stem from the hillside neighborhoods of the city and almost remain dry for many months of the year and cross the city which is vulnerable to the occurrence of natural

disasters like rain-triggered flooding drain into the Awash River which forms the boundary between Arsi and East Showa zones and Migira pond that end up inside the city.

During extreme precipitation those trigger heavy floods that slam and sweep the city, disrupt transport, dislodge some residents and jeopardize the lives of some residents in flood-prone areas in the city, in the face of the city administration has provided dykes and ditches in these areas of the city to deter flood devastations that in the city.

The gullies which pass through Adama city also pose growing threats and incidents of flood debacle and inflict havoc on the life of people in flood-prone areas and lead to hard owned property and infrastructure devastations in in low-laying parts in a miniature scale due to the combinations of different factors like lower storage and more runoff, the profile of the city, less percolations of water in the bare soils and impervious part of the city that paved immensely by either cobblestones or asphalt.

Map 3:- A relief pattern map of Adama city



Source: Adama city planning and development office (2023)

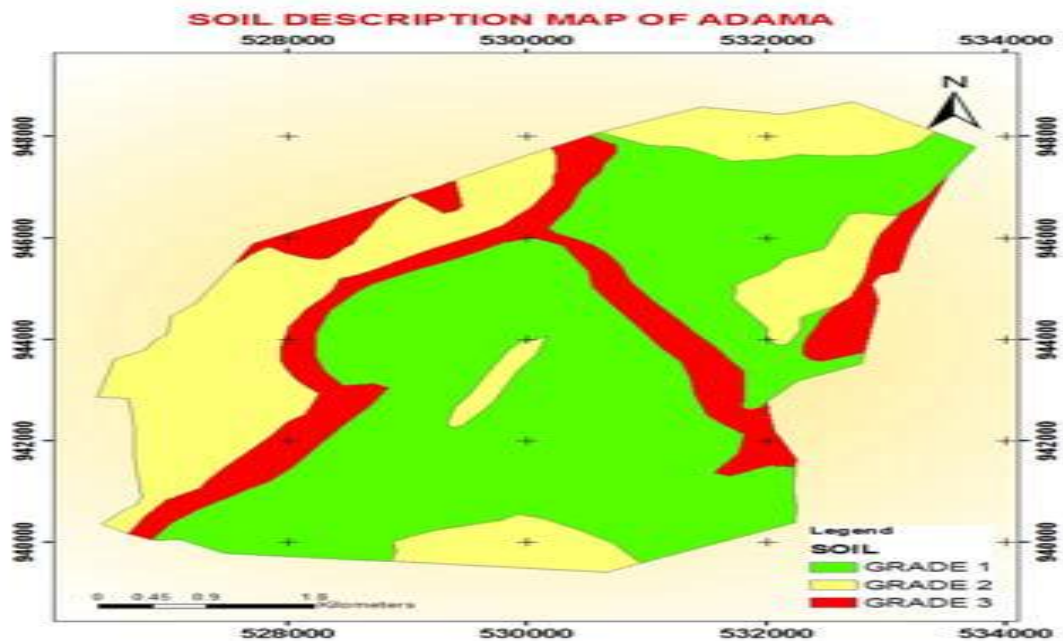
2.4 Soil Characteristics

It is quite visible that soil is a mixture that contains minerals, organic matters and living organisms. The residents of the city are dependent on the soil that have the potential to be replenished/replaced over time through the natural processes for building house, factories, vegetable garden, seedbed of flowers, etc.

Naturally, urban soils are enveloped by roads, parking lots, and buildings. Adama city is no exception. As far as the type of soil is concerned, the types of soils in Adama locale are sandy and sandy-clay in texture which mitigates waterlogging and upsurges porosity, drainage, and oxygen conditions for growing crops and other plants.

On the other hand, the erodible of soil texture of Adama are identifying with more porosity, better drainage, permeability and susceptibility to wind sweep and water erosion. Water erosion takes top soils with it in the locality. Likewise, intensive agricultural practices, gully erosion, overgrazing, deforestation, population pressure and inadequate land use planning aggravated land degradation and edaphic depletion in the locale. In lieu this, Adama's soil is good for making adobe and mud block.

Map 4: - Soil description map of Adama



Source: Adama city master plan revision project office (2004)

2.5. Climatic Conditions

Needless to say, climate and development are strongly interlinked. The spatial distribution of climatic condition of any place varies from place to place and from time to time. The elements of climatic condition are influenced by various physical factors that include altitudinal and latitudinal location, mountain barriers, distance from the sea, among others.

Adama City which is situated within the fascinating central Rift Valley of Ethiopia falls in the desert type of climate. Adama has pleasant climate. As soon as someone steps off the car, the first thing that strikes him is the sparkling atmosphere of the city. In the ensuing sub-sections, the main elements of the climate including temperature, precipitation and wind patterns will be discussed briefly.

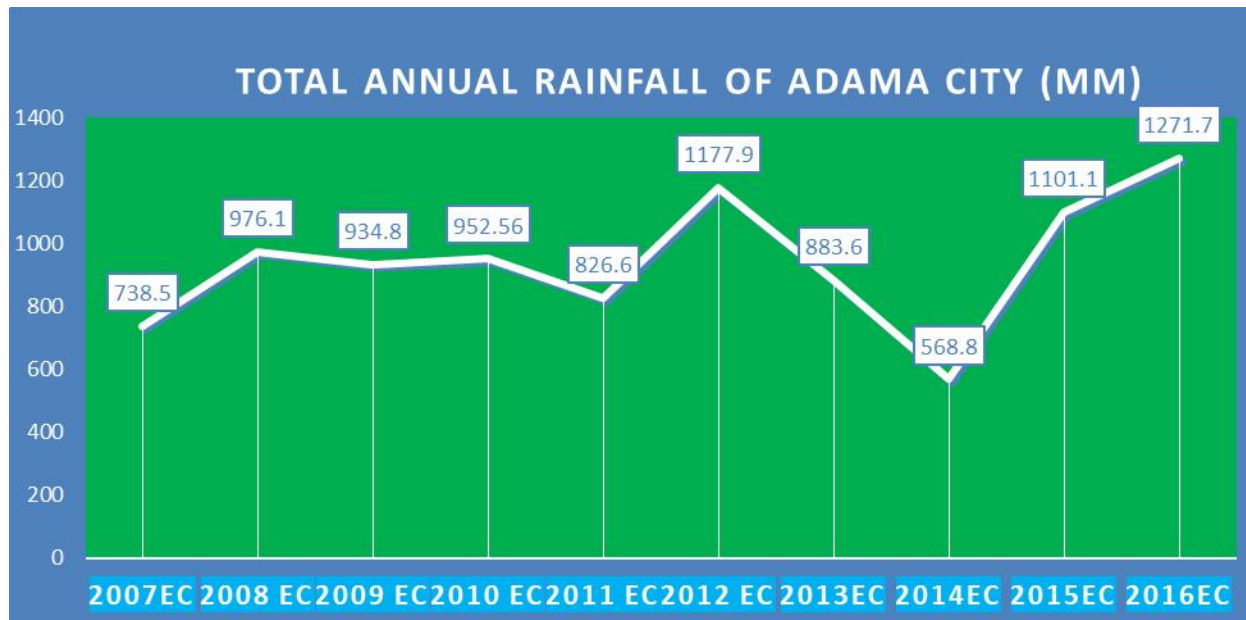
2.5.1 Precipitation

As the rest of the country, the rainfall pattern of Adama is erratic. It not fairly distributed throughout the year. As Adama city is located in lowland part of the country, Adama city and its experience generally scanty and low rainfall conditions.

Rain falls primarily during Ethiopia's two rainy seasons, as unreliable and irregular rains occur sporadically. The big rainy season begins in mid-July and ends in September. It accounts for the largest share of city's rainfalls. The second rainy season occurs from mid-March until April. The dry season lasts from October to March and from May to June. During the second rainy season the city receives little rain.

According to data gathered from Eastern and Central Oromia Meteorological Service Center, the mean annual rainfall for the last 10 years was 881mm. The average maximum and minimum rainfall were registered in 2012 E.C and 2014 E.C respectively. The average maximum and minimum rainfall in 2012 E.C and 2016 E.C were 1271.7mm and 568.8 respectively. Fair information about the amount of rainfall can be acquired from graph provided below.

Line Graph 1: - Graphic presentation of Annual rainfall in the past 10 years (2007 and 2016 A.E.C)



Source: Eastern and Central Oromia Meteorological Service Center (2024)

2.5.1 Wind

Adama is windy and fortune for its fast fresh air circulations in the region. From its very inception, Adama experiences intense westward movement of wind and perpetual high wind speeds. The predominant wind direction in Adama is from East to West. Strong wind speeds occur from October to February, according to data collected from meteorological observation station of Adama city.

Strong winds over on the city sometimes removes roofing materials and topple and dangle trees with big canopy in some locality in the city, despite wind moderates the debilitating effects of high temperatures in Adama City. The presence of this very strong speed of wind paved way for the installation of wind turbines, alternative green energy sources on the skirt of the city at 5KM distance from the center of the city.

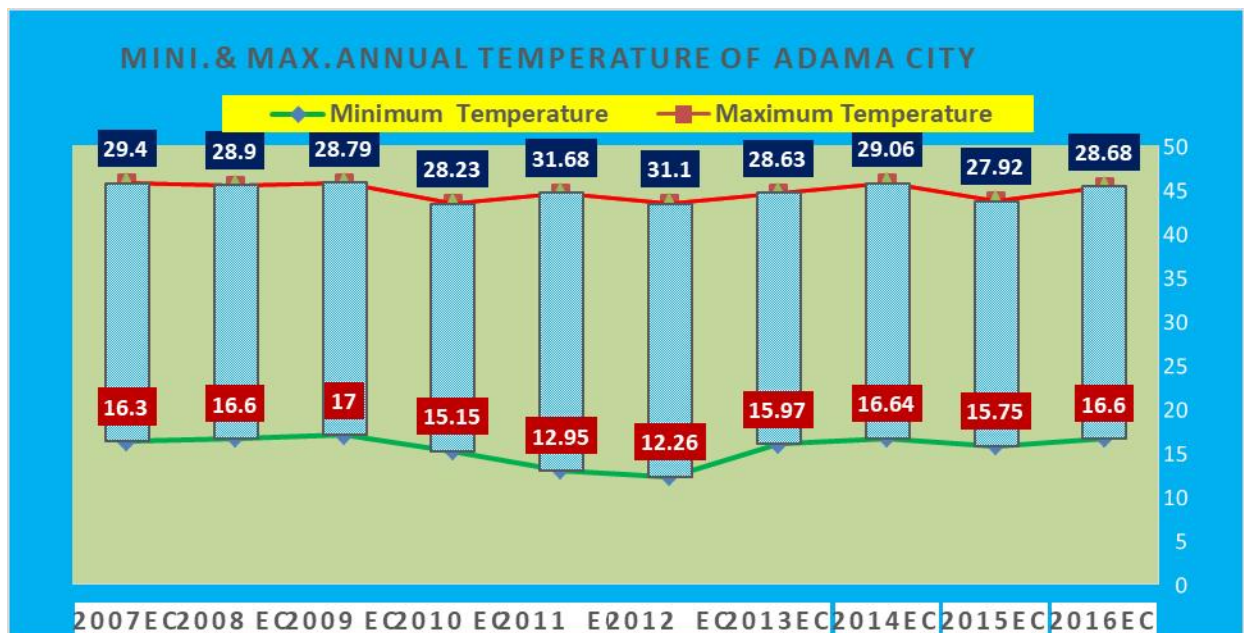
2.5.3 Temperature

Temperature which is an important environmental variable determines the types of crops that successfully grow in a given locality. Temperature of an area is determined by the altitude of the area. Being Adama city located in lowland it experiences high temperature. The dry season that lasts long months brings heat with it from day break to dusk in Adama City which is entwined

with scorching heat for several months during the summer season. The minimum temperature occurs in the months of July and August those overlap with heavy rainfall annually, whereas May and March are the hottest months in the locality of Adama City. The weather is too hot in the months of March, April and May that produce debilitating hot summer conditions for all of Adama's residents. Highest daily temperature registered after zenith and lowest temperature registered at daybreak in the city.

The diurnal range of temperature is high in the city. The average maximum and minimum temperature were registered 2011 A.E.C and 2012 A.E.C respectively in the city, according to data gathered from Eastern and Central Oromia Meteorological Service Center. The average maximum and minimum temperature were 31.68°C and 12.26°C respectively. The average annual minimum and maximum temperature of the study area for the last ten years was 15.52°C_29.24°C respectively. The difference of the amount of temperature between daytime and nighttime during dry season is higher than wet season in Adama City and its hinterlands. Fair information about the maximum and minimum annual temperature can be acquired from graph provided below.

Line Graph 2:- Graphic presentation of average annual maximum and minimum temperature in the past 10 years



Source: Eastern and Central Oromia Meteorological Service Center (2024)

2.6 Natural Vegetation

In the late 19th century, about 30% of landscape of Ethiopia was covered by all in all indigenous forest which was a home to various plants and animals, before the unwarranted decimation endemic species and loss of splendid trees or the forest in pristine condition were cleared blindly to fulfill diverse social, economic and other requirements concurrently. As a microcosm of national condition, the environs of Adama were covered by appealing forest and dense forests which provide many benefits, including high visual quality, cool ambient air by pushing out hot air and pollutants, good recreation opportunities, and rich biodiversity prior to clearing of the forests for agricultural use, the cutting of trees for fuel, and the ever-expanding urbanization have gradually changed the scenery.

Later on, the extensive acacia forests have been ruthlessly vanished by development and human activities and conversion forests to agricultural fields by the farmers to meet demands for food and other natural resources such as fuel wood, ornament, utensils, medicine, charcoal and building materials without environmental responsibility, As the surging demand for living space in urban areas, removal of vegetation for setting up buildings and roads and encroachment of urban areas towards natural habitats and concentration of people in urban areas consume arable land and green spaces and transform amusing natural environment into built up landscapes. They have brought paradigm shift on the natural environmental settings of the area that harbored diverse flora and fauna and exacerbated the vulnerability of the residents to flood traumas.

Concurrently, the locality was home to different roaming predators (hyena, leopard, lion and tiger) and endangered animals like jackals, boar, guinea fowl, warthogs, among others, prior to they lost their natural habitat and ceased to exist as the result of intense man-made duress such as natural habitat damage, urbanization, uncontrolled poaching and hunting for food, adventures, hides and skins (for decorative purposes) contributed to the threatening of some animals at the risk of extinction in the locality. As far as the type of natural vegetation cover is concerned, the natural vegetation ubiquitously found in the locality of the city include wooded grassland and thorny bushes, cactus, herbs and grasses which increases absorption into the ground before the locale lost its identity and distinctiveness as a result of significant local environmental degradation.

Today, some scattered remnants of glamorous acacia and shrubs are commonly available in yards of most houses, small sites in residential blocks, school compounds and churchyards, graveyards and uninhabitable places and hills that besieged the city with stunning inspirational views. Currently, the overall forest coverage of the city is 5,849 hectares. Out of these amount 1917 hectares belongs to the rural Genda administrations recently coalesced with the city with the expansion of the master plan of the city.

Table 1:- Forest area coverage of Adama City

S/N	Forest Area Name	Area coverage in Ha.			Forest Ownership by area (Ha.)			
		Demarcated	Un-demarcated	Total	Private	Public	Cooperative	Total
1	Boku	1494.1	43.22	1537.32				
2	Dibibisa	487.47	0	487.47				
3	Migira	503.01	33.28	536.29				
4	Kechema	359	6.16	365.26				
5	Aroge Adama	76.76	0	76.76				
6	Sire Aba Bune	887.2	181.31	1068.41				
7	Kurfa Gutu	30	28.59	58.49				
	Total	3837.54	292.56	4130	133	1394	2603	4130

Source: Environmental & Forest protection Authority of Adama City Administration (2024)

2.7 Geological Aspect

A case in point is a geological aspect of the city. It is essential to recognize that life -threatening spontaneous volcanic eruption and earthquake with unintended consequences happens within micro second. Based on rector scale earth quakes can trigger dreadful fiasco and destruction challenges and dire condition in urban milieus.

In this regard, the city lies in seismic zone of geologically active and unstable areas of the central Rift Valley that cross the country into halve and runs throughout Ethiopia in its way to from the Middle East to Mozambique. As a result of its geological formation, the city is susceptible to risk

of minor accidental trembles and tremors which can occur and make in-discriminable destruction, power outage, and travel disruption, topple trees and wreak death toll at the speed of light.

The occurrence of 5.8 rector scale magnitude earth quake and the resultant volcanic eruption and smoke happened in Dulecha district of Afar regional state, Fentale and Abomsa locale on 1/3/2025 is an awakening and warning call for Adama city which is located in the unstable Rift Valley. It triggered the evacuation of 20, 000 peoples from the locality.

Due to its geological formation numerous geysers or hot springs and fumaroles like the spectacular Boku, Sodere and Gergedi that vomit hot water and used to heal many illnesses are found at the proximity of Adama. Sodere which is almost on the skirt of Adama is popular for swimming. Despite geological data is not available as required, precious minerals are not found in the locality of the city.

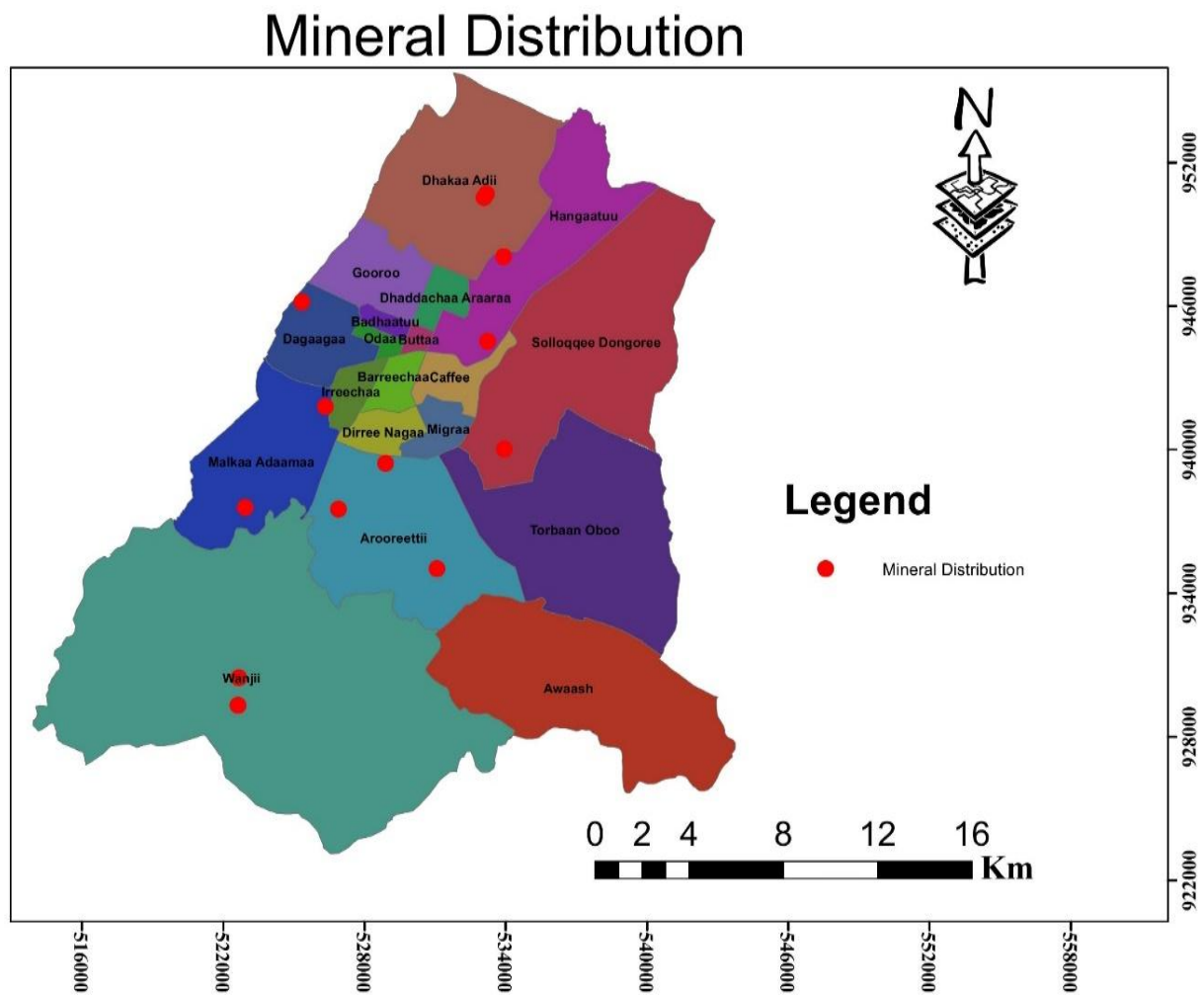
In contrary, the major mineral resources pervasive around the city are building minerals like gravel, sand, red ash and pumice.

Figure 1:- Some quarry sites of pumice & stone in skirt of the city



Source: Government communication affairs office of Adama city administration (2024)

Map: - Mineral Distribution of Adama City



Source: The planning and development office of Adama City Administration (2024)

Chapter Three

3. Demographic Characteristics of the Population

As human wellbeing and development is connected to the environment in which we live and operate, we have dealt with the physical background of the city concisely in the preceding chapter. In the proceeding chapter, a brief overview of demographic landscape of the city is presented in birds-eye-view to shed light succinctly on the demographic condition of Adama city which is the region's largest and fastest-growing city.

3.1 Population Size of the City

To start with, population size is the number of persons in the population at a given time. The size of population of any place is naturally affected by birth rates, death rates, domestic migration or international emigrations. As more people seek to live a better life in towns and cities vise-a vise the previous period, the size of population in urban areas increasing from time to time. Adama city is no exception.

In comparison to other cities in Oromia, Adama city's population mushroomed over time due to its convenient location in the heart of the country. At the same time, city populations ramped up and grow over time as a consequence of births exceeding deaths and migration. This trend comes with significant challenges. Demands for employment opportunities, energy, housing, transport, water, basic education, and healthcare are often stretching in a busy modern city of Adama.

Adama is the 3rd most populous city in Ethiopia in terms of population size next to Shegar City and Addis Ababa (Finfinne). Adama City with the size of population 875,148 as of 2024 G.C is one of the fastest growing cities in the country due to inevitable surge in rural-urban migration and natural growth of population.

By a simple calculation, the overall population density of the city is 1612 per square kilometer, according to the population enumeration made by Adama city administration in 2015 E.C. This population size is expected to double in the next 25 years.

According to the population enumeration made by Adama city administration in 2015 A.E.C., the district with the biggest population is Goro (63.136), whereas, the district with the least population is Degaga (15,200). For further clarifications, see the tables provided below.

Table 2:- The size of population and households of Adama City by sub-city (2016 A.E.C)

S.N	Name of Sub-city	Total Population			Total Households		
		Male	Female	Total	Male	Female	Total
1	Dembela	54924	58579	113503	22835	10177	33012
2	Boku	56397	44748	101144	18089	3792	21881
3	A.Geda	64832	73329	138161	20051	12954	33005
4	Dabe	81167	87401	168568	34651	13100	47751
5	Lugo	71631	80950	152581	27452	10824	38276
6	Bole	95241	105950	201191	42472	13914	56386
	Total	424192	450957	875148	165550	64761	230311

Source: Population enumeration of Adama City (2023)

Table 3:- The size of population and households by district administration (2016 A.E.C)

S/ N	Name of District Administration	Total number of populations			Number of Households		
		Male	Female	Total	Male	Female	Total
1	Degaga	9632	10940	20572	3879	1493	5372
2	Melka Adama	11492	11505	22997	5295	1169	6464
3	Torben Obo	13100	10112	23212	4330	1229	5559
4	Soloke Dongore	14437	12347	26785	3524	1094	4618
5	Migira	13882	15243	29125	4558	1461	6019
6	Buta	14944	17464	32408	4776	3614	8390
7	Aroreti	17507	16615	34122	7159	1634	8793
8	Dhadacha Arara	17164	20556	37720	8610	4154	12764
9	Wanji	21291	20338	41628	6006	3302	9308
10	Oda	19811	22230	42042	4680	3654	8334
11	Badhatu	20444	22694	43139	6716	4193	10909
12	Awash	25790	18021	43811	6600	929	7529
13	Irecha	22142	26736	48878	11534	5706	17240
14	Dire Nega	23912	27017	50929	10259	2826	13085
15	Caffe	32441	38261	70702	16346	6785	23131

16	Hangatu	34288	36793	71081	14781	5221	20002
17	Barecha	33838	38689	72527	12635	6537	19172
18	Dhaga Adi	38486	39895	78381	17630	4037	21667
19	Goro	39592	45499	85091	16232	5723	21955
	Total	424,192	450,956	875,148	165,550	64,761	230,311

Source: Population enumeration of Adama City (2023)

3.2. Age Composition

Age composition is the distribution of a population into its various groupings mainly by age. The type of population of the city divided into age segment of young, adult and old age. The population whose age ranges between 15-65 years is called adult and economically active population. Adama's population is a very youthful one.

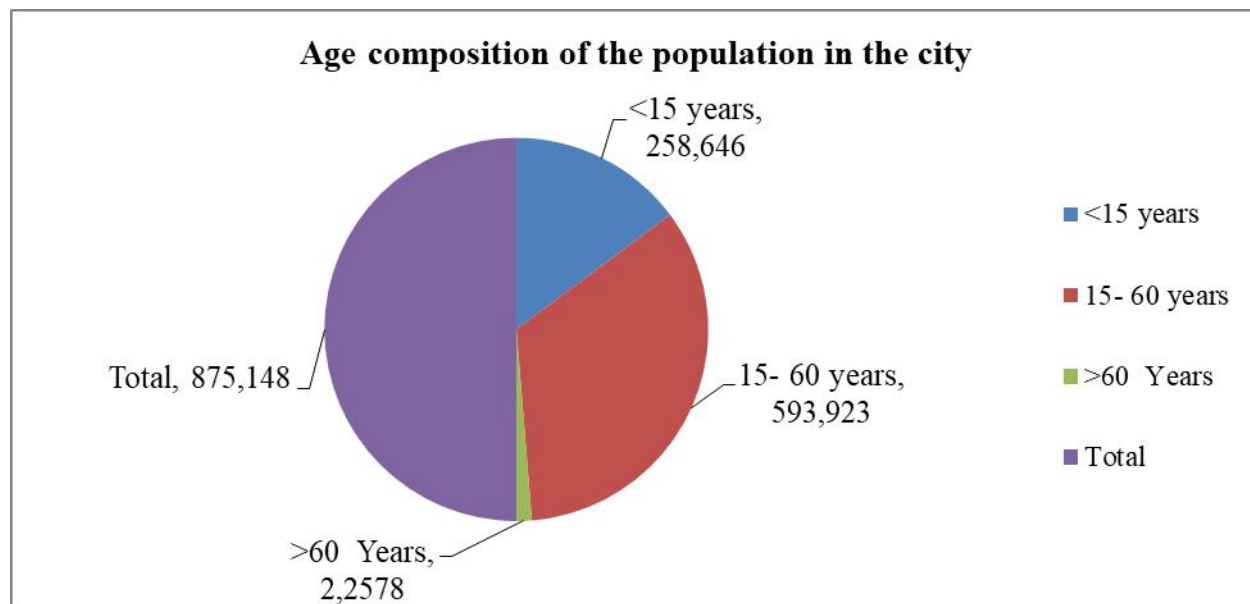
Adama's the pyramidal age structure of the population has remained predominately young with 67.87% within the age bracket of 15-29 years. This shows that the majority of its population falls under the age of fifteen. The type of population whose age is above 65 years is called old age.

The population in the age group of over 65 years accounts for only 3% of the total population; nonetheless the longevity of city's population is increasing due to change in dietary pattern and health care system. For further understanding, see the table provided below.

Table 4:- Age composition by sex type					
S.N	Age Group	Male	Female	Total	%
1	<15 years	125,368	133,278	258,646	29.55
2	15-60 years	287,880	306,043	593,923	67.87
3	>60 years	10,944	11,634	22,578	2.58
	Total	424,192	450,956	875,148	100

Source: Population enumeration of Adama City (2023)

Pie Chart 1: Age composition



3.3 Sex Ratio

Sex ratio which is defined as the total number of male populations per 100 female populations is the distribution of a population into its various groupings mainly by sex. As experiences show and the existing data portrays, Adama has skewed sex ratio. In other words, the majority of the residents of the city are women, as more females move to urban areas at a higher rate than men do to engage in job opportunities like domestic worker, house cleaner and ganisters which are available for them in urban setting.

According population enumeration made by Adama city administration in 2015 E.C, the size of male and female population in the city is 424,192 and 450,956 respectively. This gives a males-to-females ratio of 0.94:1.06. For further understanding, see the table provided below.

Table 5:- Sex Ratio and Population Size by district administration 2015 A.E.C

S.N	Name of district	Ratio to total population	Sex ratio (F:M)	Total area in Ha.	Population density /Ha/
1	Degaga	2.35	1.64	1276	16
2	Melka Adama	2.63	1.67	3046	8
3	Torban Obo	2.65	1.01	5710	4
4	Soloke Dongore	3.06	1.03	6629	4

5	Migira	3.33	1.48	482	60
6	Butta	3.70	1.36	115	282
7	Aroreti	3.90	1.45	4480	8
8	Dedecha Arara	4.31	1.92	405	93
9	Wonji	4.76	1.11	15832	3
10	Oda	4.80	1.23	160	263
11	Bedatu	4.93	1.35	175	247
12	Awash	5.01	0.89	5887	7
13	Irecha	5.59	1.98	414	118
14	Dire Nega	5.82	1.77	518	98
15	Cheffe	8.08	1.96	630	112
16	Hengatu	8.12	1.62	3070	23
17	Berecha	8.29	1.52	414	175
18	Dega Adi	8.96	1.72	4433	18
19	Goro	9.72	1.70	1267	67
	Total	100	1.49	54,943	16

Source: Population enumeration of Adama City (2023)

3.4 Population Growth Rate

This is a bird's eye view of population growth in Adama city. As we all know, population growth rate which is the change in population is determined by births, deaths plus migration flows which lead to increase or decline population size over time.

The population growth rate expresses the change in population size as a factor of time. The number of births exceeds the number of deaths to greater access to health services and living standards that resulted in population increase which is normal and inevitable and affected population growth rates positively. Large-scale migration also fuels urban growth as people leave the countryside in search of better jobs.

With the passage of time, Adama city which has become magnets for rural migrants has realized very substantial changes in both natural surge and migration flows forced by both pulls and push factors driving people to leave countryside in quest of better life. Inevitable rural-urban

migration is estimated to be a more dominant factor in the upsurge in urban populations which have major impacts on ecosystems. Pull factors include public services, security and job opportunities while the push factors include environmental degradation, low agricultural productivity, and inadequate social services, demographic pressure, and land shortages, lack of rain, recurrent drought and conflict.

Migration from rural to urban areas and the resulting concentration of populations in city which is accompanied with an expansion in urban land put pressure on the existing services and facilities in urban precincts while the resources of the city remain constant put pressure on the city's infrastructure and is a concern about the capacity of the city to accommodate them.

The current population growth rate of the city estimated at 5.3% per year per year which is the signal of rapid population growth, in the face of the city is not producing commensurate physical and social infrastructures and services as necessary to accommodate influx of the population from rural to the city in pursuit of better service and gainful employment. If the current trends of a large-scale population growth hold, the population size is expected to upswing dramatically in the coming decades and a doubling time of population is less than 20 years.

3.5. Population Dependency Ratio

Dependency ratio which describes the relation between the potentially self-supporting portion of the population and the dependent portions at the extremes of age in a specified time period is a measure of the degree of burden created by unproductive population over productive population.

The dependent groups of age 0-14 and above 65 are considered as dependent population, whereas the populations whose age falls between 15-64 years are labeled as productive population. The city's population pyramid reveals the fact that people aged sixty-four and above those are not contributing to the labor market with very low risk of death comprises 4% of the total population. Many of them are without secured means of income in their later stage of their lives. Fair information about dependency ratio can be obtained from the subsequent table.

Table 6:- The dependency ratio of the population by 2015 A.E.C

S.N	Age Group	Male	Female	Total	Percentage
1	<15 years	125,368	133,278	258,646	29.55
2	15- 60 years	287,880	306,043	593,923	67.87

3	>60 years	10,944	11,634	22,578	2.58
	Total	424,192	450,956	875,148	100

Source: Population enumeration of Adama City (2023)

3.6 Ethnic Composition

Ethiopia which is a multicultural and multiethnic nation is home to various languages and ethnicities that share common desire and goals, shared rituals, indigenous knowledge, conflict resolution mechanisms, national identity and future and live side by side in peace and safe bequeathed from the predecessor generations and should be leveraged by the current generation.

