

# Challenges of Urban Housing Provision in Adama City, Ethiopia



Jemal Salih Adem

A Thesis Submitted to the Department of Architecture

School of Civil Engineering and Architecture

Presented in Partial Fulfillment of the Requirement for the Degree of

Master's in Urban Planning and Design

Office of Graduate Studies

Adama Science and Technology University

June, 2024

Adama, Ethiopia

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Advisor: Prof. Samson Kassahun

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## DECLARATION

I hereby declare that this Master Thesis entitled " Challenges of Urban Housing Provision in Adama City, Ethiopia" is my original work. That is, it has not been submitted for the award of any academic degree, diploma, or certificate in any other university. All sources of materials that are used for this Research have been duly acknowledged through citation.

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## **ACKNOWLEDGMENT**

I would like to express my special appreciation and thanks to my advisor, Professor Samson Kassahun, for the continuous support of my master's study and research and his patience, motivation, enthusiasm, and immense knowledge. Besides my advisor, I would like to express my sincerest gratitude to all my course lecturers, the SoCEA, the Architecture Department, and its staff members for encouraging me to pursue my academic goals, creating an inspiring study environment, providing generous support, and for all that you make possible. I appreciate my respondents for their friendship, stimulating discussions, and valuable input.

A special thanks goes to my family my mother Ms. Fatuma Bushira, and my brother Dr. Ahmed Mohammed for their unwavering support throughout my academic journey and their love, understanding, and patience. Mom, words cannot express how grateful I am for everything you have done for me. Your prayer for me has sustained me thus far, and I am truly thankful.

Finally, I would like to express my gratitude to Adama city administration, sub-cities, city land administration official experts & managers in the cooperative for undertaking the study.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

SPSS Statistical Package for Social Science

UN-HABITAT United Nations Human Settlement Program

WHO World Health Organization

UNDP United Nations Development Programme

NPHA Non-Profit Housing Association

UNCHS United Nations Centre for Human Settlements

OECD Organisation for Economic Co-operation and Development

UDHR Universal Declaration of Human Rights

CSA Central Statistical Agency

## ABSTRACT

*Shelter has been a crucial and basic need for human beings since the beginning of civilization. Urban land and houses are in high demand, and demand is growing much faster than official accessibility. Unless significant action is taken, the population resident in settlements will keep growing, endangering the possibility of achieving internationally agreed goals. Therefore, this study aims to assess the housing challenges and demand in Adama City. It explores the factors that limit housing provision and suggests alternative housing options. The research used a descriptive survey method to assess the current housing demand and land provision challenges. Data from 376 sample household members of the housing union applicants was analyzed using descriptive statistics, including percentages, frequencies, and bar graphs. SPSS was used for the data analysis. The findings revealed that the lack of housing supply is a significant challenge for city residents. The average family size of respondents was three, and they faced difficulties in constructing residences due to their low income in comparison to the average house rent. Additionally, majority of residents identified were unable to obtain land for housing for more than five years due to the expensive cost of land for housing and a lack of government attention to providing land. As a result, the majority of residents were forced to rent residential units, however they found dissatisfied with their current rented private houses and similarly with the adequacy of their rented houses. The study found that 88.8% of the respondents found it challenging to find other housing options in the city due to factors such as insufficient open space for housing, inadequate compensation payments, and the inefficiency of local governments in providing solutions. The study recommends that responsible bodies to focus on increasing housing provision through implementing affordable housing programs, evaluating existing land policies, revising compensation payments, and developing innovative strategies to reduce building costs.*

*Keywords: Adama, Housing demand, Housing challenges, Housing Provision, Adequate Houses, Residential houses*

# **CHAPTER ONE**

## **1. INTRODUCTION**

Shelter is the basic needs for human being since the beginning of civilization. Housing has been the main shortage in urban city for so many years and the government have been working to address the housing shortage and to achieve urban sustainable development. However, it's not clear how will the government address the housing shortage, the challenges, and the demand of housing and major factors contribute to the urban housing shortage.

In 2030 the world urban population is projected to grow by 1.5 billion people. by 2030, 60 percent of the global population will live in cities. Over 90 percent of that urban growth will occur in cities and towns of the developing world, mostly in Africa and Asia. (UNDP, 2016)

Urban land and houses are in high demand, and demand is growing much faster than official availability. Unless significant action is taken, the population resident in settlements will keep growing, endangering the possibility of achieving internationally agreed goals. This situation is a direct result of market-oriented policies that have gradually replaced different types of social housing with loan programs in an effort to support private sector participation and individual ownership. (UN HABITAT, 2021)

The higher rate of urbanization growth in Africa has been linked to a number of complex urban issues, including a lack of affordable housing, inadequate and dysfunctional infrastructure and services, waste management, crime and related social issues, traffic and transportation management, and unsustainable physical and economic development. (Jelili, 2012)

The challenges of housing demands have been a topic of concern for many years in Adama city. The city has been growing rapidly in recent years, with new residential and commercial developments popping up all over the city. The researcher is aware of the housing demand and provision challenges facing in Adama city, and is motivated to conduct further investigations and proposes alternatives to overcome these challenges.

### **1.1. Background of the study**

The term "Housing" is determined by the size, shape, and physical attributes of the housing unit itself; the location of the house in relation to accessibility; the social and physical features of the neighborhood environment; and the services and amenities offered within the environment. (AKINYODE et al., 2020)

In addition to being a vital form of shelter, the main goals of conventional housing designs are to provide shelter, maintain, and protect the lives and belongings of the occupants as well as to create a space that is conducive to performing the purposes for which the housing was intended. (Equere et al., 2021) Many individuals around the world still struggle to find suitable housing, despite the efforts of international organizations, national and local governments, the commercial sector, and civil society. The fact that this problem currently affects people in nations with varying degrees of social and economic development may be what makes things different. Improving land market control and administration is essential to improving access to affordable housing, particularly in urban and peri-urban areas where demand exceeds supply and drives inflation spirals. The costs of land can vary significantly depending on its proximity to urban centers, commercial zones, public services, planning, and growth potential. On the other hand, labor, public services, and construction materials tend to be similar in cost all throughout housing projects.(UN HABITAT, 2021)

One of the most common misconceptions about the right to adequate housing is that it entails the construction of houses by Government for the entire population and that those who lack a place to live may just seek land for housing from the government. Even while the majority of governments have some involvement in the building of homes, it is obvious that this does not mean that the government must build all of the houses in a country. (UN HABITAT, 2021)

Because of the continent's fast urbanization, population growth, it is observed that the resilience of cities is threatened by the multiple challenges they confront in supplying the increasing demand for housing brought on by an expanding urban population, especially in developing nations. This is interpreted as a sign that more resilient cities are required, ones that can absorb the shocks caused by population expansion. The ability of a city to respond and adjust to changing circumstances, such as climate change, rapid population growth, and economic vitality, is known as urban resilience.(Equere et al., 2021)

For the first time in 2009 Africa total population were more than one billion people , with 395 million (or over 40%) of them living in cities. More people live in cities in Africa than on any other continent most of that growth is to take place in slums areas. The second edition of the annual research projects that by 2040, there will be one billion people living in cities, and by 2050, there would be 1.23 billion people living in cities, accounting for 60% of all Africans. Up to 70% of all urban population increase in Africa will occur in smaller cities and those with less than half a million residents; these cities will require greater government support in order to keep up with this growth. As a solution its seen land management and housing delivery, upgrading informal housing and efforts to accommodate internally displaced people to be planned as major task.(un-habitat, 2010)

According to Abreham (2007) states that one of the main issues that requires quick attention in Ethiopia is the shortage of housing. Even the majority of Ethiopian homes fall below the standard and lack of adequate space with inadequate drainage, energy, and water supply systems have detrimental impact on the life and health of the occupants.

Similar findings were reported by some study conducted in the city. For instance, (Haji et al., n.d.) found the city's anticipated 5.4% annual population growth rate was higher than the 2.5% annual national average for urban population growth. Ethiopia created the integrated urban housing development program in its main cities to enhance the provision of urban housing and the associated level of poverty. Being the hub for neighboring states and other regional states, Adama City is among the locations where the problems mentioned above are most severe. consequently is crucial to determine the challenges of urban housing provision and its impact on the urban households.

## **1.2 Statement of the Problem**

According to UN-Habitat, 3 billion people roughly 40% of the world population will require access to decent housing by 2030. This translates into a daily demand for 96,000 new units of accessible and affordable housing. In addition, one in four individuals live in situations that are hazardous to their prosperity, safety, or health, and an estimated 100 million people are homeless globally. Urban land and houses are in high demand, and demand is growing much faster than actual availability. If drastic and persistent action is not taken, the population living in settlements will keep growing, threatening the possibility of achieving internationally agreed goals.(UN HABITAT, 2021)

In Ethiopia, numerous efforts have been undertaken to enhance the delivery of land services since the first urban land proclamations, number 80/1993, went into effect in the early 1990s. Land is a common property of the Nations, Nationalities, and Peoples of Ethiopia and may not be sold or exchanged for any other kind of property, according to Ethiopia's constitution, article 40, sub article 3. As stated explicitly in the same article sub article 6, the government was expected to protect private investors' rights to utilize land as long as they adhered to the legitimate payment arrangements. Accordingly As long as the owner of the land use rights complies with the terms of the lease contract, land use rights may be transferred to other parties. Many attempts have been made to regulate the land market through various legislative measures, but the lack of modern management has left the market poorly run and inefficient. The primary providers of developed urban land are local governments, who in most cases are unable to meet the needs of real estate developers, investors, and inhabitants. The majority of the time, there is very little land available with enough infrastructure, and most of it is supplied without main utility service. In addition, the farmers' recompense for land that is reclaimed from them is inadequate in comparison to what they can "sell illegally," which serves as the main source of disagreement in Ethiopia's hinterlands. (Haile, 2022)

Additionally, the quantitative data of Addis Ababa's city shelter situation shows that the city's three main shelter issues are a lack of housing, low-quality housing, and unsuitable living and working conditions. as 92% of the city's residents live in impoverished homes, the situation becomes especially serious for individuals.

Between 1994 and 2004, the average percentage increase in housing stock (2.3%) wasn't in line with the average annual growth rate of the population (3%) during that same time frame. Thus, the housing shortfall will impact 65.7% of the households. Consequently, about 25% of all households reside in overcrowded housing. (Bihon, 2021)

Like other part of Ethiopia urban centers, Adama city also there has been an obvious rise in population densities and urban growth through migration. (Demelash2014) The Housing and Urban Development Office in Adama City has already built 2788 condominium units but It is still debatable, nevertheless, whether the housing units are affordable for the urban poor. But the program of condominium building shortly halted due to it face difficulties as a result of urbanization and population growth, high building material costs, a lack of government housing funding, and urban impoverished people. (Robe Abera Barka, 2020)

While numerous studies in this field have tried to examine the issue from a variety of angles, the extent to which previous studies have investigated the problems in the city has to be elaborated due to this the researcher tried to assess the challenges of existing housing provision and challenges, identify factors that constrains housing provision. Therefore, the study was investigate the existing housing provision and challenges in Adama city.

### **1.3 Objectives**

#### **1.3.1 General Objective**

The main objective of the study is to assess the current demand and the challenges of housing provision in Adama city and suggest recommendations for its improvement.

#### **1.3.2 Specific Objective**

The specific objective of the study is:

- To assess the existing housing demand and provision in Adama city;
- To identify factors that constrains housing provision for urban residents at the city;
- To suggest how to integrate alternative set of housing provision;

## **1.4 Research Question**

1. To what extent does the current housing demand and provisions in Adama city?
2. What are the existing condition factors affecting the housing provision for urban residents in the city and their impacts?
3. How can the city administration land provision for housing be improved through integrating alternatives to increase rate of housing provision?

## **1.5 Significance of the Study**

having access to secure and affordable urban housing ensures a person's health, safety, and well-being. A housing situation also can affect their access to economic, social networks, job, healthcare, education, and other resources, and cultural chances. In order to guarantee that everyone has access to decent housing and to address concerns relating to affordability, quality, and availability, housing policies and initiatives have been devised. housing problem of the low income groups in relations of its supply and affordability are the main factors of housing issues. For those and other reasons, its hoped that the result of the study would contribute towards to expose the potential housing problem, including the negative effects of increased housing demand and obstacles in Adama's housing development and improved planning and management of housing land provision in Adama city and indeed other cities in the country.

In addition, this research finding contains scholarly contributions that help anyone start research on challenges and the demand of housing examination and can be utilized as a reference for future research. It also acts as a guide for the demand assessment planning procedures of many housing authority offices. And also, the study findings was provided helpful recommendations that can assist the local government in proper decision making and help to improve the challenges of affordable housing delivery to the low income groups of the city.

