

**The Challenges of Land Development and Management Systems in
Bishoftu City: The Case of Dibayu Sub- City.**



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A MSc Thesis Submitted to the Department of Architecture

School of Civil Engineering and Architecture

Office of Graduate Studies

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Adama, Ethiopia

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DECLARATION

I declare here by this research thesis entitled “The Challenges of Land Development and Management Systems in Bishoftu City: The Case of Dibayu Sub- City” Dibayu sub- city is my own work and has not been submitted to any university for similar purpose. The reference used in this proposal are dully recognized by proper citations.

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I, the major advisor of this thesis, hereby certify that I have read the revised version of the thesis entitled “The Challenges of Land Development and Management Systems in Bishoftu City: The Case of Dibayu Sub- City” prepared under my guidance by Adugna Garomsa. Therefore, I recommend the submission of the revised version of the thesis to the department following the applicable procedures.

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LIST OF ACRONOMY

GDP	Gross domestic product
UN	United Nation
CSA	Classification of Significant Asset
FDRE	Federal democratic republic of Ethiopia
GIS	Geographical information system
NGO	Nan Government office
DEM	Digital elevation Model
H H	House Hold
LDP	Local development
OPGS	Office of Postgraduate Studies
DGC	Department Graduate Council
SGC	School Graduate Committee

ABSTRACT

Global forces like urbanization, economic reform, globalization, and technology are changing how people relate to land. This difficult relationship necessitates efficient administration and land management. The study's objective was to evaluate the effects of urbanization on land management and development in Bishoftu City, specifically in the context of Dibayu Sub City in Oromia, Ethiopia. The study took into account the use of both quantitative and qualitative data from primary and secondary data sources, and it employed the descriptive survey method. We employed questionnaires and conducted interviews with a variety of pertinent parties related to the study's topic. A reconnaissance field survey was also used to collect the data, which involved comparing the descriptions of land development and management system practices in the Bishoftu city structure plan or development plan with the actual field conditions. Next, a random and deliberate sampling approach was used to analyze the data using a probability and non-probability sampling technique. The study's conclusion shows that the impact of urbanization (population and physical growth) on land development and management systems is neither efficient nor effective because of Dibayu sub city's inadequate capacity to provide land development for various uses, poor land records, inadequate information, and inadequate management systems. Furthermore, the sub city's poor land management practices have resulted in unfair markets for land and corruption. This resulted in low municipal revenue and decreased economic activity, which hindered the sub city's ability to develop and manage its land, as well as its ability to grow economically. In order to improve land development and management, this study recommends that the sub city administration use autonomous cadastre, which is already being used by other nations. It also suggests strengthening the institution overall to increase its capacity to achieve or realize an efficient land development and management system.

Key words; *Challenges of Land Development, Management Systems, Land Administration, Land Delivery, Land Policy*

CHAPTER ONE

INTRODUCTION

1.1 Background

Every human endeavor takes place in space. Thus, land is both the basis for human survival and a priceless resource; in many developing economies, it accounts for between fifty percent and seventy-five percent of the total value of the country (Bell, 2006; Abdulai et al in 2015). To get the best results, land is usually combined with other resources like labor, capital, and entrepreneurship. These resources collectively play a part in the process of land development and are sometimes referred to as factors of production. Achieving the best outcomes from land in the context of land development entails managing and administering the land along with the products it produces, such as residential buildings, office complexes, or infrastructure, in addition to combining it with other production factors in an effective and efficient manner.

Ethiopia has a variety of development plans and an effective and efficient foreign policy as a result of globalization. Effective foreign policy in Ethiopia fosters strong collaboration with the West and leads to significant foreign trade and donations. Effects on land markets are especially varied. Regarding the connections between information and public service, this indicates that urbanization has promoted knowledge and information flows from urban to rural areas, which have enhanced employment, income, and innovation. Given the rapid pace of urban change and resource limitations, it is challenging to achieve the goal of controlling all new land development and redevelopment, necessitating a rethinking (U N Habitat, 2009).

Development Management, which was formerly known as planning control or development control, is a vital aspect of the sub city and country planning system in the United Kingdom. This process involves the regulation of land use and new buildings by the local government or the Secretary of State. On the other hand, land management covers all the activities that are related to the management of land and natural resources. These activities are required to achieve sustainable development. The concept of land includes properties and natural resources and thereby encompasses the total natural and build environment. Inadequate air and water quality, insufficient water availability, waste-disposal problems, and high energy consumption are exacerbated by the increasing population density and demands of urban environments.

Over time, research and empirical data have exposed the shortcomings in the way developing countries, especially Ethiopia, have managed urban land and development. Low land registration rates, noncompliance with development regulations, insecure land and property rights for the impoverished and women, restricted access to land for development, subpar land records, insufficient institutional capacity and land valuation systems, subpar housing conditions, and inadequate infrastructure and funding regimes are just a few examples of how these weaknesses manifest themselves. Planned urban forms, such as gated communities, satellite cities, and planned towns, and unplanned urban forms, like informal settlements with erratic land rights and subpar infrastructure and services, are the two categories of emerging urban forms in developing nations.

Thus, based on the factors of starting with population growth and urbanization, followed by environmental challenges and then technological advancements, this research analyzes the challenges of urbanization on land development and management systems in detail for the Dibayu sub-city. The paper then provides a summary of the discussion and suggests a possible solution.

1.2 Statement Problem

Bishoftu City is grappling with formidable obstacles in effectively developing and managing its land resources, especially within the confines of the Dibayu Sub-City area. Despite concerted efforts to foster sustainable urban growth, the city still grapples with crucial concerns surrounding the optimal utilization and regulation of land. Within this landscape, a multitude of challenges emerge.

Firstly, the issue of land tenure insecurity looms large over Dibayu Sub-City, characterized by the absence of clear and enforceable land tenure systems. This ambiguity fuels uncertainty among both residents and potential investors, giving rise to land disputes, informal settlements, and obstacles to development projects.

Moreover, inadequate infrastructure development compounds the city's challenges. The rapid urbanization of Bishoftu City, coupled with insufficient infrastructure development in Dibayu Sub-City, leads to a plethora of issues including inadequate road networks, water supply systems, sanitation facilities, and electricity grids. These deficiencies hamper the area's growth potential and detract from residents' quality of life.

Conflicting interests and inconsistent zoning regulations further exacerbate the situation in Dibayu Sub-City, resulting in land use conflicts, illegal constructions, and encroachments into designated green spaces and public areas. These disputes undermine planned development initiatives and detract from the aesthetics of the urban landscape.

Additionally, the soaring demand for affordable housing in Dibayu Sub-City outpaces the available supply, leading to housing shortages, overcrowding, and the proliferation of informal settlements. This housing disparity perpetuates socio-economic inequalities and strains existing infrastructure and public services.

Environmental degradation poses another significant challenge, as uncontrolled land development practices contribute to deforestation, soil erosion, and pollution. These activities compromise natural habitats, degrade water quality, and exacerbate vulnerability to climate change impacts.

Weak governance and regulatory enforcement further compound the challenges, characterized by institutional capacity issues, corruption, and ineffective enforcement of land development regulations. This fosters regulatory loopholes, land speculation, and favoritism, impeding transparent and equitable land management practices.

Lastly, limited opportunities for community participation and consultation in land development decision-making processes marginalize residents' voices and aspirations in Dibayu Sub-City. This lack of inclusivity hampers the development of locally tailored and sustainable land management solutions.

In light of these pressing challenges, there is an urgent need for comprehensive strategies and interventions to address the complexities of land development and management systems in Bishoftu City, particularly within the dynamic context of Dibayu Sub-City. Failure to effectively tackle these issues may impede the city's sustainable development aspirations and compromise the well-being of its residents. This study focused on the contribution of the challenges of urbanization on land development and management systems in detail to Dibayu sub-city.

1.3. Research Objectives

1.3.1. General Objective

The general objective of this study is to investigate the Challenges of Land Development and Management Systems in Bishoftu City: The Case of Dibayu Sub- City.

1.3.2. Specific Objectives

The specific objectives of this study were to:

- 1) To determine the sub-city's population trends, current land development and management practices, and their spatial expansion.
- 2) To examine how the Dibayu sub-city's zoning laws and land use patterns are affected by the fast urbanization of the area.
- 3) To assess how the government has responded to enhance land management and development initiatives.
- 4) To suggest organizational capability and integration for the Dibayu sub city's land management and provision..

1.4. Research Questions

1. What are the Dhibaaayu sub-city's population trends and the current spatial expansion of its land management practices?
2. What were the reasons behind and difficulties with the Dibaayyu sub-city's land development and management system?
3. How well-integrated and organizationally capable was the Dibaayyu sub-city's urban land management and provision?
4. How did the government respond to enhance the Dibaayyu sub-city's land development and management system?

1.5. Significance of the study

Both the public and the government view land as one of the most important resources for efficient land development and management systems. The difficulties that land development and management systems confront are clarified by this study. It makes a scholarly contribution to the field of planning for land management. It is also important for different kinds of organizations. It draws attention to the issues that city administrators need to address and can be used as a source of data for upcoming research projects in this area.

1.6. Scope of the study

1.6.1 Thematic scope:

The thematic scope of the study appears to be the challenges of urbanization on land development and management in the Dibayu sub-city. Consider exploring factors such as infrastructure, environmental impact, Population Growth, Informal Settlements, Weak Governance and Corruption, and community dynamics for a comprehensive analysis.

1.6.2 Spatial Scope:

This study focuses on the land development and management system of Dibayu sub-city within Bishoftu city. The sub-city was selected as a research site due to its significant concentration of challenges, and the Ethiopian government designated it as a key corridor for national and regional economic development, attracting numerous factories. The Dibayu sub-city in Bishoftu City that was studied was the one that was most affected by the challenges that urbanization was posing to land development and management.

1.7. Limitation of the study

Some of the limitations encountered during this study were:

- Lack of written official report and map about the sub city's total amount of land administration system.
- Some professionals were not given full information about the data in the sub-city.
- Some households were not interested and others did not respond to the questionnaire.

1.8. Organization of the Paper

The research paper contains five distinct chapters. The first chapter examines the general introduction of the study, the second chapter has a review of the literature, and the third chapter explains the research methodology and background of the Dibayu sub-city. The fourth chapter discusses the data organization, analysis, and presentation. Finally, the fifth chapter deals with findings, conclusion, and recommendations.

1.7. Operational definition

Cadaster: is a land information system, which contains a complete and up to date official records of land parcels it provides detail information about parcel ownership, value, location, area land use and property on land.

Free Hold: means the absolute ownership of land and is inheritable. It is only bound to the laws of the land and nothing else.

Land Administration: this refers to the process of recording, inventorying, and disseminating information about the ownership, value and use of the land and associated resources.

Land Consolidation: is the planning and redistribution of land into units of more economic and rational size, shape and location.

Land Delivery: Means an approach or mechanism whether formal or informal that enables people to acquire land for urban uses.

Land Management: is the process by which the resources of land are put to good effect. It also covers all activities concerned with the management of land as a resource both from an environmental and from an economical perspective.

Land Policy: is a policy designed to regulate, change, or manage the use of and right to land.

Land Tenure: This means the right to hold land for a definite period or the right of individuals to own and use land.

Land: is the surface of the earth with everything on it, under and over it.

Lease Hold: is an official legal document between the lessor and lessee. It is a contract between a private party and the government for a fixed period ranging up to 99 years.

Urban Land Management: is the system of controlling the general performance of urban growth in different mechanisms for efficient utilization of urban land.

Urban Land: is the platform for all human activities taking place in urban centers. It is the main resource which plays a great role in urban socio- economic development.

CHAPTER TWO:

LITERATURE REVIEW

2.1 Introduction

In this chapter, the theoretical and empirical literature that enables the researcher to understand and develop better concepts, filling the gaps in existing knowledge and increasing the researcher's confidence, has been briefly discussed and then referred to in detail. The theoretical literature includes the definition of important terms and relevant concepts, which has been briefly discussed. The empirical literature describes the policies, practices, and experiences related to the challenges of urbanization on urban land development and management systems.

2.2 Theoretical Literature

2.2.1 Urbanization in the World

The urbanization process can be understood as containing a dual transformation process: one of demographic transition from a predominantly rural to the urban population, and another of transition from an agricultural economy to an industrial and service-based economy. Push factors exist because, in rural areas, potential migrants perceive their current domiciles as no longer conducive to living and economic security. In contrast, pull factors exist due to the attractiveness of new places. Urban areas offer greater opportunities for employment, education, healthcare, etc., which pull potential migrants to settle in urban areas. (Tisdale, 1941).

Social exclusion is the result of urban sprawl into sparsely populated outlying areas with insufficient land use. The higher development costs and longer commutes that come with this kind of urban growth may have an adverse effect on the economies of scale and productivity growth that are typically associated with urban land development.

The concentration of investment and job opportunities in urban areas, coupled with the shift from low-productivity agriculture to more productive mechanized agriculture that has created labor surpluses in rural areas, have been the main drivers of urbanization. Cities are the centers of productive industrial and service activity. Urban areas generate about 80% of the global GDP, according to one estimate. Cities become magnets or draw businesses and jobs as a result of Migrants who are looking for better opportunities gather human and entrepreneurial resources to invent, create new ideas, and use technology in ever-more-productive ways (Nechyba, 2004).

The UN (2014) states that unplanned, fast urban growth poses a threat to sustainable land development when policies are not put in place to guarantee that the advantages of city living are distributed fairly or when the systems required for urban land development and management are not created. Even though cities have a comparative advantage today, hundreds of millions of the world's urban poor live in subpar conditions. Urban areas are also less equal than rural ones. Unplanned or poorly managed urban growth can cause rapid sprawl, pollution, environmental degradation, and unsustainable patterns of production and consumption in certain cities (Deguignet, 2014).

2.2.2. Migration and Urbanization

Migration from rural to urban areas and regions is one of the main mechanisms of urbanization since the process of urbanization on a larger scale involves the increasing concentration of people in urban areas (and urban regions). An important factor contributing to this concentration of human activity and population growth is the growing importance of a nation's major urban centers. Nonetheless, there are significant national differences in the fundamental causes of migration to metropolitan areas and regions (Efrem, 2017).

According to Efrem, 2017 study, distinguishing between migration (Pull-based migration) and (push-based migration) is a useful way of characterizing the situation. In both situations, migration is related to people's perceptions of the differentials between urban and rural areas and regions. The distinction between the two types of migration is related to whether these perceptions are reflected in the experience of migrants after they arrive in the urban zone. Pull-based migration involves differentials being driven by differences in living standards, job opportunities, income opportunities, and access to services. While not everyone participating in such migration necessarily finds satisfaction, the argument is that for this type of migration the pull factors are real.

This phenomenon of push-based migration leading to the development of informal settlements on the outskirts of urban areas is a significant challenge in many parts of the world. These settlements often lack proper planning and regulation, which results in inadequate access to basic services such as water, sanitation, and healthcare. The lack of proper infrastructure also contributes to poor living conditions and increased vulnerability to natural disasters.

Furthermore, these areas tend to suffer from high levels of poverty and unemployment, as migrants may struggle to find stable and decent-paying jobs in the urban areas they migrate to. The lack of opportunities and limited access to education and skills training further exacerbate their socio-

economic challenges. The presence of these informal settlements and the associated social issues also have negative implications for urban development. They strain existing resources and infrastructure in urban areas, leading to overcrowding and an increased burden on public services. Additionally, the lack of formal housing and property rights in these settlements can result in land conflicts and hinder the potential for planned urban growth. Efforts have been made by governments, NGOs, and international organizations to address these challenges and improve the living conditions in informal settlements. Initiatives focus on providing access to basic services, upgrading infrastructure, and promoting livelihood opportunities for residents. However, the scale and complexity of the issue make it a persistent problem that requires continued attention and long-term solutions (Nechyba, 2004).