Similarly, an urban setting whereby predominantly rural culture is being rapidly replaced by largely urban culture is a residence of heterogeneous inhabitants with different background who move to the urban milieus to thrive and live deprived of sowing discord and annoyance animosity. Adama city is no exception.

Since its commencement in 1916 as a rail way depot, influx of migrants from different crony and nook of the country has brought demographic transformation of population in the city. Today, Adama City is melting pot of a broad array of ethnic groups with dissimilar cultural and religious backgrounds and diverse views.

As urbanization has transformed the demographic composition and social structures of the city, the vast majority of the populations in the city are Oromo, Amhara, Gurage, and Silte who live together in respectful way. In similar way, several vernaculars are spoken in the city on a daily basis. Ethnic composition of the city can be obtained from the succeeding table.

Table 7:- Percentage of Ethnic Groups in Adama City

S.N	Ethnic Group	Percentage of ethnic group in the city
1	Oromo	59.9
2	Amhara	21.9
3	Gurage	7
4	Silte	6.2
5	Welayita	1.8

6	Tigre	1.5
7	Afar	0.2
8	Somale	0.1
9	Others	1.4
	Total	100

Source: Population enumeration of Adama City (2023)

3.7 Religious Composition

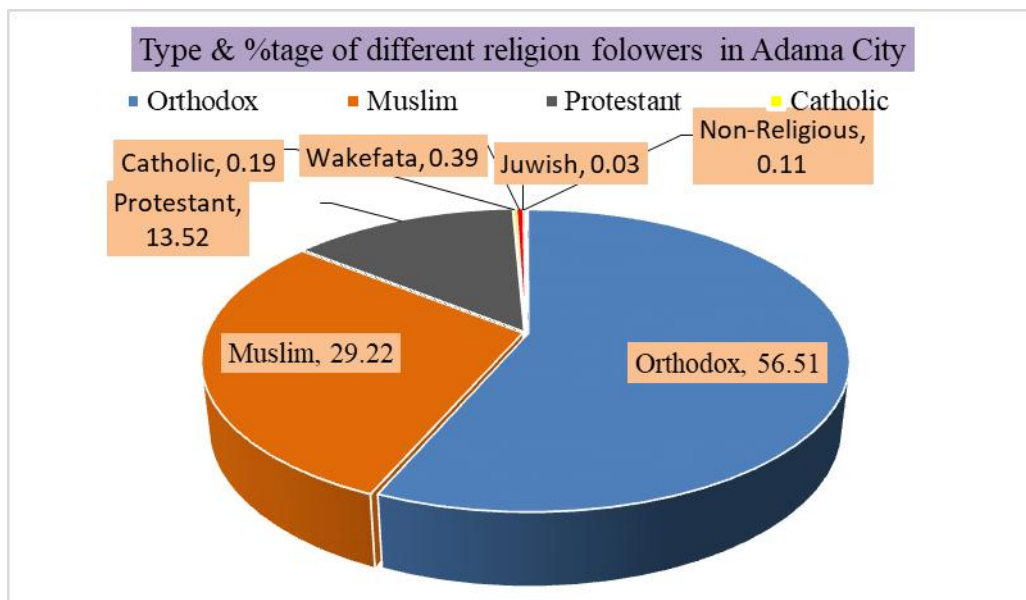
As the Biblical Saying goes that ‘man does not live by bread alone’, it is worth mentioning here that the great religions which inspire love, sorority, trust, and respect, cultivate disciplined life, discourages malicious acts, builds temperaments of citizens, reshapes citizen’s way of life and preaches unity and togetherness are the foundations on which the greater civilization rests.

With regard to religion, Ethiopia is a religious country to date. It is one of the very first nations to embrace the religions of Christian and Islam faiths. These religions have so many commonality elements like acceptable social and taboos, ethos, norms, principles and moral values bestowed from the precursors in the country. It is obvious that these elements promote stability, mutual respect, cohesion and peaceful cohabitation among different social groups that the present generation has to bequeath the forthcoming generation and generation to come.

As a result, different religion followers live peacefully in Ethiopia which should belong to all Ethiopians regardless of any difference. As a national microcosm, the vast majority of the population in the city believes in one of the three major groups of beliefs: Christianity, Islam and other traditional beliefs in Ethiopia where the state and religions are separated according to the constitution.

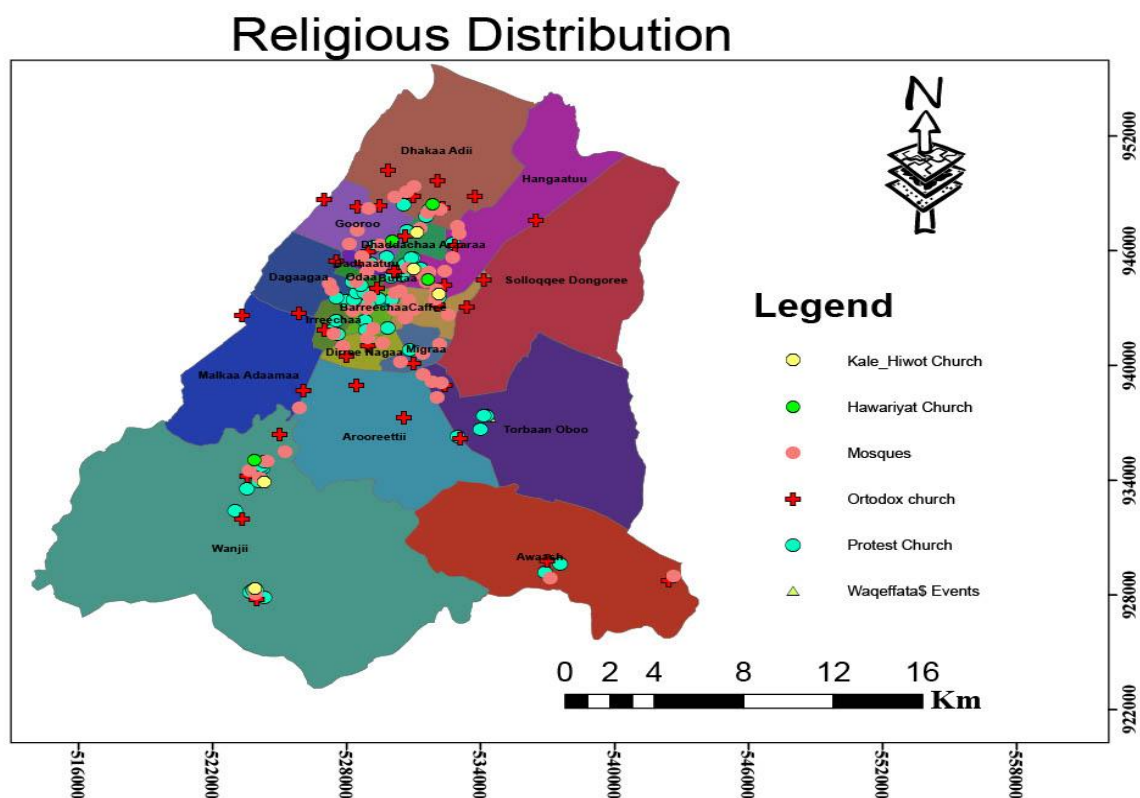
The worship facilities are needed for different religious institutions. Concomitantly, it is a domicile of many worship places and premises and edifices of different religions like churches, mosques and chapels those are completely dedicated for only religious uses or pious purposes. Besides, plenty of deacons, clergymen and Islamic scholars are found in the city. For further understanding of religion composition of the city, see the table provided below.

Pie Chart 2:- The number of the followers of different religions in Adama City



Source: Population enumeration of Adama City (2023)

Map: - Religious Disribution in Adama City



Source: Population enumeration of Adama City (2023)

3.8 Vital Statistics Registrations

At present, vital statistics is one of the major sources of demographic data. Vital registration is also crucial for admission into schools, inheritance or insurance claimer, arranging the transfer of property, a proof age to qualify for social security benefits or options, application for license to operate motor vehicles, exercising voting rights in life time, among others.

For this to happen, the city administration has the duty to ensure the preparation of vital statistics that includes the most basic human events such as birth, death, marriage and divorce from vital registration recorded as they occur.

Vital statistics are gathered from birth and death certificates, marriage licenses, divorce records and other official records to downswing lawful acts and alleviate sham marriages and other criminal acts. Figures and facts about vital statistics registrations in Adama city can be obtained from the subsequent table provided below.

Table 8:- The vital statistics registration of Adama City by year 2015 and 2016 E.C

S.N	Description	Unit	2015	2016
1	Marriage registration	No.	2,574	2,167
2	Birth registration	No.	21,658	23,494
3	Adoption	No.	49	16
4	Divorce registration	No.	134	134
5	Death registration	No.	474	589
	Total	No	24,889	26,400

Source: Vital statistics registration agency of Adama City Administration (2024)

CHAPTER FOUR

4. ADMINISTRATIVE SYSTEM

4.1 Organizational Set-up of Adama City Administration

Organizational Set-up of Adama City Administration is presented in this part. In modern day societies, administration is a part and parcel of our daily life. Particularly, public Administration which embraces all the activities of the government that should be inclusive of all political parties with diverse views and antithesis and is a conduit through which government goals and objectives are realized is an activity as old as our ancient civilization has gained greater importance since the emergence of modern Administrative State.

In today's world, administration becomes an even more complex and challenging task in both developed and developing countries those territorial integrity must be preserved. As the notion of 'one-size-fits-all' became a crazy idea than ever before and insurmountable, making political reforms, strategically thinking-out-of-the-box, setting new benchmarks and calibration and abrogation of the policy by taking into consideration the reality on the ground is inevitable to meet current public interests, needs and benefits, catalyze socioeconomic development and break away from the old notion of doing business.

As the old way of doing cannot resolve the current real challenges, designing well-tailored policy, the continuous amendments, reviewing and modification of public policies and legal frameworks and modification, reinforcing and reframing public institutions are essential to fight emerging challenges and ameliorate the lives of people who take a lion's share in national development endeavors in the shortest possible time and create conducive environment for the continuing growth and development.

Unlike the previous time, many policies were rescinded and several pragmatic policy, rules, directives, standards and procedures changes which are not a carbon copy of its predecessors were made in the hope of realizing the vision of the country, increasing the efficiency of government services and promoting good urban governance. Based on this tenet, the government has launched Urban Local Government Development Program (ULGDP) in 2001 A. E.C.

The aim was to enhance the institutional and organizational performance of urban local governments in developing and sustaining urban infrastructure and services, accommodate the

existing public grievances and progressive ideas, and address new and emerging challenges paralyzing urban development than what have been before.

As a microcosm of the country, Adama city administration which follows well-defined mandates to fundamentally achieve well-defined goals is tasked with providing city-wide leadership. It has made several institutional arrangements in the past years depending upon various policies formulated and implemented at national and regional levels to shrink bureaucratic layers not suitable for the current situation and jeopardized the growth and development of the city trapped in a vicious circle of poor performance and poor service delivery.

Following the proclamation No. 65/2003 (Megelata Oromia) and the ensuing 196/2016 (Megelata Oromia) and 250/2015 (Megelata Oromia) the scope of the authority and activities of the city the city administration has broadened to enhance the provision of services which are not offered by the private sector for the betterment of all.

The present-day pattern of city administration which has a very important place in the life of the residents and jurisdictions over the affairs of city governance is bifurcated into two, that is, municipal and state functions which have their own duties and responsibilities and working in unison.

By the same token, the institutional frameworks of Adama city administration which is in charge of offering multiple services to the townsfolk and is responsible for the administration of the 54,301 hectares is organized into legislative, executive and judiciary branches of the city administration to uphold check and balance within city administrative system.

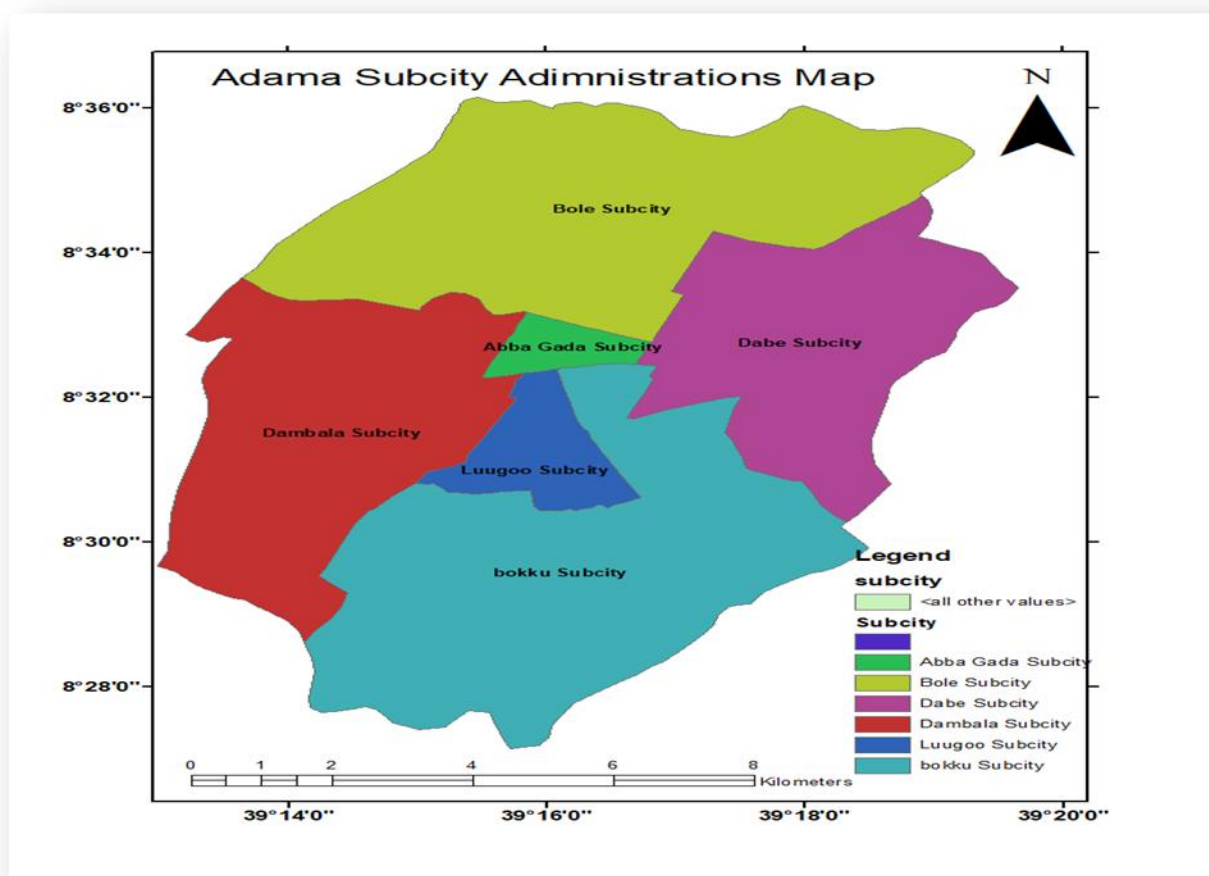
As depicts in chart 1, Adama city has three tiers local government. According to the Proclamation No. 250/2015 that upgraded the status of the city to Regeopolis, Adama City Government is organized into 33 sector offices, 6 sub-cities and 19 districts which have clear functions and deliverables to enhance public satisfaction on service delivery system and decrease overlapping and wasteful activities.

According to civil service reform, this streamlining and decentralization of public services was made order to fulfill its mission and vision, transfer of powers, functions, resources and administrative duty/responsibility from central to sub-city authorities and subsidiary bodies and

avert duplication of efforts, time and resources, reduce overlapping and wasteful activities, promote efficiency in the administrative machinery and ameliorate service delivery in a positive manner.

As it can be observed from the figure provided below, the city administration which is always behind the economic and social progress path of the city has built an administration building complex. The complex which is designed to fit smart city concept, including a situation room, a free phone call center, a museum and exhibition, 4 different halls with a capacity of 282 to 2,000 people, a gym, a library, cinema and theater rooms, a modern cafeteria, ground parking and many other has the capacity to accommodate 20 offices. The administrative divisions and the office currently built by Adama city administration presented as follows.

Map 5:- Administrative divisions of the city



Source: Adama city plan and development office (2024)

Flow Chart 3:- Organizational skeleton flow chart of Adama city administration

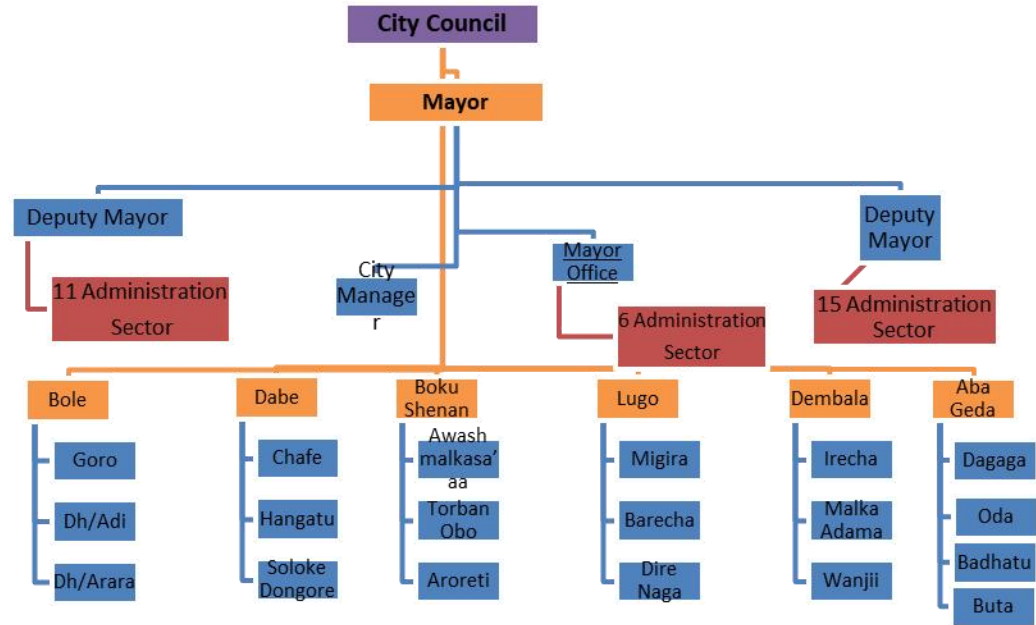


Figure 2:- Headquarter office of Adama city administration



Source: Government communication affairs office of Adama city administration (2024)

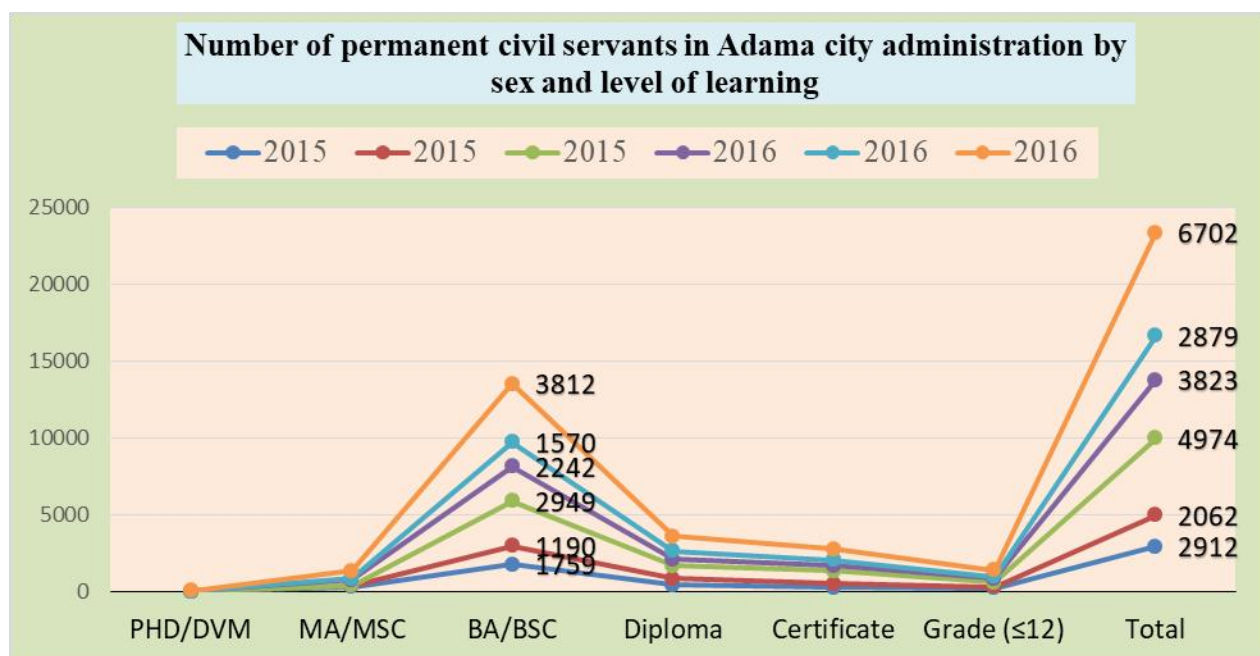
4.2 Human Resource Development

In this dynamic era, development is unthinkable without the decisive role and contribution of human resources or civil servants which play irreplaceable role in every country of the world. Since policy implementation for the proper functioning of the system is the function of civil servants, a synergy of national policies and strategies, institutional arrangements and human resources deployment with good knowledge and experience in the area of operations is critical.

Being the deployment of civil servants equipped with the necessary skills in public organizations is required; Adama City Administration which bears the responsibility of offering diverse public services to the residents is armed with the required logistics and human resources with a ray of glimmering hopes, according to the organization's structure.

This was made to raise the level of public service performance, respond to the changing needs and demands, improve poor service delivery system marred by poor quality, delays and high costs that flicker discussions, despite paucity of technocrats at the required level and deploying them based on merit are remained difficult. Further information about the case in point can be acquired from the ensuing table.

Line Graph 3:- Number of permanent civil servants in Adama city administration by sex and level of Education



Source: Public service and human resource office (2016)

Table 9:- The No. of Contractual and Temporary Employees

year	Male	Female	Total
2015	183	175	358
2016	42	21	63
Total	225	196	421

Source: Public service and human resource development office (2024)

4.3 Smart Adama Initiative

Whether we like or not, we are living in the era of digital order, globalization and the age of electronic communication where online access make every information accessible to the users within microsecond regardless of location. In the age of digital order that transcends national border deprived of any limitation and considered as one critical material for development, digital technology became the spinal cord of business and financial institutions.

As a result, the promotion of Smart City has gained increasing importance elsewhere across the world which became a simple village due to the development and expansion of information communication technology which enhances connectivity and improves service delivery. With the expansion of ICT services and diffusion of digital technology throughout the world, cities and organizations require to use digital technology with a view to acquire and disseminate real-time markets' information to millions of people, deliver services and surge information flow between buyers and sellers via digital options and platforms.

To this happen, it is imperative for every government to build the capacity, both hard and software, improve its service delivery via using different electronic networks and digital skills and simplify service delivery system in the area in which they operate and take full benefit of the opportunities via digitalization and technological innovations, infrastructure building and human resources development.

Since the incumbent government came to power in the 2018, investment in digital technology has gained impetus in order to enhance information sharing and working towards intelligence sharing for law enforcement purpose, create a stimulating environment for technological transfer, provide paperless, cashless and contactless services, increase efficiency and productivity with

dexterous and agility and support learning, innovation, wealth creation, and social development using digital infrastructure and devices.

Furthermore, smart city which uses digital technology for all city functions to provide efficient and effective services in place of awkward and time-consuming service and reduce cost through the use of digital options and platforms was initiated in a comprehensive manner to harness digitalization's new opportunities for development, meet the challenges of 21st age, cope with upswing of technological progress, promote efficiency and effectiveness, transfer information and data quickly from one section to another.

A smart city is an urban development using Information and Communication Technology (ICT) and Internet of Things to provide useful information effectively and manage assets, resources and services efficiently. In the same token, the word smart city is defined as a city that engages its citizens and connects its infrastructure electronically to enhance its live-ability, workability and sustainability.

By knowing the implications of smart city smart city initiative was introduced in 2022 to make the city a paragon of digital infrastructure development and offer agile services and improve technology generation, transfer, and utilization exhaustively and foster seamless connectivity and service.

The incumbent city administration that aspires to become a beacon of hope for others embarked on Smart Adama Initiative in order to solve the emerging problems of urban living, cope with recent technological and social changes, meet customers' demands, enhance performance, reduce costs and resource consumption, leverage digital platform and e-learning platforms.

Presently, Adama Science and Technology Office are reframed under the umbrella of Adama city administration. Moreover, Smart Adama initiative is streamlined in the organizational hierarchy of Adama city administration in order to increase the efficiency of services, reduce waste of resources, decrease in crimes, drop traffic rule violation, ensure increased security residents, diminish land-related crime and rise revenue collection.

As the figure provided below conveys, Smart Adama Initiative focuses on ten smart city goals such as smart mobility, smart public relation, smart social service, smart urban design and land

use management, digital Adama, smart technology, smart environment, smart tourism and culture, smart governance and smart people to improve service delivery and realize building a Smart City and offer prompt services without procrastination and wasting time.

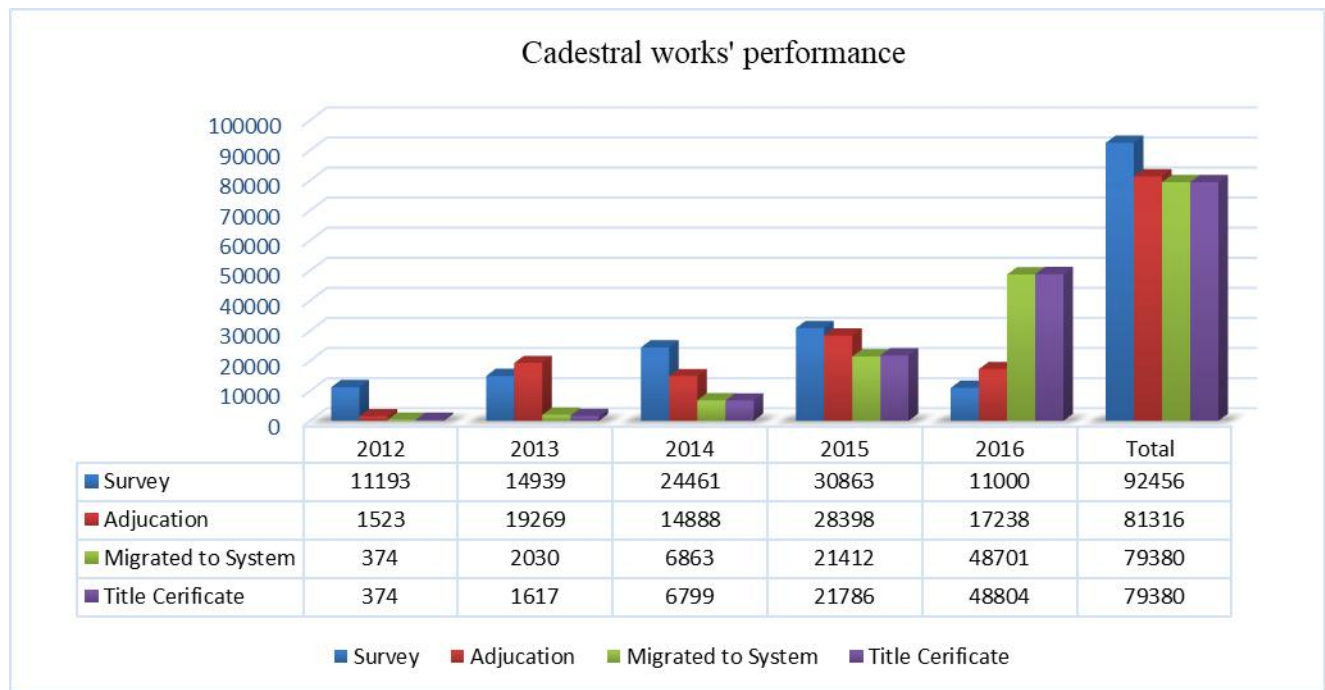
In this regard, out of 555,930 manual files 544,529 files (98%) were scanned, 805 outdoor and indoor CCTV cameras, situation room, cloud data center, the required human resources to be coached, logistics, network or connectivity set up, local area network (LAN) established, several biometric attendance devices installed in different sectors of the city administration to support the realization of smart city initiative.

The outcome of smart Adama city is enormous. According to data collected from Adama city administration, a total of 117,488 land documents have been digitized. Consequently, Adama city administration has begun to reap the benefits of smart city technology with the use of e-service.

Likewise, office document digitalization, automation offices service delivery, smart infrastructure development via implementing walking around management system, human resource capacity building were made in order to promote electronic service delivery, make poor service delivery history and deliver prompt services devoid of blood-curdling bureaucratic bottleneck and procrastination, even if much more is still needed to further strengthen the initiative.

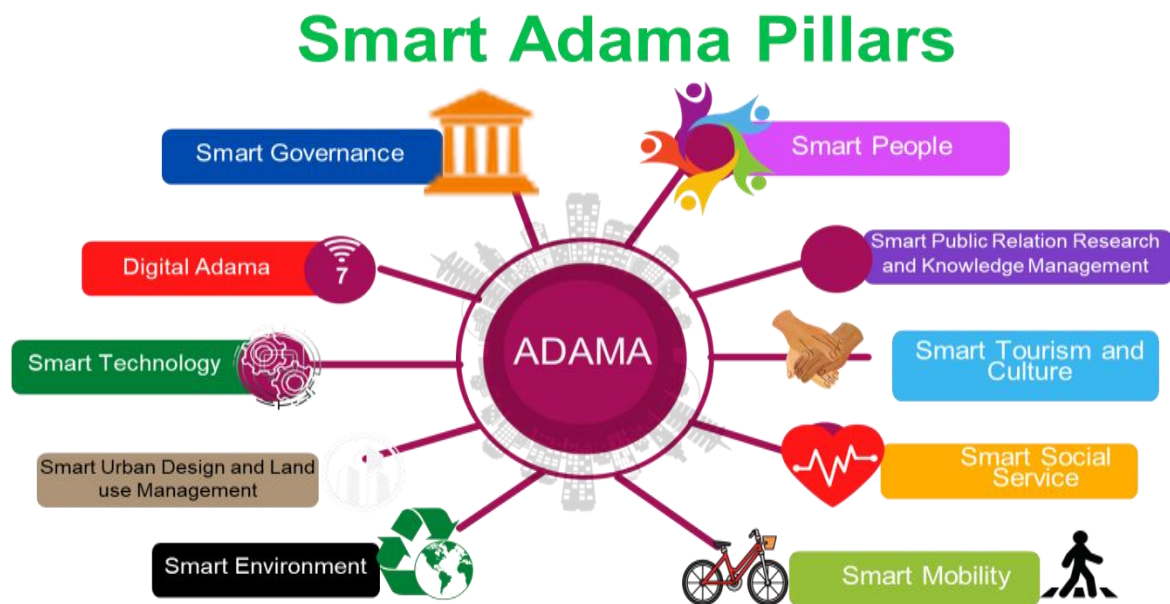
To recapitulate, the city administration is working in collaboration with Federal Minister of Urban and Infrastructure, ASTU, Oromia Science Authority, Ethio-telecom, Information Network Security Administration (INSA) and Ethiopian artificial intelligence institute by Adama City Administration in order to foster electronic service delivery and implement nationally developed information technology and related technologies, directives, standards and procedures in the information technology industry areas. The pillars of a smart city have been presented in the figure provided below.

Bar Graph 1:- Cadastral works' performance



Source: A magazine Produced by Adama City Administration for African Urban Forum (2024)

Figure 3:- Smart Adama pillars



Source: Smart Adama initiative project office (2023)

CHAPTER FIVE

5. SOCIO-ECONOMIC SITUATION OF THE CITY

5.1. Urban Economy

The foregoing discussion was put emphasis on the organizational structure of the city administration, human resources development and smart city initiative. In the subsequent deliberation urban economy and basic services among other issues are accentuated in a shortened manner, erstwhile focusing in on specific economic types.

Without question, urban centers where sufficient such as road, energy, market, trained labor, health and education facilities are available with divisions of labor and a non-farming lifestyle are the genesis of human civilization, centers of innovation and technological diffusion. Urban centers which more economically diverse than non-urban is seen as drivers of development and keys to future prosperity of the country.

When cities grow, different needs and services like banking, transport, private health care, and consumer retail market arise. For these reasons and others, urban areas which can deliver opportunities for structural transformation and drive economic, social and cultural transformations are the primary centers of economic growth, engines of national economic development and hubs social and economic interactions.

It is crystal clear that the urban economy is dominated by the manufacturing, construction, and services sectors. As a result, cities are extremely vital for the economic developments of the country. They can play a significantly role in bringing the desired level of fast and sustainable urban development and diversifying the economy towards industry and manufacturing growth based on the ongoing national reforms and strategies and other government initiatives unveiled by the government.