## **1.6 Scope of the Study**

The study scope is limited to Adama City's, with a special focus on the current housing provision problem on Adama city and factors affecting housing provision. This study looks at targeted focuses on examining the government land provision for housing, house provision for organized union especially government and private employed peoples and the current housing provision problems in the city and the key factors that constraints this practice and its impacts or

consequences is assessed. Due to time and budget constraints for further study of all urban problems in the city, this study only determines on housing provision challenges on major selected housing unions from four government and private organizations offices in Adama city. Based on the government direction priority is given to high school teachers, university staffs, health workers, and security office workers. The scope includes developing useful suggestions that designers and urban planners may apply to make urban housing more affordable to users.

## **1.7 Operational Definition**

The degree to which an urban environment is purposefully planned and structured to promote and enable walking as a practical means of transportation is known as pedestrian walkability.

Pedestrian movement modeling is the process of evaluating and foreseeing pedestrian behavior and movement patterns in urban environments via the use of simulation models and computer techniques. In order to better understand and develop pedestrian-friendly urban settings, it helps researchers and planners to simulate and anticipate pedestrian movements (Zhang, J., & Duives, D. C., 2021).

## **1.8 Definition of Key Terms**

Housing Demand is an analysis of the extent of the need for affordable housing in a community. The typical housing need and demand study has three key components: Current Need Analysis; Newly Arising Need (Demand) Analysis; and Supply Analysis. (BCNPHA, 2021)

A housing unit is a single, larger structure that serves as a place for an individual or household to live, eat, and sleep. The unit may be a single unit in a set of rooms or it may be located in any kind of dwelling, including a house, apartment, or mobile home. (Lucas, 2023)

Affordable Housing: The definition of affordable housing varies depending on the situation. In the United States, a home is deemed affordable if the entire cost, including utilities and other costs, is less than thirty percent of the net household income. In the UK, however, 80% of the market price of a home qualifies as affordable housing. According to the UN, affordable housing is defined as having a Price to Income Ratio of 3:1 or less, 4:1 or more, or severely more than that. If a rent to income ratio for tenants is less than thirty percent of their total net household income, they are said to be affordable.(UN HABITAT, 2021)

Housing supply is the amount of homes that are continuously put up for sale or rental, with prices varying. It primarily depends on the quantity of new homes built by the concerned authorities.(HABTE ALEMU GUDETA, 2010)

## **1.9 Structure of the Research**

The preparatory pages, which comprises approval of board of examiners, declaration, acknowledgments, abstracts, table of contents, list of tables and figures, body portions, reference and questioners are included in the supplemental pages. The body of the article is divided in to Five major chapters comprise the organization of the research. With an emphasis on the purpose of the article, Chapter One examines the background of the study and offers a general introduction to the urban housing. It demonstrates the goal of the study. The literature review, which includes a theoretical and empirical analysis of the topic, is covered in the second chapter. The research method, or the study's plan, is covered in the third chapter. This chapter contains parts of the study population, sample technique, data type and source, research design, study approach, and study area description. The methods for data processing, data analysis, and data gathering are the main topics of this chapter.

## **1.10 Limitations of the Study**

The following are some of the difficulties encountered in these research techniques most frequently: The study's limitations include a lack of funding, as well as the inability to find adequate local research for additional references and well-documented evidence in the town municipality and kebele administration. Furthermore, there was a shortage of sufficient secondary data on the town's housing supply issues. However, the lack of sufficient secondary data, time constraints, and financial resources were addressed by making effective and efficient use of the already available resources and through interviewing management officials.

## **CHAPTER TWO**

### **2 LITERATURE REVIEW**

#### **2.1. Introduction**

This chapter covers the literature review that is pertinent to the research problem. It provides more in-depth reports on the existing housing provision and challenges on urban residents, including factors that constrains housing provision, and suggest housing provision alternatives. It also explores previous studies on the topic conducted by various academics and talks about the theories that inform housing demand and provisions.

#### **2.2 Theoretical Review**

The literature related to the study's main terms is presented in this section of the research. It discusses about their definition, the qualities of the concept of housing provision and challenges. To properly use urban housing provision, including study housing demand, challenges, and factors affecting housing provision according to (Urban Street design guidelines 2016). Which improves society's quality of life, the research attempted to review the literature on the subject.

#### **2.3 The Importance of Housing**

Urban housing is a critical component of urban development, and its challenges have been extensively explored in the literature. Scholars have identified various factors contributing to urban housing challenges, including rapid urbanization, population growth, inadequate infrastructure, socio-economic disparities, and ineffective housing policies (Gilbert, 2012); (Glaeser, 2008).

In terms of economic potential, housing affects employers, communities, regional markets, current and prospective employees, as well as individual employees and their families. The benefits of affordable, decent housing and the consequences when it isn't available are primarily felt locally and personally. When a community lacks affordable housing, it frequently lacks housing for the low-income workers who are vital to the community. The region and its jurisdictions must allow developers and builders to create housing that is suitable and affordable for households at every income level in order to guarantee a high quality of life for all households.(NRV, 2021)

Affordable housing, underscored as a basic human need by (UN-Habitat, 2012) significantly impacts welfare, health, and socio-economic prosperity. The World Bank in various years

highlights housing's role in poverty reduction, suggesting that it enhances productivity by creating employment opportunities in construction. Insufficient housing negatively affects society's health, well-being, and the environment, reinforcing the importance of housing development beyond social services to encompass economic investment (UN-Habitat, 2012).

### **2.3.1. Concept and Definition of Housing**

Housing, a concept with varied interpretations, extends beyond mere shelter, encompassing elements such as privacy, location, and environmental amenities (Aribigbola, 2000). The Draft National Housing Policy defines housing as a process involving the provision of residential buildings with adequate infrastructure and services to meet population needs (Policy D. N., 2004). (Barker, 2009) emphasizes housing's essential role, parallel to food, in providing a secure place for human existence. Shelter, whether permanent or makeshift, serves to protect occupants, but housing entails broader aspects such as quality, comfort, and community services (Policy N. H., 2014).

In every nation, housing is a fundamental human necessity that has a significant social and economic impact on people's lives as well as their general well-being. One of the main goals of national policy is to provide appropriate and affordable housing. This goal has gained prominence in international frameworks such as the New Urban Agenda and the 2030 Agenda for Sustainable Development. Presently, in nations that are members of the Organization for Economic Co-operation and Development (OECD), one in three low-income private renters spend more than forty percent of their disposable income on rent expenses alone.(Ana Moreno-Monroy, 2020)

### **2.3.2. Legal Framework of Housing Rights**

**A. International Law:** Urban housing, recognized as a fundamental human necessity, is enshrined as a human right under international law at global, regional, and national levels. The right to housing gained global recognition in 1948 with the adoption of the Universal Declaration of Human Rights (UDHR) as part of international law (Janka, 2007).

The adoption of the UDHR underscored the importance of meeting fundamental human needs as a basic human right. Ethiopia, in line with this human rights declaration, incorporated it into the country's constitution.

One of the primary challenges in urban housing is the mismatch between supply and demand. As cities continue to attract populations seeking economic opportunities, the demand for housing often outstrips supply, leading to soaring property prices and housing shortages (Henderson, 2010). This imbalance exacerbates issues of housing affordability and access, particularly for low-income households (Van Ham, 2018). Moreover, the quality of available housing stock may not meet the needs and preferences of urban residents, leading to issues of overcrowding, inadequate sanitation, and substandard living conditions (Figueroa, 2015).

In addition to supply-demand dynamics, socio-economic factors play a significant role in shaping urban housing challenges. Income inequality and socio-economic segregation often manifest spatially, with marginalized communities disproportionately affected by housing insecurity and homelessness (Desmond M. , 2016). Discriminatory practices in housing markets further exacerbate disparities, limiting housing choices and perpetuating social exclusion (Massey, 1993).

Furthermore, urban housing challenges are intricately linked to broader urban development issues, such as transportation, infrastructure, and environmental sustainability. Inadequate urban planning and infrastructure provision can lead to spatial mismatches between housing, employment centers, and essential services, exacerbating commuting burdens and environmental degradation (Bertaud, 2018). Moreover, the lack of access to affordable housing in well-resourced urban areas often forces low-income residents to reside in peripheral locations with limited access to amenities and public transportation, perpetuating cycles of poverty and social marginalization (Newman, 2006)

Addressing urban housing challenges requires multifaceted strategies that encompass policy interventions, community engagement, and innovative urban planning approaches. Effective housing policies should prioritize affordability, inclusivity, and sustainability, while promoting mixed-income neighborhoods and equitable access to urban amenities. Collaborative efforts involving government agencies, non-profit organizations, and community stakeholders are essential for implementing holistic solutions that address the complex interplay of socio-economic and spatial factors shaping urban housing dynamics.

## **2.4. Empirical literature**

Empirical research on urban housing challenges investigates into various level of the complex issue. Studies examine the interplay between housing affordability, socio-economic factors, and spatial dynamics within urban areas. Through quantitative analyses and qualitative investigations, researchers study patterns of housing segregation, homelessness, and the quality of housing standard. These studies contribute to a deeper understanding of the multifaceted nature of urban housing challenges, housing access, affordability, and quality. By identifying key drivers and consequences of housing insecurity, empirical research informs policymakers and urban planners in developing targeted interventions and policies aimed at fostering more equitable and sustainable urban housing environments.

### **2.4.1. Brief overview of empirical literature on challenges of urban housing**

- **Housing Affordability:** Several empirical studies have focused on the affordability of housing in urban areas. Research often examines the relationship between housing prices, income levels, and socio-economic factors (DiPasquale, 1992). For example, studies use regression analysis to quantify the impact of income inequality on housing affordability indices (Mayer, 2000).
- **Housing Quality:** Empirical studies assess the quality of housing stock in urban areas, focusing on issues such as overcrowding, inadequate sanitation, and housing maintenance (Bhattacharyya, 2015). Researchers use survey data and field observations to evaluate housing conditions and identify areas in need of improvement (Desmond M. &., 2016).

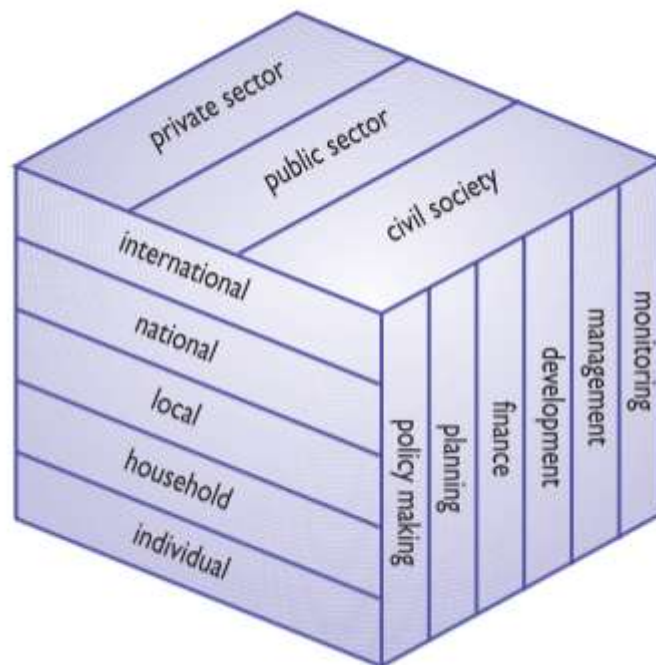
### **2.4.2. Global Approaches to Housing Provision for People**

The world's total built-up area has grown 2.5 times over the last 40 years, while the population has risen 1.8 times. At the same time, physical urban space is rising faster than the population. Lower land prices on the metropolitan periphery contribute to sprawl, but it also forces urban people to travel farther, at higher personal and environmental cost.(Ana Moreno-Monroy, 2020)

The majority of people on our planet are living in cities. Although most people in industrialized nations currently live in cities, the process of urbanization is still very much in progress in developing nations. Currently, 40% of people in developing nations live in urban areas. Nowadays, developing country cities account for 75% of the world's population increase, leading to

hypergrowth in the cities least able to support it. The average yearly population growth in developing country cities over the last ten years is predicted to be 64 million, or 175,000 people every day. Within these cities, natural population growth accounts for half of this rise.(UNCHS, 2001)

Pic 1.1. As a summary of the interactions between various socioeconomic sectors on a variety of topics at various scales it shows how stakeholders from the public and business sectors, as well as civil society at large, can contribute to pertinent solutions for those pressing issues related to human settlement. Primarily, these issues revolve around the swift expansion of urban poverty and polarization. These trends provide more challenges than governments can handle. They necessitate forming alliances with both civil society and the commercial sector.(UNCHS, 2001)



*Figure 1.1 interactions between various socioeconomic sectors*

*(Source: by UNCHS, 2001)*

Africa's population increased by 2.53 percent per year on average between 1950 and 2015, a dramatic increase over the previous several decades. It is anticipated that throughout the next forty years, this tremendous increase will continue. Africa will have 2.44 billion people living there in 2050, up from 1.18 billion in 2015, according to the most recent estimates. The rate of rural

migration to urban regions is concerning, notwithstanding the fact that 60% of Africans live in rural areas. With an average of 3.5 percent, the rate of urbanization between 2000 and 2015 was the highest in the world.(Bah et al., 2018)

### **2.4.3. Urban Housing Challenge in Ethiopia**

In Ethiopia, urban housing presents a multitude of challenges stemming from rapid urbanization, inadequate infrastructure, socio-economic disparities, and ineffective housing policies. The country has experienced significant urban growth in recent decades, with a high influx of rural migrants seeking better economic opportunities in urban centers such as Addis Ababa, Dire Dawa, and regional capitals. However, this rapid urbanization has outpaced the government's ability to provide adequate housing, leading to a severe shortage of affordable and quality housing units (Yemeru, 2018).