Overall, understanding the dynamics of push-based migration and its consequences on the development of informal settlements is crucial for policymakers and urban planners to implement effective strategies that promote inclusive and sustainable urban growth. However, while they may appear to be harsh living environments to many, there is also employment for many, and the migrants may see themselves as better off than in the rural areas from whence they came (Efrem, 2017).

2.2.3. Land Development and Management Systems: Driving Urbanization

Urbanization has long been considered one of the main causes of the need for urban land development and management systems, according to EC (2002). Land is a vital component of economic development and growth, and it is essential to achieving the Lisbon objectives, which call for more growth and employment in Europe.

More broadly, the absence of an urban land development and management system has detrimental effects on the urban environment, society, and economy. If the affected urban area has an impact beyond its borders, these effects might be felt on a regional or even national scale. As a result, having a sufficient urban land development and management system that is both large and of high quality is a crucial component of a controlled urbanization process that avoids negative effects. The majority of developing nations do not adequately plan their urbanization processes in accordance with the current and projected availability of land. Consequently, there are many underserved settlements in urban areas.

There are two perspectives on the need for land: supply and demand. The majority of Asia's developing nations get their land mostly from the government, especially for basic land uses. The majority of developing nations struggle to keep up with the rising demand for land and services due to their weak governments. As a result, in these nations, the supply of land falls short of the demand for land (Golub, 2006).

Because land needs are dynamic, they evolve over time in tandem with a country's socioeconomic development. Although created While developed nations have an abundance of services and systems for the development and management of urban land, developing countries are still having difficulty with this. In developing nations, the demand for land is always rising. Budgetary restrictions also affect these countries' ability to manage and provide sufficient systems and services for urban land development and management. Compared to their counterparts in developed countries, these conditions impede the development of land in cities and developing nations. Economic growth is slowed or even prevented by the absence of an urban land development and management system.

It is evident from the vicious cycle that "lack of urban land development and management system leads to slow economic growth and equity, which in turn leads to inadequate supply of land" that land provision cannot be achieved and managed using a routine business strategy.

There's a chance that land will not keep up with the rapid growth of cities and the escalating expectations of their populace. To close the gap in the urban land development and management system and lessen the likelihood that hazards will have catastrophic cascading effects, urgent action is required.

Unquestionably, systems for managing and developing urban land are under increasing pressure as a result of urbanization. It presents responsible authorities with the challenge of balancing the basic goal of keeping our cities livable with the imperatives of keeping services in good condition and with enough capacity to meet ever-increasing urban land demands. Rapid urbanization is causing a number of issues, one of which is the growing urban land development and management system, together with reduced accessibility to urban economic destinations, a crucial component of economic competitiveness (Bilsborrow, 1987)..

2.2.4 Urban Land

In order to achieve social goals like reducing inequality in access to land and tenure security and improving the living conditions of the urban poor, land management strategies should take into account the economic value of urban land as well as the development of land markets of society at large (World Bank, 1994).

Because it is scarce in many urban centers across the world, urban land—an essential resource for the growth of human settlement and the generation of infrastructure services—needs to be used more methodically. Urban land use is under extreme pressure due to the fast population growth in developing nations' urban centers. The primary reasons for the unfulfilled demand for urban land are the issues and

limitations in the system for allocating land. Nearly all municipalities are unable to respond to numerous requests for urban land at once (Alemu, 2002).

The Dibayu sub-city is likewise plagued by the same problem. In the process of urban development, land is essential. While it is not always evident, land plays a crucial role in every country's economy. Sustainable land development is impossible in the absence of stable land rights because investors will be reluctant to make long-term commitments. It will be challenging for transitional countries in particular to attract foreign investment (Alemu, 2002).

In general, urban land is a boundary that the urban administration owns in order to provide (achieve) economic resources, a way to accomplish social objectives, the growth of land markets, and a livable environment. There is a need for more systematic land use to promote sustainable development due to several factors, including the alarming rate of population growth, the spread of human settlements, the disparity between the supply and demand of land, and the lack of access to infrastructure services.

2.2.5 Urban Land Management

Urban land management involves a variety of interconnected activities, including environmental, social, economic, infrastructure, human settlements, and urban planning. Effective urban land management is crucial for the proper functioning of urban areas in the developing world, allowing these areas to contribute to the social and economic development of their inhabitants. Managing land effectively involves more than just planning for its use, as land is one of several resources that must be effectively managed (Alemu, 2002).

The rapid growth of the urban population nowadays leads to an increased demand for urban land. This necessitates urban governments to provide facilities, services, and urban management institutions. Urban areas in developing countries are facing various urban problems that are directly or indirectly related to urban land management activities, as they work towards achieving social and economic development for their people. Poor urban land management and control system of local governments is one of the major problem areas in urban centers of developing countries. The uncontrolled migration of people to cities and sub cities brings high competition for the existing infrastructure and facilities, which finally create a congested and unsafe living environment. To cope with this problem, sub cities should have an effective system of managing the greater demand for scarce urban land (Alemu, 2002).

In the Ethiopian context, the poor urban land management system is reflected in various ways, such as conflicts of interest between different groups over scarce urban land. This highlights the need for an efficient

land management system, which requires the coordination of different stakeholders to achieve sustainable urban development.

2.2.6 Urban Land Administration

In many parts of the world, especially in developing countries, formal land administration procedures are time-consuming, bureaucratically cumbersome, and expensive. As a result, the system is nonexistent in many less developed countries, including Ethiopia. This is due to reasons such as a lack of trained manpower, financial constraints, and limited awareness at different levels.

In order to effectively administer land, it is essential to have information about the land itself, its owners, and their rights. This information is typically recorded in a land registration and cadastre system within a formal legal framework. Some cities in the country, such as Addis Ababa and Adama, are currently trialing such systems.

Land administration encompasses a variety of systems that facilitate the management of land use rights, regulations, valuation, and taxation, as well as providing security of tenure. Effective urban land administration requires the participation of various actors and institutions, including land registries, land surveying, urban planning, land valuation and taxation, the court system, and others.

Urban land administration involves recording, inventorying, and disseminating information about land ownership, value, and use, as well as surveying and describing land parcels. It also provides relevant information to support the land market, making it an integral part of land management. According to Anbessa (2002) studies the major components of urban land administration may include the following:

2.2.6.1. Urban Land Accession Strategy

This component focuses on the study of how urban land is acquired through processes such as nationalization, purchasing, expansion in rural areas, relocation, land readjustment, and upgrading urban sprawl. It also examines the introduction of new standards of plot size and their consequences on urban land management.

2.2.6.2. Land Delivery and Allocation System

Land delivery may involve one or a combination of the following tenure systems.

A. Land Ownership: Free-Hold or Lease-hold

An efficient allocation of land, according to H.B. Dunferly, is one where each parcel of land is assigned to its highest valued use. This value includes not only the private value of that use, but also the social value of external benefits or costs imposed by that use. The allocation might be based on the type of project, the size of the resource, capital commitment, socio-economic benefits, and the balance of service distribution.

B. Registration via Cadastre System

A poor land information system leads to ineffective land management. Therefore, it is essential to accurately map and catalog allocated land, including details such as location (in a coordinate system), ownership (private, government, public, etc.), standards (e.g., grade 1st, 2nd, 3rd), and regulations (e.g., building line, building height, plot ratio). Proper registration is necessary to prevent economic misuse of land, boundary conflicts, illegal land activities, inefficiencies in land allocation, lengthy and complicated procedures, urban sprawl, environmental degradation, and land speculation (Anbessa, 2002).

C. Control and Legal Enforcement

To prevent parcels of land from remaining undeveloped for extended periods, it is important to implement land use controls. This can be achieved through regulations such as permitted plans and designs, specified plot sizes, and project timelines.

2.2.6.3. Land Use Regulation

The concept of regulating and controlling land use implies a governmental function of setting rules. There are different views on the fundamental reasons for land use regulation and control. Land control can be put in place to ensure that sufficient land is available at its resource cost for all urban activities and for public facilities to support that these activities and facilities are appropriately accessible to each other.

The primary function of government is to ensure the health, safety, and welfare of society. In the context of land use, this involves implementing regulations to prevent overcrowding, establishing standards for the proper design and capacity of utilities, enforcing construction rules to guarantee building safety, and various other measures that impact urban quality of life. Land use regulations also aim to promote fairness by ensuring that certain activities benefiting society are not restricted within urban areas and

by providing equal access to activities (such as employment) and services (such as transportation) for all social groups within the city.

Regulations and controls should ensure that urban planning can easily adapt to new patterns of population growth and economic activity. For example, activities and services should be able to expand where their value exceeds resource costs as demand for them increases, and areas or activities should be converted to other uses as their value to society changes. This adaptability is a key function. A land use control system is also capable of resolving conflicts between competing objectives and uses (Proclamation No. 7, 1993).

2.2.7 The Significance of Cadaster

Urban land is the most valuable economic and social resource in any country. Although cadastres are a relatively new idea, they have the potential to benefit every aspect of the community, from government leaders who allocate resources to individuals who use land and property-related information.

In addition to being used for physical planning, the imposition of land-related taxes and charges, legalizing tenure, and other purposes, the modern cadastral system is crucial for managing the development of urban areas. As noted by Docbe in the World Bank study (1985), transactions involving land and property can be expensive and time-consuming in the absence of sufficient information on land development processes.

A modern cadastral system should take into account the social, political, and economic advancement of the community. The land, which provides almost all necessities, is this society's greatest asset. The ability to establish an efficient and equitable land taxation system, control land transactions and ownership, reduce boundary disputes and litigation costs, and introduce a low-cost, secure, and effective system of recording and transferring interest in and on lands are all benefited by the introduction of an improved cadastral system. Better stewardship of the land enhances public land acquisition through enhanced security of tenure and helps identify the individuals with whom the government must deal (Dale, 2000).

2.2.7.1 Surveying and Mapping of Cadastral Records

Cadastral surveying involves conducting surveys to gather information for creating cadastral maps. The term "cadastral survey" specifically refers to the process of surveying land boundaries. A cadastral map, on the other hand, is a detailed map that accurately depicts every field, plot of land, and building at a large enough scale to show precise boundaries and, if needed, property ownership. According to Dale

(2000), there are three main techniques used in cadastral surveying: field or ground surveying, photogrammetry, and remote sensing. These techniques focus on discovering, recording, and presenting spatially referenced data.

2.2.7.2 Formalization of Ownership Rights

In many developing nations, a growing number of individuals are establishing informal or unauthorized settlements on the outskirts of cities, often lacking essential services and utilities. Although squatters have traditionally been present in larger urban areas, medium and small municipalities are now also experiencing a swift increase in these types of settlements (Handzic, 2010).

Even when governments initiate programs to upgrade informal settlements, the process of legalizing tenure—a crucial requirement for obtaining formal housing finance—is often hindered by outdated property registration procedures. Therefore, the implementation of Land Information Systems (LISs) can streamline the legalization of informal settlements and expedite the registration and tenure process, fostering a secure environment for investments in infrastructure and housing improvements (UNIT LAP, 2004).

2.2.8 Urban Land Management Policy

According to Dennis Robinson (1994), land policy is intended to control, modify, and oversee how land is used and owned. One of the key elements influencing a nation's development trajectory and development objectives is its land policy. From this vantage point, land policy can be seen as one tool that could help a nation achieve its development policy objectives. One of the elements influencing the development process and the way the development's objectives are carried out is land policy.

One crucial tool for the effective management of urban land is urban land policy. Rapid urbanization and political upheaval have led to a huge land-related problem, making the formulation of land policy crucial to resolving the issue and achieving the socioeconomic optimization of land use and other related goals. Providing a framework to guarantee that a country's land resources are used to promote equitable social and economic development is the aim of urban land policy.

An integrated system of land controls must be established in order to guarantee that urban land can benefit all societal levels more fairly. This will essentially stop land speculation, as government investments in infrastructure—such as roads, drinking water, etc.—have led to changes in land use. As a result of such government investment, the added value should eventually become a source of cross-subsidy for the

lower-income group, rather than just benefiting the land owners who are directly involved (Federal Urban Land Agency, 1992).

Land management, such as surveyors and land registrants, make daily operational decisions that are routine in nature. In addition, a successful land policy should adapt to the ever-changing urban landscape. Urban land policy generally aims to achieve the socio-economic minimization of land use and to bring the urban supply and demand into balance (Federal Urban Land Agency, 1992).

Therefore, managing urban land requires putting basic policy decisions about the kind and volume of land investments into practice. Effective urban land policy encourages equitable land distribution for all societal levels, establishes an integrated system of land controls to prevent land speculation, and provides government infrastructure services and cross-subsidies for lower-income groups in order to help a country achieve its goal of sustainable development.

2.3 Empirical Literatures

2.3.1 Urbanization in World

Globally, the number of people residing in urban areas has surpassed those in rural areas. In 2007, for the first time in history, the global urban population overtook the rural population, and since then, the world has remained predominantly urban. Over the past six decades, the planet has experienced rapid urbanization. In 1950, over 70 percent of the global population lived in rural areas, with less than 30 percent in urban settings. By 2014, 54 percent of the world's population was urban. Projections indicate that this trend will continue, and by 2050, the global population will be approximately 34 percent rural and 66 percent urban, almost the reverse of the mid-twentieth century distribution.

As per the International Road Federation (IRF 2010), in 2005, nearly 50% of the global population resided in an urban area with a population of one million or more. According to UN estimates of global urbanization prospects, by 2030, this percentage is probably going to rise to nearly six out of ten. By then, it would imply that 4.97 billion people would be residing in cities and other urban areas. When comparing Western Europe, the figures might be much higher. Roughly 141 million people, or 76.1% of the total population in the region, were urban dwellers in 2005. This number is expected to increase to 156 million, or 81.7%, by 2030.

2.3.2 Urbanization in Africa

Tetty (August, 2005) notes that developing nations are experiencing rapid urbanization, with African countries leading the pace compared to those in Asia and Latin America. Urbanization is often linked to development levels, with some arguing that increased industrialization is essential for a country's development. The modernization school of thought supports this view, asserting that economic growth is a prerequisite for urbanization. This approach holds that developing countries should follow the same process that developed countries underwent. However, it is thought that in developing nations generally, and in Africa specifically, the situation is different. The modernization theory of urbanization, which highlights economic development and modernization as the causes of urbanization, is inapplicable to developing nations because they have not yet achieved the same rate of economic growth as developed nations before experiencing high levels of urbanization.

Urbanization is associated with problems such as inadequate infrastructure, waste management and inadequate housing and these problems are difficult to eradicate or control. The rate of urbanization in Africa and other developing countries is quite different from what happened in the presently developed countries; at the time they were developing report that, demographically, migration is a result of urban pull which was the chief cause of urbanization in Europe and the United States. Urbanization rates were also gradual in the developed countries.

In Africa and other developing nations, both migration and natural population growth have been the primary drivers of urbanization, with migration largely resulting from rural push factors. The pace of urbanization in these regions is also swift. Consequently, the factors contributing to urbanization in developed countries differ from those in Africa. This disparity necessitates a distinct approach to addressing urban challenges.

Africa's population surpassed one billion people for the first time in 2010, with 395 million (nearly 40%) of them residing in urban areas, according to UN statistics. Between 2010 and 2050, Africa's population is expected to grow by roughly 60% overall, with a threefold increase in urban population, reaching 1.23 billion people, during this time. African cities continue to experience the world's strongest rates of population growth (3.3 percent annually on average, compared to 2.5 percent worldwide), despite stark disparities in socioeconomic and urban development.