Adama which is the busiest city in Oromia is a center for secondary and tertiary sectors including manufacturing, marketing, insurance, supermarkets, shopping malls, hotel, restaurant, transportation, storage, communication, financial intermediation, real estate service, public administration, education, health and other social services which employ large size of population in the city.

In this chapter exertions will be made in order to provide a bird's eye view of the socio-economic circumstances of the city and highlight the current economic landscape of the city in a summarized manner.

5.1.1 Land Use Pattern

Land which is a scarce in an urban region is home and heritage, and therefore a source of food, clothing and housing and sustenance and inspiration to be cared for. Land on which both rural and urban livelihoods ultimately depend is a fundamental resource for the economic development of any country in the world.

At the same time, the lands are central foundations for planning an urban region. All the land within the city boundary belongs to the municipality and farmers to be expropriated by prior payment commensurate compensations to lease urban land and provide to lead to private housing builders. Planned development ensures health, safety and property rights of citizens, environmental sustainability, efficiency in resource use, and transparency in management of affairs. Accordingly, without proper planning and infrastructure development the provision of mobility and transport, facilitating sustainable urbanization practices in the country, increasing access to energy, housing, transport, water, sanitation, health care, security, and education and sanitation services is an uphill task.

For convenience, fine-scale design that provides spatial arrangements, protects and creates inspiring places for people is extremely valuable, especially in urban regions where people concentrate on small area, to promote opportunities for current inhabitants without compromising the need of future generation, achieve balanced growth and sustainable development outcomes in cities and their environs, create better cities for years to come and a better tomorrow lying ahead and prevent adverse effects of urbanization.

Based on this belief, urban land in the urban region earmarked for the diverse people's needs including housing, industrial sites, wastes, and recreation, residential development, trash removal location, open spaces, roads and transportation terminals, etc. to mitigate the creating a crowded and jumbled shanty-town landscape, improve the overall quality of urban living and accommodate growing urban populations.

In the Context of Ethiopian Urban Planning System, a land-mosaic plan in a rectangular grid pattern is prepared for the city prior to the construction of infrastructure and other developments occurring on the lands to create sustainable settlement pattern, construct large numbers of public squares, roads, fountains, and ornamental pools throughout the city, regulate land and property uses, create diversified economy and promote safe and inclusive city.

In this regard, a number of structure plans have been prepared for Adama City. Subsequently, Adama is a planned city. It had its own approved and envisioned plan since 1920s, before Italy invaded Ethiopia in 1935. Since this historical landmark, different master plans were prepared for Adama city by the concerned bodies.

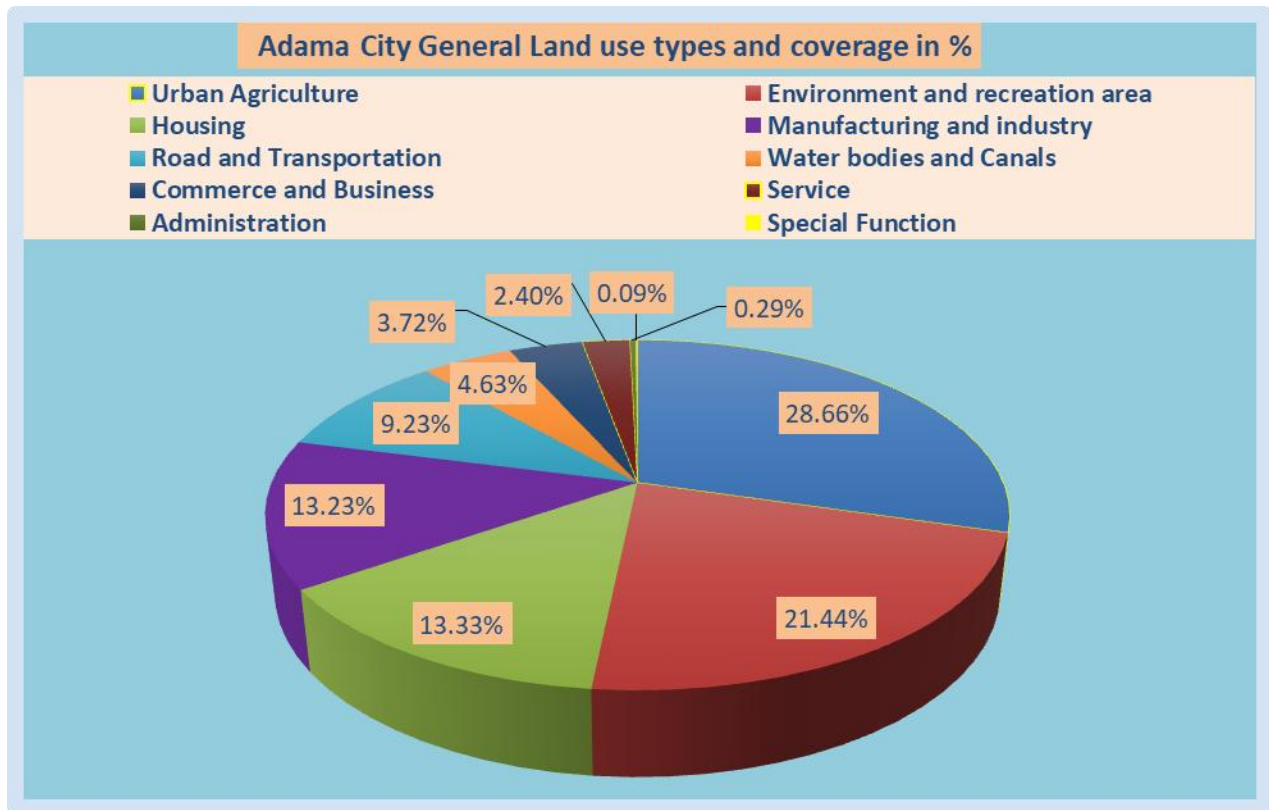
These consecutive master plan revisions were made in order to address certain development deficiencies and disparities, cope with informal land development, reap benefits in equity and access in planned manner, address the challenges of rapid urbanization, contain sprawl and restrict urban expansion into unplanned areas.

As the city is offering multiple functions, the area of the city was classified by the 9th strategic plan which shall be valid for the period of up to 10 years from the date of approval and does not end up on the shelf prepared in 2018 into different urban functions.

As it can be seen from table, the feasible 9th strategic plan in which its general land uses is categorized in to eight (8) classes propose city areas to different general land use categories such as administrative areas, residential areas, agricultural land, commercial areas, manufacturing, and other types of development purposes in consistent with the government's vision outlined in the Climate Resilient Green Economy Strategy.

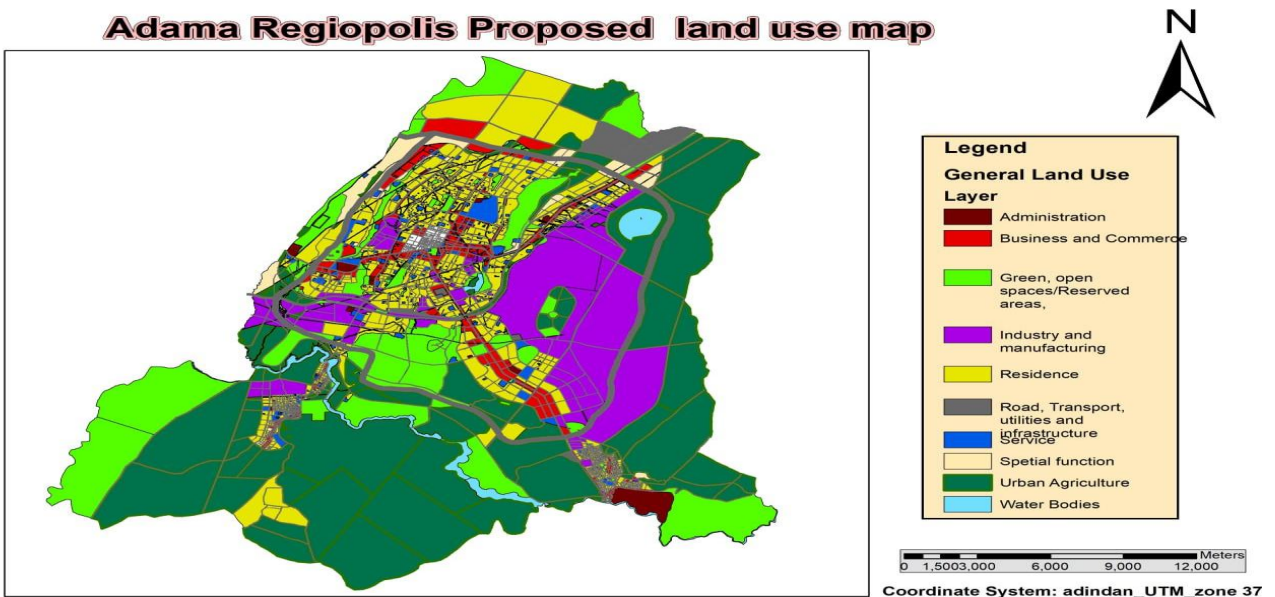
According to 9th strategic plan the total catchment of the city was 31,185 hectares. In 2023, this size was enlarged to 54,301 hectares by merging with the satellite town in its vicinity. Fair information about land use types can be obtained from the subsequent map.

Pie Chart 3:- The summary of Adama City General Land Use Categories



Source: Oromia National Regional State Oromia Urban Planning Institute (2014EC)

Map 6:- The Current Map Adama City



Source: Oromia National Regional State Oromia Urban Planning Institute (2014 E.C)

5.1.2 Housing Condition

Since people normally want access to housing, decent housing with the relevant basic services is essential for human security, dignity and well-being. To this end, housing development which is not a one-time event is part and parcel of urban development. Housing is also one of the major land use categories of the structure plan of the city.

As a microcosm of the national situation, housing development has received great emphasis from the government and the public invariably, albeit the provision of housing commensurate to the demand for housing and acquisition of affordable has become out of reach in the city, albeit the housing land use is fairly distributed in all directions of the city, according to the new strategy for structure plan preparation (40, 30, and 30). Unlike the past time, poor access to housing and unchecked internal influx of rural migrants from the countryside home villages to the cities on their own free choices to utilize employment opportunities in the cities for temporary and permanent employments as survival strategy, improve their income sources and have the better living standard with a non-farming lifestyle, make their bread buttered well and join in non-farm sectors is one of the severe problems in the city.

After the fall of the defunct military regime which is an important landmark in housing development in the country and disregarded housing development, the government has made significant changes on policies of urban land and has conceded the needs of promoting housing development, notwithstanding the regime did not change the public ownership of land in general and urban land administration remained one of the most corrupt sectors in public administration.

One of the pillars of urban infrastructure development is housing development to address the ever-increasing demand for jobs, housing and social services. It has created favorable environment for private housing builders distinctively to build their residential houses by dramatically increasing the supply of land in the cities to private housing builders, initiating slum upgrading and inner city, redevelopment and gentrification in prime location in addition, even though multiple factors like absence of mortgage banks, poor urban governance capacity in land administration, the presences of brokers in an ill-functioning land delivery system and land spectaculars, capacity limitations, price escalation of building materials, the rising cost of living, erosion of ethics, among others inhibited housing development in the city.

After the fall of the defunct Dergue regime, Adama city has undergone a construction boom. Since 2001, 3,337 houses have been built and handed over to the beneficiary by Adama city administration in addition to supplying large tract of land to private housing builders and real estate developers in the city to address the long-standing housing crisis. Besides these, 166 saving houses have been built and rented to the tenants. Furthermore, 641 alms houses have been built and handed over to beneficiaries by the city administration.

These contributed to proliferation of slums and sprawling development of residential areas on the skirts of the city. Subsequently, substantial improvements in housing development were made in the city in order to address a 17 years housing backlogs via facilitating the supply of necessary infrastructure. Like many cities around the world, there is an increasing focus on the renovation of the inner city of Adama.

Slum residential areas at the inner center of the city which are characterized by duplex type of dwellings, deteriorated corrugated-iron roofed housing units, inaccessibility and lack of open spaces and overcrowdings of people upgraded to the mixed to rehabilitate the inner of the city for urban greening and make conducive living and working area through slum clearance and the introduction of mixed development for commercial land uses include shops and super market; hotels, bars, restaurants; banks and insurance.

Accordingly, multi-stored buildings furnished with basements and safety equipment sprout up in the city which is the signals of rapid urbanization. Several demolitions of dilapidated and corrugated-iron sheet ceiled housing units constructed with locally available materials sand, cement, bricks and wood beside main roads were made to replace them with high-rise buildings in the city were made in Adama city, notwithstanding the demands for urban land outstrips land supply and access to land remains a critical constraint that sparks debate at all levels.

These drive many people to live in the squatter settlement on the skirt of the city, despite the city administration is frequently involved in demolition of informally built substandard housing in the outskirts areas of the city by poorer segment of the society, low-income bracket of the population and civil servants who are dependent on hand-to mouth life without title deeds and construction permits from the concerned bodies of the city administration.

The scarcity of affordable housing to date in the city in tandem with high cost of living endangered the lives and livelihoods of a substantial proportion of the residents of the city. To make city planning more effective and align constructions with the existing strategic plan of the city, 4200 fences and 5500 houses have been demolished in the city in 2016. Subsequently, 85 hectares of land was returned to the land bank.

According to some residents opted to remain anonymous, the recent demolition of informal settlement housing significant size of population on the peripheries of the city were forced displaced populace and other homeless individuals to dwell in makeshift shelters or abandon the city, regardless of the city government pledged to regularize squatter settlements built before the 2013 G.C. Fair information about the public houses in the city can be gained from the subsequent table. **Table 10:-** The size of public housings in the city

No.	House Type	Quantity
1	Saving House	791
2	District-Run Housing	10,292
3	Shops and stores	1,439
	Sub Total	12,522
4	Condominiums	3,337
	Total	15,859

Source: Adama City municipality housing development and transfer unit (2024)

Figure 4:- Some of condominium housings built and transferred to the beneficiary in the city



Source: Government communication affairs office of Adama city administration (2021)

5.1.2 Trade

It is a conspicuous fact that business/trade which is buttressed by agricultural and manufacturing sector is taken as a tool to accelerate economic growth and structural change in developing and low-income countries.

Needless to say, Adama is located in the most important corridor of business and transport which are beating the heart of the city to date. Without a shadow of doubt, trade which always rotates around the name and fame of the vibrant commercial city of Adama and drives the city's economy and supports a large proportion of its residents more than any sector of economy is the most dominant economic sector in Adama city.

Right from its inception, trade has been perhaps the largest single employer in the city which is obviously taken as an appropriate place to live and thrive and hosts transact-able goods, many businesses and public service is an epicenter for agricultural products coming from rural areas to the city and vice versa because of its comparative advantage.

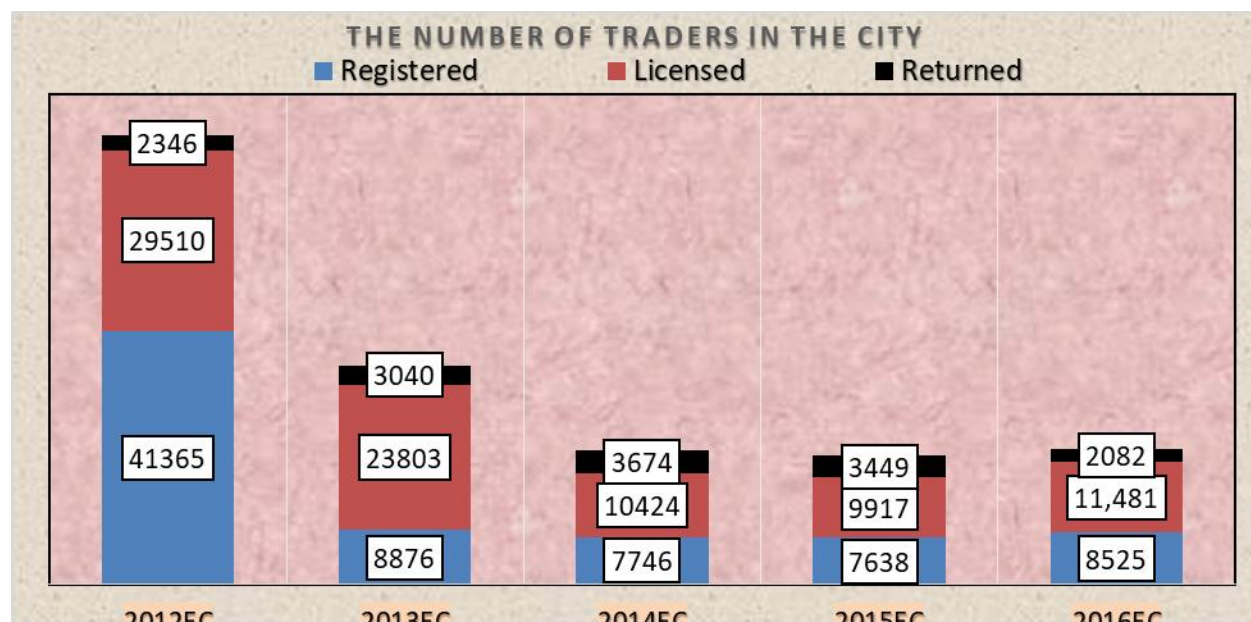
As a result, the city's economy is heavily dependent on trade and the lives and livelihoods of the majorities of residents were anchored on trade-related activities for income diversification, flourishing, staying alive and making their bread buttered well by investing in legitimate businesses and exchanging goods and services for money among different sectors of the economy in a circular way.

By taking comparative advantage of the city synonymous with trade that plays irreplaceable role in city development, numerous business firms, shopping shops, malls and stalls established in the city with optimistic view in the aftermath of the non-operational military regime to generate positive cash flow from operations and offer a better product which meet or exceed customers' expectations at a reasonable price depending on market demand. In addition to traders operate legally in the city, significant numbers of black market, makeshift weekend markets and street vendors are operating illicitly in the city.

At the same time, colossal number of residents who work from daybreak to dusk engaged in wholesale and retail sectors in densely populated neighborhoods of the city as a source of livelihood and income due its convenient location on the most important transport corridor that connects the country with the port of Djibouti and proximity to Arsi and Bale zone, Harar and other hinterland areas of high economic importance in the country and are essential components of modern trade processes.

Particularly, Arsi and Bale zone where agricultural products are produced in large quantities supply the city where business men and investors meet and make huge transactions of industrial goods and agricultural outputs have great contributions in the activities of trade by supplying agricultural products to the city and purchasing manufactured products from the city to date. Fair information about trade activities can be attained from the succeeding table, figure and map.

Bar Graph 2:- Shows the number of traders in the city from in year (2012 E.C-2016 E.C)



Source: Adama City Administration Trade Office (2024)

Figure 5:- some of the busiest streets in the city



Source: Government communication affairs office of Adama city administration (2024)

5. 1. 4 Industries

Prior to commencement of talking about the status of a case in point (industries) in Adama city, a glance at the national scenario at outset is extremely imperative. Industrial development plays key role in innovation, huge employment creation, and foreign currency generating and value addition to raw material.

Since the outright shift of country's policy from command economy trajectory to free market economy which is an important phase in the history of the country, industrialization, which is the process of transforming the country from agriculture-based economy into industry based one, is one of the nine pillars of urban development and housing in the country where most products are exported as raw materials without value addition.

The secret of behind spurring industrial development which involve in the transformation of raw materials obtained from agriculture, mining, forestry and fishery into finished with the highest standards in quality, innovation, service and social responsibility is to transform national economy, build industry-led economy deprived of compromising environmental quality, promote export, substitute import, stimulate technological transfer, create job opportunities, produce quality manufactured goods and add value

More to point, the current strategic plan earmarked 8,990.07 hectares for industrial area. Based on feasible national economic policy directives, Adama city administration has developed keen interest and given utmost priority for expanding industries on urban precinct. The hustling and bustling city is now developing a number of light industries which are equipped with emergency and firefighting equipment and contributing their part in reducing unemployment, stabilizing domestic market, generating and saving foreign currency of the country.

The existing industrial establishments based on the availability of raw materials in the locale are the consumer goods industries and light industries and labor-intensive industries those engaged in processing of farm products and producing mostly consumers' goods as import substitutes by brings resource, labor, materials, and other assets into combination through new or existing technology.

They are intended to produce substantial amount of consumer goods, make full use of existing supplies of agricultural products, meet the increasing demands of the population, reduce youth

unemployment, create jobs and add values to primary products exported without processing and increase shelf life of industrial products.

In recent years, goods and products manufactured for the home market in light industries of import savers include food industries, textile and garment, skin and skin products, wood product processing plant, paper and pulps manufacturing plant, publishing industry, glue products plant, chemical products manufacturing plant, among others.

By taking into account the untapped potentials of the city, the commencing of new industrial park in the city with the required infrastructure such as access to electricity, water and telecom service was made in the city to make the industry viable and sustainable.

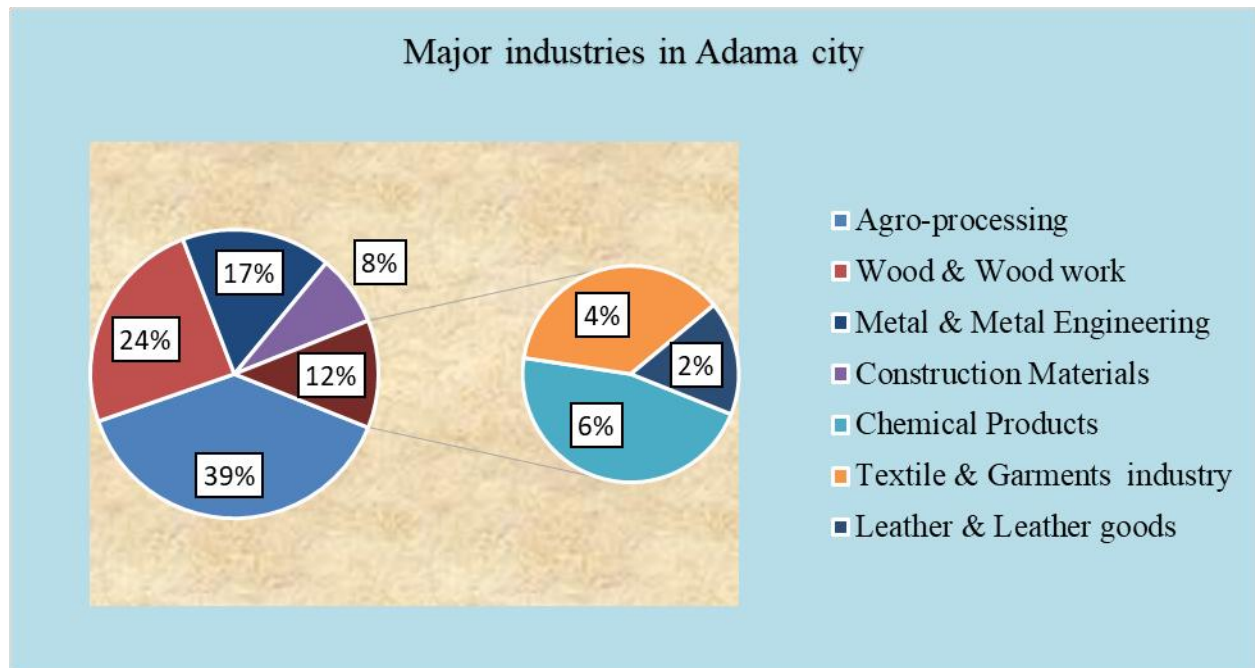
To infer, fostering the development of eco-industry that ensures economic, social and environmental benefits to the host community is critical at this moment when the adverse effects of climate change is intensifying to reduce the amount of GHG spewed by the industries into the atmosphere. Fair information about industries in the city can be gotten from the consequent table, map and figure.

Table 11:- The major industries found in Adama city in 2016 A.E.C

S. No.	Types of Industries	Quantity	%
1	Agro-processing Industries	131	38.64
2	Chemical Products industry	19	5.6
3	Wood & Wood work industry	83	24.48
4	Metal & Metal Engineering industry	57	16.81
5	Leather & Leather goods industry	7	2.06
6	Construction Materials (Inputs) industry	27	7.96
7	Textile & Garments industry	15	4.42
Total		339	100

Source: Investment and industry office of Adama City Administration (2024)

Pie Chart 5: - Major industries found in Adama city (2016 E.C)



Source: Investment and industry office of Adama City Administration (2024)

5.1.5 Investment Opportunities

It is a utopian to believe that poverty can be eradicated devoid of the active involvement of industries and businesses working day out and day in to make profit. As the government alone cannot provide jobs to all population of the country and basic and capital goods with various skills by traditional approaches, establishing effective enabling policy for investment is critical to boost ailing economy and bring improvement in standards of living for a broad cross section of society.

Since 1992, Ethiopia has pursued a range of policies and investment to build a free market economy, promote the structural transformation of the economy which is susceptible to volatility on global commodity markets and to weather patterns, achieve broad-based economic growth in a stable market economy and encourage both domestic and foreign investment those engage in profitable value adding activities.

At the same time, economic reforms which drives Ethiopia's economic growth and development was made by taking into account the reality of the country in order to diversify its economy, encourage foreign investment, create an environment conducive to private-sector-led

development, eradicate poverty in all its dimensions, enable the private sector to fully utilize opportunities available for sustainable development and transformation and promote the development of a competitive domestic private sector in the country that cannot prosper by foreign aid and loan.

Based on this conviction, new investment policy was unveiled in order to galvanize economic development, reduce unemployment and poverty, attract and retain investors, address domestic economic challenges, bring improved living condition to its population in the shortest possible period through creating conducive macroeconomic environment, the improvement and strengthening of governance and democracy and fostering a peaceful and secure working environment in a sustainable manner.

Devoid of exaggeration, Adama City which has tremendous untapped potential for investment and trade offers better job opportunities than other towns surrounded it due to its convenient location in the heart of the country, smart infrastructure development, geographical vicinity to the metropolitan, the presence of abundant financial institutions, the availability of sufficient workforce, close proximity to the dry port of Modjo, well-developed infrastructures, land supply with reasonable, low and fixed lease price, different sectors of economy, better transportation (access to the Addis-Adama Expressway and railway line), and storage and package services, among others.

Adama city which is a destination for many investments has a huge and wider business opportunity and presents tremendous opportunities and good market for financially astute foreign investors who come with idiosyncratic visions and better management system, foreign capital, knowledge and technology as well as domestic investors to engage into business to maximize returns, do business and make use of the suitable investment situation in the city which has a positive prospective.

As a result of its nodal position along Addis Ababa-Djibouti transport corridor that accounts for the country with over 95% of Ethiopia's import and export, the private investment sector is greatly expanding to take advantage of Adama and exploit the untapped potential of the city.

To paraphrase, the city is attracting trade and much-needed investment in a wide spectrum exist with regards to small scale agro-processing industries, real estate development, education, health,

hotel industry, commercial building, recreation, animal fattening, among others from time to time, as an ideal and preferred destination for investment. Fair information about invest activities in the city can be gained from the ensuing table.

Table 12:- No. of investment projects, Land delivered, capital invested & employment opportunities created in Adama City by 2015 & 2016 A.E.C

Year	No. of Investors	No. of Projects	Land delivered in hectares	Capital in Birr	Employment opportunities		
					permanent	Temporary	Total
2015		137	60.8	8,189,097,300	13,380	129	13,509
2016		137	60.8	8,189,097,300	13,380	129	13,509

Source: Investment and industry development office of Adama city administration (2024)

5.1.6 Hotels and tourism

In this highly competitive world, tourism for global connectivity and economic development, creating job opportunities and generating foreign currency is becoming increasingly important source of revenue for many countries of the world.

In this context, sustainable tourism development and destination development has seized the attention of many countries including Ethiopia which is close to the Middle East and European markets in order to gain foreign currency and economic strength, promote people to people relation in this globalization age, reduce poverty or accelerate economic growth and use the tourism industry to grow and prosper.

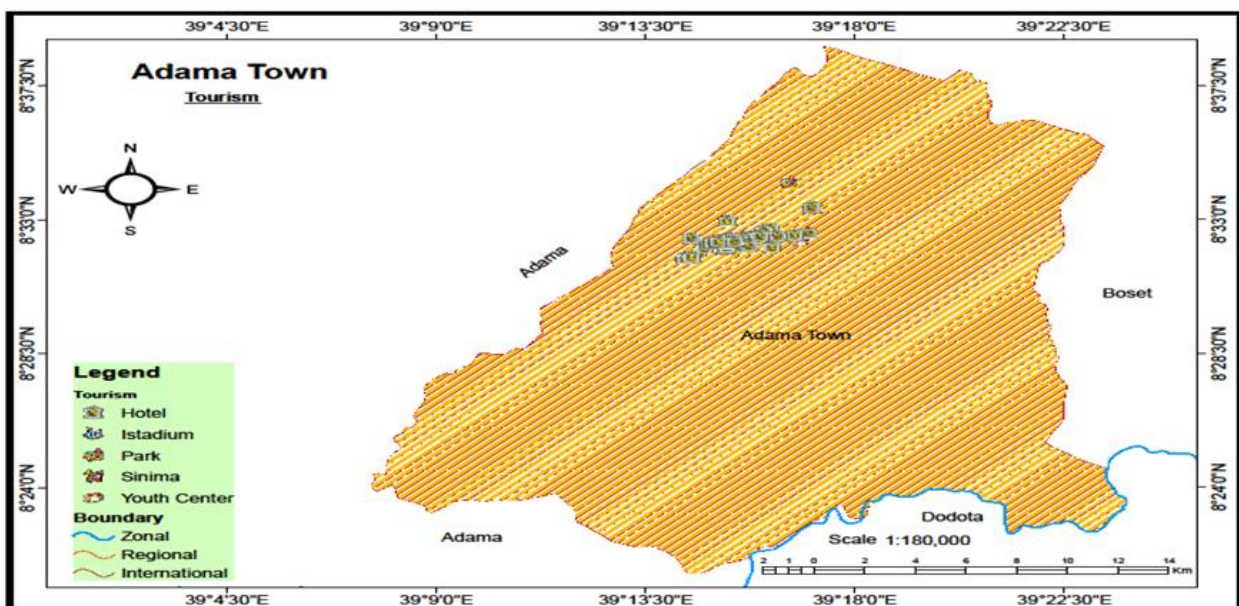
Right from its very inception, Adama City where huge public interactions from far off and nearby and high flow of tourism takes place have a long history in cordiality and hospitality industry continues to attract tourists to date. It is dubbed as '*Adama ye dance ketema*' literally mean in Amharic 'the city of dancing'.

Adama City which has traditionally been known as a tourist destination and has many and nightclubs, butcher shops, café, gift shops, brasserie hotels, barrel houses, restaurants and hotel towers run by business owners in the city around its downtown area or central business district of the city and good reputé in the country hosts multiple feasts, get together and national conferences and events serves.

The construction of Abba Geda Conference Hall in 2005 enhanced the role of the city in hosting different meetings and events in the city which known as a conference center. Particularly, the role of Sodare hot spring that situated at a distance of 10 km from the city is immense. By taking comparative advantage of the city which deserves to be a center of tourism and recreation, hospitality investment has attracted many investors.

Many individuals have been investing in building modern and deluxe hotels with every convenience, since Ethiopia adopted free market economic policy. This has led to the development of several standard hotels which offer a wide variety of cuisine, beef burger, barbecue and meals for different nationalities making stay and visiting the city blissfully and breathes takings.

Map 7: shows Distribution of Tourism Destination Areas in Adama City



Source: Planning and Development Commission of Oromia (GIS Team)

As the noted hub of conference and meetings with every passing year, tourism which is labeled as the smokeless and hospitality industry and expected to play an important role in its economic future is another important sector that has been growing consistently in the city which is a meeting place for federal and regional authorities has a wide variety of hotels provide splendid accommodations with all facilities to all people regardless of any difference.

Subsequently, different one to five-star hotels equipped with affable barmen and barmaids, well-furnished bedrooms, good pools, succulent food and cheap alcohol which are contributing to the development tourism in the city are established in the city to excel or meet expectations of customers in a friendly manner, maximize returns, drive tourism, stimulate broader growth and attract mega-events to the country through tourism promotion.

Likewise, some busy hotels which entertain myriad people are furnished with hotel facilities, alcoholic beverages, appealing banquet hall and services, sauna and steam bath, massage service, meeting halls, bar and restaurants and Wi-Fi internet broadband are providing wide arrays of hotel services to tourists, excursionists, leisure traveler let in the city and decided to make sojourn, excursion, stay, enjoy spicy and delicious diets, eat hash and sleep in the city.

The number of delightful first-star, two-star, three-star and four-star and five-star hotels in the city is 7, 5, 11, 2 and 3 respectively. The four-star hotels are canopy and Robi hotels, whereas the five-star hotels are Haile resort, Naflet Hotel and Melka Adama hotel.