One of the primary challenges is the mismatch between housing supply and demand, resulting in rising property prices and rental costs. The majority of urban residents, particularly low and middle-income households, struggle to afford decent housing due to limited formal housing options and escalating land prices (Yilma, 2020). Informal settlements, characterized by substandard housing conditions and inadequate access to basic services such as water, sanitation, and electricity, have proliferated on the outskirts of cities, exacerbating issues of housing insecurity and urban poverty (Tesema, 2021).

Furthermore, Ethiopia faces significant challenges in terms of housing policy and governance. While the government has implemented various housing programs and initiatives aimed at addressing the housing deficit, including the Integrated Housing Development Program and the Condominium Housing Program, these efforts have been hindered by issues of corruption, inefficiency, and lack of transparency (Berhanu, 2019). Additionally, land tenure insecurity and unclear property rights complicate the formalization of informal settlements and hinder investment in affordable housing development (Abera, 2017).

In response to these challenges, there is a growing recognition of the need for holistic and sustainable approaches to urban housing development in Ethiopia. Efforts to improve land governance, streamline regulatory frameworks, and promote public-private partnerships are essential for increasing housing affordability, accessibility, and quality. Moreover, there is a need

for targeted interventions to upgrade informal settlements, enhance access to basic services, and empower marginalized urban communities through participatory planning and decision-making processes (Tafere, 2019).

#### **2.4.4. Ethiopian Urban Housing Strategies**

The Ethiopian government has introduced various urban housing initiatives to meet the country's housing needs. As urban population growth continues, affordable urban housing becomes scarcer, particularly in Addis Ababa.

Due to the backlog in urban housing demands, the urban housing situation is worsening. The government has implemented a comprehensive approach to urban housing development, including land availability and construction assistance. Policies and strategies such as 10/90, 20/80, 40/60, cooperatives, and private real estate developments are employed to address urban housing challenges.

#### **2.4.5. Government-Coordinated Urban Housing Construction**

The Ethiopian government is actively engaged in various initiatives to make urban housing more accessible, particularly to low and middle-income earners, aiming to bridge the gap between housing supply and demand in metropolitan areas. Affordable urban housing remains a key concern for the government. Urban housing programs primarily benefit low and middle-income urban dwellers and are implemented through various mechanisms.

Special considerations are given to specific groups, such as female subscribers, government employees, and individuals with disabilities, in urban housing allocation programs. These initiatives aim to ensure equitable access to urban housing and address the diverse needs of urban residents.

#### **2.4.6. Low-Income Urban Housing Program (10/90)**

The government is implementing a low-income urban housing program targeting residents with a monthly income of 1200 birr or less. This program facilitates savings of between 10% and 90% through government assistance, providing land, infrastructure, and other benefits to low-income urban residents. Special provisions prioritize women and individuals with disabilities in housing allocations.

#### **2.4.7. Condominium Urban Housing Program (20/80)**

The condominium urban housing program, particularly the 20/80 scheme, is widely utilized in Addis Ababa to address the increasing demand for housing. This program encourages saving by urban residents, offering a 20% down payment with an 80% bank loan. The government provides land, infrastructure, and other support, significantly reducing urban housing demand.

#### **2.4.8. Saving Urban Housing Program (40/60)**

The 40/60 saving condominium urban housing program aims to stimulate saving among middle-income urban dwellers, improving urban housing availability and promoting a culture of saving. Beneficiaries are required to save 40% of the housing cost over five years, with the remaining 60% financed by commercial banks. The government's contribution includes land allocation and limited infrastructure support.

#### **2.4.9. Cooperative Urban Housing (100/0)**

Cooperative urban housing initiatives play a crucial role in urban housing provision, although challenges exist in implementation and accountability. Cooperative schemes involve individual members contributing to the initial costs, particularly for middle-income and higher-income groups.

#### **2.4.10. New Urban Housing Cooperatives**

Cooperatives dedicated to urban housing have been established within workplaces or institutions. Another approach to the urban housing program involves targeting individuals employed in various institutions and businesses who can save money through salary-saving methods. Employees in each institution who aspire to own a home are required to organize within the workplace based on their preferences for urban housing types. Urban housing cooperatives organized by institutions must save the entire (100%) cost of the house in advance, with 50% saved initially and the remaining 50% after acquiring a building permit. Depending on the preferences of housing developers, urban housing development can be initiated upon the request of urban house owners.

#### **2.4.11. Residential Area-based Urban Housing Cooperatives**

Self-employed individuals have the opportunity to own property through the Residential Area-based Urban Housing initiative. Residents, based on their familiarity with or acquisition of existing areas and their earning capacity, form housing cooperatives. The woreda administration leads the organizational tasks and procedures. Cooperative members are required to save the entire cost of

the urban house in advance, with 50% saved at the time of organization and the remaining 50% upon receiving building permission. The construction process is determined by the interests of cooperative members.

#### **2.4.12. Existing Urban Housing Cooperatives**

Over several years, existing urban housing cooperatives have been saving funds to become homeowners or property owners. This initiative involves saving 50% for site acquisition in advance and 50% for building permits. It is anticipated that this approach will significantly alleviate urban housing challenges. The structure and implementation are determined by the preferences of cooperative members.

#### **2.4.13. Urban housing challenge in Adama City**

One of the primary challenges in Adama city is the shortage of affordable and quality housing units. The demand for housing far exceeds the available supply, resulting in soaring property prices and rental costs (Belayneh, 2016). Many residents, particularly low-income households, struggle to find suitable accommodation within their means, leading to overcrowding and informal settlements on the outskirts of the City (Dawit, 2019).

Infrastructure deficiencies also contribute to urban housing challenges in Adama. Basic services such as water supply, sanitation, and electricity are inadequate in many parts of the city, particularly in informal settlements, exacerbating issues of housing insecurity and health hazards (Fikru, 2018). Poorly planned urban development and inadequate infrastructure provision further strain the City's housing sector and hinder efforts to improve living conditions for residents.

Additionally, there are challenges related to housing policy and governance in Adama. The absence of clear regulatory frameworks and land use planning strategies complicates efforts to address housing needs and ensure sustainable urban development (Tefera, 2017). Informal land tenure systems and unclear property rights also hinder investment in housing development and contribute to land disputes and conflicts among residents (Muluneh, 2020).

even though national and local housing policies have not yet been developed. The city housing approach is based on the free market economic principles that were established in 1991 and which foster an environment that makes it easier for the private sector, in particular real estate developers, to get engaged in housing development. (ABDISSA ERKO ROGGE, 2022)

To address urban housing challenges in Adama City, concerted efforts are needed from government authorities, urban planners, and community stakeholders. Initiatives to increase the supply of affordable housing, improve access to basic services, and upgrade informal settlements are essential for addressing housing insecurity and promoting inclusive urban development (Megersa, 2018). Strengthening land governance, enhancing regulatory frameworks, and promoting community participation in urban planning processes can also contribute to overcoming housing challenges and creating more resilient and livable communities in Adama.

## 2.5. Summary of literature review

*Table 2.1: Literature Review International*

| Title of the paper                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (UNCHS, 2001)City in a global world                                             | This study examines how The majority of people on the planet are living in cities. Although the majority of people in developed nations currently live in cities, the process of urbanization is very severe in emerging nations. In developing nations, 40% of people currently reside in urban areas. That percentage will have increased to 52% by 2020. The percentage of people who live in cities is already 75% in Latin America and the Caribbean, compared to only one-third in Africa and Asia. |
| (Virginia Center for Housing Research, 2021) NRV Regional + Local Housing Study | the focus of the report is concerned with affordable housing, the study implies that the lack of affordable options and excessive housing costs may be a barrier to economic growth. In addition households may find it difficult to pay for housing in addition to other needs like healthcare, education, and transportation since housing costs account for more than 30% of household income.                                                                                                         |

|                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(UN HABITAT, 2021)The Right to Adequate Housing</p>                                                                                                   | <p>The goal of the UN-HABITAT stressed all States have been impacted by the right to adequate housing because they have all approved at least one international treaty pertaining to the subject and made a commitment to adhering to it through international declarations, action plans, or conference outcome documents.</p>                                                                                                                                   |
| <p>(Aribigbola, 2011)Housing Affordability as a Factor in the Creation of Sustainable Environment in Developing World: The Example of Akure, Nigeria</p> | <p>Similarly in africa countries there alarming issue of housing challenges as this study focuses through private sector initiative and government support and cooperation, the 2002 National Housing Policy aimed to guarantee that all Nigerians owned or had access to quality, safe, and sanitary housing accommodations at an affordable cost with secure tenure. Issues with housing, specifically scarcity and cost, continue to exist.</p>                |
| <p>(Ana Moreno-Monroy, 2020)Housing policies for sustainable and inclusive cities</p>                                                                    | <p>Over half of the world's population currently lives in urban areas, and by 2050, that number is predicted to rise to 6.7 billion, or over 70% of the total population.</p> <p>In most cities across the world, there is a greater demand for housing than there is supply, which drives up home and rental costs. Currently, more than 40% of the disposable income of one in three low-income private renters worldwide is spent on rental expenses only.</p> |

Table 2.2 Literature Review Local

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Krems, 2017) Social Inclusion and Energy Management for Informal Urban Settlements Housing in Ethiopia          | This study aims to characterize the current housing conditions as it states that Ethiopia's current housing situation is a result of a number of factors, including: <ul style="list-style-type: none"> <li>• Poverty due to the high cost of conventional building materials;</li> <li>• Development history (urbanization trend);</li> <li>• Construction permit guidelines;</li> <li>• Master plans' designated areas for renewal; and</li> <li>• Tenure.</li> </ul> |
| (Bihon, 2021) Housing for the poor in Addis Ababa, Ethiopia                                                      | The quantitative data from the investigation of Addis Ababa's shelter situation shows that the city's three main shelter issues are a lack of housing, low-quality housing, and poor living and working conditions. Since 92% of the city's residents live in impoverished homes, the issue is particularly serious for them.                                                                                                                                           |
| (ABDISSA ERKO ROGGE, 2022) Assessment of Urban Housing Development Projects practices: The Case of in Adama city | The city housing approach is based on the free market economic principles that were established in 1991 and which foster an environment that makes it easier for the private sector, in particular real estate developers, to get engaged in housing development.                                                                                                                                                                                                       |

Source: Own computation 2024

## 2.6. Research Gap

Most of the research papers focused on the shortage affordable and quality housing units, Infrastructure deficiencies also contribute to urban housing challenges. Basic services such as water supply, sanitation, and electricity are inadequate in many parts of the city, particularly in informal settlements, exacerbating issues of housing insecurity and health hazards (Fikru, 2018). In the context of Adama City, Ethiopia, research gaps persist in understanding the impacts of rapid urbanization on housing dynamics, particularly regarding the effectiveness of existing housing policies and programs in addressing housing challenges. Furthermore, there is a need for empirical studies examining the extent and effectiveness of community participation in urban planning

initiatives, as well as the long-term sustainability and resilience of housing solutions. Bridging these research gaps through interdisciplinary approaches that integrate qualitative and quantitative methodologies could provide valuable insights for urban planning and policy-making, ultimately contributing to the creation of more inclusive, resilient, and sustainable urban housing environments in Adama City. Therefore from this knowledge gaps this research study seeks to assess the housing challenges of the proposed city, existed situation and management practices within the city administration including the gap in this paper.

## **2.7. Conceptual Framework for Housing Demand and Challenges**

The conceptual framework that follows attempts to provide an overview of the topics covered in the literature review thus far, as well as to illustrate the challenges that are related to housing demand and provisions projects and how different factors are related to one another.