In Africa, urban populations in poorer subregions are expanding at twice the rate compared to relatively wealthier areas such as North and Southern Africa. In sub-Saharan Africa, the urban population is

projected to grow from 323.5 million (37.3 percent) in 2010 to 530.3 million (48.2 percent) by 2030, and to over 1 billion (60.4 percent) by 2050.

2.3.3. Urbanization in Ethiopia

UN Habitat (1996) states that it is difficult to separate Ethiopia's current urbanization from its historical context. Ethiopian urbanization began in the state of Axum in the fourth century. There were significant cities acting as administrative, commercial, and cultural hubs during this time. Axum was ruled by the Zagwe Dynasty in the middle of the eleventh century, and Lalibela served as its capital. In Gonder, four centuries later, yet another kind of urban civilization flourished. The expansion of the cities is explained by trade. In certain urban areas, there were indications of change such as the development road, communication line, and services.

According to the Ministry of Urban Development, Housing and Construction (MUDHC, 2014), approximately 20 percent of Ethiopia's total population currently resides in urban areas, making it one of the least urbanized nations in sub-Saharan Africa. Despite this low urbanization level, Ethiopia boasts one of the highest urbanization rates among developing countries, estimated at 4.1 percent annually. This rate significantly surpasses the national population growth rate, which is estimated at 3 percent per annum. Urbanization levels were at just 6 percent in the 1960s, rising to 11 percent by 1984, 14 percent by 1994, and an estimated 17.2 percent by 2013. Projections indicate that this figure will reach 30 percent by 2025. Currently, about 20 percent of the population is estimated to live in urban areas, with roughly 60 percent of these urban regions classified as slums lacking basic services.

2.3.4 Urbanization in Oromiya

Roughly 11% of Oromia's total population, according to OUPI (2008), resides in urban areas. There will inevitably be a rise in migration to larger urban centers, making effective planning, fair distribution of urban services, and the creation of job opportunities for the expanding population in Oromia's urban centers crucial.

According to the "medium" projection by the CSA, Oromia's population is expected to rise from 18.7 million in 1994 to approximately 29.6 million in 2010 and 37.8 million in 2020. Similarly, the urban population in the region is projected to grow from around 1.9 million in 1994 to 4.2 million in 2010 and 6.5 million in 2020. The percentage of the urban population is anticipated to increase from 10.5 percent in 1994 to 14.3 percent in 2010 and 17.3 percent in 2020 (CSA, 1994). This population growth will inevitably heighten the demand for basic urban services. In addition to various forms of urbanization and urban sprawl, urban centers around Addis Ababa display distinctive urbanization features. Nearly

all urban centers surrounding the capital show common traits, such as high land settlements, a consequent decline in agricultural land and production, high rates of squatter settlements and informal land acquisitions, displacement of domestic economic activities, significant migration from various parts of the country, and outward migration of residents to the periphery, which are among the major socio-economic changes (Oromia Institute Plan, 2008).

2.3.5 Population Dynamics

The 21st century has seen a steady transformation of the global population into urban residents. The urban population has surged from less than 30% in 1950 to over 47% by 2000. Regions such as Europe, North America, Latin America, and the Caribbean are already predominantly urbanized, with 75% of their populations living in cities. According to the 2009 United Nations Report on Global Human Settlements, Africa is currently the fastest urbanizing continent. The primary drivers of urbanization include natural population growth within urban areas and migration from rural to urban regions. Additionally, the reclassification of land from rural to urban categories contributes to urban growth. The UN report of 2008 indicates that the global urban population rose from 29% in 1970 to 50% in 2008, and it is projected to reach 70% by 2050, with developing countries experiencing the highest growth rates.

2.3.6 Ethiopian Urban Land Policy

Policy pertaining to urban land is a crucial instrument for overseeing urban areas. While the nature and urgency of the issues vary depending on the socioeconomic, political, and development level of the nation, the rapid urbanization process and political changes that are occurring in both developed and developing countries have created enormous problems of land scarcity and land use inefficiency in their cities and sub cities (Desselegn, 1994). Regarding Ethiopia's land policy, the following are the key elements of its urban development policy:

- Allocating land sustainably through methods such as tendering, negotiation, and permitting

2.3.7 Ethiopian Urban Development Policies

There is comparatively little mention of cities in national and regional constitutions, despite the decentralization initiatives. The provision of the constitution that states that the Ethiopian people shall exercise self-rule at the lowest level can be used to indirectly infer the governance of cities. The government has come to understand the value of cities as catalysts for growth and the positive aspects of the urban-rural relationship. This was announced in the government's second five-year plan for peace, democracy, and development, which aims to "enhance urban centers' role and contribution towards

economic development and, consequently, improve residents' living conditions." Later government publications like the integrated economic development strategy and the poverty reduction strategy have further highlighted and elaborated on this (Tegegn, 2001). The Council of Ministers has approved the 2004–05 formulation of an urban development policy. In late 2004, a draft national policy framework for regional development was finished.

2.3.8 The Practice of Land Delivery System in Ethiopia

The land delivery system in Ethiopia has experienced various land tenure arrangements, reflecting the country's land policy and tenure systems under different governance regimes. Notable examples include the freehold land tenure system (pre-1975), the public-controlled permit system (1975-1992), and the public leasehold system (1993 to the present). In addition to these formal systems, Ethiopia, like many other developing countries, also has customary and informal landholding practices. Under Ethiopia's monarchical feudal regime, political and economic power, including the ownership of land (both rural and urban) and other properties, was monopolized for centuries. Some intellectuals and emerging capital owners managed to purchase urban plots. Conversely, the urban poor or low-income groups often had to acquire land through gifts, tenancy, inheritance, or informal group settlements. The most productive land assets largely remained in the hands of a few. It is widely recognized that in developing countries, including Ethiopia, the urban poor often resort to informal methods to access urban land (Desselegn, 1994).

2.3.9 Formal Land Delivery System in Ethiopia

The lease mechanism is the main official land delivery method for investment and residential housing in Ethiopia's major cities. However, in some smaller sub cities, it is based on rental income. A person can only utilize the use rights of the land they own; land is public property. Thus, the effectiveness of leasing policy application determines the means of formally acquiring a plot of land for housing development and investment purposes. The current active legislation pertaining to land provision is Lease Proclamation No. 272/2002, which outlines various methods for obtaining a plot of land. These consist of negotiation, auctions, lottery systems, and award systems.

Proclamation No. 172/2002 on Urban Lands Lease Holding addresses the land tenure system for urban areas in detail. Land is distributed using the leasing mechanism. While the lessee of public land is legally prohibited from selling the land or entering into any contracts that bind the land, the leaseholder of urban land is free to dispose of all or part of the interest through sale or other means of exchange. By

compensating owners of properties situated on such parcels of land, the policy permits the government to keep land needed for public interest and individual holdings for better development activities.

2.3.10 Ethiopian Urban Land Management

2.3.10.1 The Imperial Regime Era

Land management in Ethiopia was previously under the control of feudal lords. Formers owned farms, but they were merely tenants. The development of Addis Ababa as a garrison of feudal lords dividing the city's land among themselves through grants from the king was the most significant and detrimental effect of feudal land ownership on the city. As a result, the tenants and renters of the feudal lords without title deed constructed subpar housing in the form of a village or camp. Subsequently, the landowners constructed a large number of subpar rental homes, which were later nationalized as additional homes known as kebele houses. The majority of these homes made up a significant portion of the slum areas in the city (Sisay, 2009).

2.3.10.2 The Dreg Regime

Land became freely available when Emperor Haile Selassie was overthrown by the military in the early 1970s. However, the Derge regime displayed partiality by giving its own cadres or political allies the best and largest land parcels. The land would then be purchased by a middleman, who would resell it for a profit.

2.3.10.3 Post 1991

Since 1991, one of the top goals of the new government has been to eliminate all middlemen and give the people back ownership of the land. The government and the land user would be the parties involved in this relationship. Article 40(3) of the Ethiopian Constitution states unequivocally that "land is a common property of the nations, nationalities, and peoples of Ethiopia and shall not be subject to sale or other means of transfer." This means that land cannot be purchased or sold in Ethiopia. Regional governments now have the authority to control land acquisition and transfers thanks to the 1993 proclamation (Yami, 1996).

The population of Ethiopia's cities and sub citys is growing quickly, which increases demand for and pressure on the usage of urban space. Apart from housing, which occupies most urban area, additional uses of urban land include services, manufacturing, commerce, transportation, and recreation. The unmet demand for urban land is mostly the result of problems and constraints with the land distribution system;

thousands of applications for urban property are still pending and unanswered. Publicly held urban land was not the source of the problem. There is no systematic information available regarding the location, ownership, kind of use, standards, and rules pertaining to the use of urban land in our communities, with the exception of a few recent sub cities. Any piece of land can be easily identified in smaller sub cities (Yami, 1996). There is a severe lack of integration and coordination between different sectors and municipalities. One of the overall cumulative effects of the urban land management system's inefficiency is uneconomic use of land.

Uneconomic Use of land

Constraints in the land allocation process have also contributed to increased challenges in the regulatory and procedural system, which encourages speculation on land plots and uncontrolled informal settlements in urban areas. Farmers were displaced, the environment was degraded, and prime agricultural land was rapidly and comprehensively converted to urban land use due to urban sprawl. Unnecessary boundary disputes between neighboring landholders cost the public money, time, and resources (Nechyba, 2004). The absence of title deeds in a significant percentage of urban land holdings makes it challenging to mortgage the improvements on current plots or develop new ones. It is clear that traditional approaches to managing urban land, such as master planning, have not worked. Currently, appropriate planning approaches and policies must be developed in order to improve and expand the land management and information system. Enhancements and revitalization are required for the current urban land management system. More workers, new land management regulations, a reorganized organizational structure, and—above all—significant capital improvements will be needed to accomplish this. However, the costs can be quickly recovered by resolving the complex problems with the system because improved land information systems encourage better land use, which improves collection (Maboqunje, 1992).

2.3.11 Urban Land Information System's Role in Land Management

The rapid growth of urban population, the planning management, and control of urban development are becoming the most challenging task for the urban management of the city managers and urban planners. It is very difficult for urban planners to design a special planning without detailed information about the land and property invested on the land (Anbessa, 2002). A land information system comprises two components: a database that contains spatially referenced land related to a defined area and procedures and techniques for the methodical collection, updating, processing, and distribution of the data. The database serves as a tool for legal, administrative, and economic decision-making as well as assistance

with planning and development. Better access to land-related information, improved revenue collection, and the management of more sensitive land use and development are some of the other goals of LIS (Ibid).

2.3.11.1 Procedures to Acquire Land

According to Ethiopian Constitution Proclamation No. 80/1993, the government is required to guarantee private investors' use of land, contingent upon low-cost payment arrangements. For urban land, one-term leases are therefore available for a maximum of 99 years. The land use regulations of each region establish the land value and lease period for rural land (FDRE Proclamation No. 272, 2002). The zonal investment committees or the regional investment board may receive applications for the purpose of allocating land for investments. The type of project, the production method, and other factors determine the guaranteed amount of land size. Joint ventures or foreign investors may submit their land application along with a photocopy of their investment permit and action plan summary. Land lease rights are legally convertible into collateral, renewable, and subleaseable together without the need for constructed facilities. Land offices under the regional administration government are responsible for issuing land leases. Depending on the region, various rural land regulations determine the maximum lease holding period and lease price for urban areas as well as the leasehold period and lease price for rural areas (Ibid).

The Ethiopian government is in the process of transferring all citizens to the lease hold system. When land is transferred from one owner to another, the new owner is obliged to pay the Ethiopian government rent on the land.

Generally, the demand for urban land use (for housing, business, manufacturing, services, circulation, recreation, and other activities) is increased by the fast population growth, many applications are kept on the waiting list because of issues and limitations with the land allocation system. Furthermore, there is a lack of organized information on the ownership, location, kind of use, standards, and regulations related to the use of urban land, which results in the uneconomic use of land, a more complex land allocation procedure, improper land use, needless boundary disputes, and the occupation of land without a title deed.

In order to prevent these complications, it is imperative that suitable planning approaches and policies be developed in order to enhance and broaden the land management and information system. This calls for the creation of new organizational structures, new land management policies, competent and sufficient labor, as well as significant capital investments.

2.3.12 Conceptual Framework

The existence less impacts of the challenges of urbanization on land development and management system has much significance for the development of a given sub city. It makes conducive environments for investments, supports the housing development, strives to fight against poverty and solves societal problem. On the contrary poor land development and management results in hardly leverage on poverty reduction and insignificant role in holistic development of a sub city.

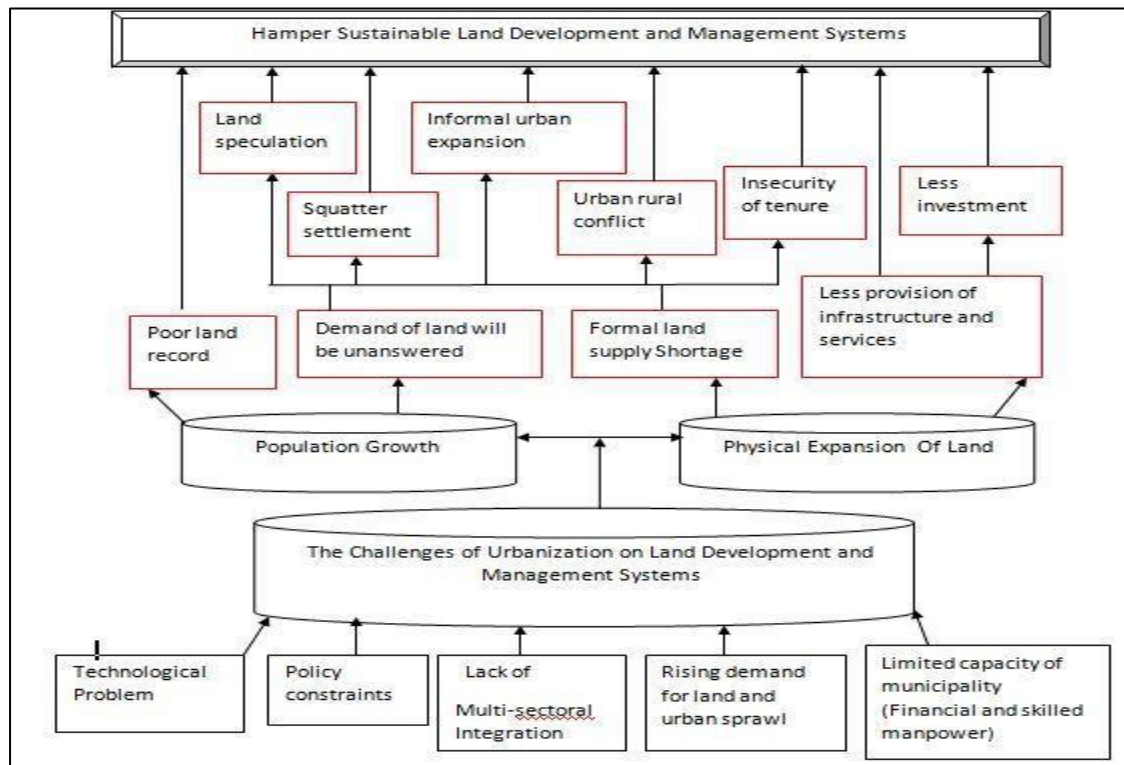


Figure 2. 1 Conceptual Framework

Source: Summarized from Literature Review

CHAPTER THREE

METHODOLOGY

3.1 Description of the Study Area

3.1.1 Location

Along Adama & Mojo Road, Bishoftu City is located about 47 kilometers southeast of Addis Ababa, the capital of Ethiopia. Additionally, its geographic coordinates are 38° 58' 42.46" E longitude and 8° 45' 8.10" N latitude. Furthermore, the sub city is situated at an elevation of 1,920 meters (6,300 feet). The climate is defined by medium rainfall and mild temperatures. Summer months (June, July, and August) bring heavy rainfall, whereas spring brings less precipitation. The research area's average temperature fluctuates between 54°F and 80°F; it is rarely lower or higher than 49°F or 85°F.