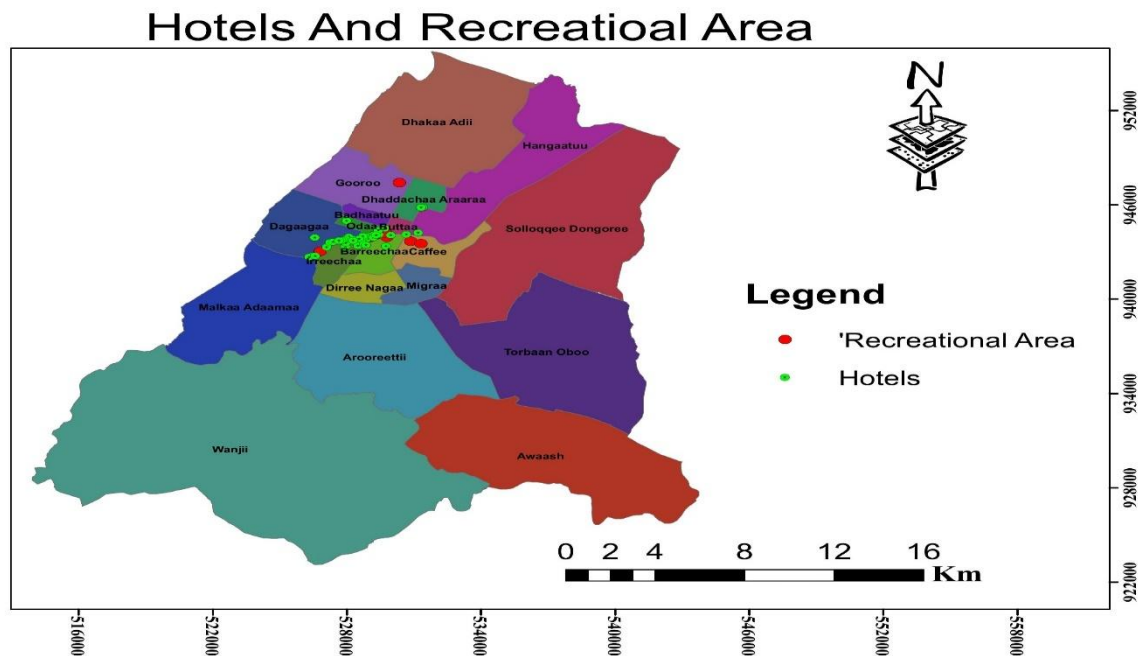
The current proliferation elegant hotel that appeals tourists and travelers in downtown of the city can enhances nearby recreation/tourism opportunity to visitors who came from somewhere and make stopover enjoyable in the city, maintain its identities and distinctiveness have played important role in job creation and income generation in the city.

The mushrooming of tourism facilities in the city because of the city's growing good image among the local and international communities are hailed by the residents of the city and beyond although there are numerous shortcomings which hamper the sector not to unleash its full potential.

To recapitulate, the city administration has to do its level to attract enormous tourist inflow in the city, increase tourism revenue, elongate the time tourists spend in the city, build the necessary

infrastructure, study the potential areas of tourism industry in the city and convert them into source of income in the coming years to boost its economy and job creation and poverty alleviation via fostering PPP and community involvement. Fair information about trade activities can be attained from the succeeding table, figure and map.

Map 8:- The spatial distribution of major hotels in the city



Source: Adama city plan and development office (2024)

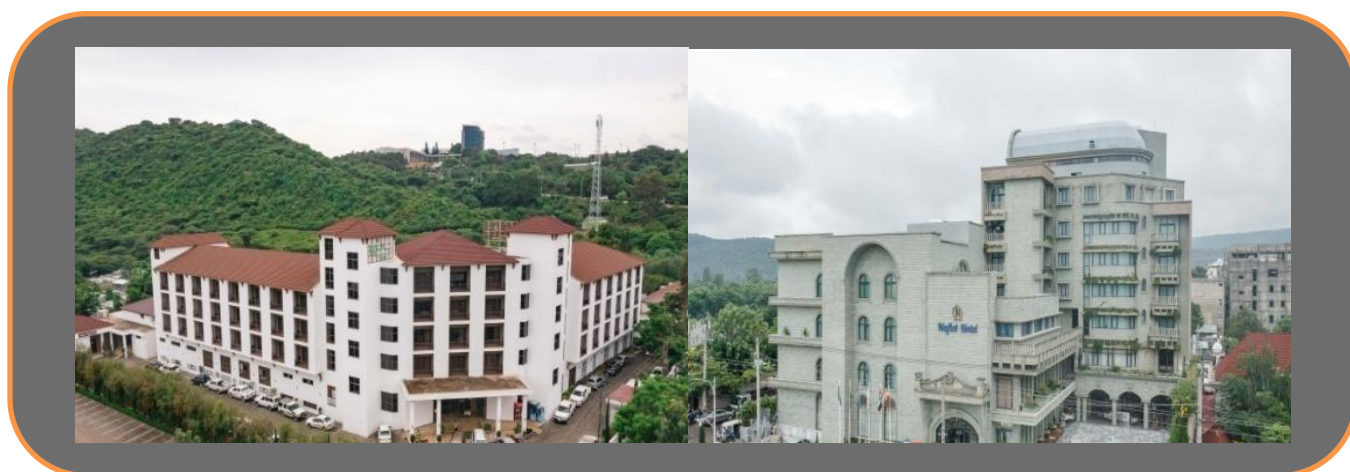
Table 13:- The number of halls, cinema halls & their holding capacity in Adama, 2016 A. E.C

S.N	Facilities and sites		Unit	2016
1	Hotels	No. of Hotels	No.	192
		No. of beds	"	7830
2	restaurants		"	304
3	Cafes		"	546
4	Pensions		"	202
5	Library	No. of Libraries	"	7
		Holding capacity	"	5000
6	Halls	Government (Aba Geda)	No. of Halls	8
			Holding Capacity	3600
		Private	No. of Halls	98

			Holding Capacity	“	48,850
		Genda's	No. of Halls	“	12
			Holding Capacity	“	3000
		Public	No. of Halls	“	9
			Holding Capacity	“	8450
		Total	No. of Halls	“	115
			Holding Capacity	“	63,900
		Private	No. of Halls	“	2
			Holding Capacity	“	1900
		Public	No. of Halls	“	1
			Holding Capacity	“	400
7	Cinema	Total	No. of Halls	“	3
			Holding Capacity	“	2300

Source: Tourism and Culture Office of Adama City Administration

Figure 6:- A partial view of some hotels in the city



Source: Culture and tourism office of Adama city administration (2022)

5.1.7 Urban Agriculture

Erstwhile reminiscing about urban agriculture, presenting the general characteristic of Ethiopian agriculture which is the largest sector of the economy and viewed as a major driver of poverty reduction in Ethiopia in bird's-eye-view is extremely imperative. Ethiopia has diverse agro-ecology like Dega, Woina Dega and Kola areas, sizable arable land, favorable climate, water and soil conditions and cheap labour. Since time immemorial, the main sources of livelihood and income in Ethiopia are agriculture.

Until recently, Ethiopia's economy is based on agriculture which is considered the backbone of the Ethiopian economy and the main occupation in Ethiopia which has more than 120 million

populations and the populous state in the horn of Africa. All governments were made unreserved efforts to transform agriculture sector, albeit the agriculture sector suffers from poor cultivation practice and frequent drought which have made things worse.

Currently, the agriculture accounts for 42% of real GDP and 80% of employment, albeit food security remains a challenge for all urban and rural population of Ethiopia due to the effects of climate change-related challenges which threaten agricultural activities and cost lives, livelihoods and economy at the present time.

The sector remains dominated by use of archaic farming implements and practices and low inputs, limited access to agricultural inputs, and paucity of financial services, improved production technologies, irrigation and agricultural markets which remained the major challenges stifled and repressed the growth and development of agriculture, regardless of agriculture is popular in the country.

In Ethiopia, the implication of poor farming practices and implements in the country are showcasing a high likelihood of continuing poverty, food insecurity and environmental degradation in Ethiopia which is more vulnerable to natural disaster and recurrent drought, flood and food insecurity and dependent on foreign aid and an importation of wheat for the last 60 years, unless strenuous efforts are made to reverse this gloomy situation through expansion of irrigation and improve the usage of water.

The major seasonal crops cultivated in the locality by local farmers are superior quality teff, haricot beans, maize, and sorghum, fenugreek, among others. They are the main sources of income for farmers striving in their day in and day out errands for achieving food security and improved nutrition, meeting domestic food requirements, improving the nutritional status all year round and transforming their life scenario.

To meet the expanded food needs of rapidly growing populations, ensure food security, feed its people, halt importation of wheat, save foreign currency, meet the entire needs of industry and reverse the scenario of dependence on importation of wheat from abroad, the government has demonstrated strong commitment to the sector through allocation of more than 15% of the total budget for the improvement of production and productivity in agriculture.

In addition, an increase in the market demand for agricultural products in urban areas has necessitated the promotion of sustainable urban agriculture which can be defined shortly as the growing of plants and the raising of animals within and around cities wrestling with food insecurity and unemployment.

Unlike the previous time, the government is fostering cluster farming; increasing the availability of improved seeds, chemical fertilizers and extension and mechanization services and divulged summer wheat initiative in the country in recent year to boost agricultural productivity and production depending on market demand and halt the importation of wheat with the use of its meager and hard owned foreign currency.

Moreover, urban agriculture which relatively new to Ethiopian agriculture system and includes various components of agriculture like animal fattening, dairy farm, apiculture, poultry and different farming activities in urban precincts implemented in urban milieus to fill food gaps.

In this sense, urban agriculture in Adama centers on livestock rearing and fattening and poultry and field cropping to help secure food production for urban residents, create job opportunities, reduce unemployment and poverty, ensure urban food security, downswing food insecurity, guarantee food self-sufficiency, enhance urban food item marketing benefits to urban populations.

In similar way, greening the cities has become a catchphrase in the country now-a-days to increase food crop production, improve livelihood status and strengthen the resilience of local people to climate change which triggers a risk of imminent food insecurity, displacement, and starvation and water shortage.

In this context, the strategic plan of the city in the pipe line allocated 30% of the total master plan catchment of the city for urban greenery including urban agricultures which enhances natural resources conservation and maintenance based on topographical settings of areas to halt the rising cost of living and food insecurity in the city and meet myriad needs of the residents of the city.

Subsequently, urban agriculture that can help improve the health and nutrition of the citizens, provides fresh food for households, markets, restaurants, and families with low transport cost; supplements income, especially for the poor is embodied in city development program and

practiced both on irrigated land along the Awash River which flows eastward in the Rift Valley and used for irrigation and rain-fed agriculture in the locale of the city.

The aim is to achieve food security and family prosperity in the city via the provision of irrigation mechanisms, improved seed, fertilizer, market linkage, tractors, improved veterinary service, open-air market, artificial insemination and veterinary services to reverse the adverse effects of climate change and food security via plantations of seasonal and perennial vegetables and fruit trees.

Since the city embarked on urban agricultural practices expansion in the urban areas reserved for urban agriculture to realize the national initiative set out at the national level, the produces grown by the urban agriculture are a wide range of vegetables (cabbage, watermelon, carrot, tomato, potato, sweet potato, green pepper, garlic, lettuce and onions,) and fruits (papaya, banana, grapes, orange, strawberry, mangoes and avocado) whose fruits, roots, seeds, leaves, stems and flowers parts are used as food.

Artificial fertilizer and vermin compost and natural fertilizer which make the soil fertile and provide healthy products to the community are used on irrigable and cultivable land to stabilize markets, earn more income, secure bumper harvest and ensure food security at household level.

Equally, the introduction of pressurized irrigation system (drip and sprinkler irrigation techniques) to irrigate horticultural crops and using organic and inorganic fertilizers, providing access to credit and improved seed varieties, improved technologies and farming methods and scaling up the use of modern farming practices were made to provide fresh and affordable products to the residents of the city, increase yields and open up alternative livelihood options for unemployed youths in urban precinct.

Apart from vegetable and crop cultivation along the bank of Awash River, animal rearing which are deemed to support individuals engaged in livestock herding in the form of milk, dairy products, meat, draft and transport animals, leather is one aspect of agricultural practices in the locality where animal feeds are available on the market.

As there is a huge upsurge in the demands for high quality livestock productions such as beef, honey, mutton, butter, pork, hide and skin, cheeses, eggs and milk, the presence of industrial bi-products and teff leftovers/chaff in the city, significant numbers of the residents with the national

motto of "food from my backyard" are engaged in homestead animal husbandry including beekeeping, animal fattening, dairy and poultry farms as alternative source of livelihood.

These involvements in collaboration with Awash Melkasa Agricultural Research Center were made to improve household nutrition and their livelihood, build assets and produce multiple crops both for home consumption and market, supply surplus healthy products to the consumers, eke out a living from agricultural activities and keep their family and children alive.

The sector has created ample job opportunities in the city in the past two years. By 2023-2024, the job opportunities created by urban agriculture was 21,911. Fair information about urban agriculture activities in the city can be attained from the succeeding tables, graph and figures.

Table 14:- Distribution & Utilization of Agricultural inputs

S. No.	Types of agricultural inputs	Measurement	Quantity	
			2015	2016
1	Fertilizer			
	NPS	Quintal	9,935	82,091
	Urea	Quintal	9,780	51,498
2	Improved seed	Quintal	33.2	34,002
3	Chemicals			
3.1	Liquid	Litre	-	2,737

Source: Adama City Agricultural Cluster Office (2024)

Table 15:- Total land cultivated & production of main season/Meher/by farmer holdings

S/N	Crop type		2015		2016	
			Land cultivated in hectare	production	Land cultivated in hectare	production
1	Rain fed					
1.1	Cereal crops		2590	98346	11,134	389,635.5
1.2	pulses		81	2,094	31,96	71,468
1.3	Cash-crop		34	5440	2765	6,830
2	Irrigation	1sr Round	940	254,750	25,150	1,117,588

		2 nd Round	690	241,500	2844	881,640
	Total			602,130		2,467,161.5

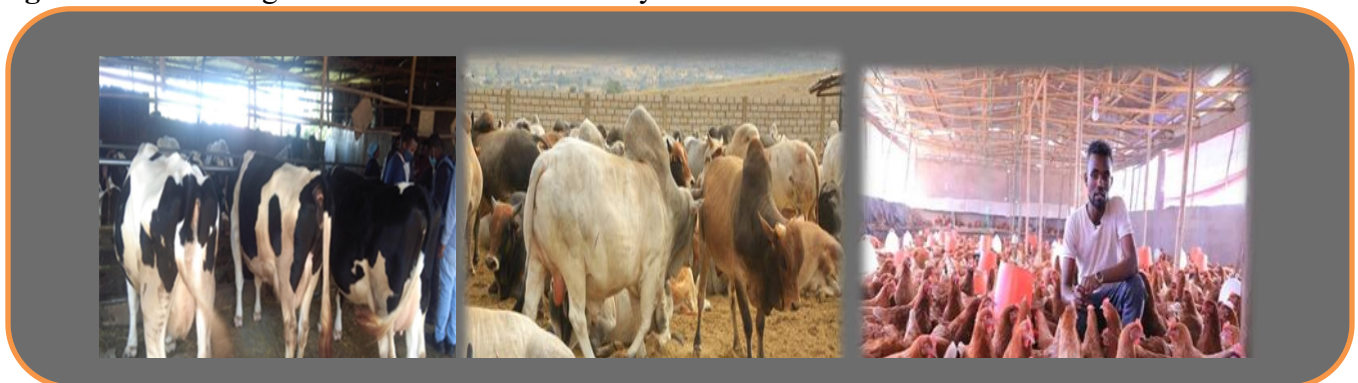
Source: Adama City Agricultural Cluster Office (2024)

Table 16:- Agricultural extension service of Adama City in years 2015 and 2016 A.E.C

S.N.	No. of peri-urban kebeles	No. of farmer households			No. of farmer households who participated in agriculture			No. of farmer Households who received agricultural extension service			No. of development agents		
		M	F	T	M	F	T	M	F	T	M	F	T
2015	4	15,868	2,314	18,182	15,868	2,314	18,182	15,868	2,314	18,182	36	24	60
2016	7	15,868	2,314	18,182	15,868	2,314	18,182	15,868	2,314	18,182	36	24	60

Source: Adama City Agricultural Cluster Office (2024)

Figure 7:- some of agricultural activities in the city



Source: Government communication affairs office of Adama city administration (2024)

Table 17:- Types of livestock in the city in 2015 and 2016 A.E.C.

S. No.	Type of livestock	Measurement	2015	2016
	Cattle	No.	50905	96,302
	Goats	“	34414	61,129
	Sheep	“	29826	58,449
	Horse	“	8111	92,69

	Mule	“	55	90
	Donkey	“	7389	22,618
	Camel	“	-	120
	Poultry/Chickens	“	900,000	1,000,000

Source: Adama City Agricultural Office (2024)

Bar Graph 3:- The size of land cultivated in hectare and the products harvested in quintal



Source: Adama City Agricultural Office (2024)

Table 18:- Number of dairy cows, production of milk and number of participants by sex

Year	Number of dairy cows				Number of lactating cows	Total milk production in liter	Number of participants		
	Exotic	Hybrid	Indigenous	Total			M	F	total
2015	-	7,400	2,850	10,250	10,250	30,665,250	2497	920	3417
2016	-	21,800	1,520	29,320	29,320	88,704,000	4,200	5,573	9773

Source: Adama City Agricultural Office (2024)

Figure 8:- A partial view of one poultry farm initiative in Adama City

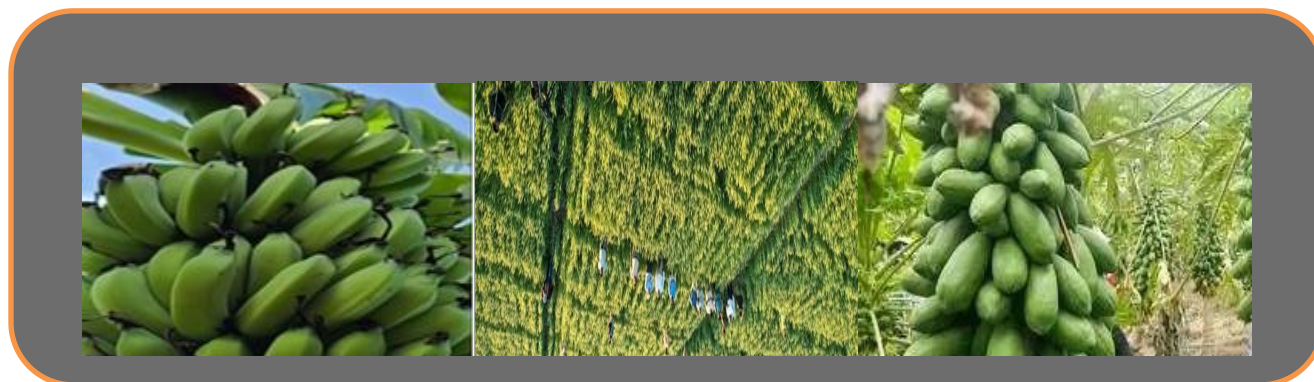


Photo Source: Government Communication Affairs Office of Adama City Administration (2024)

Table 19:- Number of Poultry/Chickens/by Type, Total Egg Production

Year	Total chickens	Broilers for meat purpose	Layers for egg production		Total egg production	Number of participants		
			Hybrid	Indigenous		M	F	Total
2015	990,000	297,000	495,000	168,000	125,872,800	150	300	450
2016	2,800,000	1,800,00	2,800,000	839,000	459,200,000	10,000	15,000	25,000

Source: Adama City Agricultural Cluster Office (2024)

Table 20:- Veterinary services

Year	No. of livestock vaccinated		No. of veterinary clinics	No. Of personnel
	Cattle	Cattle	Level “B” & “D”	Assistance technician
No20 15	43,355	91,220	7	16
2016	57,592	120,164	7	16

Source: Adama City Agriculture Office (Livestock department)

Table 21:- Honey products & the number of Honey Beehives in years 2015 and 2016 A.E.C

Description	The types of Bee Hives
-------------	------------------------

	2015				2016			
	Traditional	Transition	Modern	Total	Traditional	Transition	Modern	Total
No. of beehives	82	100	500	682	90	100	2780	2,970
Honey produced (kg)	451	2000	13500	15951	540	2,000	69,500	72,040
Individuals participated	46	147	137	330	50	138	500	688
Male	26	98	68	192	27	89	135	251
Female	20	49	69	138	23	49	365	437

Source: Adama City Agricultural Cluster Office (2022)

Figure 9: A partial view of one of the bee farms in Adama city



Photo Source: Government Communication Affairs Office of Adama City Administration (2024)

5.1.8 Consumer Cooperatives

To begin with, consumers association those aims at advancing members' interests play irreplaceable role in the provision of basic consumable goods rather than on the sophisticated durables and enabling people to pool their capital and obtaining larger credit facilities from the credit associations.

Indeed, the objective of setting up of the consumer cooperatives established and managed by voluntary members is to cut middlemen, offer a better product at a reasonable price, safeguard consumers from higher prices, create stable market, curb irresponsible artificial shortage of basic goods and non-food items and price setting by rapacious and unfair traders who aspires to generate undeserved and unfair profit from what they sold.

Based on these convictions, various consumer associations were set up in the city to curb looming price hike, keep prices fair, supply food and non-food items at a competitive price, avoid unreasonable upswing of price setting, save the consuming majority from unfair and unnecessary costs as quickly as possible and uplift the socio-economic condition of their members and local communities. The table below shows types and number of cooperatives members in Adama City.

5.1.9. Saving and Credit Associations

During this hard time, it is important to emphasize that the importance of saving and credit associations is immense. In Adama City, many saving and credit associations that contribute to the city's economic development are established in the city by individuals having similar interest and living in proximity.

They were established with a view to provide services and engage in the production and service delivery activities for their members, foster alacrity and saving culture between members and collectively overcome economic and social problems which members cannot individually achieve.

In Adama City there were 124 primary Savings and Credit Cooperatives (SACCOs) till 2016 A.E.C. The total numbers of members were 21,179 of which 10,695 and 10,484 are male and female respectively. With regard to their financial status, they have a total capital accumulation of 321,118,683.66 Birr.

Out of 124 primary cooperatives, 56 primary cooperatives organized under one saving and credit cooperative Union to develop their financial strength and foster capital growth. Moreover, saving and Credit cooperative Union has 56-member primary cooperatives which have 18,413 members (9,956 males and 8,457 females) and a total capital of 427,639,860.00 Birr. Fair information about saving and credit associations can be obtained from the table 26 and 27 provided above.

Table 22:- Types of cooperatives & the number of cooperative members in Adama City by 2016 A.E.C.

S.N	Type of cooperatives	Number of Cooperatives	Members			Capital
			Male	Female	Total	

A	Saving & Credit cooperative Union	1CU (56 Basic cooperatives under 1 coop. union)	9,956	8,457	18,413	427,639,860.00
B	Primary (Basic) cooperative	366	24,724	21,507	46,231	660,762,891
1	Consumers	115	9,541	9,538	19,079	298,967,046.66
2	Saving & Credit	124	10,695	10,484	21,179	321,118,683.66
3	Multi-Purpose	22	2,612	679	3,291	2,614,919.88
4	Fattening	20	322.00	168.00	490	1,562,000.00
5	Forest Development	16	356.00	55.00	411	130,000.00
6	Dairy	11	137.00	84.00	221	3,050,000.00
7	Poultry	20	339	184	523	1,847,100.00
8	Non- Agri Activities	3	228	90	318	1,754,504.00
9	Others	23	176.00	67.00	243	29,718,636.33

Source: Adama City Agricultural Cluster Office (2024)

Table 23:- Capital accumulation by cooperatives by 2016 A.E.C

S. No .	Type of cooperatives	Capital in 'Birr'		
		Fixed	Operational (Variable)	Total
A	Saving & Credit cooperative union	324,046,588.30	103,593,271.70	427,639,860.00
B	Primary (Basic) cooperative	611,754,713	50,030,744	658,915,791
1	Consumers	284,303,579.76	14,663,466.90	298,967,046.66
2	Saving & Credit	304,893,216.76	16,225,466.90	321,118,683.66
3	Multi-Purpose	1,049,386.22	1,565,533.66	2,614,919.88
4	Fattening	1,421,000.00	141,000.00	1,562,000.00

5	Forest Development	130,000.00	0	130,000.00
6	Non-Agri.	1,754,504.00	0	1,754,504.00
7	Dairy	3,050,000.00	0	3,050,000.00
8	Others	12,283,359.61	17,435,276.72	29,718,636.33

Source: Agricultural Cluster Office of Adama city administration (2024)

5.2. Financial Institutions

5.2. 1. Banking and Insurance Services

Needless to say, banks act as a life-blood of modern trade and business play a key role in facilitating local and international business interactions and transactions in every corner of the world. It is obvious without banking and insurances, facilitating economic growth of the country are illusory.

As a banking service and financial institution is one of the corner stones for all parts of economy, the modern commercial banks encourage investment, provide short, medium and long-term credit facilities to the private sector of economy, create loanable funds to borrowers and businesses depending on the purpose for which he money is to be used.

Commercial bank which is the largest bank in the country has the biggest size of branches in the city which is a financial epicenter in the country next to Addis Ababa. Apart from conventional banking, Islamic banking provides raw materials and commodities in kind. All banks are playing pivotal role in saving and credit services for the clients, farmers, cattle herders putting their money under their mattresses and other unsafe places.

At this juncture, out of 32 banks in the country 25 private and public banks which intend to increase market share, make money and provide diverse banking services in the city are operating in the city along with two public banks, namely the Commercial Bank of Ethiopia and the Development Bank of Ethiopia.

They opened their branches in the city where they are feasible to attract savings from all sorts of individuals, provide convectional banking services and interest free banking services and cover

financial services to depositors, money borrowers that cannot be provided exclusively by public financial institutions in the country. By 2024, the numbers of bank branches operating in the city were 313. For further understanding, see the table and map provided below.

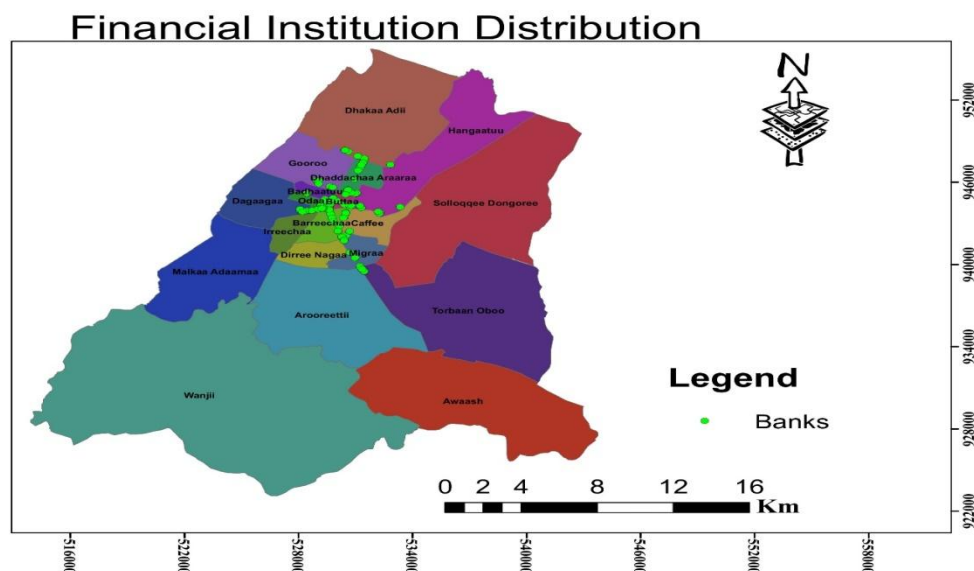
Table 24:- The number of Financial Institutions (Banks) in the city, 2016 A.E.C

S. N	Name of Banks	Number of Branches
1	Commercial Banks	41
2	Developmental Banks of Ethiopia	1
3	Oromia Banks	31
4	Oromia Cooperative Banks	21
5	Awash International banks	34
6	Dashen banks	24
7	Buna international banks	16
8	Hibret banks	8
9	Birhan banks	9
10	Nib international banks	9
11	Wegagen Banks	4
12	Abbay Banks	8
13	Innat Banks	6
14	Anbessa Banks	5
15	Zemen Banks	2
16	Global Banks	15
17	Addis Banks	4
18	Abyssinia Banks	33
19	Sinke Bank	22
20	Hijira Bank	3
21	Ahadu Bank	1
22	Amhara Bank	5
23	Zemzem Bank	2
24	Tsehay Bank	2
25	Tsedey	2

26	Gada Bank	3
27	Remis	2
Total		313

Source: Adama city plan and development office (2024)

Map 9:- Spatial distribution of banks in the city



Source: Adama city plan and development office (2024)

5.2.2 Insurance Companies

It should be borne in mind that the likelihood of the hike of risks and damages associated with the expansion of business firms is high in the city serving as economic nerve center in Oromia. Furthermore, human traffic will increase with a rippling effect on hospitals, banks and other facilities.

The residents of the city are becoming more and more business minded particularly in the field of property and vehicle insurance. As a result, different insurance companies opened branch offices in the city to offer life insurance and non-life insurance services and meet the demands of their clients, de-risk business activities, provide insurance against third party risks, save lives or minimize bodily injuries and provide vehicle with insurance against third party risks.

The number of insurance service has augmented vis-à-vis previous years in line with the expansion of banking services, industry and trade those were paved the road for the establishments of many insurance companies in the city.

Currently, 18 insurance companies are opened their branch offices in the city. Fair information about the banking and insurance activities in Adama City can be achieved from the succeeding table.

Table 25:- Number of Insurance Companies in the city by 2016 A.E.C

S. No.	Name of Insurance Companies	No. of Branches
1	Ethiopian Insurance Company	1
2	African Insurance Company	1
3	Awash Insurance Company	1
4	Nyala Insurance Company	1
5	Oromia Insurance Company	1
6	Nice Insurance Company	1
7	United Insurance Company	1
8	Nib Insurance Company	1
9	Nile Insurance Company	1
10	Abbay Insurance Company	1
11	Global Insurance Company	1
12	Birhan Insurance Company	1
13	Lucy Insurance Company	1
14	Tsehay Insurance Company	1
15	Zemen Insurance Company	2
16	Anbessa Insurance Company	1
17	ELGI Company	1
18	Buna Insurance Company	1
	Total	18

Source: Adama city plan and development office (2024)

5.2.3. Micro-Finance Institutes

The modern commercial banks which require customers to provide adequate collateral/security which is a type of security provided to the lender by the borrower as a guarantee for the repayment of money as proof of the borrower's financial capacity for securing their money when defaults happen have their relative merits and demerits, before lending any amount of loan with initial equity contributions not to lose money and maximize capital gains.

As a result, banks are always reluctant to provide loans to skeptical causal workers who cannot pay back the interest and principal as per the schedule, start-up businesses and self-employed segments of the society with financial illiteracy because of unstable income, lack loan guarantees

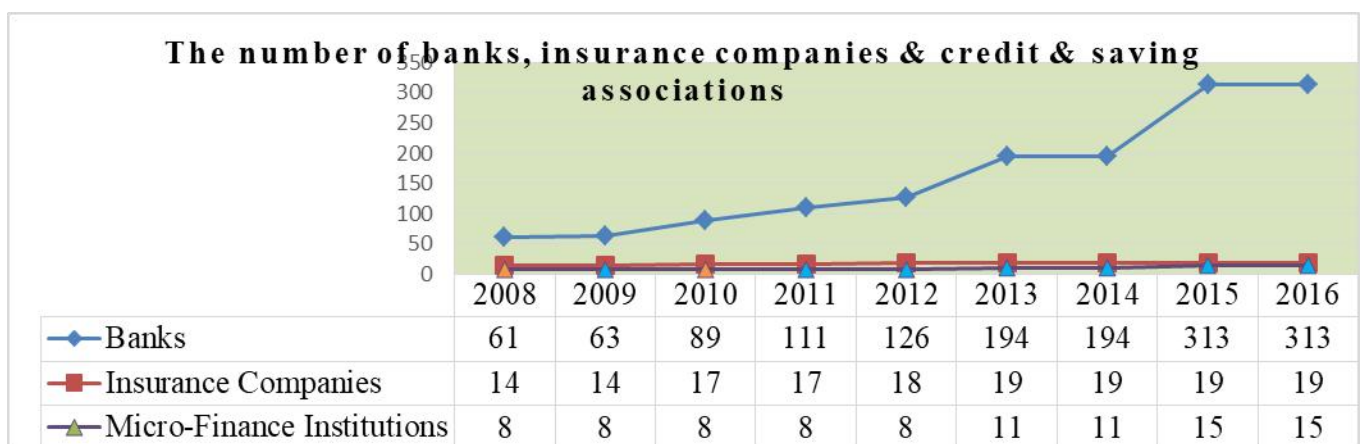
and collateral such as land, buildings, and modern business plan to draw loans from commercial banks and other financial institutions.