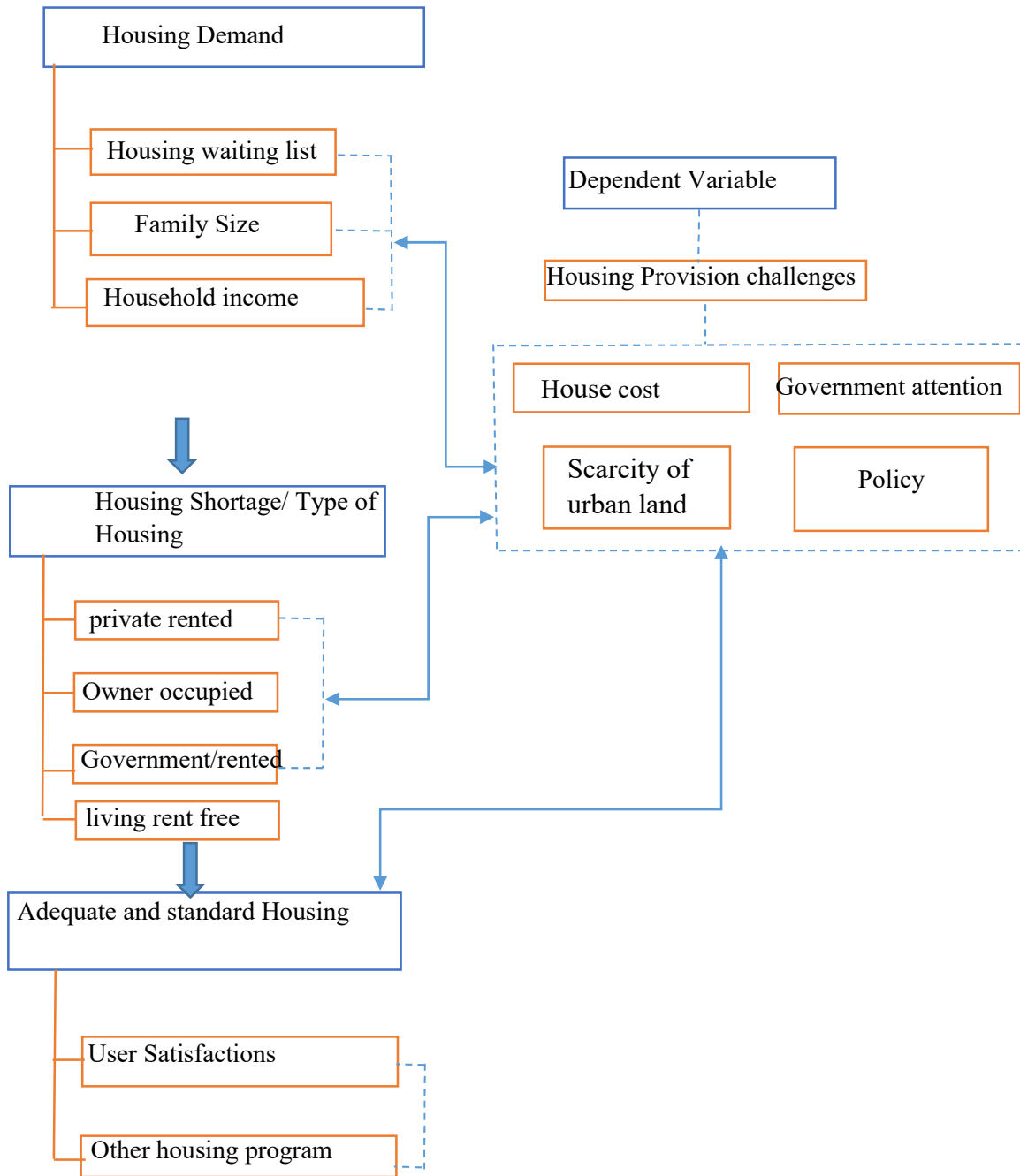


Figure 2.2 Conceptual Framework for housing demand and provisions Analysis

(Source: by own author, 2024)

## CHAPTER THREE

### 3. RESEARCH METHODS

#### 3.1 Description of the Study Area

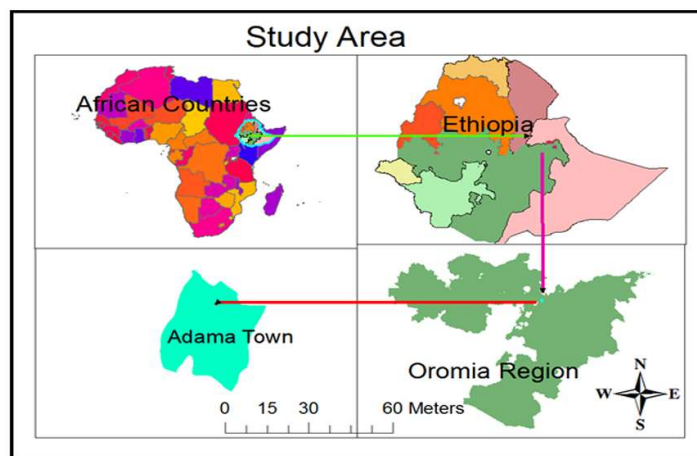
##### 3.1.1 Location of the study area

The city of Adama is located in the Oromia region in central Ethiopia, about 100 kilometers southeast of the country's capital, Addis Ababa. Adama serves as the East Shewa Zone's administrative base and is an important point for regional trade and transportation. Adama is elevated, at a rough elevation of 1,713 meters (5,620 feet) above sea level.

Adama City is economically connected to numerous regions and localities. It was initially established as a hub for transportation along the railway connecting Addis Ababa and Djibouti. Supply from agriculture, manufacturing, and commerce all move through the port of Djibouti.

The estimated total population, as of the 2015 Census, is 324,000. The two main pillars of Adama's economy were the port transportation infrastructure between Eth and Djibouti and hospitality.

The tourism industry and Ethiopian-Djiboutian transit are becoming more and more important to Adama's economy. Numerous conferences from Addis Ababa and other parts of the country are held at the town. Adama is becoming into a more rural city despite its recent tremendous growth, and it has a lot more industrial zones than neighboring cities.



*Figure 3.1 Location Map of the study area*

*(Source: produced by Siraj & Golla, Journal of Civil Engineering Research 2020)*

### 3.1.2 Physical environment

#### Climate

Adama features a distinct wet and dry season due to its tropical savanna climate. June to September is the hot and rainy season; October to May is the drier season. Adama's average yearly temperature is approximately 18.5°C (65.3°F), with typical monthly highs and lows of 25–27°C (77–80°F) and 11–15°C (52–60°F), respectively. Acacia trees scattered here and there and mixed savanna grasslands make up the majority of Adama's natural vegetation.



*Figure 43.2 Adama city Temperatures  
(Source: produced by national metrology agency)*

#### Topography

Adama's topography is largely level with some minor slopes. Plains make up the majority of the environment, with occasional hills and mountains in the surrounding areas. The Ethiopian Highlands, which are a component of the Great Rift Valley system, climb up in the west. The vast area of Adama is around 29.86 square kilometers or 11.53 square miles. Around 1,712 meters (5,617 feet) are Adama's elevation above sea level. Adama is located next to the Awash River, which supplies vital water resources for both human consumption and agriculture.

### 3.1.3 Socioeconomic conditions

#### Administrative condition

Adama is an important administrative hub and the capital of the East Shewa Zone. It contains six administrative centers for sub-cities, each with a sub-kebele or woreda. The administration of Adama includes managing issues about infrastructure development, public utility management, public service delivery, and urban planning. The Adama City Administration, which is in charge of the general management and policy direction of the city, has jurisdiction over it.

#### Economic activity

Adama's economy is mostly centered on trade and industry, and it is a significant hub for transportation and trade. Recent years have seen a large investment in infrastructure, notably the construction of the Eth-Djibouti Railway, which runs through the city and increases its economic significance and connectivity within Ethiopia.

Agriculture, manufacturing, trade and commerce, and the service (hospitality) sector are the main drivers of Adama's economic activity. Its advantageous position and proximity to Addis Ababa bolster its possibilities for economic growth and development.

#### Population

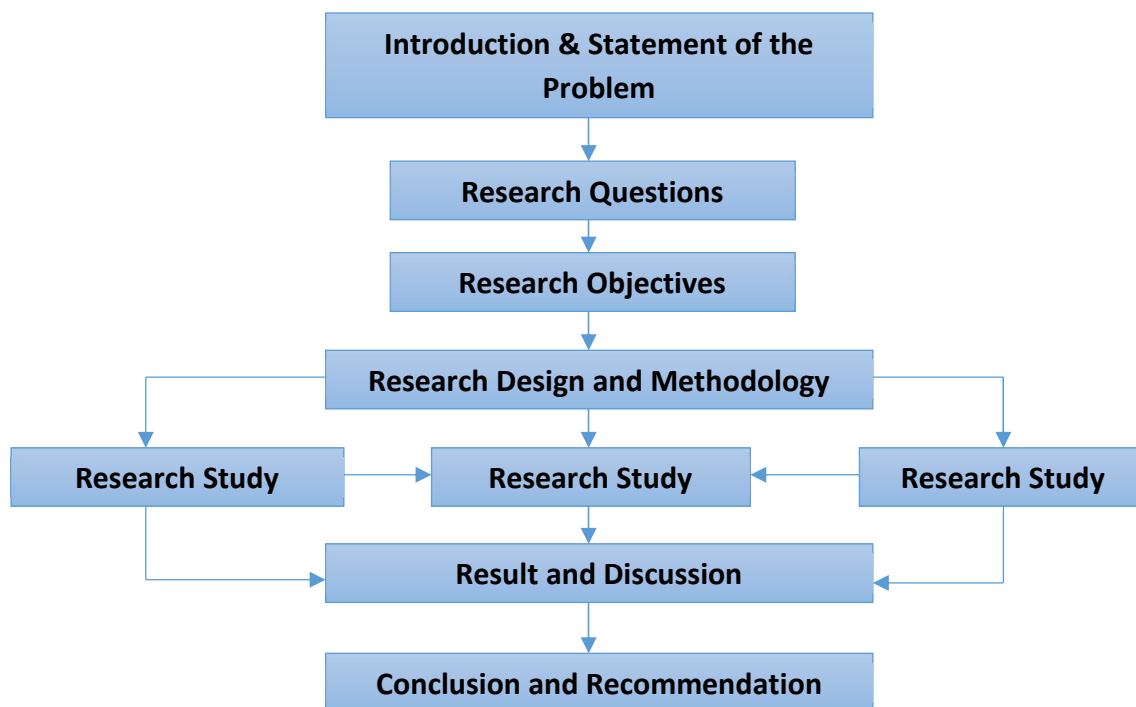
As per the 2015 census, Adama has a population of between 300,000 to 400,000, making it one of the most populated cities in the nation. The city is a significant hub for industry, transportation, and trade.

Adama, Ethiopia has a population density of about 220,000 persons per square mile, according to the 2007 census. Adama occupies an area of approximately 29.86 square kilometers. The population density would be roughly 7,366 persons per square kilometer based on these facts.

## 3.2 Research Methods

### 3.2.1 Approach and Research Design

In order to achieve the objectives of the study, the research has been focused on a mixed research approach both quantitative and qualitative research methods has been used in this investigation to assess the challenges of Urban Housing Development Projects in Adama city. Open and close-ended questionnaires utilized to gather data on the topic. Secondary data gathered from a variety of sources including books, research papers, articles, journals, and websites. These methods were chosen to ensure that enough information is collected for the study. Aswell as an empirical, methodical study that uses numerical data to evaluate phenomena, test theories, and identify patterns or relationships is known as quantitative research. To measure connections, quantify variables, and extend results to a broader population. Exploratory in nature, qualitative research makes use of words, narratives, and meanings in addition to non-numerical data collection and analysis to attempt to understand and interpret social phenomena. By combining information from several sources, it aims to offer improved comprehension.



*Figure 3.1 Organizational Structure of the Study  
(Source: by own author, 2024)*

### **3.3 Data type and source**

the researcher has been used both primary and secondary data sources; such as Open-ended and closed-ended questionnaires will be used to gather the primary data. The researcher used the information gathered from the employee interview in addition to other sources. For example, survey data has been obtained by distributing formal questionnaire papers for members of the registered housing unions to obtain information about their housing challenges. The necessary data for each objective of the study are categorized as follows: For the first objective, information on housing demand and provision is needed. The second objective requires factors affecting housing provisions, their current housing conditions, the Third objective relies on data related to assess if there other options for housing solutions.

#### **3.3.1. The primary source of data**

The primary data are gathered through a questionnaire survey and an interview. Private and government employees and key informants completed the survey in the research areas. Interviews have been conducted by the researcher with important professionals who have been in charge of housing provisions and land administrations. These people include planners and designers in the field of urban planning and design, architects, engineers, and related fields.

#### **3.3.2. The secondary source of data**

The collection of secondary data Population data, number of registered housing unions and waiting list data from the Adama municipality data which are counted and surveyed at a particular period has been collect from the Adama municipality. These has been used as input for housing demand and provision.