The settlement is positioned between the Great Rift Valley to the east and the foot of an elevation to the west. Here, maps of the city of Bishoftu are shown in the following map.

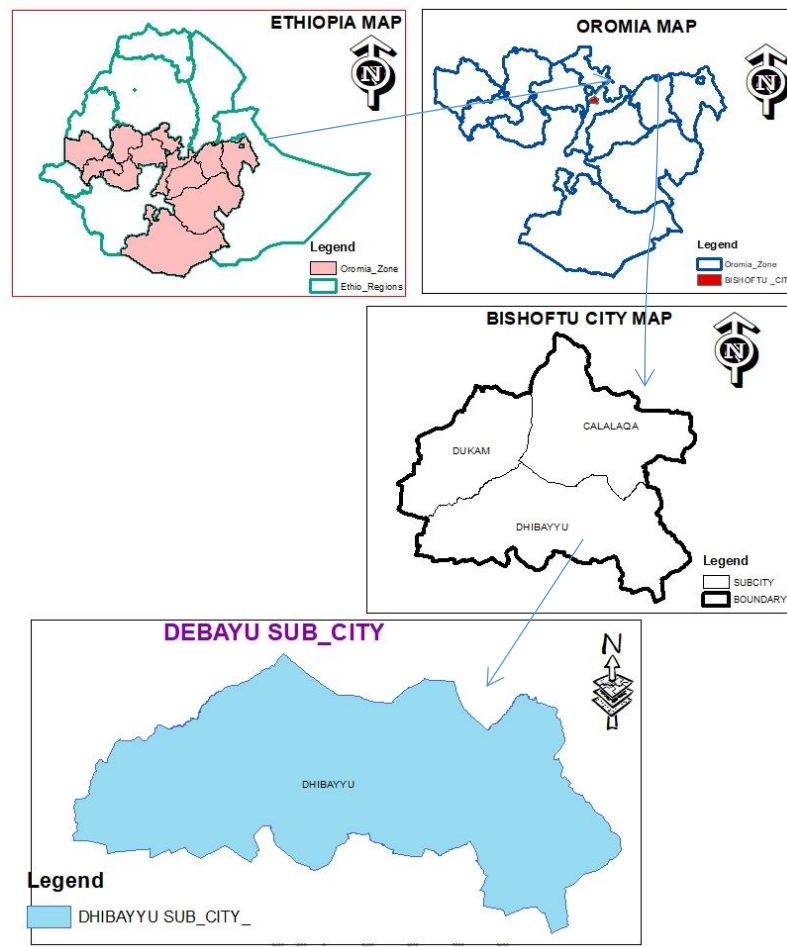


Figure 3. 1 Map of study area.

3.2. Research Design

This demonstrates the conceptual framework that guided the research paper. The real issues surrounding the effects of urbanization on land development and management systems were first identified as the study's starting point. To enhance comprehension of these issues and propose potential remedies, every approach to obtain sufficient data was pursued. Given that the research was primarily quantitative, a more series-based data-gathering approach is required to enable careful consideration of the primary issues. To accomplish this, information was gathered from other houses and through interview questions.

The descriptive survey method was applied for questionnaire, interview, and observation information, and the analytical descriptive survey method was used for primarily quantitative data. This approach was selected for this study because it was the most appropriate research method that used both qualitative and quantitative data. Additionally, the researcher and respondents were able to communicate directly and closely thanks to the survey research approach.

3.3. Data Sources and Types

Data was gathered for this study from a variety of sources, including respondents' households in Dibayu sub-city from four Woreda, the city Administration Office, the Municipality, the Urban Land Management and Development Office, the Constriction Office, and the sub city Investment Office. A variety of data-collecting instruments, such as questionnaires, interviews, and observation, were used to gather pertinent information from the concerned officials/experts from the aforementioned offices and sample developers from the chosen Woredas.

Using the data collecting tool used for each category of data, primary and secondary data were gathered from the aforementioned data sources. Photographs acquired while on field observation, survey findings, and information gathered from respondents, leaders, and experts through questionnaires and interviews were the main data categories. On the other hand, the secondary data consisted of records, guidelines, reports, and maps that were acquired from the city administration office, investment office, urban finance and development office, and urban land management and development office.

Furthermore, for mapping and spatial analysis used High-resolution satellite imagery and Geographic Information Systems (GIS) were employed to map land use patterns, including the precise location of Investment, residential areas, green spaces, and environmental features. This provided a spatial foundation for understanding the physical relationships between different land uses and potential

conflicts. Household Surveys and Interviews used in-depth interviews and surveys were conducted with residents living in the four woreda. This qualitative data captured their lived experiences, concerns about ownership, health and safety, perceptions of environmental impacts, and hopes for the future. Government Documents and Reports: Official documents and reports from relevant government agencies, such as the Bishoftu City Planning Commission, will provide valuable insights into existing policies, regulations, and land use plans related to the challenge of urbanization land development and management system.

Table 3.1 illustrates the types of data used in the study, the formats, and where the data was gathered:

Table 3. 1 Data sources and types

S/N	Data	Sources	Data types	Cell size/scale	Remark
1	Structure plan of the sub-city	City administration	CAD		
2	Road infrastructure	Ethio-GIS	Shape files		
3	Population data	Central Statistical Agency	csv		

3.4. Software used for study

Software like, Hexagon ERDAS IMAGINE, ArcGIS, Google earth and other geospatial software were used for data extraction and preparation of data analysis. SPSS and Microsoft Excel 2019 used for socioeconomic data analysis and interpretation. Table 3.2 below shows a summary of the software used in the research.

Table 3. 2 Tools used in the study

S/N	Material name	Versions/ sources	purpose	Remark
1	ArcGIS 10.8	ESRI	Data Processing and Thematic map preparation	

2	Google Earth pro	-	Use as a base map in visual image interpretations, and generate coordinate points for the images.	
3	Microsoft Office	Microsoft 2019	Integrating attribute and compositing proposal (report writing)	
4	SPSS 26	-	Analysis of statistical data	
5	Handheld GPS	-	Fielded data collection while site visitation for accurate location	

3.5. Sampling Techniques and Sample Size

3.5.1. Sampling Techniques

To ensure that the research questionnaires were completed and the desired goals were met, a mixed type of sampling procedures, including simple random sampling and purposive sampling, were employed in this study. The Government office sample was chosen using purposive sampling techniques because this sampling strategy was better suited for this particular study, since the challenges of urbanization on land development, management, and administration systems varied among Sub-cities for various reasons. A straightforward random probability sampling technique was used to select samples unbiasedly from the four woredas from the Dibayu sub-city to assess the method's dependability.

Adequate and trustworthy information was gathered from Sub-city locations where land development was actively underway to achieve the study's objectives.

3.5.2 Sample Size

The Dibayuu sub-city has four Woredas, with an estimated population of 172,420 (90,227 males and 82,193 females), according to the Bishoftu City Finance and Economic Development office. Conducting research with the entire population in the study area proved to be challenging. Consequently, a representative sample from the study's area was used to conduct the research. The population and households were well identified prior to the selection of the sample size.

The sub-city of the research areas has 34,484 households. Also included in the study's target population were respondents who resided in four woredas, the sub city administration office, the Municipality, the

Urban land management and development office, the Construction office, and the Investment office. The sample size was the total number of units chosen for analysis in the study in order to provide a representative sample. The sampling frame of this study was the total households of the four woredas i.e., 34,484 house units, which was greater than 10,000 target populations.

An equation was provided to determine the sample size for categorical or quantitative data, the equation shown below was used to determine the sample size for a limited population (Kothari, , 2010).

$$n = \frac{N Z^2 p q}{\{E^2 (N - 1) + Z^2 p q\}} \dots\dots\dots \text{equation (3.1)}$$

Where; n= is t

N- Total population size = 10,000

Z= is the level of confidence of the sample size,

P and q are the population proportions and

E = sets the accuracy of the sample proportions

Assumption:

- Confidence level (95%) thus Z = 1.96
- Sample statistics (i.e. population proportion)
- Margin of error(E) =± 5%=0.07

Therefore solving for n:

$$n = \frac{34484 * 1.96^2 * 0.5 * 0.5}{\{0.05^2(34484 - 1) + 1.96^2 * 0.5 * 0.5\}} = 195$$

Table 3. 3 Distribution of Representative Sample Households in the Study Area

No	Woreda	HH		Total	Proportion	Sample size
		Male	Female			
1	Dhaka Booraa	5,943	5,040	10,983	10,983/34484*195	62
2	Biiftuu	4,937	4,698	9,636	9,636/34484*195	54
3	Hoora Haadhoo	4,423	4,382	8,805	8,805/34484*195	50
4	Dirree	2,742	2,318	5,060	5,060/34484*195	29
	Total	18,045	16,439	34,484		195

Table 3. 4 Distribution of Representative Sample Different offices in the Study Area

	Office from where Respondents have been selected	No. selected		Method of selection
1	Sub-city Administration	5	Subcity Administration Office Expert in SP Monitoring and control Expert in Infrastructure Department Expert in Asset management Expert in Compensation	Purposive
2	Sub-city Construction office	6	Head office Expert in Public Building Regulator Expert Private Building Regulator Expert Infrastructure Regulator Expert construction permits Expert in SP Monitoring and control	Purposive
3	Sub-city Land Management & Development office.	6	Head office Expert in land preparation Expert of tenure security transfer Department Head of cadastral Expert of cadastral Expert in SP Monitoring and control	Purposive
4	Sub-city Investment office	3	Head office Expert of Investment of land Regulator Expert in Investment promotion	Purposive
Total		20		

Source: Dhibayyu sub-city Administration

Overall, there were 215 samples in the sample. Ninety-seven percent of the households in each woreda and the remaining ninety-three percent of the questionnaires were filled out by senior professional experts in the sub-city.

Each Sub-city's resident households made up the sample for this investigation. By dividing the total number of homes in a sample frame by the sample size, the sampling interval of the block for calculating the total size was found. Although the starting number was chosen at random from the blocks, the sample Questioners and interval were known. The list of resident HHs from each block and woreda was used to accomplish this.

3.6. Methods of Data Collection

Both primary and secondary data were collected in the study area through structured open-interview questions for experts and closed-structured questionnaires for HHs deemed suitable for the study's end product and caliber. Studies, reports, cadastral maps, land grade maps, land use maps of the sub city, and the recently created document known as the "structure plan" are also examined as secondary data sources from which pertinent information that supports the conclusions of this paper could be gleaned. While secondary data was gathered by reading through documents, reports, and related literature, primary data was gathered through field observation, questionnaires, interviews with officials and experts in the relevant offices, and questionnaires prepared for sample residents in the three Sub cities.

3.7. Data Analysis

Once all the data required for this study had been gathered, SPSS, GIS, and Excel were used to analyze the data. The data was collected from primary and secondary sources and reported in the form of a narrative description. The analysis was conducted based on the quantitative and qualitative character of the data.

3.8. Data Presentation Method

To make the results easier to read, the data was presented using the proper data presentation techniques and instruments, such as percentages, tables, charts, and images, as well as maps created with MS Excel or SPSS & GIS software.

3.9. Methods of Ensuring Data Quality

By following these precautions, the validity and reliability of the research's findings were guaranteed. The conclusion was reinforced by the new information gleaned from the concurrent application of quantitative and qualitative methodologies. The goal of the study aligned with the consultation of knowledgeable individuals (experts & researchers) on matters requiring expertise and the cross-checking of data collected from various respondents.

The tools chosen may contribute to illuminating the obstacles urbanization poses to land development and management strategies. The impact of population pressure, issues with land development and management systems, and physical growth or expansion on the sub-city

administration's on-land development could be discussed. In order to better illustrate the relationship between the land development and management systems and the challenges posed by urbanization, pertinent data was gathered issues with land development, management, and urbanization.

3.10. Ethical Consideration

Before the distributed questionnaire and interview questions were asked, all research participants included in this study were duly informed about the purpose of the study and their willingness and consent were secured. Regarding the respondents' right to privacy, the study protected each participant's identity in confidence. Since names were kept private in every situation, collective terms like "respondents" were employed.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 The socioeconomic profile of the respondents and their rate of response

4.1.1. The respondents' socioeconomic profile

4.1.1.1 Age and gender of the participants

Migration, mortality, and fertility trends are all significantly impacted by the age and gender composition of a population. A significant portion of the population is concentrated in the age groups of 30–40 (40 percent), 41–50 (25 percent), 18–30 (19 percent), 51–65 (11 percent), and 65+ (5 percent), according to the population distribution by five age groups.

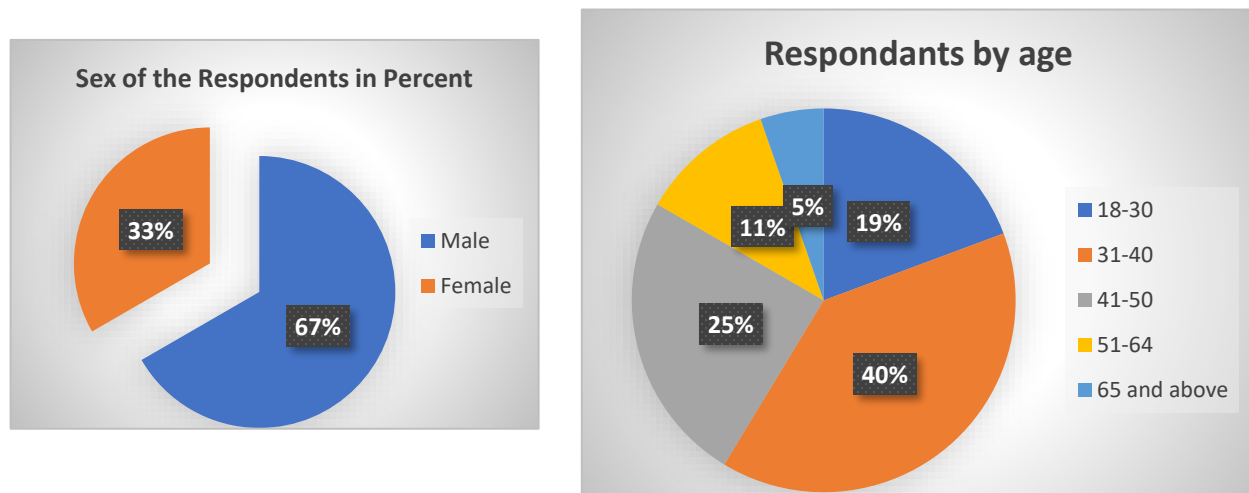


Figure 4. 1 Graphical representation Sex and gender of House hold respondents

Sources: Sample of house hold survey by reseacher,2023/24

Based on observations of the wide age distribution of the sub city's population, it was found that roughly 40% of all people are between the age of 30 and 40, and only 2% are elderly. Ages 18 to 64 make up the largest age group in the population (86 percent). According to this, roughly 40% and 25% of the population, respectively, are under the age of 18–30 and 31–45. This indicates a growing need for land and challenges facing the sub city's land development and management systems for various uses both now and in the years to come.