These financial institutions often go through a lengthy procedure to approve loan applications, offer loan and avoid default. Lack of foreclosure opportunities, difficult and lengthy procedures and lender's eligibility criteria prevent the youth and other borrowers from putting their business ideas into practices.

Knowing these formidable hurdles of lack of access to microfinance credit loan programs in the region, eight micro finance institutes which support citizens participated in small business are opened their branches in Adama City to support the residents excluded from bank loans, provide debt organizations seeking to start a business successfully, create a small business and promote saving habits among the general public.

As noted above, their establishment in the city is critical to enhance access to credit, fill the gap in loan acquisition in the urban and hinterlands, make a difference in the lives of people, support low-income groups who cannot borrow from domestic capital markets and provide bankable assets, prevent borrowers from dependency on informal lending sources or usury, among others. Fair information about the micro-finance activities in the city can be gotten from the table provided below

Line Graph 4: -The number of banks, insurance companies & credit & saving associations



Source: Adama city plan and development office (2024)

Table 26:- Number of Saving and Credit Associations by 2016 A.E.C

S.No.	Name of Micro – Finance Institutions	No. of Branches
1	Bussa Gonofa Micro-finance	1
2	Mellit Micro-finance	1
3	Wassasa Micro-finance	1
4	Vision Micro-finance	1
5	Gesha Micro-finance	1
6	Metemamen Micro-finance	1
7	Dynamics Micro-finance	1
8	Kendal Micro-finance	1
9	Girand Micro-finance	1
10	Peace Micro-finance	1
11	Harbu Micro-finance	1
12	Ager Micro-finance	1
13	Tsehay Micro-finance	1
14	Liyu Micro-finance	1
15	Addis Micro-finance	1
	Total	15

Source: Adama city plan and development office (2024)

5.3. Access to Economic Infrastructures in the City

In a classic sense, access to basic services is one of the requirements for a healthy and productive citizenship. In today's urban region, the growth and development of cities rest on investment in improved infrastructure facilities such as roads, buildings, and bridges which are an essential precondition for the well-functioning of modern economies.

The development of infrastructure which serves all segment of the population deprived of no difference to be elevated to improve the livelihoods of the people, enhance connectivity and regional integration and forge socio-economic development of any country.

For this to happen, conspicuous improvements in road infrastructure which lead to better business opportunities or raise land and property values in urban regions was made in the country which is currently one of the most urbanized countries in Africa. Likewise, rural-urban linkage via efficient road network installation that satisfies the need of rural population who frequently visit urban areas in order to purchase farm implements, sugar and other essential items like oil and sell their agricultural produces is extremely imperative.

In this context, the provision of safe, accessible, and affordable public transport infrastructure which is vital to the growth and development of the country is a fundamental prerequisite for an imminent socio-economic advancement of the Ethiopian population. In this light, resilient physical infrastructure development through increased budget allocation for roads took a central place in country development program.

From this one can conclude that the aim is to improve regional connectivity, increase country's global competitiveness, bring improved living conditions to its population, ameliorate infrastructure development and spur economic development and social transformation based on the ongoing national reforms and strategies and other government initiatives unveiled by the government.

In so doing, substantial improvements in infrastructure development which is commended by different entities were made in the city in order to help move passengers and freight across the city cheaply, reliably and rapidly, enhance quality of life, improve travel times and safety levels, reduce costs, transform the city. For convenience, the subsequent sections seek to throw a perfect light on the expansion of the utility services in the city.

5.3.1. Road Infrastructure Networks

In the urban context, effective mobility and timely access to goods and services require well-developed, safe, secure and affordable transport network and services to facilitate the movement of goods and people in the city and increase access to opportunities and markets.

Apart from facilitating other socioeconomic activities, the expansion of road in the areas falling within the ambit of the country by taking into account the reality of the country is the responsibility of the government to boost the country's potential in attracting investments from all over the world, build inclusive economy, stimulate the economic growth and development of

the country which is the key issue, ameliorate transport service provision, promote Ethiopia's development and integration and address the infrastructure deficit.

In this spirit, the growth and development of any city is contingent upon the existence of well-functioning and reliable transportation infrastructures and fuel dispensing stations, telecom, pass-ways, dual carriageways, underpasses or overpasses bridges, wayside stops for refreshment, parking lots, water and electricity networks which have a very important place in the life of people and poverty reduction. In addition, the installation of monuments and roundabouts that beautify the city is also extremely imperative.

A good transport system depends on diverse transport infrastructure that divides the land into little sections and has real and significant impacts on the productivity of cities increases efficiency in flows of goods and services and satisfies transport providers, government, and passengers.

Transport infrastructure was underdeveloped and often in poor condition for a number of years in the city where a number of primary products are routed through Adama before being exported via Djibouti. Unlike the preceding, the installation of infrastructure and rehabilitation of roads in the context of the city's plan is one of the city government's key priorities areas in city development to enhance community connectivity, more effectively address urban infrastructure backlogs and faster movement of goods and people within the city.

In acknowledgment of the important role of transport infrastructure and services in speeding up transport in the country and accelerating national development substantially, the National Urban Green Infrastructure standard (NUGIS) stipulated that 30 percent of the land should be allocated for roads and infrastructure to cope with an anticipated rapid urbanization expected to happen in years to come.

The NUGIS implementation has already begun to produce roads that covers 30% of the city's land, build resilient infrastructure, improve access to inputs and markets and generation of employment opportunities, resolve poor coverage of streets and associated infrastructure in urban areas mostly clogged with pedestrians, bicycles, and vehicles.

In Adama city context, 30% of urban land was dedicated to road infrastructure which is an enabler of socio-economic development and increases the values of land in urban areas by the 9th strategic plan prepared in 2018 in order to make city areas desirable to potential investors, harness the potential of economic corridors between cities, facilitate a movement of people devoid of leaving no one behind, goods and services through improved infrastructure, relieve present transportation bottlenecks.

Based on this tenet, the city which is a busy transportation center has made enormous progress over the last two decades in comparison to the previous decades in infrastructure and services across the city which in turn will transform the image of the city to become the magnet for domestic and foreign investment and a beacon of spark hope for others in the country.

As the figures from the tables provided blow indicate, Adama city has been portraying better performance in road development more than what have been before in alleyways and road network which is classified in to asphalt road, cobble road, gravel road, red ash road, large block Stone, and earth pressed road, natural earthen road, concrete bridge and culvert have been noticed substantially in recent years which do not take place at haphazard to forge the development of infrastructure in different aspects of development.

As it is observed from the table, the city has been transforming its infrastructure landscape with greater diligence and perseverance. In recent years, the tarred road density has increased dramatically. Almost every major road is tar sealed which is an important landmark in the history of the city. In 2024, the size of cobblestone road, gravel roads and asphalt road in the city was 252.73 km, 224.34 km and 296.3 km respectively.

The number of bridges and culverts built in the city is 106 and 193 respectively. Since 2019 G.C., urban infrastructure development has created more than 18,000 opportunities for youths and women. The city is well served by road haulage and the roads are good, in spite of the road signs and directions desperately needed in many of the junctions in the city are not really available to guide drivers.

To recapitulate, the existence of some formidable challenges in road infrastructural development entail city administration' relentless efforts to make urban areas suitable to their residents and new investment, effectively manage road assets in the city, enhance evaluation and monitoring of

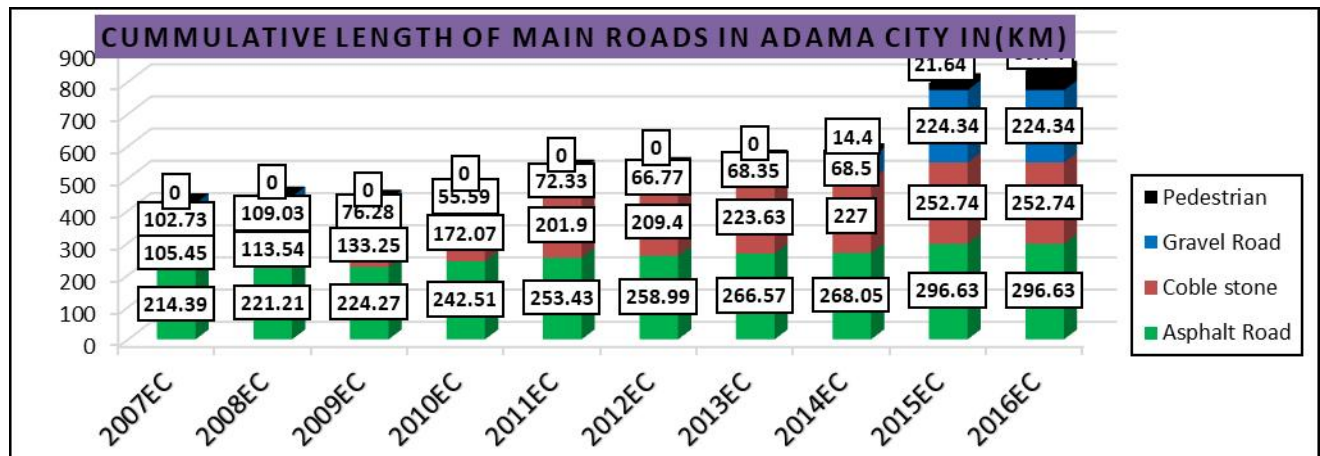
road development that consumes hefty sums of capital from the coffer of the city administration and other stakeholders every year. Fair information about road infrastructure can be attained from the ensuing graph and figure.

Table 27:- Type of Road and length in Adama City

S.N.	Road accesses and facility		2016 A.E.C
1	Type of Road in Km	Measurement	
1.1	Asphalt	kilometer	296.63
1.2	Gravel	kilometer	224.34
1.3	Cobble stone	kilometer	252.74
1.4	Red ash road	kilometer	77.75
1.5	Dry Weather (Earthen)	kilometer	616.9
1.6	Walkway	kilometer	60.74
1.7	All weather road	kilometer	834.45
2	Road Structure		
2.1	Concrete Bridges (in number)	No.	75
2.2	Drainage Canal	kilometer	390
2.3	Culvert (in meter)	No.	107
3	Street light	No.	4910

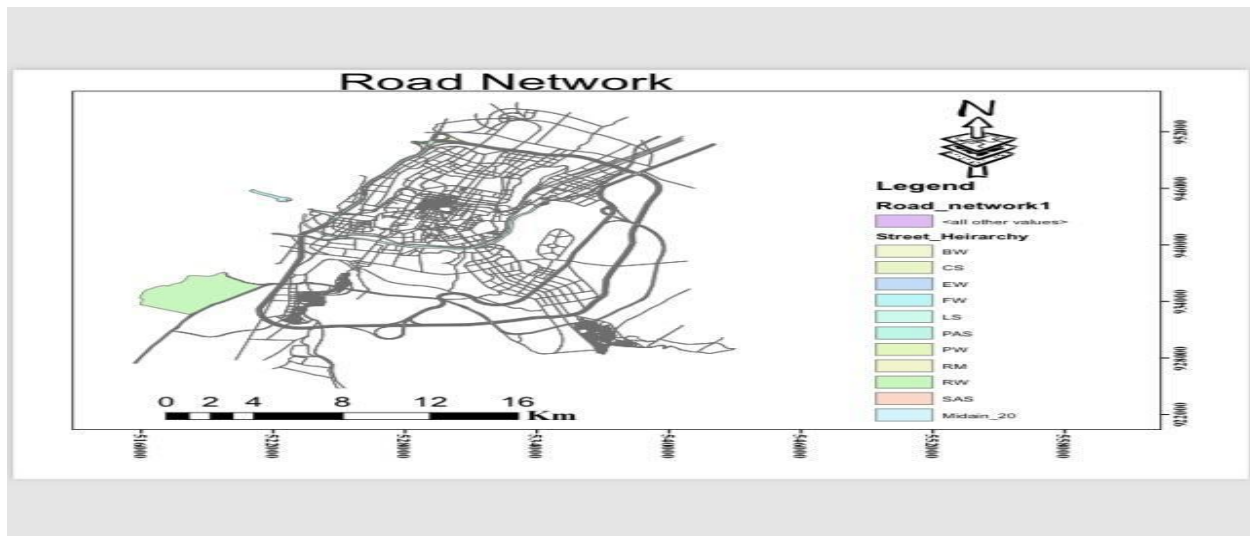
Source: Adama City Municipality office (2024)

Bar Graph 4:- Type of main Roads and their Cumulative Length in Adama City from 2007EC _2016EC (in KM)



Source: Adama City Municipality office (2024)

Map:-Road Network of Adama City



Source: Adama City Municipality office (2024)

Figure 10:- Visual presentation of some roads in the city

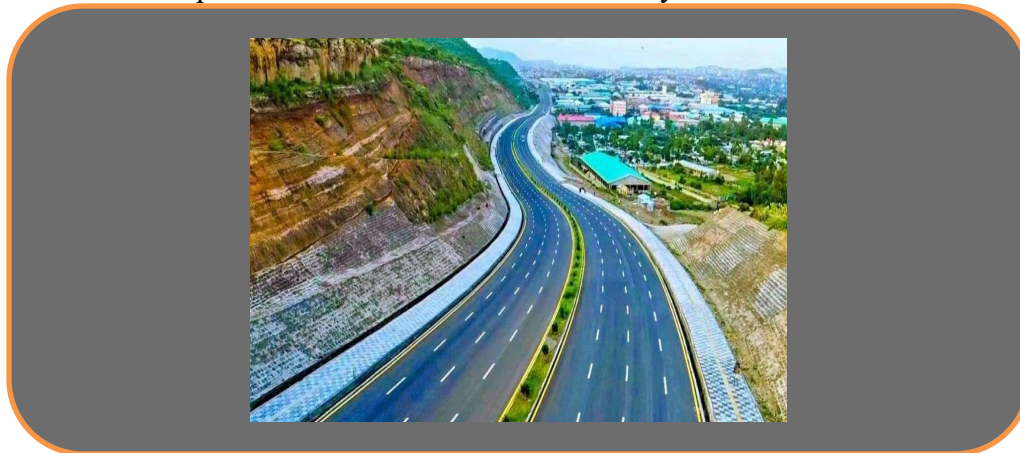


Photo Source: Adama City municipal service office (2024)

5.4. Community Participation in City Development Endeavors

As fostering local development well suited to the needs of the people devoid of local community participation is viewed as clapping with one hand, the involvement of local communities who are important building blocks of an urban region in local development at all stages of the project design and implementation is substantial to meet the needs of the public.

In the same token, the city government's unilateral efforts and works alone would not take the city administration anywhere deprived of active and real involvement of local community in all endeavors of city development. As city government cannot fully fund urban services and infrastructure for the advancement of the city by a city's own-source revenues and present all necessary public goods and services, working hand-in-glove with different stakeholders and putting on board the grass root community in city development endeavors consistently are extremely considerable to encourage strong all-rounded participation of the city's residents in all aspects of the city development endeavors.

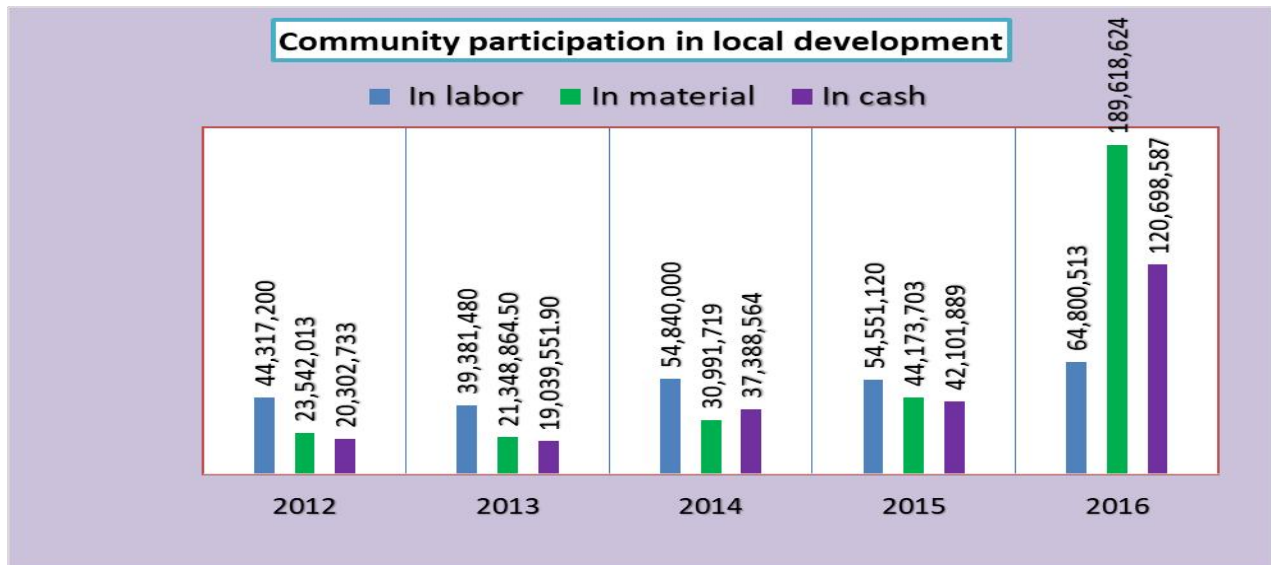
With this conviction, the government has placed a strong emphasis on community participation in local development process hopefully in order to enhance resources availability, come up with viable solution, meet the demands of the residents in a better way, move from skepticism to consent, address concerns and grievances that arise in connection with a development project and byroads, galvanize the support of the public and reverse the past trajectory of local development approach, nevertheless community involvement in local development was not received the public attention it deserves in the past time.

Apart from earmarking lofty budget that worth hundreds of millions of Birr annually; community participation which is an alternative vehicle for mobilizing resources and does not end has gained momentum. By considering the far-reaching implications of community involvements in city development endeavors, enhancing public private partnership (PPP) and public mobilization within the ambit of the city via frank discussions is one of the nine pillars of urban development and housing in Ethiopia.

Consequently, community participation is mainstreamed in city development program order to identify development gaps for immediate intervention, take part in the implementation process, air their concerns and expectations, accommodate the aspirations of the local community which have a stake in city development program and have a role to play, share costs of infrastructure construction and maintenance, solve a range of knot issues in synergy with the local community, speed up the pace of infrastructural development in an equitable, transparent and efficient manner, develop sense of ownership among the residents and put the needs of its citizens at the forefront of all its development activities.

Community participation which has a high potential for up-scaling the practice in other urban areas has showed noticeable improvement over time more than what has been before. This stride was made with a view to address budget deficits, promote local developments in their best interest that reflect people’s priorities, put the public and government in the same page, meet the public pleas for basic service delivery, provide well-tailored and appropriate infrastructure on the preference of the dwellers in Adama City administration. Adequate information about community mobilization and participation in the city development effort can be obtained from table, graph and figures provided below.

Bar Graph 5:- Community participation in local development in Birr and areas of participation, (2012-2016 E.C.)



Source: Adama city Finance office (2024)

5.5. Rail Way

The movement of people and goods and the expansion of trade and commerce has been seriously hampered by low level of infrastructure, lack of inland highways and railways throughout the country and the existence of impassable terrains and rivers used to make travel overland difficult.

To open up this sleepy and isolated country from the outside world and country with the rugged topography to the rest of the world and awaken the country from hibernation a narrow-gauge railway was established during the reign of Emperor Menelik in the country. The railway that

runs from the port of Djibouti to Addis Ababa was built by the French between 1987 and 1917. Adama was the main halt on the railway in the central part of the country.

Presently, the oldest rail line leas to Djibouti is out of business. The country which has no access to the sea port and became landlocked since 1993 came up with the importance of the establishment of modern standard gauge railway line in contrast with the existing dilapidated Ethio-Franco narrow gauge line, as Ethiopia relies on Djibouti port services for more than 90 percent of its land-based trade.

Currently, Adama city is fortunate to have connection with this 753-km electrified and modern standard gauge railway line which runs through the city has virtually replaced the old meter-gauge railway. The old meter-gauge railway is now out of service in the country.

Rail haulage can carry heavy bulk-products and plays the most important role in the national economy of the country and reducing transport, port service and storage costs that consume much of the country's hard currency. The railway transports huge numbers of commuters every day from the city and vice versa. New Railway Station was built in the city alongside the construction of Ethio-Djibouti Electric rail way. For further understanding, see the figures provided below.



Source: Adama City Planning and Development Office (2024)

Adama city has no full-fledged leverage and capacity to offer these utilities to the residents of the city at the required quality and quantity. For this matter, there is a need for government intervention in utility services which are public-owned in the city.

For the time being, the subsequent discussion attempts to shed perfect light on utility services including electric service, running water supply and sewer systems and cellphone services which are sole responsibility of states and local governments in Adama city.

5.11.3.1 Power Supply Service

As their names imply, energy which is the engine of economic development is an important driver of rapid economic transformation everywhere. Energy which is consumed by industry, transport and used for cooking, heating and lighting is one of the basic necessities for the survival of human race and economic and social development.

As human being is dependent on power for various needs, energy is an essential precondition for the progress of the nation and the functioning of modern economies. Devoid of adequate supply of energy ensuring sustainable development and economic and social transformation is extremely illusive.

Apart from this, power supply which is the backbone of modern economic growth and touches every aspect of life from cooking to transportation and income generation is pivotal for industrial growth, job creation, foreign investment flow and household supply.

Ethiopia which is coined as ‘The Water Tower of Africa’ has an ample supply of water, with large lakes, 12 river basins, and a sizable surface and underground water reservoir as well as it is endowed with a variety of green energy resources potential, despite 70% its water resources flow to the neighboring country.

As the demand for power supply upsurges from time to time, the exploitation of environmentally friendly energy sources include all forms of biomass, hydro, geothermal, solar and wind which have no significant effects on human and environmental health has took precedence over fossil fuels in the country as improving the energy sector without which national development would be an illusion has gained momentum in the country.

Furthermore, promoting renewable energy generation and harnessing renewable energy sources were received priority in the country consistently to reduce the effects of climate change that impact the lives and livelihoods of citizens in multiple ways. The clean energy investments were made in Ethiopia to unlock energy potential, build climate change resilience economy, reduce reliance on fossil fuel consumption that affect the country's economy, achieve net zero carbon emission, ensure self-reliance on clean and renewable resources of energy and reduce GHGE and air pollution that exacerbates climate change ramification with unpredictable repercussions.

Since 1963, Adama City has been supplied with power generated from hydropower plants in the country. Adama city which is consuming tremendous amounts of energy has made considerable progress in improving access to power supply through the use of potential resources of the country for the benefits of the citizens.

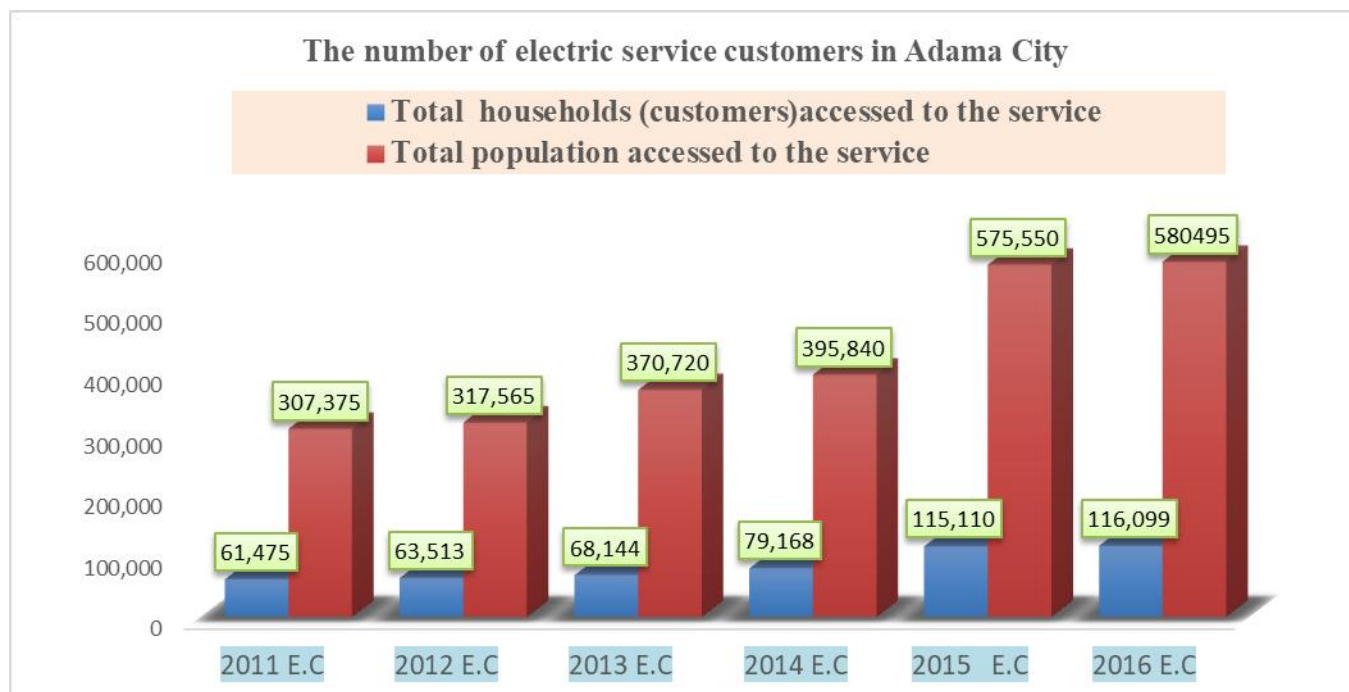
Adama wind farm 1 and 2 which generates 53 and 151 Mega Watt respectively inject power to the national grid system. Presently, Adama City receives reliable electric power supplies for 24 hrs. from interconnected a national electric grid system which provides electricity through an interconnected power grid system in the country.

Many households use electricity as the main source of energy, despite the fact that other sources of domestic energy supply (charcoal, firewood, dung, crop residue, biogas and kerosene) are still used by significant number households out of electric connections.

The glows of light coming from electric poles installed along the streets give impressive and fine-looking image to the city from dusk to dawn, even if there is frequent power hiccups occur in the city that sometimes plunges into power blackout and more must be done to satisfy present demand for urban infrastructure and services.

Access to electricity has increased dramatically. According data gathered from Ethiopian electric utility office of Adama District, the current electric power demand is 225 MWH, while the current supply of electric power is remained 125.325 MWH. Fair information about electric power supply in the city can be attained from the table and figure provided below.

Bar Graph 6:- The number of electric service customers in Adama City from (2011EC-2016EC)



Source: Ethiopian Electric utility Adama District office (2024)

Table 28:- The number of electric service customers in Adama City

SNO	Year	Number of customers (house-holds)	Total population accessed to the service	% Of people supplied with electricity
1	2011 E.C	61,475	307,375	71%
2	2012 E.C	63,513	317,565	70%
3	2013 E.C	68,144	370,720	71.3%
4	2014 E.C	79,168	395,840	78.66%
5	2015 E.C	115,110	575,550	65.7%
6	2016 E.C	116,099	580,495	66.3%

Source: Ethiopian Electric utility Adama District office (2024)

5.7. Access to Potable Water Supply Service

Broadly speaking, water is one of the crucial elements that are required by all living creatures to exist and to reproduce themselves. In the same token, people need clean freshwater to drink, for domestic use, personal hygiene and sanitation, cooking, construction, washing clothes and cars, power and waste disposal, cooling, agricultural food production and running industry.

As a result, access to safe drinking water and proper sanitation is both a right and a basic need and the foundation of all developments elsewhere. Before the City Administration has developed new water supply system in 1995, Adama city where their surface water such as seasonal and permanent rivers, streams, lakes and other inland water are not available was synonymous to shortage of water.

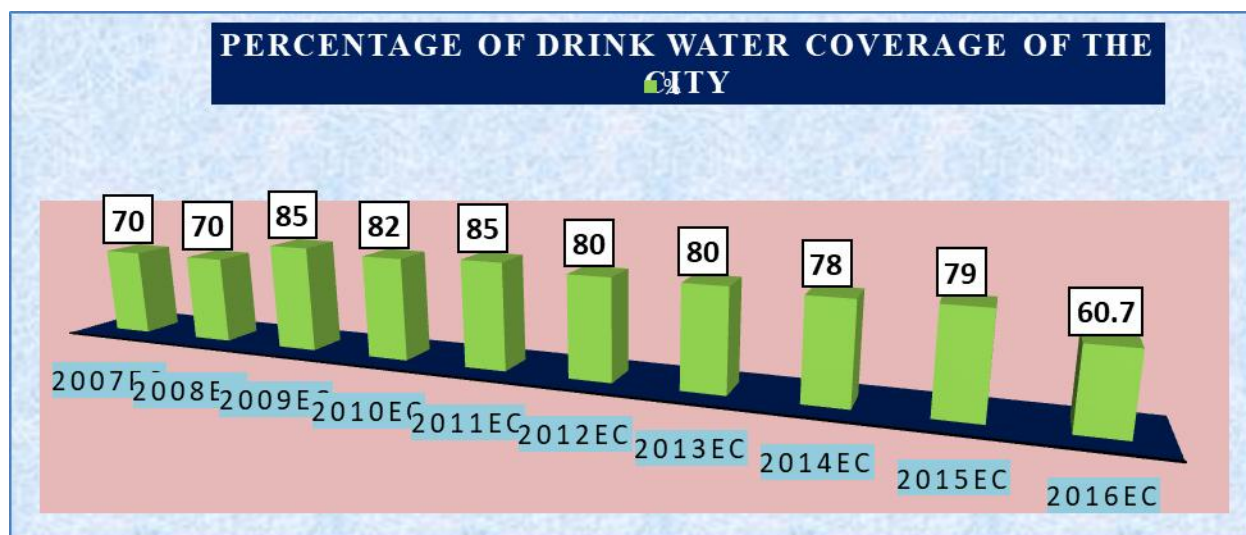
Prior to intervention and the construction of water diversion plants in Adama city in 2004 at the adjacent to Awash River at an outlay of 103,000,000 Birr in 2004 to provide adequate water to the townies and curb the shortage of safe water in the city, water supply in the city was contingent on disused boreholes dug in the city for several years

As the high demand of water for drinking, sanitation, industry and the like is growing from time to time in the city; Adama city administration has attached great importance to investment in clean water supply, water points, sewage treatment, and solid waste disposal to enhance water service coverage, respond to concerns and grievances of the residents, improve water supply for human consumption, expand and construct water facilities, enhance water production and distribution and address the mounting difficulties pertaining to water scarcity in Adama City.

As a result, improved water supply, several households have access to running water and are supplied with potable water. Currently, the major assets being used for provision of the water supply service includes water production and treatment plant, water lines, reservoir, pumps, valves, chambers, water wells (boreholes),

In doing so, Adama city which relies on Awash River for its water supply needs is totally getting sufficient conventional and safe water service from two treatment plants built on the bank of Awash River and the city has made considerable progress in improving access to water and sanitation facilities in order to improve access to water supply and sanitation, despite tap water coverage is decreasing due to rapid urbanization and population increase. Fair information about water supply in the city can be gained from the tables, figure and map provided below.