### **3.4 Sampling technique**

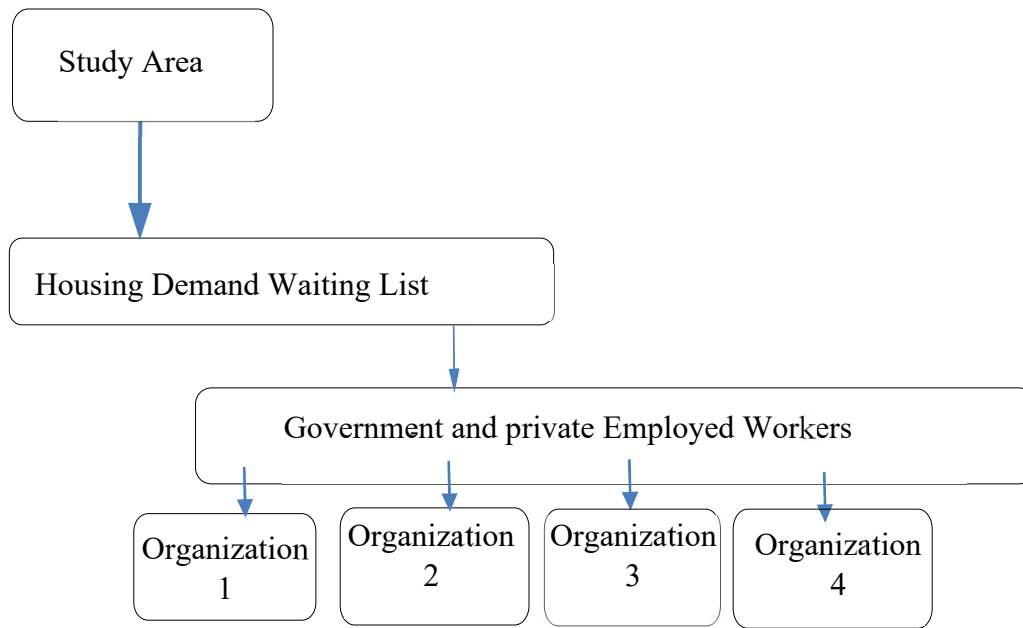
Stratified random sampling techniques has been used to get the sample size. This technique has been used by dividing the population into geographical locations, or strata. It involves random selection from each stratum (four organization) proportionately, allowing the researcher to make strong statistical inferences about the whole group. Taking a sample from a sample frame of Residents, and Urban Planners and Designers (UPD) to gain relevant data.

For the ease of the research study, several sample techniques have been selected, each with a separate explanation. Data from the household survey and the census has been used to calculate the population of the housing waiting list. Its become difficult to find the exact number of waiting list from each organizations but it has been identify the majority of the waiting list union is from university staffs, high school teachers, health workers, and security workers. The study's representative target the waiting list union members of the hole adama city. The study has been concentrated on people who registered to get land for housing. Residents: The study were taken into account the viewpoints of locals who reside in neighborhoods with various housing conditions and challenges. Their judgments of housing condition and experiences with it can offer important insights into how housing conditions affects household living condition.

### **3.5 Sample Size**

The sample sizes depend on the actors in the housing industry and the following are proposed. To maximize the effectiveness of the study, a random sampling makes sure that the sample includes representatives from every segment of the community. Additionally, it facilitates urban housing construction projects and could increase the accuracy of population-wide characteristic estimates (Kothari, 2004). Equation (i) provided the sample formula at a 95% confidence range and a 5% significance level. The population to be sampled is known.<sup>377</sup> accuracy

To get representative targets, a stratified random sampling technique has been employed. The stratification process used in the study area is depicted in the following diagram.



*Figure 3.3 Sample Determination of Representative Target by Stratifying Study group*

*(Source: by own author, 2024)*

The sample size determination for stratified sampling an ideal sample is one that meets the standards for effectiveness, representativeness, was utilized to select samples from four private and government organization in each stratum or organization using the subsequent formula.

The researcher's goal is to obtain 376 representative samples from the target populations of housing demand waiting list. This equates to a total of 376 sample sizes from an 20,000 population that represents each organization.

Slovin's formula

$n$  = sample size

$N$  = population size

$e$  = Margin of Error

*if there is no margin error, then use 5%*

$$n = \frac{N}{1 + Ne^2} \quad n = \frac{N}{1 + N(e)^2}$$

Finally, the sample size of=376 to be divided equally for each target group since population not estimated.

In this case, the researcher wishes to collect a total of 376 representative samples from all target group in the given four organizations workers who applied for housing land, which includes university staffs, high school teachers, health workers, and security workers. This figure was probably be selected by the researcher using their best judgment, taking into account the size of the population, the availability of resources, and the desired degree of precision for the study.

### **3.5.1 Method of data collection**

The researcher used both primary and secondary data sources to gather information for the study on the Assessment of Urban Housing demand, challenges and factors: The Case of in Adama city. Open-ended and closed-ended questionnaires used to gather the primary data required for the study from stakeholders. In order to improve the clarity of the questions for the study, the researcher distributed questionnaires to the target demographic as a pilot test of the research instrument prior to delivering the questionnaires to the respondents. The researcher utilized the information gathered from the employee interview in addition to other sources. The suggested method and procedures have been followed for the primary data source collection to reduce questions.

Secondary data, including as housing demand and provision data of the municipality. The researcher was chosen the housing unions of the city from different private and government organizations as it is documented in the municipality.

### **3.5.2 Method of Data Analysis and Presentation**

To achieve the aim of the study, the following mixed data analysis techniques were applied:

The statistical package for social sciences (SPSS) is a software tool that will be used to examine the data obtained from the respondents. After being coded and consistency confirmed, the data gathered from the survey questionnaire will be imported into SPSS. The data analyzed using descriptive statistics analysis techniques, and the results presented using frequencies, percentages, means, and standard deviations. Correlation analysis utilized to illustrate the relationship between the supply and demand for a number of urban housing development projects in order to support the descriptive statistics.

The collected data examined using a quantitative kind of explanatory analysis. In the study, both descriptive methods would be used. The researcher can provide the data in a statistical format and summarize it with the aid of descriptive statistics. The statistical package for social sciences (SPSS) Version 27 is used to examine quantitative data surveys obtained from questionnaires. In the meantime, a quantitative data set is used to cross-check the validity and reliability of in-depth interview analysis employing description and narrative. Tables, charts, and figures are used to portray the data that have been collected and processed from primary and secondary sources. Correlation analysis will be utilized to provide the relationship between various project demand and supply practices in order to strengthen the descriptive statistics.

Furthermore, the researchers used predictive statistics to aid in the recognition of significant patterns, pinpoint potential correlations between variables, assess the degree of affordable housing provision, and enhance the significance and utility of the data analysis. To encode and analyze the data, the statistical program for social sciences (SPSS) Version will be utilized.

### **3.6 Ethical Consideration**

The researcher was aware of ethical issues related to privacy and confidentiality throughout the research process. The study participants guarantee the privacy and confidentiality of any information they provide in the surveys.

Participants will get a written and verbal explanation of the study, and prior to the survey, informed consent have been obtained. Participants in this study voluntarily provided their information, and the researcher guaranteed respondents that their answers would be kept private and utilized exclusively for this study's objectives. Furthermore, the participants notified that the study is solely intended for academic purposes and that the advantages arising from the investigation will not surpass any potential hazards.

### 3.7 Methodological framework

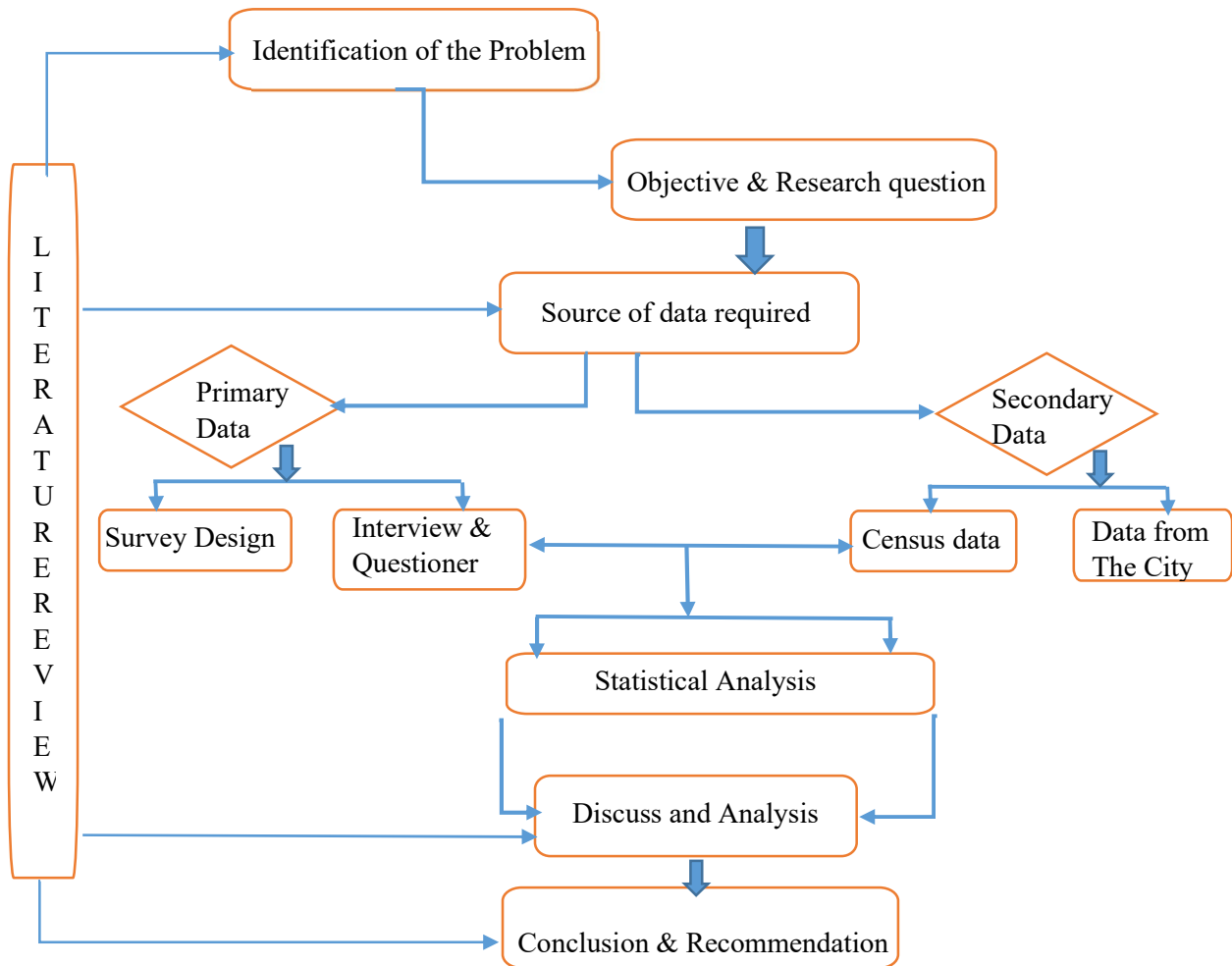


Figure 3.4 Methodological Framework of the study

(Source: by own author, 2024)

## CHAPTER FOUR

### 4 RESULT AND DISCUSSION

#### 4.1. Social - Demographic Characteristics of Respondents

##### 4.1.1. Characteristics of the respondents by age

Regarding the respondents' demographic characteristics, Table 4.2 shows that majority of the respondents are male representing 66.5% and the remaining 33.5% are female respondents. Table 4.1 reveals that of the 376 respondents, only 12 (3.2%) were between "45-54" years of age or older, with 112 (29.8%) being between the ages of 35 and 44; 228 (60.6%) between the ages of 25 and 34; and 24 (6.4%) between the ages of 18 and 24. The biggest percentage of responses were in the age category of 25–34, followed by those in the 35–44 age range. These two age groups made up the economic and fertility perspectives. Consequently, they have an even higher chance of experiencing rapid population expansion, which has an impact on housing supply. These age groups needed or demanded dwellings for a variety of reasons. However, with reference to the respondents' marital status, of the sample as a whole, 66.5 % were married, 23.9 % were single, and 9.6 % were divorced (Table 4.3).

Distribution of the sample population by Age

|       |         | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|---------|-----------|---------|---------------|-----------------------|
| Valid | "18-24" | 24        | 6.4     | 6.4           | 6.4                   |
|       | "25-34" | 228       | 60.6    | 60.6          | 67.0                  |
|       | "35-44" | 112       | 29.8    | 29.8          | 96.8                  |
|       | "45-54" | 12        | 3.2     | 3.2           | 100.0                 |
|       | Total   | 376       | 100.0   | 100.0         |                       |

*Table 4.1 Age profile of respondent's  
(Source: Respondent survey)*

Distribution of the sample population by Sex

|       |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|--------|-----------|---------|---------------|-----------------------|
| Valid | Male   | 250       | 66.5    | 66.5          | 66.5                  |
|       | Female | 126       | 33.5    | 33.5          | 100.0                 |
|       | Total  | 376       | 100.0   | 100.0         |                       |

*Table 4.2 sex profile of respondent's  
(Source: Respondent survey)*

Distribution of the sample population by Marital Status

|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Never Married     | 90        | 23.9    | 23.9          | 23.9               |
|       | Currently Married | 250       | 66.5    | 66.5          | 90.4               |
|       | Separated         | 36        | 9.6     | 9.6           | 100.0              |
|       | Total             | 376       | 100.0   | 100.0         |                    |

*Table 4.3 marital status of respondent's  
(Source: Respondent survey)*

#### 4.1.2. Family size of the respondents

The total respondents' breakdown is shown in Table 4.4: The following breakdown of household sizes: There were 92 (24.5%) households with three people, 90 (23.9%) households with four people, 81 (21.5%) households live alone, 66 (17.6%) households with two people, 16 (4.3%) households with sex people, 9 (2.4%) households with seven people, and 5 (1.3%) households with eight people. 44.9% of units have one room on average. As to(Krems, 2017) The average number of people living in a housing unit is 3.8 in over 44% of the units (more than 3 –slum).