4.1.1.2 The size of the respondents' families

The size of the respondents' families influences the researcher's ability to make relevant and logical recommendations. According to the computed data gathered from the respondents, 71.8 percent of families consisted of one to three people, 23.7 percent of families consisted of four to six people, and the remaining 4.5 percent consisted of seven or more people. The family size of the sub city should therefore be taken into account when the government responds to the current land management issues facing the settlements. Decisions made in this regard could cause the nation to experience political, social, and economic crises if they are not thoroughly considered and addressed.

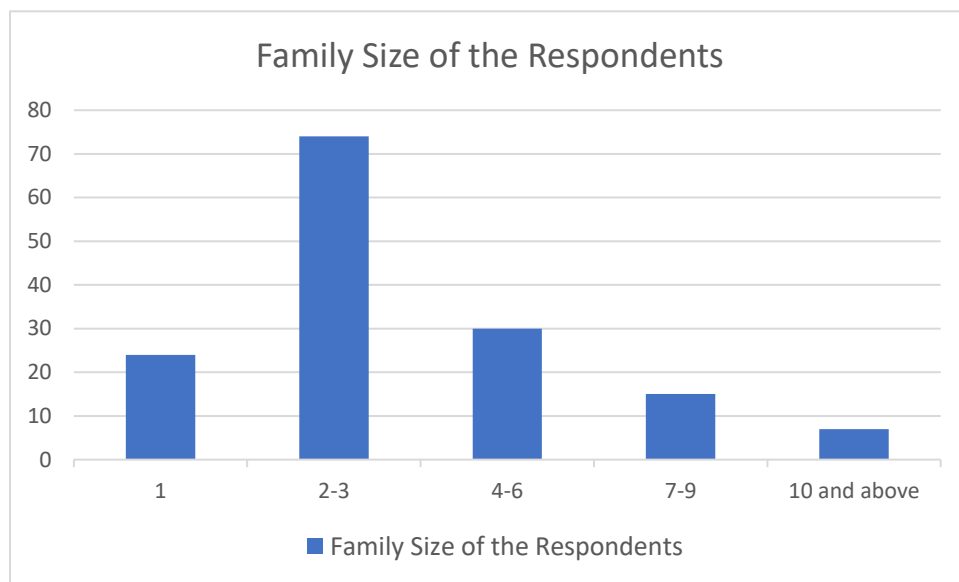


Figure 4. 2 Graphical Representation Family Size of House hold Respondents

Sources: *Sample of house hold survey by reseacher,2023/24*

4.1.1.3 Education Status of the Respondents

Out of the 156 household heads, figure 4.3 above indicates that the majority of them—up to 95 percent—are educated. This demonstrated that most household respondents could readily comprehend the law and the land regulation system, as well as the effects of urbanization on the effectiveness of land development and management systems from informal (mostly manual labor) sources. Additionally, since they possess the educational credentials required to be employed in governmental or nongovernmental institutions, they are well-equipped to facilitate access to the information related to land administration. Additionally, they have very little chance of obtaining formal plots because they find it difficult to meet the financial and administrative requirements of municipalities.

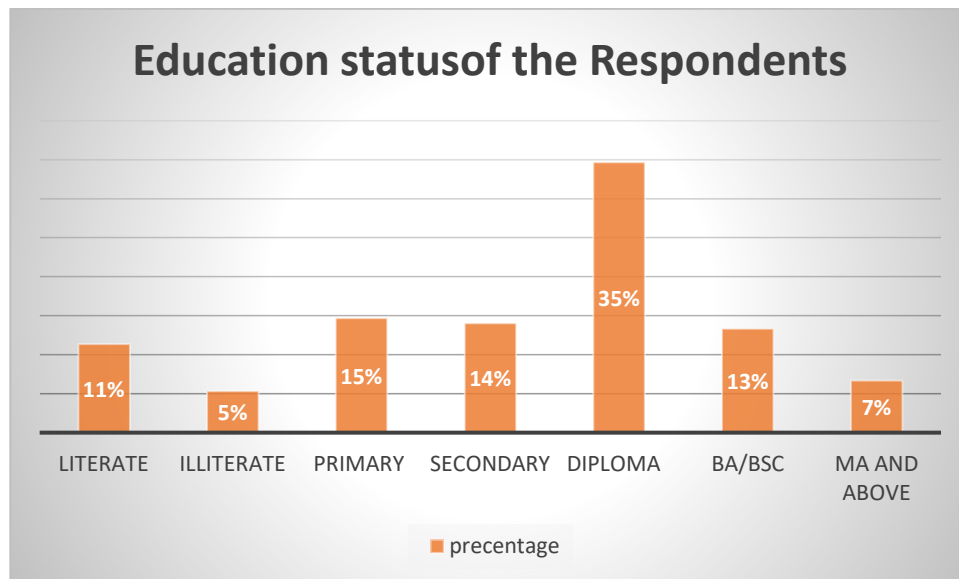


Figure 4. 3 Graphical Representation Education Statues of Household Respondents

Sources: Sample of house hold survey by reseacher,2023/24

Regarding the respondents' educational backgrounds, the data computed and displayed in the graph showed that, of all household heads surveyed, over half had completed high school or higher. Thirteen percent had their first degree, and seven percent had their second or higher. Merely 18.6% of all household heads surveyed had a grade level of four or lower. This could suggest that illegal land holding is not justified by a lack of education.

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4.1.1.4 Occupation Status of the Respondents

Reveals that the majority of household heads—56 percent—are self-employed and work as daily laborers, doing jobs like driving cars for transportation, farming, traditional waving, unofficial land brokering, selling tea and bread, making regional specialties like "Areki" and "Tela," among other things.

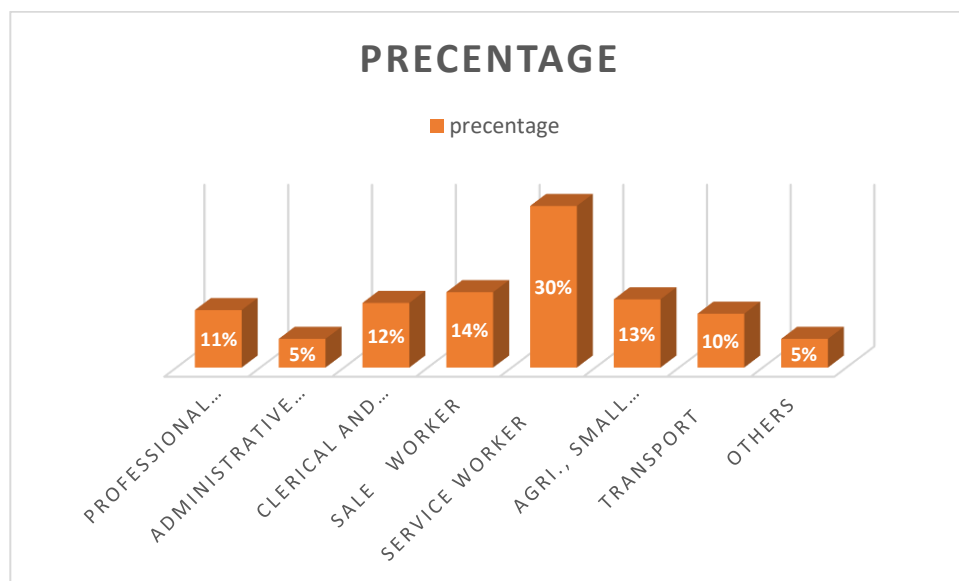


Figure 4. 4 Graphical Representation Occupation Status of House hold Respondents

Sources: Sample of house hold survey by reseacher,2023/24

4.1.1.5 Martial Status of the Respondents

It is well known from practices that different statue groups have different housing needs. Windowed and divorced groups are less interested in owning a home than married groups, who are more interested than other groups in this regard.

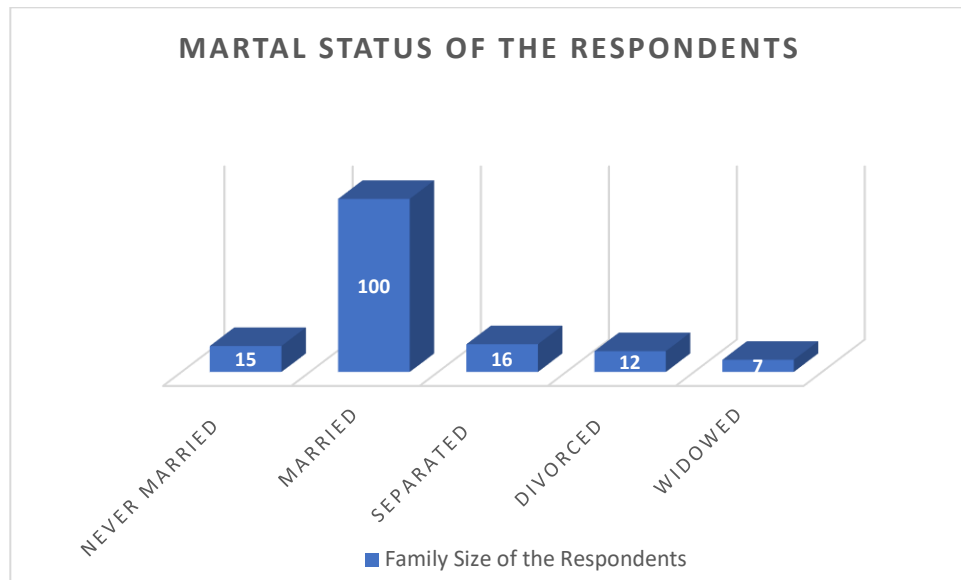


Figure 4. 5 Graphical Representation Martial Status of House hold Respondents

Sources: Sample of house hold survey by reseacher,2023/24

4.1.1.6 Income Status of the Respondents

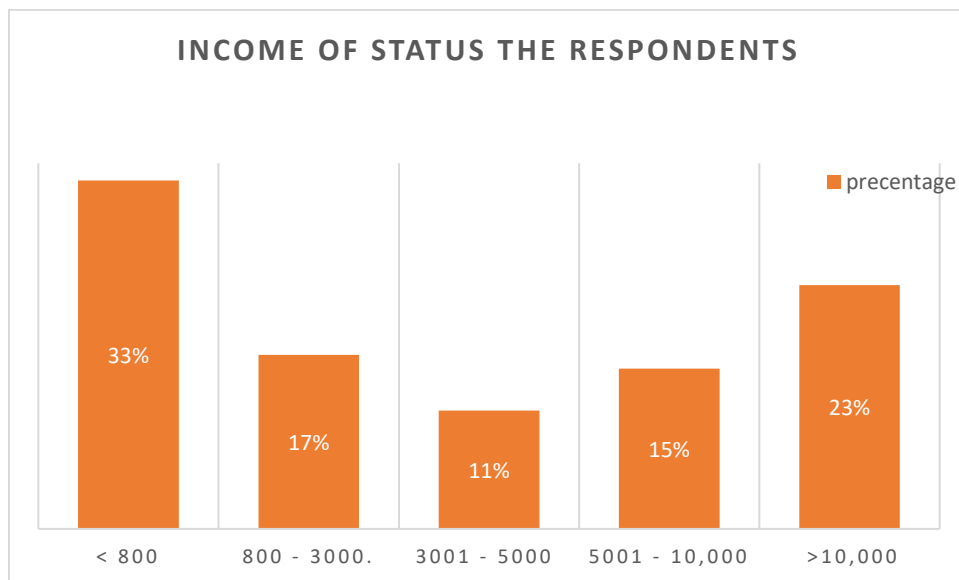


Figure 4. 6 Graphical Representation Income Statues of House hold Respondents

Sources: Sample of house hold survey by reseacher,2023/24

A plot of land or an average residential house (as per the city's standard) costs more than 2,500,000 birr, based on information from respondents and household surveys. However, as the sample in graph 4.8 above demonstrates, the majority of the sub city's citizens make less than 3,000 birr a month, which was insufficient even for their consumption needs. This large gap resulted from the insufficient amount of land available for housing, which drives up the price of purchasing a home. Many were forced to live in rental housing as a result, which was particularly challenging for those with large families.

4.2. Cause and Sources of population Growth in the Sub city

The primary data from the survey of 156 households revealed that 37% of respondents thought that the sub city's high population increase was due to natural growth, 43% to migration, and 17% to the sub city 's peripheral expansion. Concurrently, the participants elucidate that their reasons for migrating to the sub city were as follows: 55% were motivated by job search, 10% by education, 8% by better services, 7% by cultural communication, and 20% by other factors.

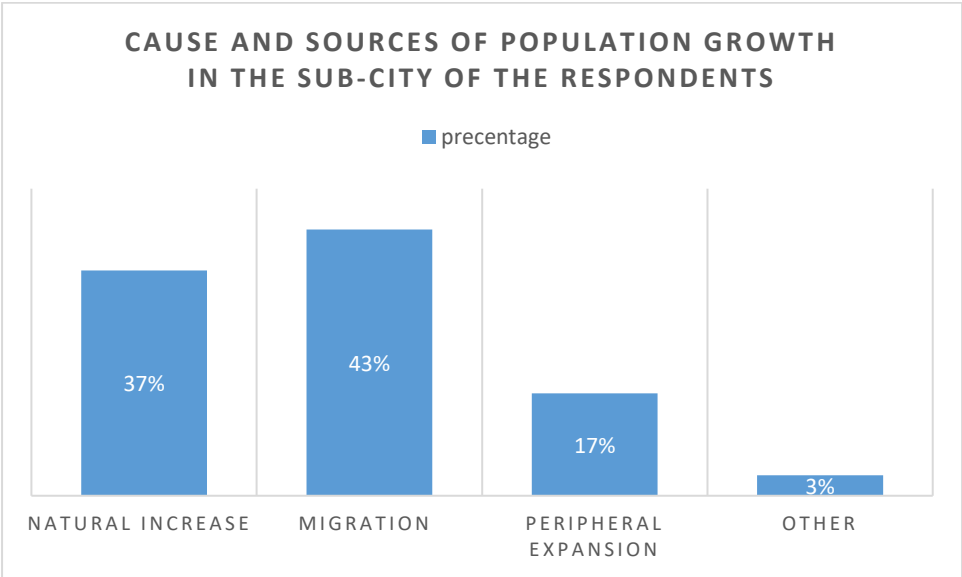


Figure 4. 7 Graphical representation Cause of population Growth of Household respondents

Sources: Sample of house hold survey by reseacher,2024

The sub city was heavily occupied by industries, recreational areas, and tourist attractions, as evidenced by the secondary sub city data profile, which shows that population migrations within the sub city were extremely high. These activities provided the fundamental means of employment

creation for the people who moved from the surrounding rural areas of the weredas and other country side to the sub city. Consequently, the actual data on the migration of people to Sub City showed a monthly increase of approximately 750 men and women who came to Sub City to establish themselves as Bishoftu people.

4.2.1 Rate of population Growth of the sub city

In the sub city, there were 115,164 non-migrants and 55,256 migrants overall in the 2015 census. This suggests that in 2022, the proportion of migrants in the subcity's overall population was roughly 32.4%, but grew to 41.8% in 2022—a rise of 8.4%. But as of right now, 43% of respondents to a household survey were migrants from other parts of the county. It was well recognized that migration was sex selective since sex affected the decision to migrate. Female dominance was prevalent in movements that covered relatively short distances. Between 65 and 56 percent of the migrants were women out of this. As a result, women constituted the majority of those who migrated to the sub city.

4.2.2 The Existing Spatial Expansion of Land Development Practices of the sub city

OUPi's overall structure plan for the city, which was developed in 2015, encompassed 2808.89 hectares. With the 2018 OUPi structure plan revision, the city's total area grew to 3,503 hectares. The area expanded by 694 hectares in 2023–2024. Despite the fact that almost all activity was centered around lakes and along the highway, the sub city has experienced remarkable physical growth of 78.1% in the southwest, east, and northeast. The city's lake area was also bustling with business activity. Numerous business-related activities took place in this area.