Bar Graph 7:- Tap water coverage of the city (2007EC-2016EC)



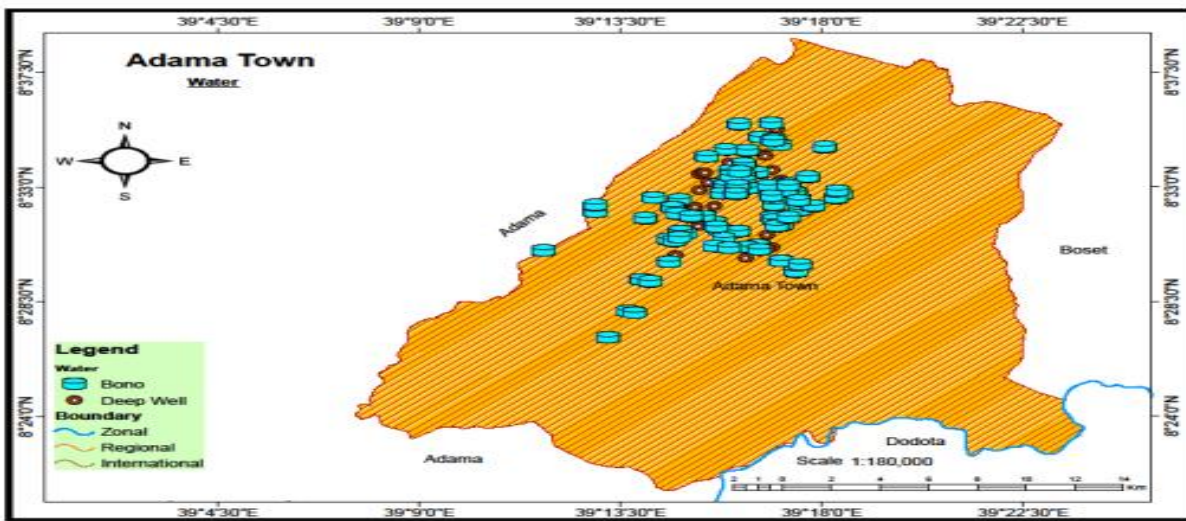
Source: Adama city water and sewerage service organization (2024)

Table 29:- Water production, supply, demand & per capita consumption

Description	Unit	2015	2016
Lengths of Water Line (pipe Lines)	km	568.9	667.5
Water stations (tabs)	No.	116	116
House connection(meters)	No.	82,441	90,592
Water Production	M ³	16,071,668	16,461,932
Water Supply	M ³	16,071,668	16,461,932
Water Supply Excluding leakage	M ³	12,918,162	13,259,374
Per Capita water Consumption	M ³	60.5	41.51
Per Capita water Consumption according to	Litter	80	80
Total Demand for water in m ³ /year	M ³	23,235,375	25,554,322
Difference b/n demand and supply in m ³ /year	M ³	8,393,087	9,092,390
Water Coverage	%	79%	60.7%
Income collected	Birr	258, 040,000	475,678,674.63
Water linkages	%	19.5%	19%

Source: Adama city water and sewerage service organization (2024)

Map10 : shows the spatial distribution of water supply service infrastructure in the city



Source; Planning and Development Commission of Oromia (GIS Team) (2024)

Table 30:- The number of liquid wastes generated and disposed

The number of liquid wastes generated and disposed				
SN	Description	Unit	2015	2016
1	Amount of liquid waste generated per day	m ³	10,334,530	10,690,094
2	Amount of disposed liquid waste per day	m ³	76,000	106,000
3	Number of institutions (private Owners) engaged in sewerage disposal services	No.	13	13

Source: Adama city water and sewerage service organization (2024)

5.8. Telecom Service

Needless to say, telephone service within Ethiopia was originally introduced during the reign of Emperor Menelik II. In a fiercely competitive world, improved connectivity which offers immense economic benefits and enhance economic growth and development will attract new business and investments, reduce the cost of doing business and will offer small, medium and micro enterprises access to new markets.

Equally, better-quality internet penetration and accessibility also offers direct benefits for local government entities to improve the efficiency and effectiveness of public services in a

globalizing world. With this conviction, the government has demonstrated a strong commitment to the expansion of telecommunication lines and telecom services.

This resolute devotion which ignited sparkling hope in the country was made in order to empower individuals and organizations digitally, provide reliable network infrastructure, provide non-interrupted telecom services, deliver quality services, meet the demands of the customers, catch up with the modern world and promote digital economy and online marketing, among others.

As Adama City has a large potential for an imminent flourishing trading, industry, conference and tourism, the government is doing its level best performance to increase the provision of telecom services in the city, align telecom services to the swelling needs of citizens, transform the telecom sector which fosters e-commerce, meet the information needs of the community and support the steady growth of the city.

To sum up, telecom services, which have become an essential for the survival and growth of any organization, is increasing steadily in line with the growth of the city from time to time to promote seamless connectivity and adeptly make delivery of services faster amidst internet connection disruptions have become common practice in different parts of the country.

5.9. Postal Services

It is imperative to note that postal service which includes the distribution of letters, parcels and money is one of the oldest modes of communications that involves the transmissions of messages from one place to another place through different media of communication. Better economic and social developments in the city contributed for better postal services delivery system in Adama City which is well connected with other parts of the country.

Postal service was established in 1936 in the city. Since then, the Adama postal office gives quite plenty world standard services to the community in the city and its surrounding. The numbers of post offices giving service in the City currently are 3. The numbers of Post Stations found in the city are 3. Fair information about postal services in the city can be learned from the table provided below. **Table 31:-** Postal services delivered in 2015 and 2016 E.C

S.No	Type of services delivered		2015	2016	
			Item	Bag	Item

1	In coming & outgoing postal services		114,511	2692	21,041
1.1	Letters (in coming postal services)		64,199	3337	11,074
1.2	Letters (outgoing postal services)		50,312		9967
2	EMS		6,505		4307
3	Parcel		177		340
4	Number of P.O.Box	Rented	1,104		520
		Unrented	2,396		879
		Total	3,500		2,621

Source: Ethiopian Postal Service Adama Branch (2024)

5.10. Mobility and Transport

Transportation which is the actual physical movement of people and goods from one location to another in a given area is viewed as a vehicle for socioeconomic development in any locale. As all basic facilities and goods essential for human beings' survival and life are not available in all parts of the earth at the required level and quantity, goods and services move from place to place using different modes of transportations.

Subsequently, several means of transportations which are lifeblood of the city exist for both people and goods to create an efficient public transport system, facilitate the circulation of freight and people back and forth and reciprocal relationships between different entities every day.

The provision of safe, accessible, and affordable public transport infrastructure includes bus station, parking services, bus & taxi terminals, freight terminals, garage, railway station is a vital requirement for the socio-economic development of the Ethiopian population and farmers bringing their farm produce to cities and towns and vice versa.

In the same token, the provision of more expedient and efficient intra-city means of transport on time and physical infrastructures such as parking lots, terminals, fuel dispensary, vehicles and networks which play a decisive role in snowballing carrying capacity of roads clogged with traffic, down swinging transaction and operational costs for transporting goods and commodities and stimulating economic growth through facilitating easy mobility of people and goods and services between cities connected by sealed roads is the prime mission of any government.

An efficient urban public transportation system is required in order to increase efficiency in flows of goods and services, enhances the linkages between suppliers and producers, reduce

transaction costs and facilitate market exchanges, increase availability, accessibility, affordability and sustainability of services and offer convenient road haulage services for the residents who are commuting to work on public transport and private vehicles move back and forth in the city.

The city invested a large percentage of its budget toward an effective integrated public transportation system which transports people and goods in and out of the bustling city of Adama. The recent improvement of road network in the city more than what has been happened before has facilitated the movement of passengers and freights in the city lies on the busiest road connecting Ethiopia with Djibouti. Furthermore, the purchase of 14 city buses are offering transport services in the city has been made by Adama city administration to alleviate the acute shortage of transport facilities in the city during peak/ rush hours. Currently, 20 fuel dispensaries are found in the city to help vehicle replenish fuels.

The majorities of the urban populace who deserve to have a safe and comfortable transport system use a combination of travelling by foot, bicycle, and minibus, bus operating on streets to get to work and from work, school or other activities and move around.

In addition to fostering pedestrian walkways and bikeways/lanes which are environmentally friendly transport system to decongest the city's traffic, reduce the incident of accident and traffic throng, lessen dependency motorized transport that belch greenhouse gas emission, provide safer, more convenient walking opportunities for children and the elderly and save energy, keep the health of the inhabitants, provide convenient sidewalks and bicycle routes and walkways/pedestrian ways for its residents in the city, the provision of mass transport system are advisable. Fair information about transport activities can be acquired from the next table.

Figure 13:- Pictorial presentation of city buses in the city



Source: Government communication affairs office of Adama city administration (2024)

Table 32:- Mileage Matrix

Towns	Adama	Modjo	Wolenchiti	Dera	Asella	Bushoftu	Finfinne	Metehara	Wonji
Adama	---	23	25	25	75	55	100	90	9
Modjo	23	---	48	48	98	32	77	113	32
Olenchiti	25	48	---	50	100	80	125	65	34
Dera	25	48	50	---	50	80	125	115	34
Asella	75	98	100	50	----	130	175	165	84
Bushoftu	55	32	80	80	130	---	45	145	64
Finfinne	100	77	125	25	175	45	---	190	109
Metehara	90	113	65	65	165	145	190	---	99
Wonji	9	32	34	34	84	64	109	99	---

Source; -Adama master plan revision project office (2004)

Table 33:- Number and type of Public Transport Vehicles in Adama City

S.N.	Type of Public Transport	Year	
		2015 E.C	2016 E.C
1	City Bus	8	8
2	Bajaj & Mini-door	13,002	14,620
3	Minibus Taxi	701	803
4	Motor Cycles	3886	4336
	Total	17597	19767

Source: Adama City Transport Authority (2022)

5.11. Cattle Slaughtering House

Generally speaking, safe meat production for sale and home consumption begins with slaughtering animals. Slaughter house is one the critical municipal service offered by the municipalities to urban inhabitants elsewhere in the cities of whatever size. In this framework, Adama City was established its own slaughter houses in 1934 A.E.C. currently, the city

administration has established modern abattoir at an outlay of 20 million Birr in 1994 A.E.C. The Abattoir has the capacity to slaughter 300 cattle and 200 sheep/goats per day.

The move behind it was to protect the community from risks that could endanger health, mitigate disease transmission from animals to humans who are the vital asset of the city, reduce illegal cattle slaughterer that endangers the health of people, generate revenue for city administration, provide their inhabitants healthy, fresh and safe meats by healthy and skilled persons and up-to-date butchery equipment. Fair information about cattle slaughtered in the abattoir of the city can be obtained from the table and figure provided below.

Table 34:- The number of animals slaughtered in municipal slaughter house

No	Animal type	Unit	2015	2016
	Cattle	No.	20,827	17,992
	Goats & sheep	“	21,569	15,895
	Total	“	42,396	35,903

Source: Adama Municipal services office (2024)

Combo Graph: - The trend of slaughter service (2012-2016 A.E.C)

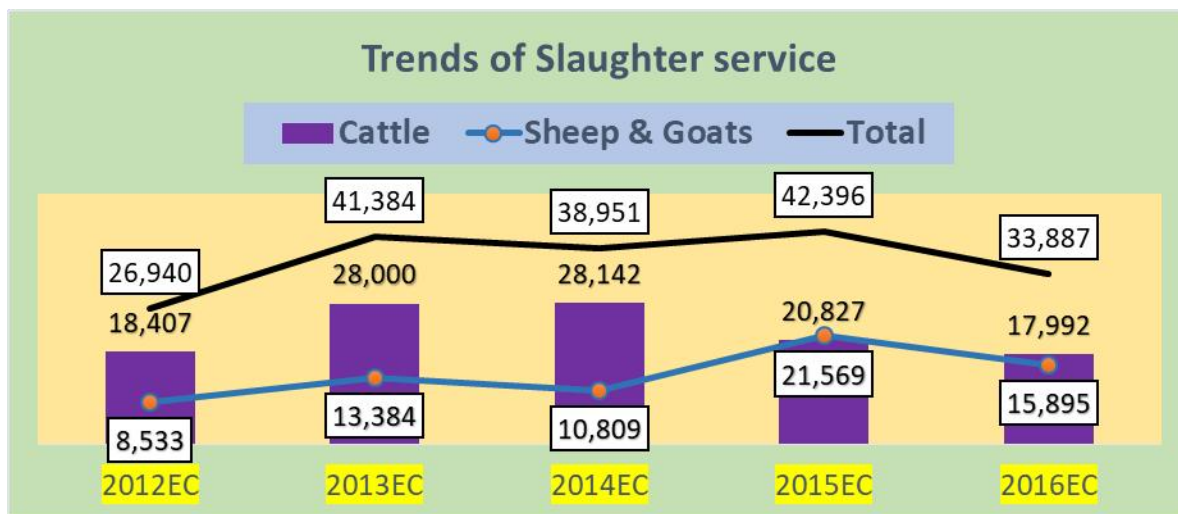


Figure 14: - Pictorial presentation of abattoir house in Adama city



Photo Source: Adama Municipal services office (2022)

5.12. Solid and Liquid Waste Elimination

Urban areas naturally produce many solid and waste productions on daily basis. Wastes make the city unfit for living, complicating urban lives, blemish the image of urban areas and trigger serious health problems vise-a vise the previous period, unless they are properly collected and disposed safely.

This call for the provision of better waste disposal and sanitation services in urban settings which are the sources of mounting solid (leftovers, rubbles, bi-products and faeces) and liquid waste (urine, garage wastes and waste water) generated on daily basis from residential, commercial, markets, municipal and industrial plants to save human lives and protect human, animal and environmental health.

This call for the provision of better waste disposal and sanitation services in urban settings which are the sources of mounting solid (leftovers, rubbles, bi-products and faeces) and liquid waste (urine, garage wastes and waste water) generated on daily basis from residential, commercial, markets, municipal and industrial plants to save human lives and protect human, animal and environmental health.

In parallel with fostering city development maintaining the lives and livelihoods of the residents who deserve rights to clean environment in sustainable manner through circular transformation of wastes, elimination of waste/effluent which are resources if we manage it properly and is not a

one-time job is extremely momentous to reduce putrid smell and toxic pollutant effects on natural systems.

For this reason and other reasons, Adama municipality is responsible for refuse collection within their area of jurisdiction. One of the most important functions offered by the municipalities to the residents of towns and cities is waste collection and disposal which can blemish the image of the city.

Subsequently, the municipal service office pours hefty money tenaciously into bulldozers and compactors purchasing, abattoir construction and slaughtering services, sewage and sanitary and solid waste collection and disposal, purchasing of trucks and solid waste collection containers, building sanitation infrastructure, and solid and liquids waste facilities to maintain human and environmental health, though it is difficult to change the whole situation at once.

Additionally, municipal office availed permanent tankers, dry pit lavatories, wastebaskets, trashcans, dustbins, waste/trash bins, incinerators at different sites in order to decrease wastes threat to health in the city, protect urban dwellers against bad smells, infectious disease and other health hazards and remove toxic and other wastes as well as to increase the coverage of handling garbage collection and disposing.

The solid waste collection also supported by new and old solid waste containers and old and new dust bins distributed throughout the city. The city's main asphalt and cobble roads are cleared daily from midnight to dawn by 600 people, even though sludge pond, public toilets, communal toilets, areas-based containers, suction tankers, septic tanks, vacuum-truck and dump trucks are inadequate as compared to the large amount of emitted from different hotels, householders and so forth.

In the last ten years (2014-2024), the number of vehicles has been transporting solid waste increased from 4 to 31. Likewise, 54 MSEs have been licensed to collect solid waste from households and businesses enterprises, transport wastes to transfer stations and create job opportunities. Waste from these stations is transported to permanent dry waste disposal sites using compactors, trucks, and other vehicles.

These all-out endeavors were made to reduce litter, improve the healthiness of the residents, avoid and minimize pollution, maintain the quality of the environment, improve the quality of life, mitigate trespassing of certain environmental protection regulations and reduce unsanitary living condition via implementing 3R principle (remove, reuse and recycle), despite waste collection and elimination system is still in rudimentary state.

In conclusion, it is advisable that waste resources generated in the city can be used to electricity generation, job creation and compost production that can be used to boot agriculture produces in the city where significant number of the residents are failed to ensure food security. Fair information about the waste collection and disposal can be achieved from the table and figure provided below.

Table 35: - The city's solid waste generated and disposed in 2016 A.E.C.

SN	Description	Unit	2015	2016
1	Amount of solid waste generated	m ³	483,399	540,347
2	Amount of disposed solid waste	m ³	386,720	529,252
3	No. of MSEs engaged in disposal services	No	133	127

Source: Adama City municipal service office (2024)

Figure 15:- some of waste transport facilities in the city



Source: Government communication affairs office of Adama city administration (2024)

Table 36:- The number of liquid wastes generated and disposed

SN	Description	Unit	2015	2016
1	Amount of liquid waste generated per year	m3	10,334,530	10,690,094
2	Amount of disposed liquid waste per year	m ³	76,000.00	106,000.00
3	Number of institutions (private Owners) engaged in sewerage disposal services	No	13	13

Source: Health office of Adama City Administration (2024)

5.13. Access to Sanitation

Before reviewing access to sanitation in Adama city, offering some brief background information on sanitation is extremely imperative. Inadequate waste management services and poor hygiene and unhygienic conditions lead to the decline of air quality, unpleasant living conditions and a contaminated and unhealthy environment.

Poor personal and environmental hygiene lead to the spread of water borne, food borne and air borne diseases like typhoid, typhus, asthma, cholera, amoeba and dysentery. These diseases endanger the lives of people, unless wastes are collected and eliminated properly and personal and environmental cleanness are made. On the other hand, good sanitation saves lives and prevents degradation of environment.

As environmental health and human health are highly connected, Adama city deserves to have adequate and quality sanitation facilities which buttress healthy living conditions in the city. As a result, access to sanitation is one of the most important basic services and key subjects as it concerns the health and dignity of human beings who deserve rights to sanitation and hygiene.

Since the residents of the cities have the right to adequate living standard including access to clean drink water and latrines and so forth, municipalities provide their inhabitants with sanitation services. Adama municipality service office is no exception.

In this context, sanitation service is carried out by local government authorities. A sanitation service is one of the most important functions of Adama municipality service office to make the city a better place and bring improved living conditions to its population in unprecedented scale.

This service is steadfastly offered in order to prevent inhalation of contaminated air and ingestion of unpleasant pollutant air especially in crowded urban areas during eating and drinking, build

the image of the city, keep cities livable and attractive for people, enhance the standard of living, make living and working in urban center safer and withstanding urbanization risks, make the city clean, safe, healthy and hygienic.

Figure 16: - street cleaning activity and one of the trucks used to collect solid waste



Source: Government communication affairs office of Adama city administration (2024)

5.14. Developing and Managing Green Area Activities

From its inception, urbanization which create an unnatural environment and built spaces such as commercial, industrial, roads and parking lots, high-rise residential, single-unit residential, and highways came with negative outcomes is a double-edged sword. On the one hand, it is an essential part of development and can lift societies up by prompting diverse urban environments that stimulate creativity and innovation.

On the other hand, rapid urbanization without appropriate policy responses to its particular challenges poses negative ramifications include an augmented greenhouse gas (GHG) emissions from the transport system and network; increased loss of natural habitats and rare species, deterioration of air quality, decline in biodiversity, anomalous traffic congestion and air pollution that put our lives at risk, impact citizens and bring damages to human health while urbanization is widely viewed as a key engine of development.

Since cities began to grow, the movement of people from rural to urban settings where built and un-built areas amalgamated has been associated with dire conditions to be mitigated in urban

spaces which often experience elevated ambient temperatures compared with the surrounding countryside.

It is indispensable to recognize that the negative effects of development-induced environmental degradation and contamination, urbanization, population and economic growth and surge in energy consumption and the effects of climate change are deteriorating the quality of the environment and human health disadvantageously and posing an appalling threat to the survival of the human species in every nook and cranny of this planet.

As many people have become detached from their natural environment which is labeled as natural capital with the growth of cities and land use changes, working protection of nature for sustainable social and economic development and maintenance of ecosystems which provide nearby access to nature and recreation for residents has gained momentum in unprecedented manner to continue our survival on this planet sustainable.

Particularly, the importance of appealing green areas which serve as foundations for green infrastructure that can meet the needs of burgeoning urban populations and is labeled as “the breath of urban dwellers’ and provide a wide array of benefits to people for economic, social, environmental, structural and aesthetic benefits has seized immense importance during this hard time.

Setting aside open green spaces in urban precincts and living in harmony with nature play a paramount role in saving some animals at the risk of extinction of biodiversity, ensuring environmental sustainability, carbon and toxic pollutant storage and sequestration, counteracting anthropogenic CO₂ emissions, creating suitable locations for many or most terrestrial species to live, improving air quality and reducing exposure to noise and toxic smog that impact everybody.

In the same token, awe-inspiring green infrastructures including urban forests, public parks, community gardens, green roofs, green building, road side green, recreational areas and botanical garden has captured immense importance in urban milieus in unprecedented scale to begin greening the city from the heart of the city where there is a shortage of urban greenery infrastructure.

The aim is to create environmentally comfy and sustainable city, ensure long-term prosperity and quality of life for future generations and environmental sustainability, remove and air pollution, water pollution, and ecological constraints resulting from augmented automobile use and expansion of industries.

Particularly, the expansion of magnificent green spaces especially in inner cities which are not a one-time job is chiefly significant for recreation, inspiration and the general well-being of residents living under harsh condition. Therefore, a successful city must balance social, economic and environmental needs and ecological health and economic development to address anomalous and practical urban-related challenges, meet the needs of the current generation without compromising the long-term needs of future generations, treat the natural and built environment and the people that interact with environment, protect cities from greenhouse gas emission surges.

By considering the far-reaching implications of urban greenery which are essential to a healthy environment and meet the urban challenges of today and the negative repercussion of rapid urbanization, the operational strategic plan of the city had set aside 30 % of the total area of the city for the environmental use category in response to recent changing economic and environmental imperatives.

This gives green light and rays of hope to increase the beauty of the city, change gloomy faces of the city, lessen crowding in the commercial district, achieve more sustainable management of urbanization and improved biodiversity conservation through spatial planning and raise the welfare and sustainable quality of life, people and ecosystems in boisterous urban settings where most people will live in the forthcoming period.

The importance of urban greening has given considerable recognitions in many towns and cities, including Adama. The city continues to invest in planting palm and other glamorous and ornamental trees in hillsides of the city and in inner city in comply with environmental policy and standards and the adapted urban development policy, albeit the development of greenery assets in Adama is not yet as suitable as demanded.

In addition to fostering the replacement vehicles use fossil fuels by vehicles dependent on renewable energy sources at the national level, planting trees and beautification of the city were

made to avoid the flood damage to the downhill side, reduce environmental, water and air pollution, shrink the risk of flooding, provide practical responses to climate change challenges, bequeath climate resilient country to the forthcoming generation, halt extinction of biodiversity, change the image of the city which has a positive prospective.

Adama city has made considerable effort in alignment with the Government's vision outlined in the Climate Resilient Green Economy Strategy and legally binding National Urban Green Infrastructure Standard (NUGIS) which is essential for fighting the effects of climate change and conservation of biodiversity.

The former green infrastructure standards was annulled to address urbanization challenges in bud with an emphasis on urban resiliency, augment green infrastructure, protect the environment and human health while providing other social and economic benefits, improve ambient air quality and urban air pollution, improve aesthetic values for the urban communities before the city is bathed by imminent heat, noise and carbon die oxide often taken as air pollutants in urban areas where there is a milestone change of land use.

The area of the city allocated to urban greenery was 29,221.37 hectares. Out of this size, 16,018.8 hectares (29.5%) has been developed for the efficient management of smart ecosystem services. The number of parks and neighborhood parks developed by the city government and community involvement in the city are 4 and 27 respectively. They are becoming places of rest and accommodation for residents and city's visitors.

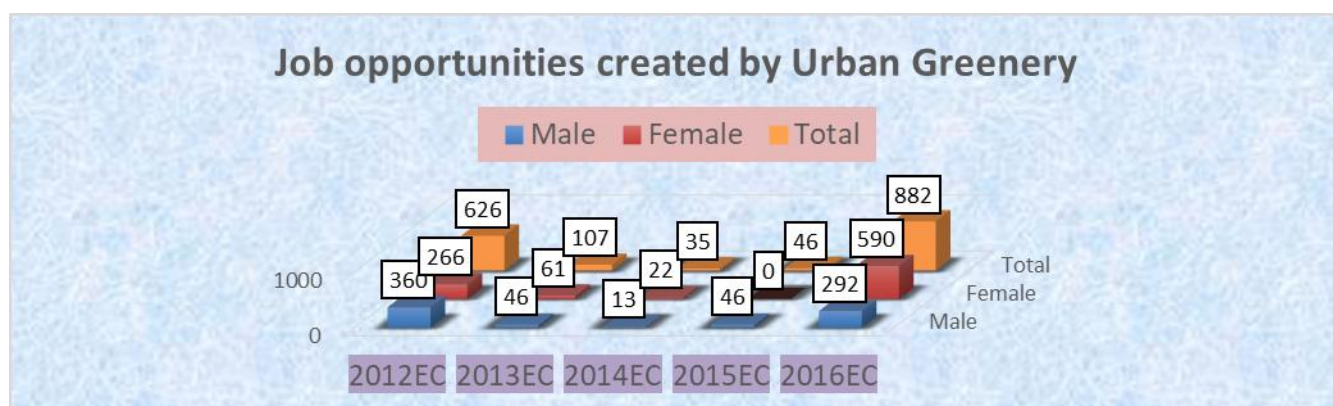
City parks are used to host weddings ceremonies, meetings, entertainment and graduation events, offer band service, video and photo service, recording religious songs and other programs, indoor games, cafeteria receptions and sports games, whereas neighborhood parks are used for lodging children, women and seniors, gatherings of neighborhood elders and *Idirs*.

Pre-urban Forest area in the city is estimated at 4,124.06 hectares. It is reserved to circumvent the flood damage to the downhill side. By 2024, the number of job opportunities created by urban greenery development was 936. 67% of the employment was created for women.

Subsequently, diverse types of green spaces including Diaspora Park, Dambala Botanical and recreational park, Migra Park, Caffee Park, Boku Urban Zoo and Botanic Garden which can

contribute to biodiversity conservation and climate change adaptation and mitigation were established in the blooming Adama endowed with salubrious and fabulous climate, in spite of the size of developed green areas which sequester carbon in the city are far below the standard plan of the city being some green spaces were transferred to other land use categories against the proposed structure during the previous structure plan implementation. Fair information about urban greenery in the city can be achieved from the succeeding figure and maps.

Bar Graph 8: - Shows Job opportunities created by Urban Greenery (2012 E.C-2016 E.C)



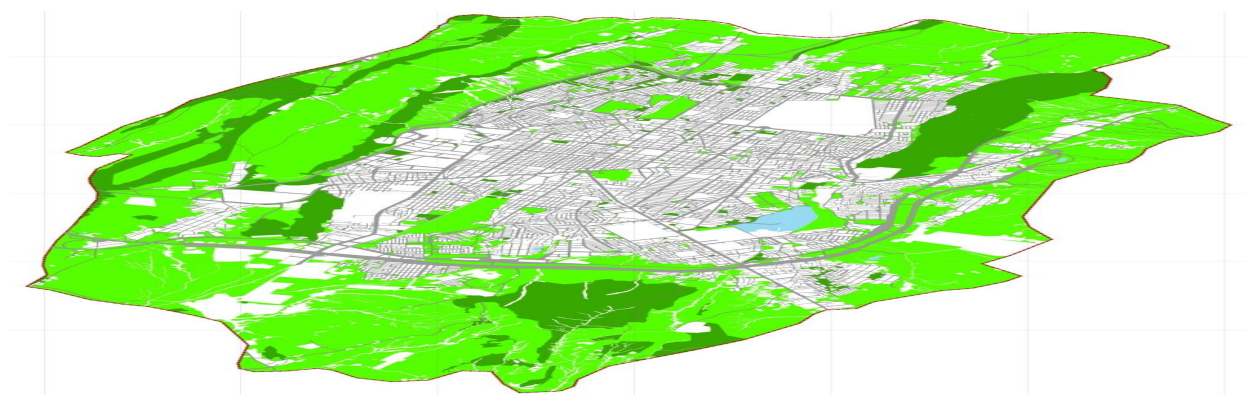
Source; Adama City Municipality Urban greenery and sanitation main core work process (2024)

Table 37: - A progressive growth of Urban Greenery development in years 2008 & 2016 A.E.C

No .	Fiscal Year	2010	2011	2012	2013	2014	2015	2016
1	Size of Land in (Hec)	16.1	21.9	22.18	1719	91.72	2.5	12.13

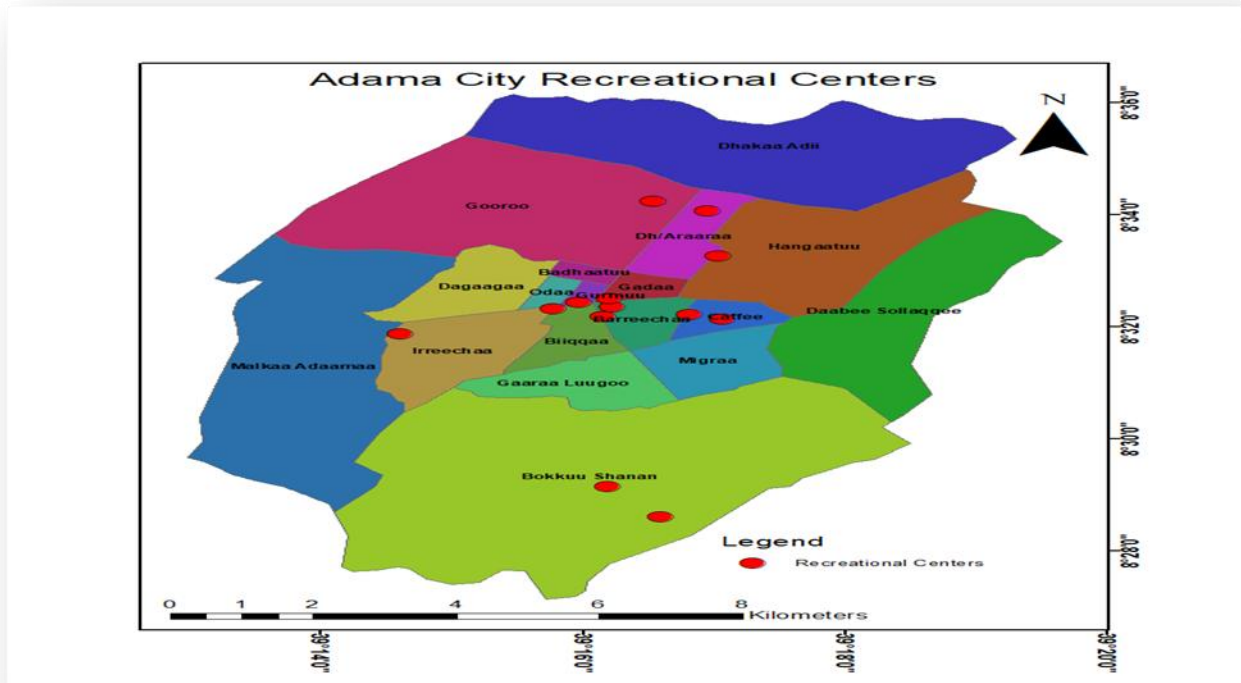
Source: Urban greenery and sanitation main core work process (2024)

Map 11: - The spatial distribution of open green spaces in Adama City



Source: Adama structural plan revision project (2018)

Map 10:- The spatial distribution of recreation centers in Adama City



Source: Adama city plan and development office (2024)

Figure 17:- some green areas in the city



Source: Source: Government communication affairs office of Adama city administration (2024)

5.15. Sport Facilities

This section sheds light on sport activities and facilities in Adama city which is displaying rapid expansion, economic growth and competitiveness in the country. It is crystal clear that sport activities are a critical part of every strong community, as a quality of life that includes physical, mental and social wellbeing of citizens increase life expectancy and improve productivity of citizens.

On the contrary, physical inactivity which is tantamount to killing oneself and obesity contribute to the reduction of life expectancy lead to the prevalence of non-communicable diseases like high blood pressure and diabetes have become serious and causes of diseases that could threaten anyone of us at any time in the country.

These calls for increased regular physical activities to stay healthy, prevent ailments, reduce health-care cost & increase labor productivity, encourage residents to take part in the sport of their preference & decrease risks over illnesses and overweight. In Ethiopian context, the sport activities are largely under the support of government of Ethiopia, regional states and city administrations.

As a small-scale version of the national condition of the country, the city administration has a responsibility to create pleasurable recreational places where non-working times are spent outside the home with shared happiness and sport facilities include play lot, neighborhood playground, sport field, stadium and sport center, horse racing fields, tennis and basketball courts, swimming pools, baseball fields, picnic areas, nature trails, bicycle paths, and other facilities in the areas of the inner city with little room for expansion.

The generic justification building sport facilities which are useful for the wellbeing of the society specially for the youth is to foster social inclusion, build healthy citizens, host sport events, meet the needs of football fans, safeguard the youth and adolescents who have no other places to go and stare at social media platform and susceptible to unwanted practices on a daily basis in urban settings among other things.

Adama is one of the country's sporting centers. Adama hosts different sport tournament in the region. Football is the most popular sport in Adama. It is also home to more professional sports team competing at the national and international level and footballers, though port facilities are insufficient especially at the central parts of the city.

In a nutshell, the city administration and other pertinent bodies have to play their due role with unflinching determination in the expansion of sport facilities in order to save youth from unwanted practices and abhorrent acts, foster social inclusion, meet the needs of youth to relax, create a better place for youth roaming on the streets of the city wastefully, address the plights of

youth in the city and reduce urban delinquency in the bud. In this line, the table provided below depicts the number of sport clubs, registered sports men by sport type, coaches and referees.