Total Family Member of the household

|               |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|--------|-----------|---------|---------------|--------------------|
| Family Number | "1"    | 81        | 21.5    | 21.7          | 21.7               |
|               | "2"    | 66        | 17.6    | 17.7          | 39.4               |
|               | "3"    | 92        | 24.5    | 24.7          | 64.1               |
|               | "4"    | 90        | 23.9    | 24.1          | 88.2               |
|               | "5"    | 14        | 3.7     | 3.8           | 92.0               |
|               | 6.00   | 16        | 4.3     | 4.3           | 96.2               |
|               | 7.00   | 9         | 2.4     | 2.4           | 98.7               |
|               | 8.00   | 5         | 1.3     | 1.3           | 100.0              |
|               | Total  | 373       | 99.2    | 100.0         |                    |
| Missing       | System | 3         | .8      |               |                    |
| Total         |        | 376       | 100.0   |               |                    |

*Table 4.4 family size of respondent's household  
(Source: Respondent survey)*

Most sample households are made up of large families; Table 4.4 shows that the average mean family size of respondents was 3. The average family size of the city, as reported by CSA 2007

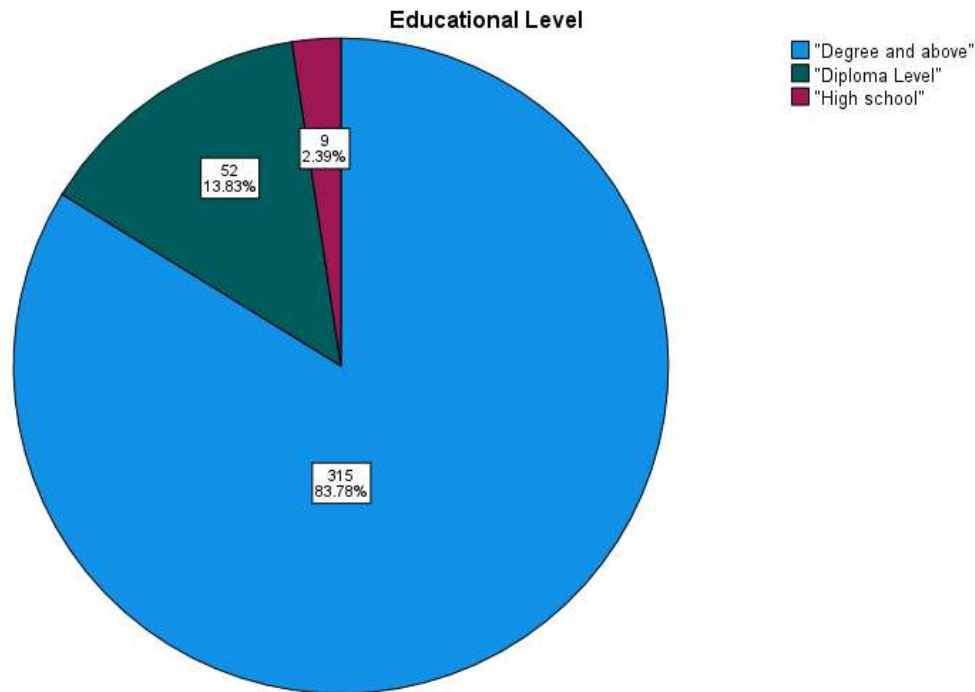
Census, is comparable to the average family size of the sample houses with an average of 3.66 people per household. Thus, there is a relationship between large family sizes and the supply of adequate housing. Put differently, houses meant for large families need to be used for residential or other uses, including business. Because of this, if there was a housing shortage, it would have an impact on them. A scarcity of housing supply may also arise if there is not enough homes available.

#### 4.1.3. Educational background of the respondents

Out of the 376 total respondents, 315 (83.78 percent) had completed their first degree or higher, 52 (13.83 percent) had completed their diploma and certificate, 9 (2.99 percent) had finished their secondary school. (Figure 4.1).

|       |                    | Educational Level |         |               | Cumulative<br>Percent |
|-------|--------------------|-------------------|---------|---------------|-----------------------|
|       |                    | Frequency         | Percent | Valid Percent |                       |
| Valid | "Degree and above" | 315               | 83.8    | 83.8          | 83.8                  |
|       | "Diploma Level"    | 52                | 13.8    | 13.8          | 97.6                  |
|       | "High school"      | 9                 | 2.4     | 2.4           | 100.0                 |
|       | Total              | 376               | 100.0   | 100.0         |                       |

*Table 4.5 Educational level of respondent's  
(Source: Respondent survey)*



*Figure4.1 Educational level of the respondent's*  
(Source: Respondent survey)

#### **4.1.4. Characteristics of respondents by level of their income**

Among the 376 respondents, According to their income level, the respondents' characteristics are as follows: In terms of monthly household income, 42% of all sample homes made between made between 5001 and 10000, and 37.5% made more than 10000 Birr and the remaining 20.5% of households in the entire sample made less than 5000 birr. This implies that a contributing factor to the cities housing shortage is the poor income of the applicants people, which makes it challenging for them to construct their residences due to their low income (2000\_5000) in comparison with the house rent which is in average is 7106.38. the majority of the respondents 63.9% they spend between 3000 Birr to 8000 Birr in house rent this indicate that households spend a significant portion of their earnings on housing rent. To the result of this, similar result indicates the that households earning less than 87.00 USD per month are unable to build a single-room dwelling, even with subsidized prices and interest rates, and those earning less than 50.00 USD are not eligible to be program beneficiaries.(Bihon, 2021)

| Total Household income |                       |           |         |               |                       |
|------------------------|-----------------------|-----------|---------|---------------|-----------------------|
|                        |                       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
| Valid                  | "2000-5000 birr"      | 77        | 20.5    | 20.5          | 20.5                  |
|                        | "5001-10000 birr"     | 158       | 42.0    | 42.0          | 62.5                  |
|                        | "morethan 10000 birr" | 141       | 37.5    | 37.5          | 100.0                 |
|                        | Total                 | 376       | 100.0   | 100.0         |                       |

*Table 4.6 Household income of respondent's  
(Source: Respondent survey)*

| Amount of rental income |       |           |         |               |                       |
|-------------------------|-------|-----------|---------|---------------|-----------------------|
|                         |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
| Valid                   | 10000 | 32        | 8.5     | 8.5           | 8.5                   |
|                         | 11000 | 24        | 6.4     | 6.4           | 14.9                  |
|                         | 12000 | 6         | 1.6     | 1.6           | 16.5                  |
|                         | 12500 | 24        | 6.4     | 6.4           | 22.9                  |
|                         | 15000 | 16        | 4.3     | 4.3           | 27.1                  |
|                         | 2500  | 16        | 4.3     | 4.3           | 31.4                  |
|                         | 3000  | 76        | 20.2    | 20.2          | 51.6                  |
|                         | 4000  | 6         | 1.6     | 1.6           | 53.2                  |
|                         | 4500  | 16        | 4.3     | 4.3           | 57.4                  |
|                         | 5000  | 52        | 13.8    | 13.8          | 71.3                  |
|                         | 6000  | 6         | 1.6     | 1.6           | 72.9                  |
|                         | 7000  | 6         | 1.6     | 1.6           | 74.5                  |
|                         | 7500  | 24        | 6.4     | 6.4           | 80.9                  |
|                         | 8000  | 54        | 14.4    | 14.4          | 95.2                  |
|                         | 9000  | 18        | 4.8     | 4.8           | 100.0                 |
|                         | Total | 376       | 100.0   | 100.0         |                       |

*Table 4.7 Rental amount per months of respondent's  
(Source: Respondent survey)*

Related research emphasized that the public is currently concerned about rising residential house rent because it accounts for the majority of household expenses, cutting the amount of money available for other purchases of goods and services. (Mekonen, 2022)

## 4.2. Housing demand and supply at Adama City

According to the data; 350 households, or 93.1 percent of the sample, made an attempt to get land for housing from the municipality accordingly 60.1% of the respondents they unable to obtain land for housing for more than five years. Furthermore, the majority 55.3% of sample households reported that it was very difficult to secure land for housing due to "house is very expensive, I cannot afford it", 41.5% reported that it was challenging due to luck of government attention on providing land for housing, and just 3.2% reported that it was difficult go get land for housing due to Scarcity of urban land.

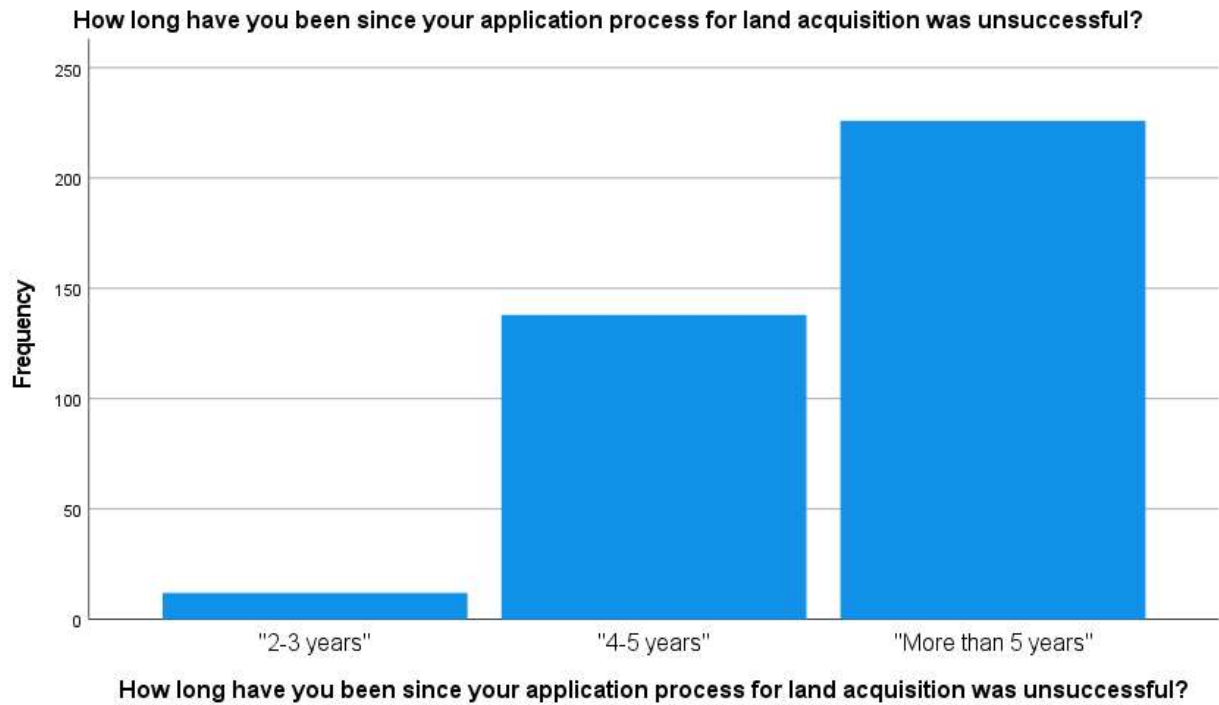
| Do you have a plan to Owen a home? |       |           |         |               |                    |
|------------------------------------|-------|-----------|---------|---------------|--------------------|
|                                    |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                              | Yes   | 350       | 93.1    | 93.1          | 93.1               |
|                                    | No    | 26        | 6.9     | 6.9           | 100.0              |
|                                    | Total | 376       | 100.0   | 100.0         |                    |

*Table 4.8 housing plan of the respondent's  
(Source: Respondent survey)*

How long have you been since your application process for land acquisition was unsuccessful?

|       |                     | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------------------|-----------|---------|---------------|--------------------|
| Valid | "2-3 years"         | 12        | 3.2     | 3.2           | 3.2                |
|       | "4-5 years"         | 138       | 36.7    | 36.7          | 39.9               |
|       | "More than 5 years" | 226       | 60.1    | 60.1          | 100.0              |
|       | Total               | 376       | 100.0   | 100.0         |                    |

*Table 4.9 housing request duration of the respondent's  
(Source: Respondent survey)*