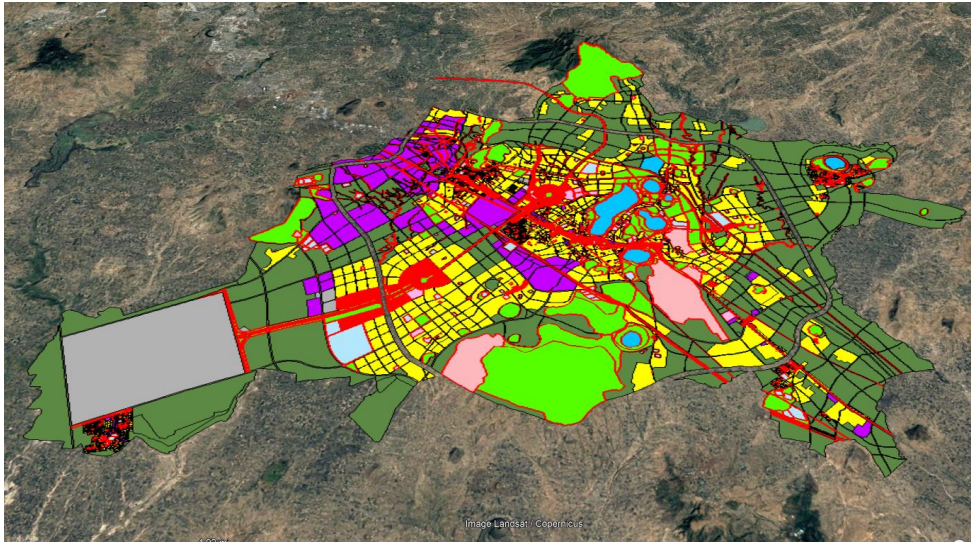


Figure 4. 8 The Existing Land Use of 2023

Sources: *Dibayu sub city computed from 2023 revised structure plan*

The data shown in figure 4.10 above indicates that, without satisfaction with the land development and land management system, land development and physical growth toward agricultural land are increasing dramatically in all land use categories.

The primary data, as illustrated in graph 4.11 below, was collected from 150 suburban households regarding their opinions on city land development and its physical growth.

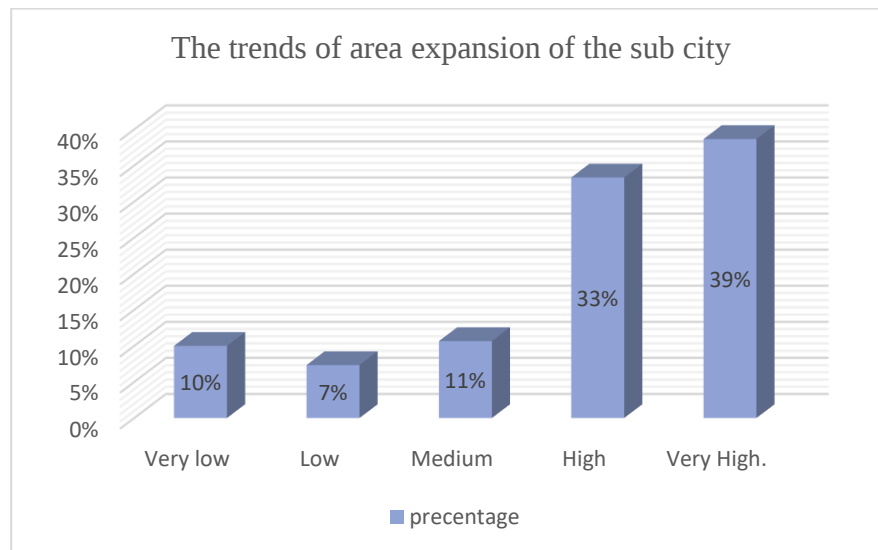


Figure 4. 9 Graphical representation the trends of sub city area expansion HH information

Sources: *Sample of household's survey by reseacher,2023/24*

Eighty-three percent of household respondents agreed that the sub city's medium to very high trends of area expansion were characteristics of peri-urban expansion patterns. This was a novel kind of multifunctional area that alluded to the peri-urban, or peri-urbanization, dynamics. It stood out for having a low population density by urban standards, scattered settlements, a high dependency on transportation, split communities, and little land development and spatial governance.

In the agricultural dominances, peri-urban living and employment may become the most typical lifestyle. Its hallmarks included ostentatious consumption, social displacement, and poverty. In cases where changes in economic, social, and cultural dynamics were observed, the urban or suburban form was physically expanded. The wider region between heavily populated urban cores and rural hinterlands is known as the peri-urban area. reduces land use and population densities The focus of land use has shifted from rural livelihood and agriculture to urban development, mainly as a result of expropriation for the construction of roads and railroads, resale, and inheritance. Due to a lack of affordable housing, there is a localized version of the current migrant culture in urban villages as a result of mass population migration.

4.2.2.1. The Existing Land Development of the sub city

The information collected from 150 homes and 20 offices included professional samples who answered ten questions with closed and open-ended responses. Their responses demonstrated that the sub-city's overall sentiment regarding land development and equity in the systems for providing and delivering land fell between very low and low within a high percentage. This suggested that the sub city 's land developments and guiding system had a flawed implementation process of their own.

According to secondary data sources, the current trend in sub-city land development is defined by linearity brought about by land development activities spreading along the sides of the highways to Addis Ababa/Ziway and centralization of activities and services (monocentric). As a result, there were increased activity levels, particularly on the highway leading from Addis Ababa.

The sub-city's current urban land development pattern might not be able to meet the demands of its rapidly expanding population and influx of investment in the future. As a result, the creation of a single main center should facilitate the decentralization of pulled activities in sub-city land

development. In this sense, decentralization of the workforce and population is brought about by the growth of the road system and transportation.

Table 4. 1 The House Holds Survey evaluation of land related information within the sub city

No	Land facilities	Degree of respondent's agreement					Total
		5	4	3	2	1	
1	The sub-city's land development is directed by its structural plan.	9	5	41	38	57	150
		6.0%	3.3%	27.3%	25.3%	38.0%	
2	Community involvement in the sub-city's land development process	11	12	29	45	53	150
		7.3%	8.0%	19.3%	30.0%	35.3%	
3	Equity in land distribution within a sub-city	3	5	30	36	76	150
		2.0%	3.3%	20.0%	24.0%	50.7%	
4	Fair land development allocation for urban residents	6	9	24	34	77	150
		4.0%	6.0%	16.0%	22.7%	51.3%	
5	Satisfaction on urban land provision	5	7	25	33	80	150
		3.3%	4.7%	16.7%	22.0%	53.3%	
6	Satisfaction on urban land development provision	2	8	31	49	60	150
		1.3%	5.3%	20.7%	32.7%	40.0%	
7	Satisfaction criteria to apply for land investment.	8	12	31	53	46	150
		5.3%	8.0%	20.7%	35.3%	30.7%	
8	The Balances of demand and supply of land in the sub city	6	11	27	54	52	150
		4.0%	7.3%	18.0%	36.0%	34.7%	

9	Satisfaction the compensation payment for property owners whose land is to be expropriated.	1	2	23	29	95	150
		0.7%	1.3%	15.3%	19.3%	63.3%	

[5=V. Good 4= Good 3= Medium 2= Low 1= Very Low

Sources: *Sample of house hold survey by reseacher,2019/20*

Because these subland developments of the centers form commercial strips and accommodate institutional, service, office, industrial, and warehousing functions, they have the potential to alter developments along road sides. As a sector of the sub city, each of the center's subland developments acts as a hub for the top-notch basic services and activities that are provided to the residents of those sub land developments. These centers were anticipated to house a densely populated area along with public and private employment, such as the government and administrative centers, as well as economic activities, offices, businesses, banks, housing centers, and social, cultural, and entertainment services.

Four sub land developments of the centers in various parts of the sub city were therefore essential to accelerating the vibrant growth. This decentralizes economic activity, administration, and the provision of various services that the sub city 's residents require. This sub city was found at peripheral location of Dibayu sub city mainly in expansion area where there was the least population density and infrastructure development due to large area occupancy of farming communities.

4.2.3. The Existing practices of the Land Management System in the sub city

4.2.3.1 Land Administration

A. Land Information System (Cadastre)

In order to make land and housing transactions easier, cadastre systems aid in the registration of land and housing rights as well as the issuance of certificates of tenure. According to an interview with municipality experts, the sub city lacked a cadastre system because of administrative and financial limitations. A cadastre project necessitates a large budget, highly qualified labor, and an ongoing follow-up and updating mechanism. Large landowners in the sub city were consequently not paying their fair share of land taxes, many land and housing transactions occurred without rights

being registered or certificates of tenure being issued, and the landowners themselves experienced a sense of insecurity.

Due to these and other associated issues, the sub city did not receive the benefits it was due and lacked the financial stability to pay for the upkeep of its infrastructure and provision of services to its citizens.

4.2.3.2 Land Registration System

The process of recording information about a land parcel in order to grant ownership rights and facilitate effective land management is known as land registration. The Dibayu sub city administration's current land registration system was ineffective because, according to experts in the land development and management office, there was no effective cadastre system in the sub city due to managerial, financial, and technological constraints. A cadastre project requires highly skilled labor, a sizable budget, as well as a mechanism for ongoing follow-up and updating. As a result, the Bishoftu city only registers the plot with the owner's name; it lacks an adequate and efficient cadastre system that would provide detailed information about the parcel of land.

It was clear that effective cadastral systems were necessary for the efficient management and/or administration of urban land. A cadastre was a formal public document that registered the right of ownership of urban land within a specific sub city boundary. Value, area, a physical description of the landownership, and other details like infrastructure or land use are all included in a cadastre plan. The sub city 's current system for land registration was limited to the fiscal cadastre, which only provided partially fledged information about the property. The sub city experienced issues like poor infrastructure provision and inefficient land development, minimum income of the municipality from land charge/rent, proliferation of squatter settlement, sprawl of the sub city without service, difficulty in providing certificate of ownership, land dispute in the sub city periphery area, illegal hold and transfer of urban land, and underutilization of the potential part of the sub city center due to the poor land registration system and the least amount of total revenue collected than the sub city deserved.

However, a well-functioning land registration system makes it easier to manage border disputes, improve land management for effective use, and enhance the land tax collection system. Consequently, it expedites the sub city 's overall land development while permitting the highest level of transparency.

4.2.3.3 Land Allocation and Management

Candidates must submit an application for land only if they meet the requirements, according to the office's land lease manual. Any applicant for residential land cannot have previously had any land registered in his name and must have lived in the sub city for at least two years. If any of the applicants were couples, then none of them ought to be listed as the owners of any real estate or land. Land was made available in cooperative systems, free hold, land lease, individual applications, or associations of applicants who complied with the requirements.

Different approaches were taken in dividing up the land for investments. A lease system was used to distribute the land when there were many applicants, and the winner was given the land right away. Negotiation was used to distribute land if there was only one applicant and no bidders. If the investment has substantial social and economic benefits, land was provided as part of the negotiation.

Micro and small-scale enterprises had access to land under the short-term lease system. Only land reserved for this purpose may be used for the construction of permanent structures, and easily detachable building materials are required.

The Sub city administration, however, finds it challenging to implement it. This was brought on by a severe lack of available land, as well as by the high cost and financial strain of having to pay previous owners' compensation and provide developers with land by the deadline, according to information from the sub city land development and management office.

Table 4.2 below shows the responses from a sample of the sub city 's homes about how long it took to obtain the land they were investing in.

Table 4. 2 Time Taken to Acquire Land for any Development

TIME	FREQUENCY	PERCENT
At the spot	1	0.7%
In a hour	2	1.3%
In a day	10	6.7%
In a month	30	20.0%
In a year	107	71.3%
and more than		
Total	150	100.0%

Source: sample survey, (20019/20)

According to table 4.2 above, only 28.7% of respondents were waiting less than a month to obtain the land they requested for any kind of investment, compared to the other respondents, who accounted for 71.3%, who were waiting more than a year. This demonstrated the lengthy and cumbersome land allocation system's bureaucratic and illegal services to the residents, which has a detrimental effect on the sub city 's land development. If immediate action is not taken to address the current situation, the lack of a formal land allocation for housing would, on the other hand, undoubtedly lead to an illegal land acquisition to meet the need for housing.

4.2.4.4 Land Valuation

The subcity's land grades differ depending on the amenities and activities that are located there. Due to the concentration of high-value businesses and services in the CBD, this area typically has the highest land value. The sub city administration in the area is required to direct land development by preparing land grades and utilizing the assigned initial lease price for each grade of land for different uses, in accordance with the ONRS sub city plan implementation and land administration proclamations, regulations, and directives.

Despite the fact that the regional government drafted this directive, the land development and management office divides the urban land into four land grades, but the limited land grading system applied for the entirety of the sub city prevents it from being fully implemented in Dibayu sub city. According to the expert in the office interview, the sub city is now divided into two land value classifications (land grading) areas: the central (CBD) area has a higher land value, while the remaining areas are similar in land value.

This suggests that there was an implementation issue, which pointed to poor institutional performance. This, in turn, indicated that land resources were not being used efficiently, which undoubtedly adds to the ineffectiveness of the land management system.

4.2.4.5 Land Delivery System

The lease hold and free hold systems were methods of obtaining land in the official land delivery system. One of the Bishoftu cities in the Oromia national regional state that has been using the formal land delivery lease system since 2015 is Dibayu sub city.

In addition to the issue of squatting and speculation related to the halting of land delivery for residential purposes from 2015 to 2023, the sub city administration provided information that

indicated numerous other issues that added to the inefficiency of the land delivery system in the sub city. Some of these included the prior owners' failure to promptly evacuate their land when it became necessary for public use, inadequate and negligent actions by certain professionals, ignorance of the land resource, and a lack of sufficient funds to pay compensation and deliver the land within the allotted time frame.

4.2.4.6 Land Holding System

As this study's literature section explains, Ethiopia has had a variety of land holding systems under various regimes. The country's current government maintains a system of land ownership through leases.

One of the sub cities in the Oromia National Regional State's zones that was subject to the lease system since 2007 was Dibayu. The urban land development and management office's data revealed that the sub city 's close proximity to Addis Ababa, in contrast to other regions, deterred some investors due to the extremely high initial lease price during the first years.

After 2007, land in the sub city allocated for different uses is managed under the lease system; however, if the allocation is made prior to this date, the land administration system remains in the free hold system, and the property transfer was integrated into the lease system.

4.2.4.7 Land Market in Dibayu sub city

On the urban land market, land rights are transferred in exchange for value. Within the Dibayu subcity, there are still systems of land supply that are both legal and illegal. Although very urban dynamic changes drive the demand for urban land for various urban functions, the government controls the supply of formal land market on a rent basis. On the basis of infrastructure development and economic benefit, Dibayu sub city urban land development and management has separated the urban land into four distinct grades. For instance, the economically vibrant central business district's land is rated as first grade, while the surrounding area is rated as second grade. The land surrounding the center in some selected areas, third grade is taught in certain designated areas, while the fourth grade is poorly accessible and situated near the sub city's edge. Most often, grade one and two land grades are allocated for investment or residential use.

The Oromia Regional State Bureaus of Urban Land Development and Construction determine the land grades and the associated prices based on the specified land grades. The fact that peasants

have occupied the land prevents the government from easily allocating land through formal mechanisms. The sub city 's high rate of urbanization and population growth has increased the amount of inefficient formal urban land supply, leading many people to choose to engage in the unofficial land market. According to data from the household survey, 21% of respondents considered formal land holding systems to be the source of land market activity, while 79% of respondents agreed with the illegal land market.