Table 38:- Number of Sport Clubs, registered Sports Men by Sport Type, coaches and referees by type of Sport Year 2016 A.E.C

S. No.	Description of Sport Type	Number of Sport Clubs	Registered Sports Men	Number of Coaches	referees by type of Sport
1	Foot Ball	4	112	54	34
2	Basket Ball	-	-	3	6
3	Volley ball	-	-	4	7
4	Table Tennis	-	-	4	4
5	Ground Tennis	-	-	1	1
6	Culture sport	-	-	2	2
7	Athletics			8	34
8	World Taekwondo	-	-	45	10
9	International Wushu	-	-	5	4
10	Weight Lifting	-	-	2	29
11	Chess & Dart	-	-	3	2
12	Deaf Olympics	-	-	4	6
13	Paralympics	-	-	3	1
14	Badminton	-	-	4	5
15	Karate	-	-	6	8
16	Swimming	-	-	2	1
17	Boxing	-	-	2	1

Source: Adama City Administration Sport & Youth Office (2024)

5.16. Micro and Small Enterprises

As we have seen in other chapters, urban regions today are mushrooming in population in developing countries with unintentional consequences urban poverty which is a state of a person with lacking enough material assets or income that the person can live with a good quality life and unemployment which is a state in which a person above a particular age (usually 15) is not getting paid from any organization, crime, congestion and poverty which is hot topics in the media and the world of politics and the gravest human rights plights.

At this difficult situation, urban centers which are adamantly struggling to provide adequate infrastructure and services to the residents and people moved into towns and cities in urban settings are becoming the seat of pervasive poverty and unemployment. Nevertheless, the majority of Ethiopian population lies at productive age, poverty which casts shadow on the lives and livelihoods of some compatriots is rampant in the country.

The lack of employment and poverty especially in big cities forces people wallowing in quagmire of abject poverty to send their kids to work rather than putting them to schools and usually drives people to indulge in unfair practices like prostitution, theft and other criminal activities which can jeopardize national security.

Rapid urbanization has also fueled the rise of unemployment that many cities of the world grappled with in developing countries amidst the size of affluent population are accruing from time to time. Poverty alleviation and employment creation has become challenges for many city authorities around the world. As the economy cannot provide decent jobs and nurture employment, the problems of unemployment and poverty have always been major obstacles to economic development.

Poverty mitigation which has become a matter of international priority took a central place in city and mainstreamed in development plan and programs based on national policy and strategy. Likewise, poverty alleviation which is reverberating across the world is one of the pillars of urban development in Ethiopia to foster a just and equitable society.

Similarly, pro-growth and pro-poor strategies, policies and investment program were designed and taken seriously in the country to foster equity and inclusive efforts and build micro and small industries for sustainable job creation and job creation, poverty alleviation with focus on women and youth were unveiled and implemented in the country.

As a matter of fact, Adama City is among the first liners in implementation of the program in order to improve family income, provide more jobs to the residents in dilemma unlike never hitherto, cope with the swelling disparities between the rich and the poor via promoting entrepreneurship development and urban food security strategy

Furthermore, micro and small enterprise development which is seen as the way to improved quality of life, unemployment, poverty and inequality in the country where large number of populations without jobs is one of the pillars of urban development policy with the primary objective of creating jobs for the urban unemployed and poverty reduction.

These multifarious activities underpinned by increased pro-poor public spending in agriculture, education, health, water, roads, rural electrification were made in order to break out of the vicious circle of poverty that bring about psychological trauma, hopelessness and dissatisfaction among the youths disbanded their families, enable jobless citizens to commence their business and improve the lives and livelihoods of stout-hearted individuals and their families through enhancing business and financial literacy.

Consequently, job creation and skill development office fully streamlined into the existing city government structure at city level to bolster poverty alleviation and address key challenges to urban poverty reduction, confront the challenges of poverty and unemployment which leads to improvement of the economic welfare of the poorest segments of the population.

To this end, the provision training on entrepreneurship and business management and availing production and sale sites and organizing bazaars were made, in spite of unemployment and poverty remain the major developmental challenges of the city due to lack of adequate incubation centers, credit facilities, poor land provision, poor employment creation and the unavoidable and irreversible rural-urban.

In Adama City context, the direct beneficiaries from micro and small enterprises are youth, women that constitute about half of the population and the low-income group of the society who have been involved in different associations to engage in textile and garment, leather and leather products, construction inputs, traditional clothing, food items, mining, metal and wood products, irrespective of poverty, unemployment, food insecurity are increasing at alarming rate in the city. Fair information about job creation and poverty reduction in the city can be gained from the graph provided below.

Table 39:- Jobs created in micro and small-scale development in years 2015- 2016 A. E.C

R.NO	Sector	Description	2013 E.C	2014 E.C	2015 E.C	2016 E.C
------	--------	-------------	----------	----------	----------	----------

1	Manufacturing	NO. MSES	147	138	220	244
		Male	421	348	636	1055
		Female	337	260	510	852
		Total (F+M)	758	608	1146	1907
2	Construction	NO. MSES	145	256	154	200
		Male	703	1010	620	878
		Female	667	223	546	762
		Total (F+M)	1370	1233	1166	1640
3	Trade	NO. MSES	244	877	323	255
		Male	579	1389	1637	1038
		Female	441	1313	1298	912
		Total (F+M)	1020	2702	2935	1950
4	Service	NO. MSES	555	739	787	779
		Male	5041	6184	12657	10671
		Female	1493	1315	3400	3473
		Total (F+M)	6534	7499	16057	14144
5	Agriculture	NO. MSES	47	35	29	155
		Male	419	397	206	1441
		Female	328	193	97	1085
		Total (F+M)	747	590	303	2526
Total		NO.MSES	1138	2045	1672	1633
		Male	7163	9328	16629	15083
		Female	3266	3304	6789	7084
		Total (F+M)	10,429	12,632	23418	22167

Source; The job creation and skill development office (2024)

5.17. Productive Safety Net Program

In many developing countries of the world, quite a large number of urban dwellers live in ‘life-threatening’ conditions of poverty and unemployment which will remain not to be resolved by political or legal decisions. Obviously, the haves lead a luxurious life, while the have-nots live a miserable life.

Government ate concerned about the reduction of poverty, inequality, and unemployment, as an income inequality between the haves and the have-nots is rising sharply. Never unlike before, Ethiopia has invested heavily in infrastructure, agriculture, education, health, disaster risk management and safety nets to furnish employment to citizens and speed up socioeconomic development of the country.

These investments have led to significant progress in economic and social development including increased life expectancy, reductions in income poverty and malnutrition, increased school enrolments and expanded access to health services, fresh water and improved sanitation, even with significant number of its populations are suffering from the combination of food insecurity and inadequate employment opportunities.

Apart from this, the Productive Safety Net Program (PSNP) which is a five-year phase of the government program and subsequently replicated to other towns was targeted 11 major cities with the highest rates of poverty in the first place, as more of the urban poor tangled in poverty live in large urban centers.

Since then, Adama is one of the selected cities among 11 major cities selected for urban productive safety-net program in Ethiopia by the time to underpin food security for vulnerable households who cannot afford purchasing basic goods and items and reduce chronic food insecurity and protect vulnerable populations using social transfer scheme or programs, pro poor food security interventions.

The UPSNP has been under implementation in Adama City since April 1, 2009 A.E.C. with a view to increase income and opportunities, feed the hungry, address poverty and vulnerability of susceptible households with no enough food and grappling with the rise of poverty and tackle the urban food insecurity and poverty worsening living condition in urban areas

Figure 18:- Public works performed by UPSNP in Adama City



2	Solid waste collection & disposal	50	1075	1210	1280			
3	Integrated watershed development	---	403	454	840	235	255	1755
4	Social infrastructure development	---	269	302	320	119	236	1004
5	Urban agriculture	---	269	302	320	119	235	1699
6	Permanent Direct Beneficiaries	---	1280	1440	1563			
	Total number of the beneficiaries	100	3968	4464	5123	15,768	10,646	
	Budget Allocated in million Birr		5.95	58.68	98.3	41.7	332.8	

Source: Urban productive safety net program core work of process of Adama municipality (2024)

CHAPTER SIX

6. SOCIAL SECURITY AND JUSTICE

6.1. Social Justice

6.1.1 Crime and Law Enforcement

It should be borne in mind that the growth and expansion of urban centers with the erosion of traditional values and the broken down of basic social units and networks are fueling the growth of criminal activities that jeopardize the lives and livelihoods of citizens living under insecure condition in urban settings which are prone to criminal activities.

At this challenging moment, rising unemployment, poverty, insecurity and violence which induce a wide range of social, economic and psychological problems on the individual, community and national levels constitute one of the most dominant risks of urbanization.

Afore thought criminal activities range from petty theft to organized crime are increasing in the country and committed in daylight, despite the majority of Ethiopians have a great respect for law and justice.

In similar way, these unintended implications which stems from the country's high economic inequality and low social cohesion can undermine security and peace of the citizens, hamper growth and discourage investment and have the potential to derail both social and economic prosperity, create stress and fear among the residents in urban areas with weak resilience to shocks.

Enforcing the right of city residents to safety is very vital. Devoid of violence and crime prevention and maintenance of civil peace and security and durable peace which is oxygen for all activities and base for all developments and long-lasting stability to the country at all costs, there is no democracy, justice and human rights protection within a given territory. Adama city is no exception.

As the city's journey towards prosperity and economic strength are contingent on maintain peace and order that requires setting up crime preemptive mechanisms and multidisciplinary and inter-sectoral interventions, the maintenance of peace and order via making local authorities more effective are critical preconditions for people who takes a lion's share in the city development to thrive in urban spaces.

In this essence, the government which is considered as a shepherd of the people and custodian of public right which should not be comprised revokes ineffective laws and regulations and unveils new regulations and standards, as in the absence of durable peace and tranquility and without the respect of person and property; it would be impossible for people to prosper and live peacefully.

Based on this conviction, the city administration as a propeller of durable peace and security which touch every aspect of our life has undertaken various measures to regulate rising crimes and harmful practices and improve enforcement of law and order, combat the mounting threat of crimes in urban areas, promote and protect the rights of food-insecure citizens regardless of their social status, political opinions, ethnicity, and religious affinity.

In addition to investing in poverty reduction, arrangement of institutional frameworks bearing the responsibility of enforcing laws was made steadfastly to maintain peace and order, provide efficient judiciary system in line with their mandated responsibilities, apprehend and put culpable mobsters and hooligans for breaching laws under custody and behind bars, protect public facilities, foster the right to live in dignity and safety which should not be compromised and prevent crimes intentionally acted by individuals with the intervention of the court processions, police and justice office.

In this regard, the city administration has the power to take appropriate measures against crime perpetrators, conduct reasonable inquiry, make those culpable mobsters and hooligans for breaching laws, enforcing the law, prevent public plights and crime that can be committed by anyone anytime and anywhere in bud by the law enforcement system and judiciary authorities.

The frameworks of law enforcement agencies which are working in conjunction with the local authorities which do not intervene in legal process and responsible for the maintenance of public security are divided into court, department of justice, police and prison police to minimize administration detention without charges and guarantee peace and security to the residents of the city.

In Adama City context, major crimes committed in the city are theft, rape, deception, murder, juvenile delinquency, gambling, breach of trust and law, weird kidnapping individuals for ransom, consumption of addictive substances/cannabis, flows of illicit goods like drugs and weapons and anomalous child pornography, among others.

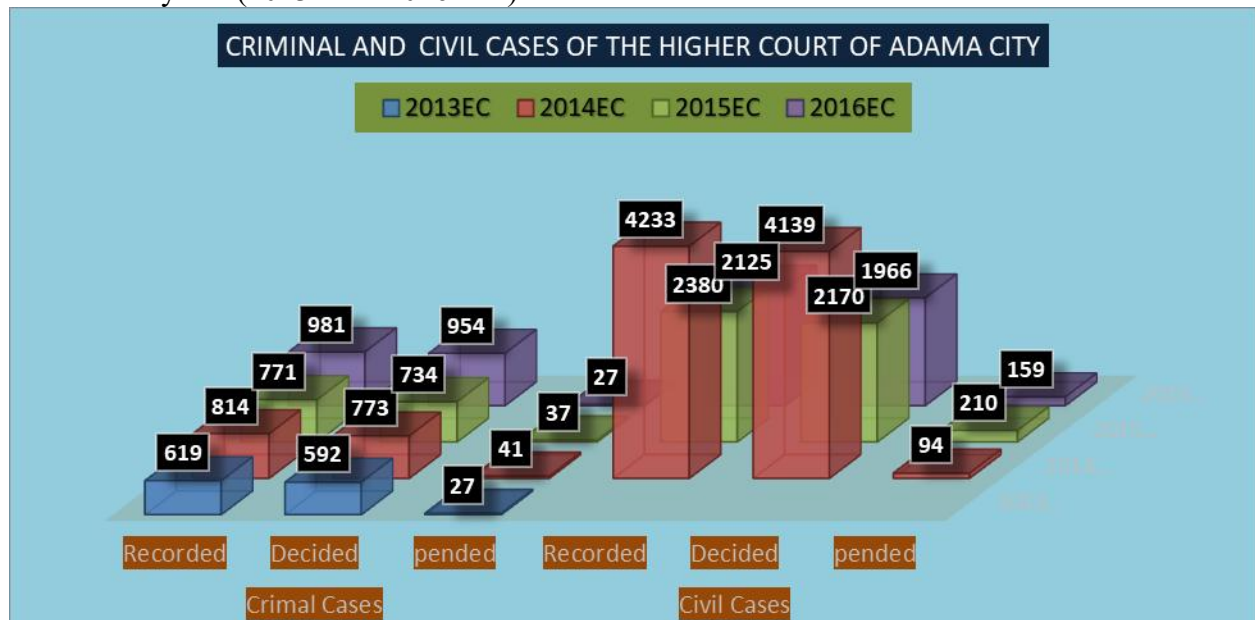
In addition to investing in poverty reduction, arrangement of institutional frameworks bearing the responsibility of enforcing laws was made steadfastly to dissuade criminal activities, maintain peace and order, provide efficient judiciary system in line with their mandated responsibilities, arrest and apprehend and put perpetrators of crime under custody and behind bars and foster the right to live in dignity and safety.

In this regard, the city administration has the leverage to take appropriate measures against crime perpetrators, conduct reasonable inquiry, make those, enforcing the law, prevent public plights and crime that can be committed by anyone anytime and anywhere by the law enforcement system and judiciary authorities. Furthermore, indoor and outdoor CCTV cameras are installed in different localities to foster smart security devoid of compromising public security. The number of outdoor and indoor CCTV cameras put in in the city is 669 and 136 respectively.

The city has achieved significant gain in law enforcement and crime reduction and crime has dropped in the city due to the installation of CCTV surveillance on street corners, AL, upsurge of security and an improved police and militiamen presence than in previous years to reduce crime and combat crime with heavy police and militiamen presence in and around the city.

As a result, the security landscape of the city is good. the criminal cases lodged, decided and pending cases in the year 2015 and 2016 A.E.C presented in this profile with a view to demonstrate the number of despicable crimes committed in the city and the number of perpetrators in the crime in the city. For further detailed information, see table 41 that provided below.

Bar Graph 9:- Reveals Criminal and Civil cases of the Higher Court of Adama City in years (2013 E.C -2016 E.C)



Source: -The Higher Court of the Special zone of Adama City (2024)

6.2 Social Security

Social security primarily refers to a social insurance that provides social protection against socially recognized conditions including poverty, disability, women and children, older persons and persons with disabilities, unemployment, separations of children from families and others.

Everyone deserves the right to have access to social security, when the lost the ability to support themselves and their families by their own effort and resources. In such a situation, social security is desperately needed to show compassion, mitigate social stigma adamantly, and support the poor, women, minorities, and other disadvantaged members of society whose life is in pain and miserable proactively.

Efforts were made more than what has been before via the provision of alms houses and social houses and mobilizing people who are able and willing to stretch out hands and help those in need of it in the city where significant numbers of the residents are intertwined with different economic and social problems.

Apart from facilitating other socioeconomic activities, governments have legal with a sense of justice and rationality to feed famish population, ensure economic prosperity and social security, respond to social issues, promote social security services to the people leading despondent life and beseech on streets, support children born out of wedlock and mentally retarded and impaired individuals and jobless citizens until they find the right and good opportunities and during this hard time.

To this end, charity services of citizen unveiled by the regional government of Oromia. Subsequently, candid efforts were made in the city to fulfill certain social objectives and improve the lives of citizens wallowing in quagmire of poverty in the city through implementing national policies and specific strategies and mobilizing community in all round charitable services.

As shown in the table below, the office labor and social affairs under the umbrella of Adama city administration registers unemployed people routinely to provide information for the organizations interested to recruit jobless citizens and hire employees and know the rate of unemployment and employment in the city.

The data constellated from the office of social and workers affairs office of the city reveals that the total number of economically active population of Adama City was 349,135 (Male 176,809 and Female 172,326). Regarding their education background, 3.1% of the unemployed and job seekers were illiterate and about 4.84% were diploma holders and above and 44.12% were Grade 9 and above. For further understanding, see the table provided below.

CHAPTER SEVEN

7. SOCIAL SERVICE DEVELOPMENT

Following the preceding chapter on security and social justice, social institutions offering social services such as health and education which is regarded as a basic human right and the centerpieces of human development is the salient point will confer briefly at the outset in this chapter in order to provide the big picture social service development in the city.

Likewise, healthy people can work harder and longer than sick people. In context of social service, a glimpse of picture about Adama City can be obtained from the following explanations that will be made on education and health facilities in the city succinctly.

7.1 Education Service

7.1.1 General Education

Before reminiscing about the status education services in the city concisely, it is imperative to highlight the effects of education on social and economic development at the onset in this section. In today's world of science and technology, it is self-evident that modern education dispels error, discovers truth, instills humanity in their minds and hearts and has transcended power and the foundation of economic, political, social and cultural life of society.

It also brings about behavioral change among the citizens with diverse upbringings went to schools with the aims of acquiring scholastic skills and professional knowledge and careers for a better job opportunities and higher pay. It is correspondingly is important to liberate human, harmonize physical, mental and social well-being of citizens, and come up with new ideas, new technology and new creative substance that transform the country in various spheres.

Likewise, the quality of human capital is an important element in the progress of a nation than rare earth minerals and previous minerals like gold and diamond. Moreover, transforming the country without human capital is absurd. For this to happen, any government has the legal and social responsibilities and obligations of expanding secular education that encourages creativity, diversity and growth, brings paradigm shift in thinking, build skill, knowledge and attitude among the students, precludes social decay, and procreates industrious and ethical citizens that play key role in marching towards economic growth and prosperity.

As country's journey towards prosperity involves the building of basic infrastructure and human resource development, modern Education was introduced by the emperor to impart values, ideas, attitudes, and aspirations to the students with different background and break away from old notion of education held by the church in Ethiopia.

Subsequently, Ethiopia has given due emphasis to improving the educational status of its citizens. Furthermore, governments invest in people who deserve right to education which contributes significantly to human capital formation to build new schools and renovate the old ones and improve enrolment rate in primary schools even in the most challenging times via increased budget allocation for education.

As human capital investment bring about high financial returns, the aim was to fulfill the need of human resource, generate the blue collar workers and white collar office workers, foster inclusive narrations, increase capacity at national, organizational and individual levels, rise literary rate, health, material prosperity, and poverty decline, yet insufficient school facilities, absence of budget allocations for pre-primary schools and the poor quality of education remained challenges in the sector.

In contrast, decaying physical plant, the worst classrooms to be revitalized and painted, paucity of student discipline, troubles with the teaching staff, low morale, and limited resources are rampant in public schools in the city. The data collected from education office of Adama city administrations display that the net and gross enrollment for grade one students is 96.3% and 93% respectively. The tables and maps provided below disclose some interesting facts about number of schools and students in all level of leanings in the city.

Table 41:- Kindergarten (KG) Schools, Enrolment and SAP

Year	Number of KG Schools	Enrolment			School Age Population		
		M	F	T	M	F	T
2015	124	15,696	14,493	30,189	6395	6396	12791
2016	170	24,607	23,301	47,908	13,563	13,723	27,285

Source: The Education office of Adama City Administration (2024)

Table 42: - Number of Primary Schools by Ownership and Cycle

Year	Grade (1-8)		
	Government	Non-Government	Total
2015	30	95	125
2016	64	111	175

Source: The Education office of Adama City Administration (2024)

Table 43:- Number of secondary schools by ownership

Year	Grade (9-12)		
	Government	Non-Government	Total
2015	13	20	33
2016	15	29	44

Source: The Education office of Adama City Administration (2024)

Table 44:- Regular Student Enrolment in Primary Schools owned by Government and Non-Government

Year	Grade (1-8)								
	Government			Non-Government			Total		
	M	F	T	M	F	T	M	F	T
2015	20,376	23,805	44,181	17,329	17377	34,706	37705	41182	78887
2016	30277	33994	64271	22,945	22945	22907	53222	56939	87178

Source: The Education office of Adama City Administration (2016)

Table 45:- Regular Enrolment in Secondary Government and Non-Government Schools by sex & Owners

Year	Grade (9-12)								
	Government			Non-Government			Total		
	M	F	T	M	F	T	M	F	T
2015	10,736	13,360	24,096	13960	17517	31,477	24696	30877	55573
2016	10887	13482	24369	4466	5506	9972	15353	18988	34341

Source: The Education office of Adama City Administration (2024)

Figure 19:- Ifa Boru Schools built in Adama City



Source: Government communication affairs office (2024)

Table 46:- Number of Detained Primary and Secondary School Students by Sex & Owners

Year	Grade (1-8)									Grade (9-12)								
	Government			Non-Government			Total			Government			Non-Government			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
2015	435	377	812	91	82	173	526	459	985	370	441	811	32	30	62	402	471	873
2016	546	478	1024	226	156	382	772	634	1406	900	1161	2061	60	58	118			

Source: The Education office of Adama City Administration (2024)

Table 47:- Performance in University Entrance Examination

Year	Number of Students Sat for Examination			Number of students Qualified			Percentage Qualified		
	M	F	T	M	F	T	M	F	T
2015	5271	2529	7800	1278	1528	2806	24.24%	60.42%	35.97%
2016	3576	4284	7860	531	433	964	14.85	10.1%	12.26%

Source: The Education office of Adama City Administration (2024)

Table 48:- Number of Government and Non-Government Primary & Secondary School Teachers in Adama City

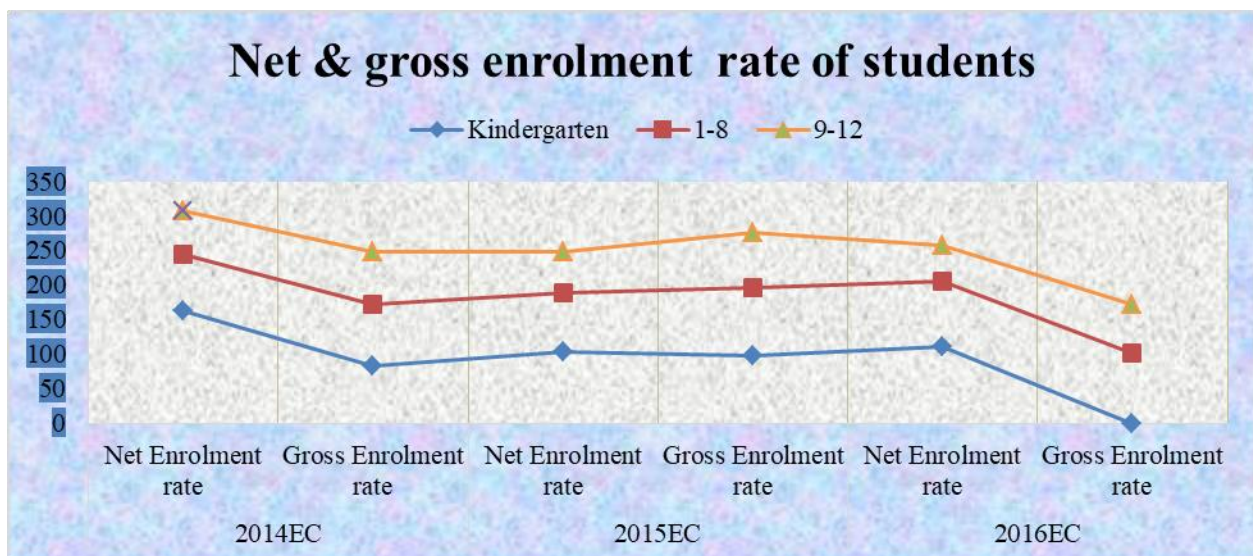
Year	Primary (1-8)									Secondary (9-12)								
	Government			Non-Government			Total			Government			Non-Government			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
2015	387	543	930	679	622	1,301	1066	1165	2231	485	182	667	453	183	636	938	365	1303
2016	658	919	1577	893	830	1723	1551	1749	3300	651	237	888	335	48	383	986	285	1271

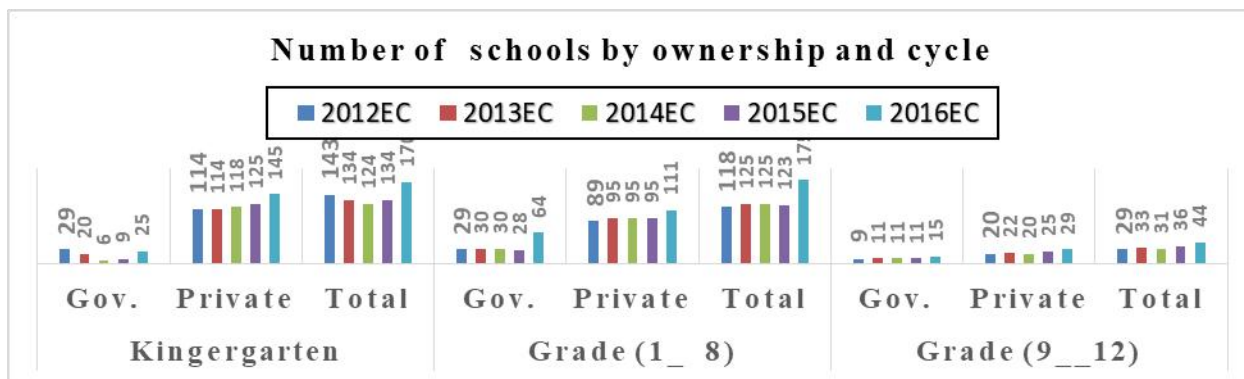
Source: The Education office of Adama City Administration (2024)

Table 49:- The Trends of Enrollment Rate of students in Adama City

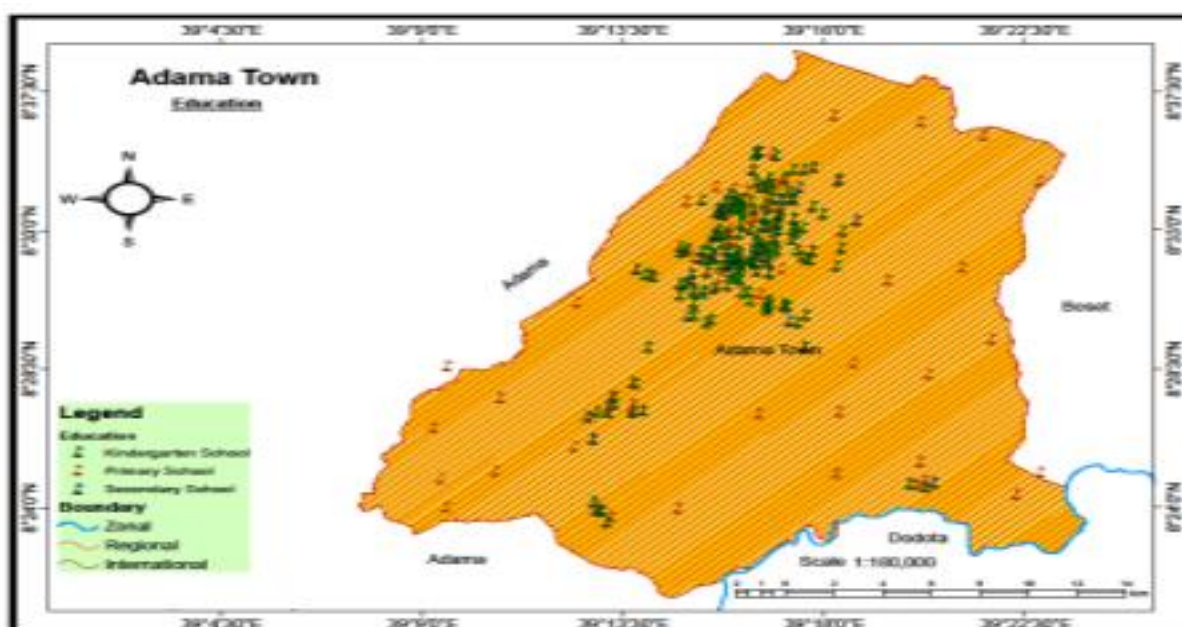
S.No.	Grade/Level	2015		2016	
		Gross Enrolment	Net Enrolment	Gross Enrolment	Net Enrolment
1	Kindergarten	98.2	104	0	111.4
2	Primary (1-8)	97.7	84	101.8	94.3
3	Secondary (9-12)	79.39	60.4	69.5	52.2

Source: The Education office of Adama City Administration (2024)

Line Graph 5:- Net and gross enrollment of students**Bar Graph 10:-** The summary of the number of schools by grade level and ownership



Map 11: Shows Distribution of Educational Institution in the Adama City



Source: Planning and Development Commission of Oromia (GIS Team) (2024)

7.1.2 Education Quality and Efficiency Indicators

Nowadays, education which contributes to improving the well-being and the ideological, social and cultural values of any society is considered a basic and necessary component in the globalized world.

By the same token, a good quality education which unlocks different opportunities is required to gain ample basic skills, advanced skills, social skills knowledge and an array of scholastic skills of the subject matter, become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual well-being of citizens.

On the other hand, poor quality education would lead to low quality human capital. Efficiency is the relationship between the outputs and inputs of an education system to bring them up to standards. It is extremely crucial to acknowledge that higher quality of life is achieved by getting proper education and health care facilities.

Pupil to section ratio (PSR) and pupil to teacher ratio (PTR) are some of the indicator's efficiency and quality in education. They indicate an average number of pupils per class and give a rough estimation of class size and assess the efficiency of resource utilization.

The national standard set for PTR is 50 at primary (1-8) and 40 at secondary level. On the other hand, the national standard set for PSR is 50 at both primary and secondary level. According to the table provided subsequently, the PTR was better in relation to the national standard set by the government except PSR rate for 9-12 grade students in the year 2015 E.C that is above the national standard. In Adama City context, the (PSR) and (PTR) situation can be attained from the subsequent table.

Table 55:- The PSR and PTR for Primary & Secondary schools of Adama City

Year	Grade Level	Number of students	Number of sections	Number of teachers	PSR	PTR
2015	1-8	110123	3959	3300	28	33
	9-12	55573	637	1303	87	43
2016	1-8	78887	1796	2231	44	35
	9-12	34341	708	1271	49	27

Source: The Education office of Adama City Administration (2024)

7.1. 3 Technical Vocational Educational Training

Some years back, there was no job opportunity for the graduates of TVETs from these few vocational schools established in the country which can offer a wide array of career options in many different industries. Hard skills training activities were fostered by the government with a view to ignite creativity, transform education system focusing narrowly on cognitive goals, improve the employability or income generating activities the trainees while it received very little attention at the time.

As a result, past regime was brushed aside the concern for vocational education that undermined innovations and the utilization of modern technology in efficient manner in the country to fill skill gaps and meet their developmental needs in certain circumstances.

Against this background, the government is expanding technical and vocational training to help create competent and self-reliant citizens and transfer technological abilities that will contribute to the country's economic and social development. The beginning of structural change in the economy of the country has favored the change of education and training policy in 1994 that is applicable to the needs of the country.

The change of policy was designed to accommodate differing comparative advantages, upgrade its human capital skills and technology utilization, improve the education system based on the country's concrete condition and focus on technology and science based hard skill over soft skills recently.

Moreover, the increasing demands for blue-collar workers were forced government to improve its education system, formulate new education policy and revise the old curriculum and educational system preventing creativity with extraordinary skills from flourishing.

Presently, Ethiopia has placed much attention to vocational training by identify where labor of what kind was needed in order to facilitate the innovation process at all levels, unleash creativity, fill the gaps in technology and innovation in the country and meet the demands of the market and industry, actualize technology transfer in various fields, simplify the livelihood of many people, accelerate the economic transformation, take the country to the pinnacle of success and extricate itself from poverty and backwardness and become a prosperous country.

Following the federal reform, several TVETS were established in the city. These education and training activities both in the private and public sector were mad to improve the level of human capital of the individuals, achieve the aforementioned goals, many TVETs with adequate human and material facilities are established in the city in accordance with the guidelines designed by the government to foster innovations within the country, produce blue-collars alumni with vocational skills, raise labor productivity, curb youth unemployment, meet the demands of the market and industry.

In doing so, many students are enrolled in vocational training schools in the city with passion and tenacity to become mechanics, plumber, and ICT professional and so on, find safe a job, enable them to equip themselves with the required skill and knowledge and change their life scenarios.