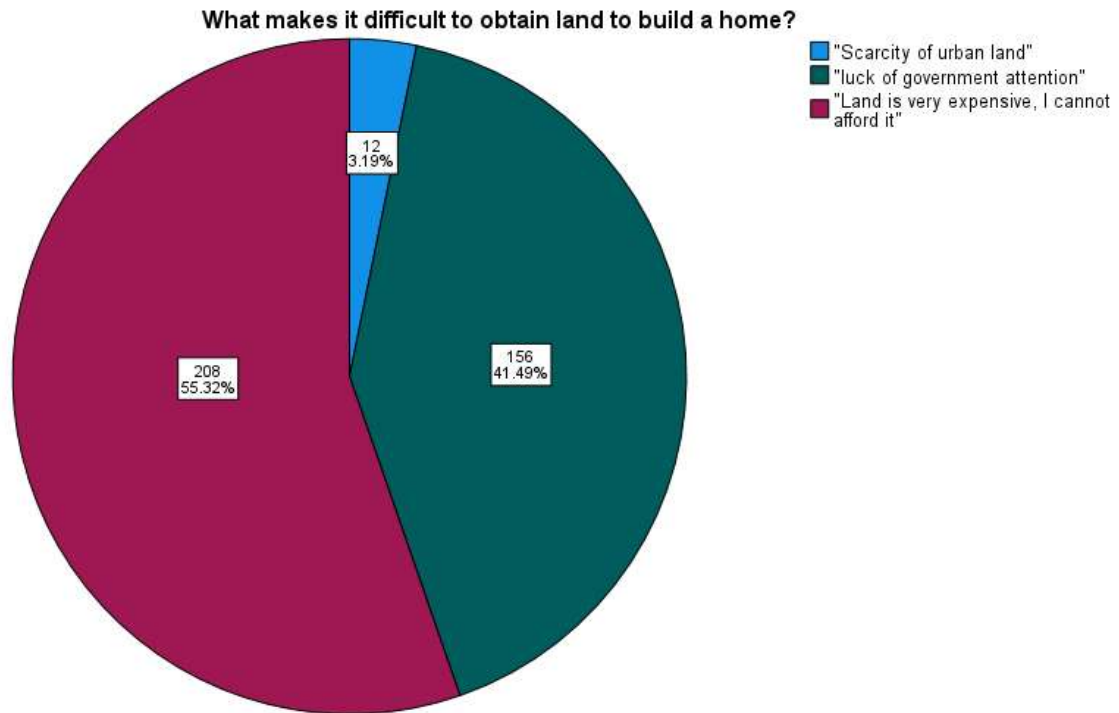


*Figure 4.2 housing request duration of the respondent's  
(Source: Respondent survey)*

What makes it difficult to obtain land to build a home?

|       |                                              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------------------------|-----------|---------|---------------|--------------------|
| Valid | "Scarcity of urban land"                     | 12        | 3.2     | 3.2           | 3.2                |
|       | "luck of government attention"               | 156       | 41.5    | 41.5          | 44.7               |
|       | "Land is very expensive, I cannot afford it" | 208       | 55.3    | 55.3          | 100.0              |
| Total |                                              | 376       | 100.0   | 100.0         |                    |

*Table 4.10 difficulties variable of the respondent's  
(Source: Respondent survey)*



*Figure 4.3 difficulties variable of the respondent's  
(Source: Respondent survey)*

### 4.3. Housing condition

Fig 4.4 displayed the sample homes' or respondents' prior the current adequacy for the household living conditions. Consequently, 174 (or 46.3%) of the respondents are very dissatisfied with current rented private house, 168 (44.7%) is also dissatisfied with the current rented house adequacy condition, only 18 (4.8%) and 16 (4.3%) had neutral and satisfied with the current home adequate for their household's needs. However, Table 4.11 shown below only 40 (10.6 %) are currently rented homes from the government.

It is evident from the field observations and sample images (Figure 4.4) gathered from various city dwelling units that the majority of Adama City's urban people lived in crowded building types. Given that most urban dwellers live in packed type (side by side rental housing), this suggests that the majority of them lack some degree of privacy. Furthermore, people living in such conditions typically had insufficient space and were housed in attached or packed types of buildings. According to interviews with carefully chosen sample households, the age of the existing homes was taken into consideration, and many of them needed to be rebuilt after a few years. The least number of respondents (1.16 percent). The implication of this result when compared with the

findings of (Krems, 2017) in Addis Ababa city over 50% of the dwelling units are classified as sub-standard or poor quality due to the low grade of construction materials used.



*Figure 4.4 photos of old housing units taken from different areas of Adama City  
(Source: photo by Autor, 2024)*

In your opinion, is your present home adequate for your household's needs?

|       |                     | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|---------------------|-----------|---------|---------------|-----------------------|
| Valid | "very dissatisfied" | 174       | 46.3    | 46.3          | 46.3                  |
|       | "Dissatisfied"      | 168       | 44.7    | 44.7          | 91.0                  |
|       | "Neutral"           | 18        | 4.8     | 4.8           | 95.7                  |
|       | "Satisfied"         | 16        | 4.3     | 4.3           | 100.0                 |
|       | Total               | 376       | 100.0   | 100.0         |                       |

*Table 4.11 current housing condition of the respondent's  
(Source: Respondent survey)*

what type of house is your present home:

|       |                                    | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|------------------------------------|-----------|---------|---------------|-----------------------|
| Valid | "Owner occupied"                   | 24        | 6.4     | 6.4           | 6.4                   |
|       | "private rented"                   | 306       | 81.4    | 81.4          | 87.8                  |
|       | "Government/association<br>rented" | 40        | 10.6    | 10.6          | 98.4                  |
|       | "living rent free"                 | 6         | 1.6     | 1.6           | 100.0                 |
|       | Total                              | 376       | 100.0   | 100.0         |                       |

*Table 4.12 current housing type of the respondent's  
(Source: Respondent survey)*

#### 4.3.2. The overall condition of urban residents' access to housing in Adama City

As the table 4.13 shows Sample households were asked about if there is housing option such as cooperative housing, condominium houses in the city, accordingly the majority 88.8 % found it difficult to get other option for housing in the city.

is there any option for to obtain cooperative housing (Condominium House) in the city?

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | Yes   | 42        | 11.2    | 11.2          | 11.2                  |
|       | No    | 334       | 88.8    | 88.8          | 100.0                 |
|       | Total | 376       | 100.0   | 100.0         |                       |

*Table 4.13 housing option of the respondent's  
(Source: Respondent survey)*

Additionally, interviews with representatives of the, municipality offices, and urban inhabitants attested to the fact that most individuals were renting private homes because there were not enough kebele houses or government-owned rental properties, like condominiums. High monthly housing prices resulted from this, especially for federal employees.

Ethiopia's urban housing shortage is a pervasive problem that drives up rent costs for inhabitants. It may be inferred that most urban dwellers in Adama City rent private homes, with very few living in kebele or municipality housing.(Mekonen, 2022)

| Type of applicants                                                                        | Total number of registered household to obtain land for housing |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Capable to build their own home                                                           | 20,000                                                          |
| Low income individuals registered for kebele houses or government-owned rental properties | 5,000                                                           |

*Table 4.14 housing request waiting list  
(Source: Municipality survey data)*

According to the questionnaire and Interview conducted with some selected municipality offices those concerned bodies confirmed that large number of urban residents were apply to obtain land for houses as (table 4.14) However there were low kebele and municipality housing provision. no enough housing provision because of the following major factors:

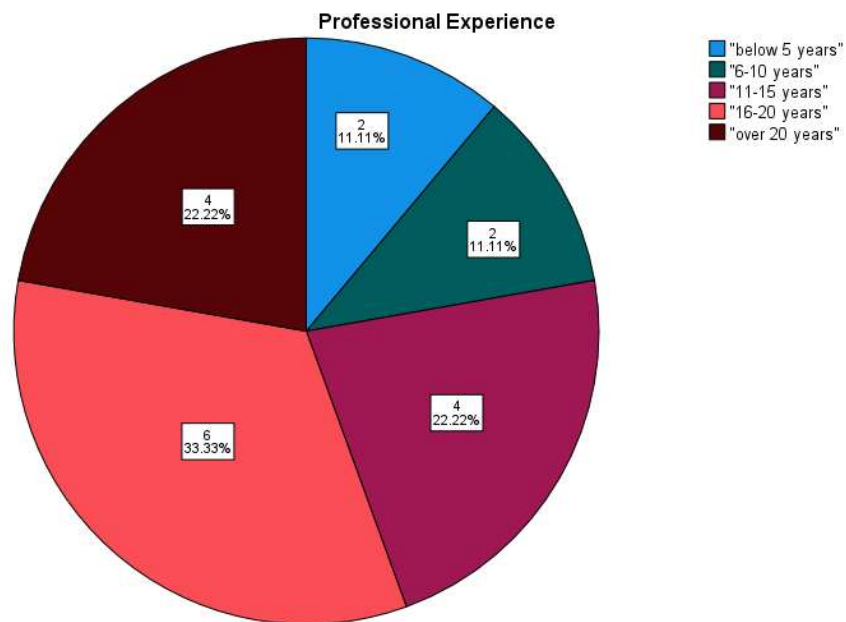
1. insufficient open space for housing and an imbalance between the supply and demand of housing.
2. inadequate compensation payment in replacement land for housing as a challenge since farmers demand payment at the going rate for the available land's market value in order to value the property and calculate the compensation rate. additional studies shows that majority of the evicted farmers from their land for housing purpose were dissatisfied with compensation paid to expropriated households.(Gemeda et al., 2023)
3. the weakness of local governments to afford effective and efficient solutions to the issue. One of the main issues is the financial constraints in obtaining enough money for the municipality to provide land for housing and to provide affordable homes.

Professional Respondents on responsible bodies for housing demand and provision

The distribution of responders based on the number of years of work experience is displayed in Table 4.15 and Figure 4.5 The majority of respondents (33.3%) had sixteen to twenty years of experience, followed by those with over 20 years (22.2%) and those with 11-15 years (22.2%). This may show that the respondents are sufficiently and well-informed about the Adama city House demand and provision issues in which they have taken part. Thus, it can be concluded that the survey's findings are fairly accurate and give a true picture of the situation of the housing demand and provision in the Adama City.

|       |                 | Professional Experience |         |               | Cumulative |
|-------|-----------------|-------------------------|---------|---------------|------------|
|       |                 | Frequency               | Percent | Valid Percent | Percent    |
| Valid | "below 5 years" | 2                       | 11.1    | 11.1          | 11.1       |
|       | "6-10 years"    | 2                       | 11.1    | 11.1          | 22.2       |
|       | "11-15 years"   | 4                       | 22.2    | 22.2          | 44.4       |
|       | "16-20 years"   | 6                       | 33.3    | 33.3          | 77.8       |
|       | "over 20 years" | 4                       | 22.2    | 22.2          | 100.0      |
|       | Total           | 18                      | 100.0   | 100.0         |            |

*Table 4.15 professional experiences of the municipality employee respondents  
(Source: Respondent survey)*



*Figure 4.5 professional experience of the respondent's  
(Source: Respondent survey)*

#### **4.3.3. Factors Affecting Housing Provision**

Table 4.16 shows majority of the respondents 72.2 % and 27.8% strongly agree and agree on the issues there is over demanded land request for housing in relation to the government house supply. Additionally, Based on their prior experience working on land administration, the participants were asked to rate 5 elements within each category. The relative significance index (RII) was then used to examine the data.

In your opinion, do you believe there is over demanded land request for housing?

|       |                  | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|------------------|-----------|---------|---------------|-----------------------|
| Valid | "Agree"          | 5         | 27.8    | 27.8          | 27.8                  |
|       | "Strongly Agree" | 13        | 72.2    | 72.2          | 100.0                 |
|       | Total            | 18        | 100.0   | 100.0         |                       |

*Table 4.16 housing demand view of the respondent's  
(Source: Respondent survey)*

The weakness of city governments to provide sufficient land and infrastructure  
for residential purpose

|       |               | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|---------------|-----------|---------|---------------|-----------------------|
| Valid | "Fully Agree" | 12        | 66.7    | 66.7          | 66.7                  |
|       | "Agree"       | 2         | 11.1    | 11.1          | 77.8                  |
|       | "Neutral"     | 4         | 22.2    | 22.2          | 100.0                 |
|       | Total         | 18        | 100.0   | 100.0         |                       |

*Table 4.17 government weakness to provide housing  
(Source: Respondent survey)*

|                |                                                                                                        |                                                                                                                                                                                           |                                                                                                        |                                                                                                     |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
|                | The weakness of city governments to provide sufficient land and infrastructure for residential purpose | Illegal management of urban and peri-urbanland by illegal real estate developers, brokers, periurban farmers, and corrupt bureaucrats and administrators lead to land provision dalliance | Informal housing units becomes the challenge to obtain free land for the future urban expansion areas. | Federal Government existing policies and practices is one of the challenges for housing provisions. | Subsidies that can be provided as part of public housing programs should target households |
| Fully Agree    | 66.70%                                                                                                 | 66.70%                                                                                                                                                                                    | 33.30%                                                                                                 | 27.80%                                                                                              | 66.70%                                                                                     |
| Agree          | 11.10%                                                                                                 | 27.80%                                                                                                                                                                                    | 50%                                                                                                    | 44.40%                                                                                              | 27.80%                                                                                     |
| Neutral        | 22.20%                                                                                                 | 5.60%                                                                                                                                                                                     | 16.70%                                                                                                 | 11.10%                                                                                              | 5.60%                                                                                      |
| Disagree       | 0%                                                                                                     | 0%                                                                                                                                                                                        | 0%                                                                                                     | 16.70%                                                                                              | 0%                                                                                         |
| Fully Disagree | 0%                                                                                                     | 0%                                                                                                                                                                                        | 0%                                                                                                     | 0%                                                                                                  | 0%                                                                                         |

*Table 4.8 respondent's questionnaire results  
(Source: Respondent survey)*

#### 4.3.4. Additional Factors Affecting Housing Provision

“If you believe there is an imbalance of high demand related to land provisions, what is the main reasons?”