According to data from the land management and development office of Dibayu sub city, 6,543 of the 9,856 households who applied for residential plots were granted one. The allocation gaps revealed that 3,313 households were present. This shows that just 33.6% of the need is satisfied, indicating insufficient housing supply. Due to the lack of available land and the high demand for housing, many people had to look for other solutions, one of which is squatting. Because of the formation of new households and the demolition of affordable public housing during renewal, this subcity generally has a high demand for housing. Nonetheless, the CSA report indicates that there is overcrowding (measured by the number of people sharing a room, the number of single-room apartments, and the registration rate for cooperatives and condominiums). For example, over 25% of units are typically single rooms.

Ethiopia's Proclamation 574/2007 states that no land development activity can take place in an urban center without first obtaining a development authorization. The building permit (also known as the land development authorization) and legal acquisition of the land are requirements that the urban land administration will make sure are met before any building is constructed. Not only was this permission required for the construction of new buildings, but it was also required for their modification and demolition.

Therefore, based on data from the Land Management and Development office of Dibayu sub city, the estimated number of illegal housing units is over 7,526; this represents nearly 21.8 percent of the sub city's housing stock. The sub-city administration of Dibayu provided the secondary data, which showed that the informal settlers' minimum land holding was 100 m², their medium holding was 200 m², and their large area holding was 500 m². The Oromia regional state's urban land lease law stipulates that a landholder must meet a minimum requirement of 105 square meters of land hold area in order to be considered effective. As can be seen from the data above, 7,526 households were holding land illegally in informal settlements.

The sub city administration of Dibayu thus loses land lease revenue within the minimum standard of land hold system of 105m² *7,526 informal settlement * minimum land lease auction price registered 3,800 Birr/m²/99 years, which results in 3,002,874,000.00 Billion Birr/m²/99 years, meaning the sub city loses 30,332,060.61 Birr per year from land lease revenue. According to this understanding, the sub city 's sustainable land development and management are impacted by the informal settlements, which also pose a challenge to multidisciplinary direction.

The data obtained from the same office indicates that illegal settlements are generally located in the expansion areas and on the outskirts of sub city s, where there are ample amounts of undeveloped farm land.

4.2.4.8 Demand and Supply of Land

Due to its proximity to Addis Ababa and the main urbanization corridor running from Addis to Hawassa, Bishoftu City has seen a significant increase in demand for land for investment or residential use. This caused a large number of people from Addis Ababa and the surrounding rural areas to migrate to the city. This led to a sharp increase in the city's population, which in turn increased the demand for land.

In the Dibayu sub city, there is currently a severe land shortage, despite the sub city 's master plan having just been completed (2018). This issue makes the inefficient land supply a result of the inadequate land management system. Between 2007 and 2010, land was only provided for investment purposes, small and micro businesses, and residents whose property was going to be taken for development purposes. The majority of the sub city 's residents were forced to live in rental housing or squat because this greatly increased the cost of purchasing a residential house, making it unaffordable for them.

4.2.5. Major Factors Contributing for an Inefficient Land Management System

The sub city administration faces various obstacles in carrying out its land management and administration system-related duties and responsibilities, as revealed by the professionals interviewed for the sub city. These constraints have different origins.

The professionals in the land administration office responded that the following were the main causes of the inefficiency and ineffectiveness of the land development and management systems:

- technological limitation

- Formal bureaucracy
- Limitation on Corruption Policy
- Budgetary limitations
- Material issue
- Insufficiently skilled labor

which the first three have a significant impact on the issue at hand, based on interviews conducted with various office experts.

4.2.6. Major Consequences of Inefficient Land Supply Systems

As was previously discussed in this paper, there was an imbalance between the supply and demand for land, an unfair distribution of land due to corruption, and bureaucratic steps and procedures in the land delivery system. As a result, there were several negative effects, such as the growth of slum areas, the squatter settlements, the illegal land market, an increase in the level of corruption, and land speculation.

4.3. Result of Interview from different concern Bodies

4.3.1 The Challenges of Urbanization on Land Development and Management System in Dibayu Sub-city

In order to carry out sustainable land development and management as well as administration, the Dibayu Sub-city's urban land development and management office faced numerous obstacles. The following were the main issues raised during the interview with the concerned officials and office experts.

One of the primary obstacles to urban land development, management, and administration in Dibayu Sub-city was the sub city's persistently high population growth (abnormal growth rate 4.1 - 7.3 %), as evidenced by growth trends. The highest rates of migration between urban and rural areas may be the cause of this. Migration from rural areas in and around the sub city, as well as from other rural areas of the nation, primarily in search of better employment opportunities in the building of homes and industrial activities. Ultimately, the sub city's high land demand and unplanned peri-urban expansion trends are primarily caused by urban-urban migration.

Due to the high cost of land for housing and overall house rent, people were moving to and from these sub cities, which facilitated a high rate of illegal land holding system in the sub city. This

implied the dynamics of peri-urbanization and created a new type of multi-functional territory. Therefore, the contradictory illegal work situation that was carried out in the sub city greatly contributed to the problems with the sub city's land development and management system.

The sub city's second set of difficulties included a cadastre system, land registration, and severe financial constraints in addition to professional ethics and commitment. As a result, the municipality's financial capacity was lower than anticipated due to inefficiencies in tax estimation and collection caused by the lack of a cadastre and inadequate property registration systems. This vicious cycle of inadequate land registration procedures and budgetary limitations made it more difficult to manage urban land effectively, which was essential for the development of sustainable urban areas.

The suburban land market, as discussed above, is thought to have a higher than average number of illegal dwelling units, making management of land development in all its facets challenging. In the sub city, the illegal land markets make up nearly 33.6% of the total housing stock. The sub city administration's practices have resulted in a loss of over 30 million birr from land lease revenue. Furthermore, they have encouraged unplanned land expansion towards rural woreda within the sub city. According to this understanding, the sub city's informal settlements have an impact on sustainable land development and management, outweighing all multidisciplinary direction challenges.

In the sub city, there were many conflicts of interest amongst the various actors. The sub city's master plan must direct land development, and any modifications must be made with participation from the professionals. On the other hand, the sub city's higher authorities made decisions without consulting experts or the general public out of political expediency. The lack of coordination and participation in the decision-making process led to the property owners' reluctance to approve the land development project.

The sub city's growing need and scarcity of land for housing and investment posed another difficulty for land development and management. Finances were insufficient to pay developers' compensation and provide an instant response. There was a problem identifying the true investor and house builder because so many people were considering land as a business.

Another significant issue facing the sub city was a lack of skilled labor to provide appropriate solutions for issues pertaining to land development and management. Assigning the appropriate

professional to the appropriate job position was another issue. Above all, the lack of recorded data, particularly regarding land markets, makes land management and administration challenging, time-consuming, and laborious.

4.3.2. Effects of the Existing Land Development and Management on the Land of the Dibayu Sub-city

The sub city's current, inadequate land management system has had an impact on the subcity's land development as well. The following is a summary of some of the effects that were reported during the office experts' interview.

Due to the long-term inefficiency of the land supply for housing and the rising demand brought on by the subpar land registration system, speculators were able to illegally add the nearby vacant lands to their properties. Due to the current lack of supply and high demand for land, the cost of purchasing land and building a home has increased to the point where most locals cannot afford it.

The office's lack of morally and professionally qualified personnel has had a significant impact on the service delivery system. The above-discussed issue of poor and non-computerized documentation system led to complaints and low satisfaction from clients and respondents regarding the lengthy and bureaucratic nature of the service delivery process. This has a detrimental effect on the process of drawing investment and development on its own. The following are the findings of the suburban office professional interview regarding the impacts of the inadequate land development and management system:

One of the reasons the sub city was unable to pay for the costs of infrastructure and service provision was the inadequate system for tax estimation and collection. As a result, many areas of the sub city lacked internal access roads, street lights, and other utilities.

The people who obtained land through illicit means were being forced to relocate by the current land delivery system, which is primarily used for political purposes. This gave many developers a strong sense of tenure insecurity, which, if corrective action isn't taken, will undoubtedly have a detrimental effect on the sub city's land development.

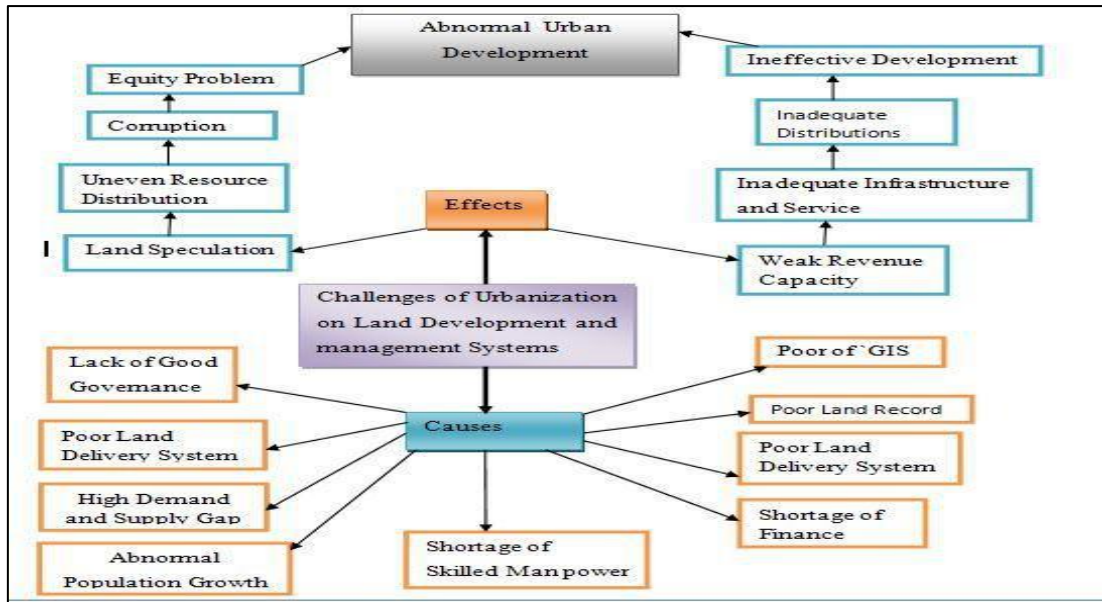


Figure 4. 9 Cause and Effects of the challenges on land development and management systems

Source: Summarized from Research finding

4.4. The Integration and Organizational Capacity Urban Land Management Provision in the Sub city

4.4.1. The Integration on Land Management Systems in the Dibayu Sub city

Senior experts from sectoral offices and the administrator of Dibayu Sub City were interviewed about the sub city's provision of urban land development, organizational capacity, and sector integration. This interview confirms that there was little integration between the various sectors in the urban land development and management office. Similarly, there was very little integration between the land development office, the management office, and the community, especially with the developers.

There were no laws or regulations that bound various sectors, such as the Construction Office, which prepared design permits and weakly regulated their implementation, and Land Development & Administration, which prepared urban land use plans and monitored their implementation regarding land administration in accordance with master plans. The sub city plan's land provision, financing, and community provision, as well as the OIP's overall land planning, monitoring, and project evaluation capabilities, are inadequate for carrying out the

duties and responsibilities associated with urban land planning and provision. due to the organization's lack of decentralization to the sub city's practice areas.

4.4.2. The Organizational Capacity of the Office

The regional Construction and Urban Development Bureau appears to be using the organizational structure of First Grade sub cities of ONRS, despite manpower constraints. The office had very little technical, financial, or human capacity to plan and provide land in accordance with the rate of urban population growth, area expansion, and road network as per the master plan.

The lack of laws and regulations governing various land-related sectors makes the sub city vulnerable to shady urban land provision, poor customer service and standards, shady design permit-based development processes that are tedious, and a lack of consensus regarding urban land development and management systems.

4.5. The Government Responses in Order to Improve Land Development and Management Systems in the sub city.

The sub city's current structure plan was created in 2018, as was indicated in the sections before it. But the master plan doesn't fix anything; there are still issues with correctly implementing it because it doesn't have the flexibility and local development plans that strengthen implementation.

Because land speculation and illegal settlement are closely related to professional ethics and the delivery of land for residential use, the sub city administration is unable to effectively control them. The land administration office claims that tolerance is the only practical course of action, particularly in cases of unlawful land acquisition.

Although the sub city office's mechanism, which permits residents to incorporate vacant land adjacent to their property through legal channels, is thought to lessen illegal land acquisition and speculation, its actual implementation was hampered by a lack of personnel and other issues.

Because land speculation and illegal settlement are closely related to professional ethics and the delivery of land for residential use, the sub city administration is unable to effectively control them. The land administration office claims that tolerance is the only practical course of action, particularly in cases of unlawful land acquisition.

The sub city office's system, which allows neighbors to legally incorporate undeveloped land next to their property, is supposed to reduce illicit land acquisition and speculation, but in practice, staffing shortages and other problems made it difficult to put into practice.

Furthermore, table 4.13 below demonstrated how the prior experts were negligent and compromised when granting the landowners a title deed certificate.

Table 4. 3 Identified problems on the title deed certificate of the land holders

PROBLEM	Woreda of administration									TOTAL	REMARK
	01	02	03	04	05	06	07	08	09		
Sketching	8	107	28	24	0	8	0	0	0	175	
Overlapping	0	20	6	19	0	6	6	0	0	175	
Others	2	10	1	10	0	0	5	4	0	350	
Total	10	137	35	53	0	14	11	4	0	700	

Source: *Dibayu sub city land development and management office, (2023/24)*

The sub city administration's goal this time is to prepare the sub city's cadastre because an autonomous cadastre, when properly implemented, can enhance the efficiency and effectiveness of the sub city's land development and management, ultimately contributing to the city's overall land development.

Though the sub city administration's efforts to address the issues were generally quite limited and some of them were merely planned, their efforts are still encouraged to be made to the fullest extent possible.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The Dibayu sub city's location at the main axis of the urbanization corridor along Addis to Hawassa road and its proximity to Addis Ababa contributed to the sub city's population growing alarmingly at times, largely due to migration seeking employment opportunities. Numerous businesses and industries can be found in the sub city. Most of these migrants were from the surrounding rural areas and Adama, Modjo, Addis Ababa. On the other hand, the sub city currently lacks an efficient, open, and thoroughly documented urban land development and management system as a result of the growing demand for land for investment and housing brought on by population growth.

This section focuses on drawing important conclusions about the administration and urban land development system in the Dibayu sub city using the findings and issues discussed. There is currently a very limited supply of developed land in Dibayu sub city because the majority of land seekers are primarily interested in using it for residential purposes. Due to the mismatch between the supply and demand of urban land caused by the limited land supply, squatter settlement and unplanned settlement have proliferated in the sub city's inner and outer regions. The presence of squatter settlements and unplanned settlements affects the effective use of land and the execution of the city's recently created structural plan. It also has an impact on the administration's budget because compensation is paid rather than allocated to essential projects.

Due to the large acreage of land occupied by land holders for expansions and the lack of available land for housing, there is a growing demand for land in the sub city. This has allowed speculators and squatters to invade the central and peripheral areas of the sub city. Sometimes the issue gets severe because there is a weak mechanism for controlling and regulating land use.

In order to make the best use of the available land, the current land development and management system needs to be revised. High rise buildings are starting to appear, particularly in the sub city's main thoroughfare and in the central business district.