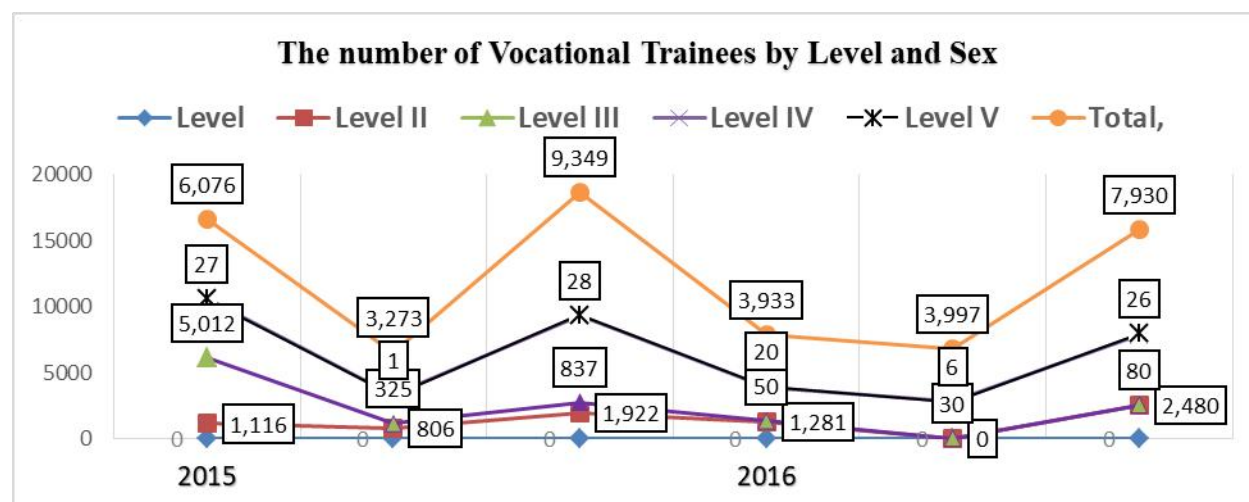
TVET education is anchored on automotive, electricity, ICT, agro-processing industry, textile and garment, construction, hotel and tourism, welding and plumbing among others Fair information about technical and vocational education training in the city can be obtained from the table provided below.

Table 51:- The number of Vocational Trainees by Level and Sex in 2015 & 2016 A.E.C

S.No.	Level	2015			2016		
		M	F	T	M	F	T
1	Level II	1,116	806	1,922	1,281	1,199	2,480
2	Level III	5,012	325	837	50	30	80
3	Level IV	4,421	2,141	6,562	2,582	2,762	5,344
4	Level V	27	1	28	20	6	26
	Total,	6,076	3,273	9,349	3,933	3,997	7,930

Source: The job creation and skill development office (2024)

Line graph 6:- The number of vocational trainees by level and sex

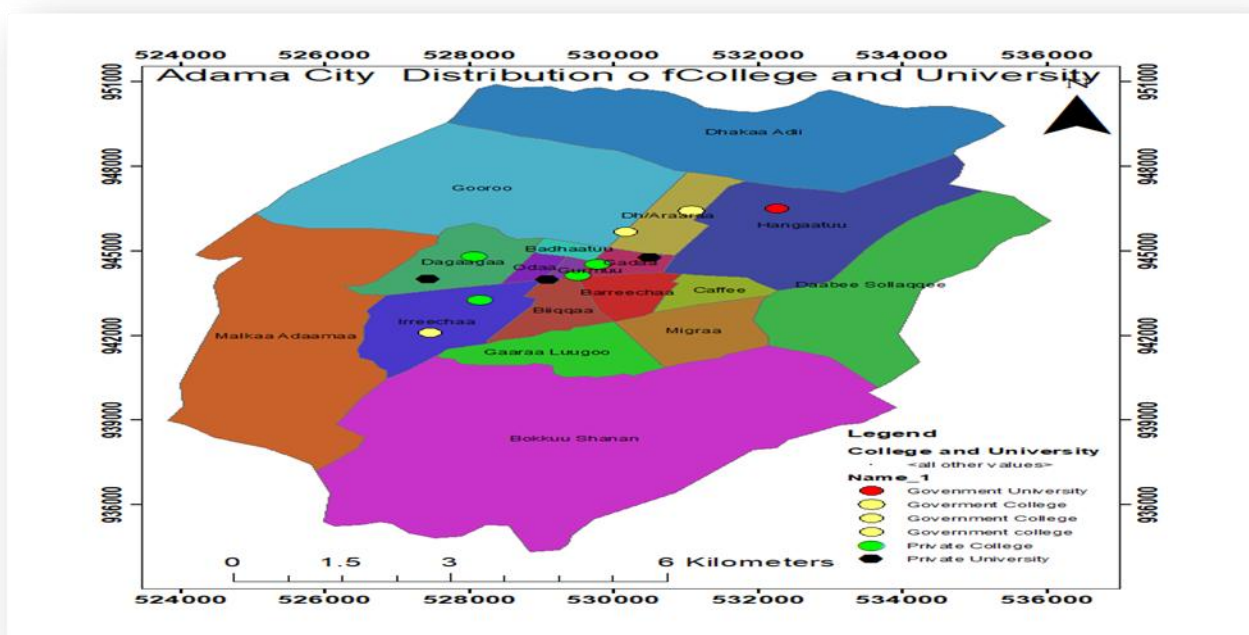


7.1.4 Private Colleges and Universities in Adama City

As a hub of intellectual life and learning, Adama City is a home to many private universities and college offering universal knowledge in different field of studies. Unlike many other cities, it is also the birth place for the Rift Valley University College and other colleges.

Presently, the city is the domicile of Rift Valley University College, Unity University College, Harambe University College, Sub-Saharan University College, Genius land University College, Royal university college, Oromia college, among others. Fair information about private colleges and universities can be attained from the consequent map.

Map 12:- The spatial distribution of colleges in the city



Source: Adama city plan and development office (2024)

7.1.5 Adama Science and Technology University

For any successful economy science and technology which are oxygen for innovation are the basic prerequisite to develop the human skills and administrative structures and are needed to exploit their acumens, extra ordinary skills and resource and sustain economic growth efficiently and effectively.

Universities which should be the catalysts of change and promoters of knowledge, innovation and entrepreneurship have a significant economic impact on local trade, accommodation, transport, the provision of culture, etc.

Recognizing this undeniable fact, Nazareth technical college was initially established in the city in 1986 EC (1993) by the assistance the French government to equip students with knowledge and skill, close knowledge gaps, encourage innovation, accelerate the pace of technological innovation, and upscale the use of innovative technology to transform the life of citizens in Ethiopia.

Initially, it was upgraded to Nazareth College of technical teacher education. Later, it was promoted to the status of Adama University in 2005 and was renamed by the council of ministers Adama Science and Technology University in 2011 to create competitive professionals capable of advancing the nation's journey towards prosperity and boost innovation and research that accelerate growth and development of the country.

So that Adama City is fortunate to have this prestigious and reputed ASTU in the city that has been chosen as a model university and considered as a center of knowledge to carry out researches and work as the center of excellence in science and technology in the country and beyond.

ASTU which offers a wide range of post and undergraduate programs has created conducive environment for tertiary education seekers in the city and opened various programs in applied and engineering technology which is fundamental for all development and dedicated to prepare professionals supporting the achievement of the growth and transformation plans of the government, offers a wide range of post and undergraduate programs, produce competitive and ethical graduates and innovative knowledge and emerging technology.

7.2 Health Service

7.2.1 Health Facilities and Health Personnel

Before getting into the details of the health facilities and health personnel in Adama city in this portion, it is better to understand some basics of health which is a quality of life that includes physical, mental and social wellbeing.

At present-day, it should be borne in mind that the overall quality of your life and health are the most priceless possession and valuable assets of human kinds needed to be successful in life, lead a healthy and happy life, effectively and efficiently perform any physical activities and accomplish our life objectives no matter how old we are.

To a great extent, improved health care system that develops a culture of nutrition, hygiene and sanitation to maintain wellness, stay alive, enjoy better overall health, make a meaningful difference in the lives of the citizens who deserve healthy life and improve the quality of urban life can significantly boost productivity and production.

Apart from facilitating other socioeconomic development activities even in the most challenging times and circumstances, the provision of improved water supply and health care services in the precinct of any city for the inhabitants of the city and non-residents is one of the priority areas of intervention in the cities in the country to wean the spread of ailments and diseases and provide an efficient integrated and high-quality affordable health care system.

As the number of people seeking health service is swelling across the city, the introduction of safe water supply, excreta disposal system, food, environmental and personal sanitations, public health education, deploying health extension service employees extremely momentous to improve the overall quality of urban living.

In the context of Adama City, strengthening health service system is one of the utmost priorities in the city to expand public health facilities and ultimately ensure compliance with the national health policy. Accordingly, Adama City Administration undertakes various tasks based on the national health policy that offers more attention for prevention health-care approach than curable activities as Ethiopia's main health problem are contagious and tropical diseases.

The ultimate objective of pumping of hefty budget for the health care system in the city to have a healthy and productive resident and provide people access to broader medical services and pharmaceutical supply at more affordable rates and low fees, upsurge accessibility of medical equipment and oxygen supply, laboratory services, facilities and health workers, among others in unprecedented manner.

More or less, the health institutions which are deemed to be clean, safe and attractive have been blooming in the city steadily in comparison to the previous period and furnished with modern health professionals and advanced medical facilities to improve the coverage of health services across the country.

While doing so the city administration has managed to improve the quality of health service delivery, change the past portfolio by providing residents with key public infrastructure and

health care services in unprecedented manner, while challenges of the importation of drugs and medical implements from abroad are attributed to a low quality of services and remained challenges in improving the health of the citizens in the country.

As figures and facts demonstrate, the general level of public health has been raised significantly during the last two decades. By 2024, the size of government hospital, private hospitals, health centers, clinics, pharmacies, drug stores and medical implement dispensers is 1, 7, 10, 163, 60, 96 and 4 respectively.

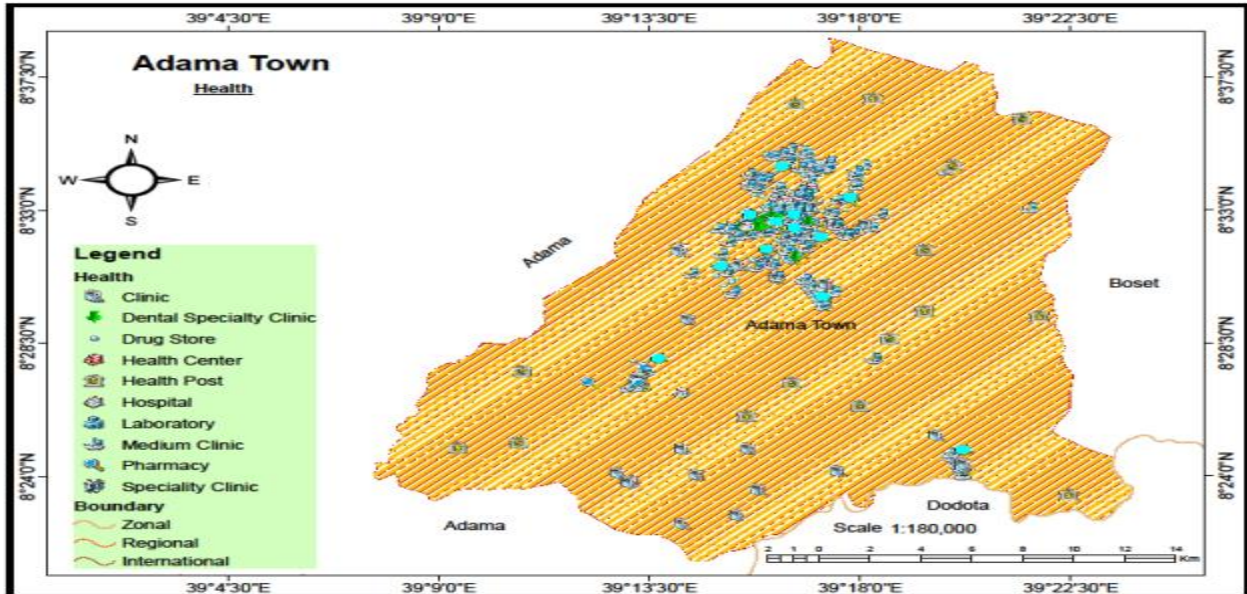
In similar way, setting up emergency response is imperative to support the potential victims of the natural and man-made disaster and offer emergency assistance. In this regard, Ethiopian Red Cross Society functions in the city to save human lives, first aid kits, makeshift shelter, tents, medical equipment, ambulances and other facilities and disaster risk management for the potential displaced people as soon as possible. In addition, firefighter brigade organized under the hierarchy of municipal office to preempt fiascos may occur in the city. Fair information about health facilities in the city can be obtained from the tables, figure and maps provided below.

Table 52:- The number of health personnel deployed in public health institutes

	Type of Professionals	2015 A.E.C			2016 A.E.C		
		Male	Female	Total	Male	Female	Total
2	No. of Health personnel	641	819	1460	723	974	1697
2.1	Health Extension	0	96	0	0	145	145
2.2	Pharmacist	47	40	87	85	87	172
2.3	Laboratory technologist	106	87	193	110	83	193
2.4	X-ray technologist	8	8	16	8	8	16
2.5	Environmentalist	11	10	21	3	4	7
2.6	Midwife	47	114	161	39	101	140
2.7	Health Officer	51	57	108	48	53	101
2.8	Nurses	277	359	636	254	463	717
2.9	Doctor	80	22	102	168	24	192

Source: The Health Office of Adama City Administration (2024)

Map 13:- The Spatial Distribution of Health Institutions in the City



Source: The planning and development office of Adama city administration (2024)

Table 53:- Women and Children Health Service Delivery in Adama City

No.	Description of Women and Children Health Service	Year	
		2015	2016
1	Type of maternal health service (MHS)		
1.1	Family planning	70,522	102,584
1.2	Anti-Natal Care (ANC)	20,664	26,891
1.3	Post-Natal Care (PNC)	20,650	27,836
1.4	Number of fully vaccinated Children	17,538	22,980
1.5	Number of Delivery by health Professionals	19,936	24,765
2.	Number of under 5 Children vaccinated by type		
2.1.	DPT1	19,189	26,064
2.2.	DPT3	18,323	25,096
2.3.	Measles	17,747	23,077
2.4.	BCG	21,555	26,658
3	Number of Children fully immunized	22,274	22,928

Source: The Health Office of Adama City Administration (2016)

Table 54:- The number of health facilities & Institutions in Adama City

S.N	Basic Health Indicators	Ownership					
		2015 A.E.C			2016 A.E.C		
		Government	NGO	Total	Government	NGO	Total
1	No. of Health Institutions	9	361	370	32	526	560
1.1	Health post	-	-	-	17	-	17
1.2	Clinic	-	157	157	-	247	247
1.3	Health Center	8	2	10	13	2	17
1.4	Hospitals	1	9	10	1	9	10
1.5	Pharmacy	-	58	58	-	81	81
1.6	Drug store	-	129	129	-	179	179
1.7	Diagnostic laboratory	-	2	2	1	4	5
1.8	Whole Sellers	-	4	4	-	4	4

Source: The Health Office of Adama City Administration (2024)

Table 55:- Conveys the summary of basic health status indicators

Basic health indicators	2015	2016
Total population	529,883	875148
Physicians to population ratio	1:233616	1:4558
Health officers to population ratio	1:14,601	1:8665
Nurse to population ratio	1:5,371	1:1221
Child vaccination coverage	105%	109%
Total number of people using family planning service	70,976	102,584
Total number of people using long term FP service	34,965	40,754

Source: The Health Office of Adama City Administration (2024)

Table 56:- The Ten Top Diseases in Adama

S. No.	Type of diagnosis	2015	2016
--------	-------------------	------	------

1	Pneumonia	13,590	4,498
2	Acute tonsillitis, unspecified	9,143	8,418
3	Dyspepsia	13,233	16,582
4	Urinary tract infection	11,130	13,267
5	Diarrhea	7,601	8,066
6	Acute tonsillitis	6,317	4,608
7	Cough	8,381	7,074
8	Typhoid fever	8,719	9,717
9	Gastroenteritis or colitis without specification	5,124	4,955
10	Upper respiratory tract disorders and unspecified	6,621	5,857
	Total	89, 859	83,042

Source: The Health Office of Adama City Administration (2024)

7.2.2 Family Planning

A lawful marriage which is a sacred covenant is recognized as the basis of society. A contract of marriage by mutual consent in the presence of witnesses at any time is a civil contract among parties who have attained the age of puberty at the time of marriage devoid of coercion and compulsion is extremely momentous.

On the other hand, the marriage of the parties after attaining age of puberty as a wife or husband is entailed to thwart the wrath of God, curb connubial connections which are labeled as adultery and illegitimate children and legalize sexual intercourse taken place with wife's free consent and procreate children during his lifetime after marriage.

As a result, excess procreation of children jeopardizes the lives and livelihoods of citizens. For this and other reasons, designing effective family planning and access to reproductive health are critical in the world of today in a bid to improve the quality of health service delivery, diminish high incidence of early pregnancy and clandestine abortions in life time, decrease the population growth rate and address the health and development challenges posed by rapid population growth

As noted explicitly, successful family planning service is widely delivered in different government and private health institutes in the city by taking the consent of women into consideration. The provision of these facilities more than what has been happened before is to

teach especially the women who have reproductive right on effective family planning practices, reduce fertility rate per woman in the child bearing age (15-49) years through providing education to the women who give birth to the child about contraceptive methods that interfere with the normal process of ovulation, fertilization, and implantation and attain improved health status of infants and children. In consequence, the number of women using modern methods of family planning services is increasing from time to time in the city.

Figure 20:- A partial view of some health institutions in the city



Source: Government communication affairs office of Adama city administration (2024)

CHAPTER EIGHT

8. REVENUE COLLECTION AND EXPENDITURE

8.1 Revenue Collection

The existence of collective consumption of goods and services necessitates putting some of our income into government hands. According to a widely held view of revenue, revenue is issues of the existence of government which is a legitimate institution with full-fledged power to extract money from society in the form of taxes which are received from the taxpayers who pay an

amount of money in the form of tax on his income, wealth, etc. without expectation of direct return or benefit to tax payers.

The objectives of taxations are to transfer purchasing powers from individuals to the government that controls the actions and the affairs of the people and reduce inequality in income and wealth, increase employment and reduce inequality in income and wealth, expedite economic development, provide social and economic service driven by human needs and wants.

Moreover, basic life sustaining public goods and services like roads, power, municipal services, and other public infrastructures that the markets failed to provide to society due to their natures of non-rivalry and non-excludability are normally supplied by public agencies to the public that the market fails to provide.

The Constitution in 1995 and the subsequent laws distributed revenue collection powers between the central government and the regional governments to divide the different income tax sources into smaller slices and share them between the federal government and the regional governments.

Subsequently, fiscal decentralization and administration decentralization since 1991 give authority to urban local governments with wide administrative jurisdiction responsibilities. Furthermore, fiscal autonomy gives the urban local governments capacity to assess the number of taxpayers liable for a tax levied, make decision on their own revenue sources, manner of collection, and administration, expand the tax base and improve efficiency in the collection of fees and charges and arrears.

After the urban governance reform was made in 2004, the city administration is mandate to improve efficiency of tax collection and ensure provision of the appropriate infrastructure, potable water supply, street light, roads construction, sewerage lines, sanitation, garbage collection and disposal, public markets, abattoir service, recreation and cultural places, municipal services, so forth in urban milieus in the shortest possible time.

In comparison to other cities in Oromia, Adama city which has a positive prospective and is expected to be financially sustainable in the foreseeable future has strong economic bases and promising potentials for growth in all aspects, even if calculating the wealth generated in the city to reckon the taxes to be paid is difficult.

The city administration gets its income mainly from stark increase of taxes levied on households and business firms in the form of direct and indirect taxes to effectively provide public services and maintain its infrastructure or improve public works. Land and land related services generate more than 80% of the city's revenue.

Besides these, the other sources of fund of the city administration which is expected to be financially sustainable in the foreseeable future are the regional government of Ethiopia, federal grants, federal road fund office, grants in the form of foreign aid from the developed nations, IDA and other miscellaneous sources.

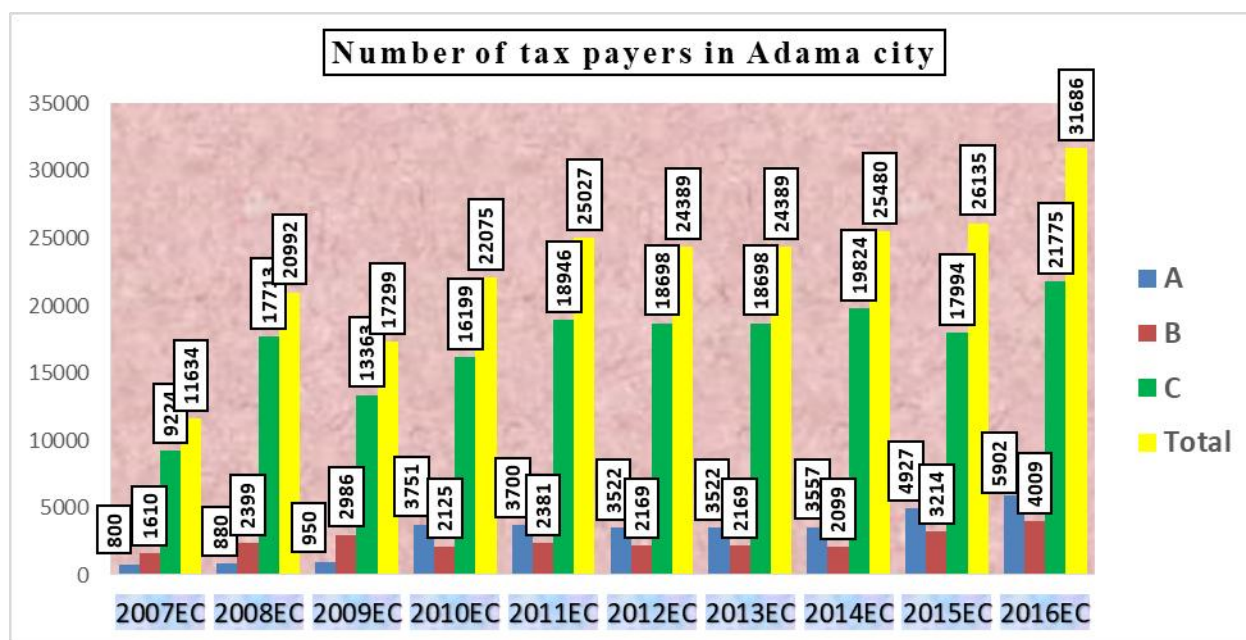
The municipal revenue tariff improvements, implementation of cadaster, tax base improvement, and adoption of digital technology and introduction of new revenue sources were played significant role in revenue collection enhancement in the city. Over the past five years, the city administration was able to collect 18.84 billion Birr. Fair information about revenue collection in the city can be attained from the tables provided below.

Table 57:- Revenue Collection Trends of Adama City in the year 2015 & 2016 A.E.C

SNO	Revenue category	2015	2016
1	Tax revenue	3,796,985,879.33	5,311,644,159.50
1.1	Direct taxes	2,114,842,298.24	3,161,732,201.40
1.2	Indirect taxes	1,682,143,581.09	2,149,911,958.10
2	Non-Tax revenue	221,513,056.10	207,765,989.25
	Sub total	4,018,498,935.43	5,519,410,148.75
3	Municipal revenue	1,124,603,156.66	1,779,565,216.68
	Grand Total	5,143,102,092.09	7,298,975,365.43

Source: The Revenue Authority office of Adama City Administration (2024)

Bar Graph 11:- Number of tax payers in Adama City, (2015-2016 A.E.C)



Source: The Revenue Authority office of Adama City Administration (2024)

8.2 Expenditure

As unequivocally mentioned above, revenue is a means to achieve sustainable development elsewhere. Governments allocate scarce resources to programs and services undertaken by governments through the budget process.

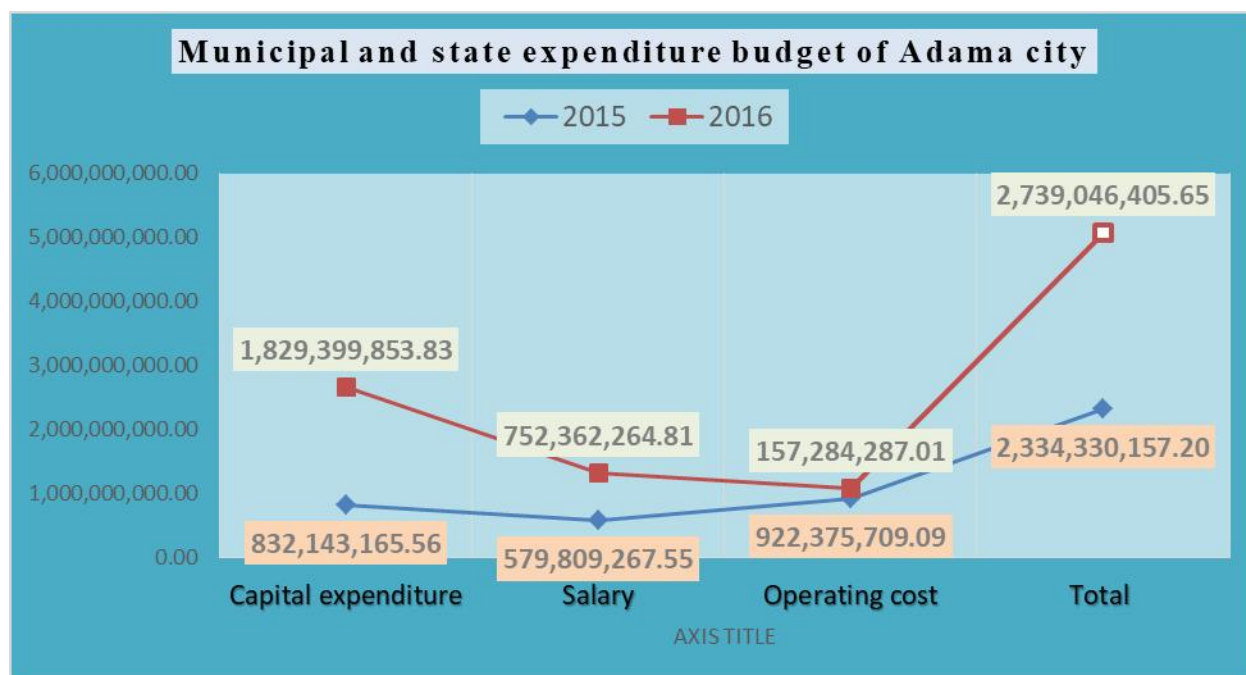
In this light, the city administration which moves huge budget and injects hefty money for recurrent and capital spending every year has a responsibility over public spending decisions. Based on national fiscal policy, public expenditure is made to provide government programs and services to the benefits of its constituencies, expedite growth and development of the city and deliver adequate urban services such as police, education, medical facilities, transport and communication facilities, sanitation facilities, judicial services, etc. at the lowest possible cost.

As revenue collection of the city is showing steady growth in the last years, the periodic annual budget execution of the city has made tremendous progress every year to run certain programs, ensure provision of the appropriate infrastructure, even if the overall revenue collection is insufficient to fully finance the urban services and infrastructure to rapidly growing urban populations.

The rationales for the pro-poor public spending in education, health, water, power, roads and telecommunications that ratified by the city council entitled to revising and pruning inflated budget and have direct impact on poverty reduction and income generation in the city was to to

provide good infrastructure to the residents, satisfy diverse societal needs in efficient way, change the scenario of the city, finance its people-centered economic and social development and improve its infrastructure in a phase-by-phase approach. In this regard, fair information about expenditure of municipal office and state functions in the city can be acquired from tables and graph provided below.

Line Graph 7:- Municipal and state budget expenditure (2015-2016 E.C)



Source: The Finance Office of Adama City Administration (2024)

Table 58:- Subsidies and grants the city received (2015 & 2016 A.E.C)

S. N	Types of subsidy & grants	2015	2016
1	Road fund	22,717,650.93	46,000,000
2	IDA	184,686,261.30	-
3	Oromia Government	78,080,769	46,848,461.50
4	School Grant	4,148,045	49,939.98
	Total	289,632,726.23	92,898,401.48

Source: The Finance Office of Adama City Administration (2024)

Table 59:- Number of NGOs Operating in the city

Budget year	No. of NGOs	No of projects	Budget earmarked	No of the beneficiaries		
				Direct	Indirect	Total
2015 A.E.C	50	54	152,247,937.60	63,254	316,270	379,524
2016 A.E.C	60	54	143,365,000.00	48,500	242,500	291,000

Source: The Finance Office of Adama City Administration (2024)

Conclusion

In its more than a century existence, Adama has passed through many twists and turns throughout the life cycle of the city development to reach the stage of becoming economic and tourist destination in the country through incremental change. For that matter, the organizational set up of Adama City Administration has made several changes that have contributed to its impressive development performance.

As the authors have mentioned irrevocably earlier, strenuous efforts were also made in the past by Adama City Administration which always strives to attract and retain investors, promote the city's big name and fame in trade, tourism and investment in the country is always behind the economic and social progress path of the city.

After peace and normalcy have returned in the country with the fall of defunct regime of Dergue, these seamless efforts were made with a view to make sure that city is attractive places in which to work and live, provide people-centered infrastructure and services, build and transform image of the city, expedite socioeconomic development of the city, make the city preferable to investment, residence, trade and industry and build an iconic city with good reputations.

Today, Adama city which has promising future in economic, social and technological spheres of development is on the route of transformation due to momentous change took place in terms of the physical expansion and demographic condition of the city in row compared with the preceding times.

The current history of Adama City has been marked by unparalleled growth trajectory in the areas of building roads, ditches and bridges, laying cobble stones, telecom services and water supply services that directly affect the quality of urban life. Momentous change took place in the physical expansion and demographic condition of the city in row. The city continues to take a better place in the country and register a cyclical progression in all spectrums of development vise-a-vise the preceding time and become one of the fastest growing cities in the country.

At the same time, it has become the country's 3rd largest city, a better place to live and thrive by choice over the years on many counts of living standard, second-to-none in the region and the leading conference venue for experts and practitioners to share experience and discuss strategies that will influence millions of people next to Addis Ababa and Sheger city in Ethiopia.

At this point in time which needs for co-operation more than ever before, the city government's unilateral exertions and works alone would not take the city administration anywhere deprived of active and real involvement of local community in all endeavors of city development. This in turn demands existence of the participation of different entities to maintain its progress.

Accordingly, the city administration which is always behind the economic and social progress path of the city has to step up its tenacious efforts towards working hand-in-glove with different stakeholders, collaborators and financers which have their own roles to play in city development undertakings seamlessly momentous to ensure the sustainability of the current growth momentum, remain vibrant for the long term, bring about measurable and genuine changes in the well-being of the residents and snuff out the myriad daunting challenges facing the city in unprecedented scale.

List of References

Adama master plan revision project office (2004). Adama city growth, 2004, Finfinne (Addis Ababa).

Adama structure plan revision project, (2018), spatial study report, Finfinne, Ethiopia, pp. 22 & 47.

Federal Negarit Gazeta (1995). The Constitution of the Federal Democratic Republic of Ethiopia, Addis Ababa, Ethiopia.

Federal Negarit Gazeta (2002). Proclamation 300/2002, Environmental Pollution Control, Addis Ababa, Ethiopia

Federal Negarit Gazeta (2005). Ethiopian Urban Development Policy, Addis Ababa, Ethiopia

Federal Negarit Gazeta (2008). Proclamation No. 574/2008, Urban planning

Federal Negarit Gazeta (2014). The Ethiopian National Urban Green Infrastructure Standard

Manea, G. (2014). Green cities – urban planning models of the future, University of Bucharest, 2014: pp 462, 464 & 466.

Megeleta Oromia (2003). Proclamation No. 65/2003, The Urban Local Government Proclamation of the Oromia, article 7(6) Finfinne, Ethiopia

Megeleta Oromia (2016). Proclamation No. 196/2016, A Proclamation to Amend Oromia Regional Government Cities Re-establishment Proclamation No.195/2016, Finfinne, Ethiopia

Negarit Gazeta (1945). Proclamation No, 74/45 A proclamation to provide for the control of municipalities & township, 1945, Addis Ababa, Ethiopia

Negarit Gazeta (1975) Proclamation No. 31 of 1975, A rural land reform, 1975, Addis Ababa, Ethiopia

Negarit Gazeta (1975) Proclamation No. 47 of 1975, A proclamation to provide for government ownership of urban land s and extra urban houses, 1975, Addis Ababa, Ethiopia

Proclamation No. 104 Of 1976, Urban dwelling associations consolidation and municipalities proclamation, 1976, Addis Ababa, Ethiopia