Developers and residents who are investing in the sub city have expressed dissatisfaction with the bureaucratic corruption and drawn-out land allocation procedures; however, the applicants themselves are the real culprits, having created obstacles for urban land management and

development that make it difficult to identify the true issues with residence household housing. This indicates that a lot of people view buying land as a business, leading them to apply for land with fictitious or insufficient justifications.

The Dibayu sub city's urban land management system is unable to keep up with the rate of land development in spite of these circumstances. The sub city's development efforts were occurring randomly and erratically rather than being adequately supported by land management tools. The sub city's inadequate land administration system, in particular, its lack of a cadastre, its incomplete land and property registration system, its inaccurate assessment of land value, and its taxation system, contributed to the sub city's weak financial standing when it should not have.

The lack of a cadastre and inadequate land registration systems lead to a weak tax estimation and collection system, which limits the city's ability to generate revenue. This means that the sub city is forced to rely on grants and subsidies to pay for inadequate infrastructure and service delivery. Investment is discouraged by the subpar land delivery system that houses residents and creates a sense of insecurity of tenure. All of these have an impact on the sub city's development and are the outcome of the ineffective land management system.

5.2 Recommendations

Dibayu sub city in Bishoftu city is a quickly expanding metropolis where numerous land development projects are underway in a variety of industries. However, there are restrictions on land management and administration that support this land development, such as the unequal distribution of land caused by a lack of transparency and disregard for rules and regulations. In order to mitigate and/or resolve these relevant issues and maintain the advancement of the land development and management system, the following recommendations will be raised:

- An effective mechanism for reducing population pressure on the sub city should be in place to support sustainable land development and management systems. This can be achieved by utilizing tools such as an efficient plan and implementation system, a land cadastre system, land registration, land transactions, tax estimation and collection, and so forth.

- Making Dibayu Sub City an efficient and capable sub city in terms of customer service, eliminating all bureaucratic processes and requirements that deter residents, foster a sense of unease, and encourage the illegal use of electronic customer service in offices to hold land.
- In order to ensure tenure security, decisions about land development and management systems should be made after consultation and coordination among the relevant parties and, to the greatest extent feasible, in accordance with the sub city's structure plan.
- It is necessary to perform a socio-economic feasibility study prior to making decisions about changing the use of land. It is preferable for the sub city community to live sustainably and for the effective use of the land.
- Clear and equitable suburban regulatory frameworks should be put in place to manage haphazard land development and to encourage effective land use.
- By removing obstacles to obtaining urban land due to bureaucratic corruption, the subcity administration and other relevant bodies should reduce the shortage of skilled labor in both quantity and quality for effective and efficient mobilizations of land management and administration.
- The location of informal settlements and slums in the sub city should be better under control, with measures based on local land lease laws.
- In order to combat land speculation and redistribute for the urban poor, the subcity administration should handle land banking.
- Because it will impede the development of urban land, the subcity administration should fight against the environment that encourages employees to act unethically.

In conclusion, I would like to suggest that anyone interested in delving deeper into this particular study area utilize it as a starting point for their own research, keeping in mind that it is prepared using the limited data available as a result of various circumstances and reasons that are explained in the section on study limitations.

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Annex

Annex I. Questionnaire

Adama Science and Technology University Questionnaires for Survey

The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub-City.

Dear respondent, I am Adugna Garomsa, a graduate students in the program of Urban Planning and Design. I am conducting research with the topic “*The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub- City*”. Therefore, the information you are going to give will help me to assess the urbanization on urban land development and management system of Dibayu Sub-City and to suggest possible solutions. This questionnaire is prepared for academic purposes.

I hope you provide me with an excellent response for my research questions. If there is any point that needs to be clarified you will contact me through +251922481622.

Thanks for your willingness!

Instruction

Key guide to be followed when responding the questions

- No need writing name
- Make X symbol in the given box.
- Write your opinion on the open space provided in the questions.
- It is possible to encircle more than one if your answer is more than one in the close ended questions.

QUESTIONNAIRES

PART - 1

I. General Information and Characteristics of Households:

General Information of Household

1.	Sex	A. Male	B. Female								
2.	Age	A. 18-30	B. 31- 40	C. 41-50	D. 51-65	E. 65 and above					
3.	Family Size	A. 1	B. 2-3	C. 4-6	D. 7-9	E. 10 and above					
4.	Educational status	A. literate	B. Illiterate	C. Primary	D. Secondary	E. Diploma	F. BA	G. MA and above			
5.	Occupation	A. Professional and technical	B. Administrative and managerial	C. Clerical and related	D. Sale worker	E. Service worker	F. Agri., small scale husbandry and forestry	G. Transport	H. Other		
6.	Marital Status	A. Never	B. Married	C. Separated	D. Divorced	E. Widowed					
7.	Ethnic Composition	A. Oromo	B. Amhara	C. Wolayta	D. Silte	E. Gurage	F. Kembata	G. Hadya	H. Gamo	I. Tigray	J. Others
8.	Religious Composition	A. Orthodox	B. Protestant	C. Catholic	D. Muslim	E. Traditional or Cultural					
9.	Income status	A. < 800	B. 8000 - 3000.	C. 30001 - 5000	E. 5001 - 10,000	F. >10,000					
10.	Monthly expenditure	A. < 100	B. 100 - 1000.	C. 1001 - 3000	E. 3001 - 5,000	F. >5000					
11.	Saving Behavior	A. < 100	B. 100 - 1000	C. 1001 - 3000	E. 3001 - 5,000	F. >5000.					
12.	Previous area of residences	A. Origin		B. Migrants (I. Urban		II. Rural		III. abroad)			
13.	Distribution of In-migrants Reason for Coming to the sub city										
	A. Searching for Job opportunity	B. Education	C. Better service	D. Cultural Attachment	E. Others						

PART - 2

II. Information Regarding to Land Provision, Delivery, Land Development and Management System of Residents

1. How do you observe the trends of population & area expansion of the city?
A. Very low B. Low C. Medium D. High E. Very High.
2. Do you observe high population increase in Dibayu Sub- City? **A. Yes B. No.**
If your answer is **Yes**, by what extent do you measure it?
A. Low B. Medium C. High D. Very high E. Over
3. What do you think for high population increase?
A. Natural increase B. Migration C. peripheral expansion
4. If your answer is migration explain the reason why peoples migrate to this city?
A. Searching Job B. Education C. For better services D. Cultural communication E. Other
5. Does the city have Structure plan? **A. Yes B. No**
6. Is the land development of the city guided according to its Structure plan? **A. Yes B. No**
7. Is there community participation in the structure plan preparation and implementation process of the city? **A. Yes B. No**
8. Is there community participation in the land management process of the city? **A. Yes B. No**
If **Yes**, what is their role? **A. Give idea only B. Opposing the mistake C. Decision**
9. Do the current land use changes comply with the Structure plan of the city? **A. Yes B. No**
10. The City is using guidelines for effective land management process? **A. Yes B. No**
If **No**, why? **A. Lack of awareness B. with full awareness C. corruption**
11. Is there any practice of illegal land delivery system in the city? **A. Yes B. No**
12. Is there informal settlement? **A. Yes B. No**
If **Yes**, what kind of control mechanism do you use? **A. legalization B. Demolition.**
13. What is the land holding system in the sub city? **A. Freehold B. Lease C. Gift D. Heritance**
14. Does the long time take for land delivery in the city? **A. Yes B. No**
If **Yes**, how long it takes? **A. At Spot B. In an hour C. In a day D. In a month E. In a year**
15. Do you pay charge/rent for the land? **A. Yes B. No**
If **Yes**, how many **A. Less than 100-birr B. 100–300-birr C. 301- 600-birr D.601- 1500-birr**
E. 1501- 3000-birr F. 3001–4000-birr G. 5000 birr and above

16. Do you have title deeds? **A. Yes B. No**

If **Yes**, when do you get? **A. before 1983-year B. Between 1983 - 1997-year C. after 1998 Year**,

If **No**, how do get? **A. Informal market B. Free hold C. Cooperative**

17. How do you evaluate land development within the sub city?

No	Land facilities	Degree of respondent's				
		5	4	3	2	1
1	Land Development of the city guided according to its Structure plan					
2	Community participation in the land development process of the city					
3	Land provision fairness with in a city					
4	Equitable Provision of land development for the city dwellers					
5	Satisfaction on urban land provision					
6	Satisfaction on urban land development provision					
7	Satisfaction criteria to apply for land investment.					
8	The Balances of demand and supply of land in the sub city					
9	Satisfaction the compensation payment for property owners whose land is to be expropriated.					

5 = Very Good 4= Good 3= Medium 2= Low 1= Very Low

Annex II

Adama Science and Technology University

Interview

The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub- City.

Dear respondent, I am Adugna Garomsa, graduate students in the program of Urban Planning and Design. I am conducting research with topic “*The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub- City*”. Therefore, the information you are going to give, will help me to assess the urbanization on urban land development and management system of Dibayu Sub-City and to suggest possible solutions. This interview is prepared for academic purpose.

I hope you provide me your excellence response for my research questionnaires. If there is any point needs to be clarified you will contact with me through +251922481622.

Thanks for your willingness!

INTERVIEW QUESTIONS

Interview for Sub city administer Body

1. How do you observe the trends of population and physical growth of the city?
2. Is the Population & physical growth of the city pre-planned expansion?
3. What problems do you observe on land development and management system because of rapid population & physical growth of the city?
4. How do you evaluate the spatial distribution land development and management system in city, do you think that there is an equitable distribution of within land development and provision in a city?
5. How do you see the integration & organizational capacity in urban land development and management, is there binding rules & regulations, if there is no binding rules & regulation what methods the city use to integrate different responsible sectors?
6. Do you believe that the land of the city is sufficient for urban residence to provision, how do you evaluate the lack of land provision on urban residences and delivery? & what socio-economic problems do you observe because of the lack of land provision?
7. What do you suggest on urbanization management & land development and management systems to minimize the challenges of the sub city?

Annex III

Adama Science and Technology University Questionnaires for Survey

The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub-City.

Dear respondent, I am Adugna Garomsa, a graduate students in the program of Urban Planning and Design. I am conducting research with the topic “*The Challenges of Land Development and Management Systems: The Case of Bishoftu City at Dibayu Sub- City*”. Therefore, the information you are going to give will help me to assess the urbanization on urban land development and management system of Dibayu Sub-City and to suggest possible solutions. This questionnaire is prepared for academic purposes. I hope you provide me with an excellent response for my research questions. If there is any point that needs to be clarified you will contact me through +251922481622.

Thanks for your willingness!

Instruction

Key guide to be followed when responding the questions

- No need writing name
- Make X symbol in the given box.
- Write your opinion on the open space provided in the questions.

QUESTIONNAIRES

PART - 1

Questionnaires for Urban Land Development and Management and Related Other Office Professional.

1. How do evaluate influence of population & physical growth on your road infrastructure provision?

_____.
2. Do you observe the land development and management system plan & provision coincide with land use plan standard of the sub city?
_____.
3. How do you observe the land development and management system quality in the sub city?

_____.
4. How do you evaluate the experience of land development and management system provision of the city, do you observe urban land development and management system challenges due to lack of those demand and supply?

_____.
5. How do you evaluate the land delivery system condition of your city, do the sub city has strong commitment on land management?

_____.
6. How do you evaluate the inter & intra sectoral integration on land development and management system, is there binding rule & regulation?

_____.
7. How do you evaluate the contribution of existing land development and management system with land use functionality?

_____.

8. Is there a plan or any attempt made to conduct land registration or cadaster?

—.

9. What are the reasons that enforce you to think about cadastre that will be applied in the exercise of land management in the sub city?

10. What changes do you think will be gained by applying cadastre to the currently land management system?

11. What do you think are the roles of cadastre in the land management system of the sub city?

12. What solutions do you recommend to minimize the problems related to land management in the sub city?

13. Do the Agency create conducive environment for stakeholder participation on land development and management system planning & implementation?

14. What do you suggestion in all challenges on land development and management system in a sub city?

15. How do you evaluate the integration & organizational capacity in urban road infrastructure provision?

No	Integration & Organizational capacity measuring indicators	Respondent agreement
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		3	2	1
1	City institutional capacity in land development and management planning, provision & delivery			
2	Administration and expert commitment to enhance stakeholder integration			
3	Administration and expert skill and knowledge to manage their works			
3	Community/stockholders participation practice in land development and management system.			

3= Adequate 2= Inadequate 1= No response

Formats

FORMATS TO FILL DATA'S

Total Population Size of Dibayu Sub- City, 1984-2023

Years	Total population		Period	Increment rate (%)
	CSA census and estimates	Dibayu Sub- City estimates		
1984				
1994				
2007				
2008				
2013				
2018				
2022				
2023				

Dibayu Sub- City Distribution of Representative Sample Households.

No	Wereda	Formal HH	Informal HH	Total	Proportion	Sample size
1	Hora wereda					
2	Dhaga Bora wereda					
3	Biftu wereda					
4	Dirre wereda					
	Total					

The Sub Land Development area and population density of the cities by administration units in Dibayu Sub- City.

Development area of the Cities	Administration units	Pop ⁿ Size	Area (ha)	Density	Perimeter (m)	CI

Dibayu Sub- City General land use category in 2013 and 2023 years.

No	General Land Use	Land Use Code	2013 year			2023 year		
			Area (m2)	Area (Ha)	%age	Area (m2)	Area (Ha)	%age
1	Residence							
2	Commerce							
3	Service							
4	Green, Open and Recreation							
5	Administration							
6	Industry and Manufacturing,							
7	Transport and Infrastructure							
8	Water Bodies							
9	Vacant & Farm Land							
Total								

Dibayu Sub- City Municipal Expenditure by major Categories, 2023

S.N	Types of Expenditure	Total of Year		% of Total		Remark
		Planned	Performed	Perform	From Total	
1	Salaries & pension					
2	Wage					
3	Publications					
4	Fuel & lubricants					
5	Allowance					
6	Perdiem and office entertainment					
67	Fixed Asset					
8	Maintenance					
9	Service fee					
10	Stationeries					
11	Other recurrent Expenditure					
12	Other Miscellanies Expenditure					
Total						

Dibayu Sub- City Revenue planned and performance of the municipality in the past ten years.

Year	2014	2015	2016	2017	2018
Planned					
Performance					
Gap/Over					
Year	2019	2020	2021	2022	2023
Planned					
Performance					
GAP/OVER					

Balance between Revenue & Expenditure of Dibayu Sub- City.

S.N	Balance Between	Total and Year			Remark
		2013	2022	2023	
1	Revenue				
2	Expenditure				
	Balance				

Required and existing man power of Dibayu Sub- City Land development and management office ,
(2023)

No	Work section/ Department	Existed			Required	Gap	
		professional	Non professional	Total		Number	%
1	Head office						
2	Land Bank and compensation						
3	Land Tenure						
4	Land Reform						
5	Land Transfer.						
6	Land Administration						
7	System Management						
8	Land Evaluation, Inspection on Informal settlement						

9	Land Evaluation, Inspection and auditing						
10	Land Registration						
Total							

Housing Units (HU), House Holds (HH) and House Hold - Housing Unit Ratio (HH: HU) in
Dibayu Sub- City, 2008, 2013, 2018, 2022 and 2023

Year	All Housing Units	Total HHs	HH:HU	Remark
2008				
2013				
2018				
2022				
2023				

Housing Requirement of Dibayu Sub- City

Year	All Housing Units	Total HHs	Additional HHs	Additional HUs
2013				
2018				
2022				
2023				

Identified problems on the title deed certificate of the land holders in Dibayu Sub- City

Problem	Wereda of sub city Administrative									Total	Remark
	01	02	03	04	05	06	07	08	09		
Sketching											
Overlapping											
Others											
Total											