“Is there is any effective alternative set of housing policy instruments to provide greater supply of affordable units to an over demanded housing market?”

“In your opinion, what can be done to upsurge the housing land provisions in Adama?”

For above questions a respondent from the professionals from the town administration office emphasized that the majority they agreed there is an imbalance of high demand related to land provisions due to the following reasons:

**Migration:** Migration of people at a large rate play a role in urban growth of the city and diversity rural-to-urban migration.

**population growth:** Urban land is growing far more slowly than population growth.

**Trade and business expansions:** Since the city becomes a center pf the nation’s imports and exports, several number of industries it attracts many for population increase. Despite the growth in businesses’ desire the city administration has been unable meet demands for housing.

In addition to the above its confirmed by the respondent’s there is an effective alternative set of housing policy instruments to provide greater supply of affordable units to an over demanded housing as listed below:

- To improve land diversity system and improved information management systems.
- Due to horizontal urban expansion and development, there is high rate of land transformation in peri-urban areas it becoming a major concern the respondents believe that the farmers are dissatisfied with local government compensation standards.
- informal settlements: the respondent’s they agree one of the challenges is due to high rate of informal settlements and weak controlling interventions system of the local governments. Finally, majority agree the local government should prioritize "informal urban types" regularization through gradual and participatory means.
- To fulfil the high housing demand majority recommended transformation from horizontal housing settlement to low-rise settlement.

#### **4.3.5. Interview results:**

Interviews were conducted on 10 Adama municipality and land administration professionals Experts in various fields of land management and urban and regional planning on management levels with the aim of asking some questions to share their knowledge and opinions. The interview questions included a combination of closed-ended and open-ended questions. as listed below:

“Is there any land provision in the city administration annual plan for the local people, who mainly request housing?”

The result of the interview shows that majority respondent's gives an answer “yes” to the first interview question and confirmed there is annual plan quotas of land utilization for housing but they found the current land provision is lower than the quotas determined in the plan since annually planned to provide 3, 400 lands for households but the amount of land supplemented by land administration office was 2000 for households with special cases mostly focuses on teachers and military household groups. Inadequate implementation results from the lack of a strong legislative foundation, growth in the number of informal settlements, and absence of public–private developers.

“What are the factors that affect the land policy and practices for housing land provisions?”

The result indicates that Land provision trends and Policy is one of the major challenges to achieve the annual housing provisions due to several reasons: insufficient open space and an imbalance between the supply and demand of housing, absence of financing sources for relocation and land compensation in accordance with existing plans and procedures.

“What are the possible solutions to respond to high housing demand in the future?”

The result of the majority respondent's provided some possible solutions according to their view as listed below: to solve the inadequate compensation payment its recommended to be covered by the applicants (users) in the housing waiting list and the existing land policy require government appropriate intervention to be revised considering the current various housing issues and major challenges, since every household is able to pay for housing up to a predetermined percentage of income it require long term credit, and financial support to increase housing funds and subsidies programs for low income households, minimize Construction costs through innovative ideas and technologies, solve the expensive building material prices and taxes, encourage private housing

developers those who have a variety of housing options to solve the shortage of housing, and finally they recommended the government to focus on providing affordable vertical housing development that aims a denser communities which also helps to preserve natural land resources and minimizes the need for urban sprawl.

#### 4.3.6. Case study for housing density:

The aim of the case study is to support the research findings and to assess the benefit of vertical housing development in relation to the current housing scheme on the city. Accordingly the researchers identified the average size of a plot in Adama city was 140 m<sup>2</sup> for one household as pic house provision were conducted on the annual plan on land provision to house unions. Considering ten plot of lands converting the land use to low-rise housing development (G+4) with the same number of rooms the density assessed using Revit Architecture design software. This vertical-horizontal house prototype case study only limited to check the increase of number of households with the same land plot area.

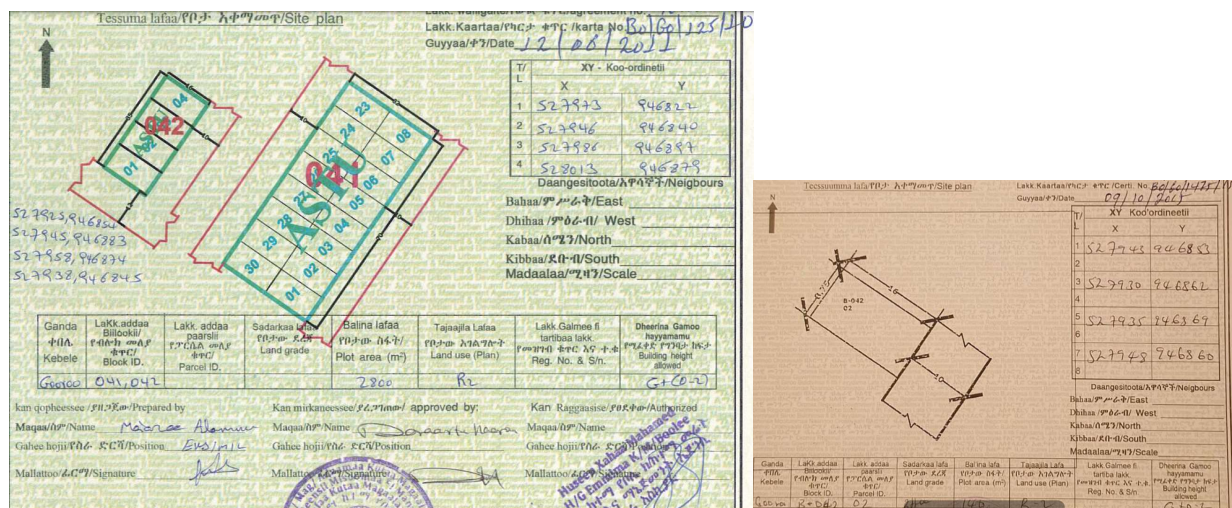


Figure 4.6 A typical site plan of house union

(Source: Municipality data)

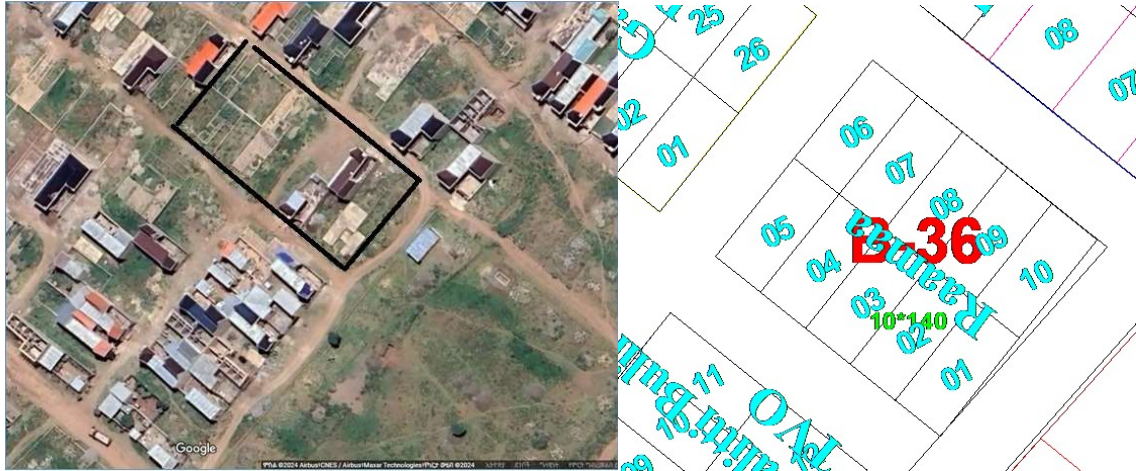


Figure 4.7 Land Location for Sample study

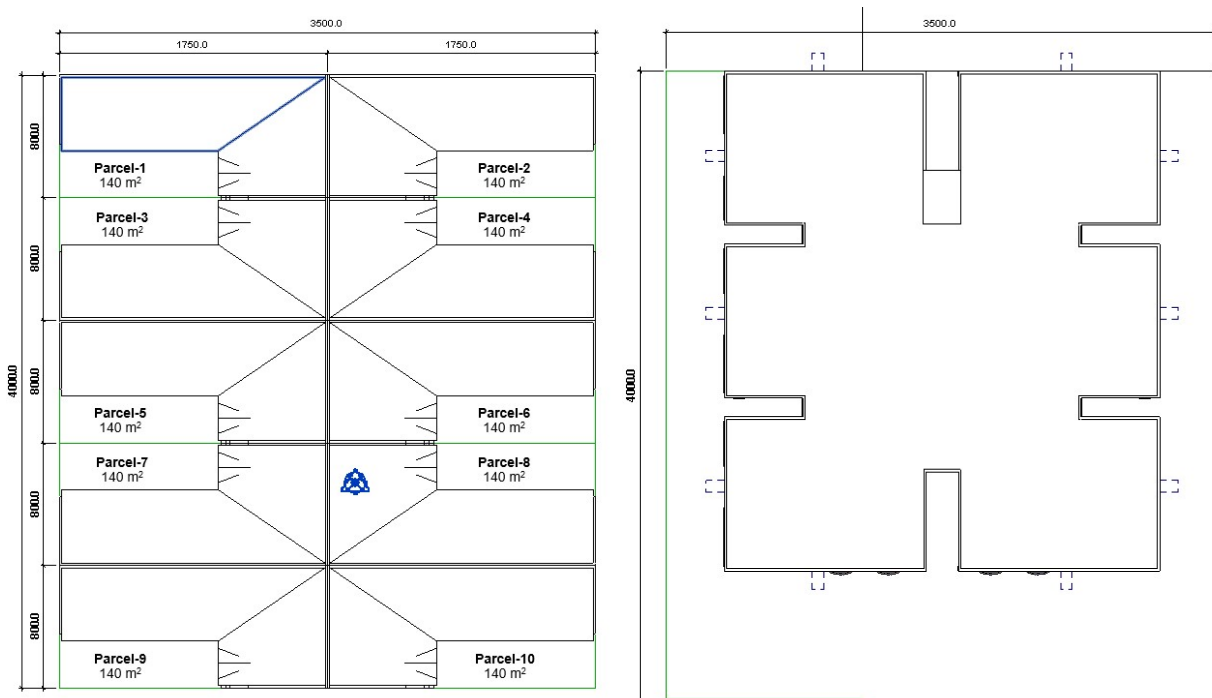


Figure 4.8 Horizontal housing development G+0 vs vertical housing development G+4  
(Source: Author design proposal 2024)

In the Study of the Development of a Prototype of Vertical Residential Houses G+4 with space requirements for three family size with additional ground space for parking and containing private patios and a centralized, shared courtyard space. Considering the researcher finding of average three family size the prototype program will include (Living room, master Bedroom with master bathroom, two single bedroom, kitchen and common bathroom).



*Figure 4.9 prototype floor plan for one household and 3D  
(Source: Author design proposal 2024)*

The whole block site transitions from detached, single-family homes to G+4 low-rise building with some portion of ground level surface for parking area and open space, it's found that 125.63 m<sup>2</sup> area per household is allotted. Accordingly, the result it found 120% increase in household from 10 household to 22 total number of households. Excluding other factors vertical land housing development increase housing provision with limited land resources.

## **5. CONCLUSION AND RECOMMENDATION**

### **5.1. Conclusion**

This paper's main goal is to assess the supply and demand for land, with a focus on low-income individuals and different housing options based on their actual affordability. This has led to a shortage of homes that is fairly priced. The population is growing faster than the amount of land that is available for housing. household that are unable to meet their needs in the housing market are likely to be those who do not own a home or who rent a property that is either unaffordable or inadequate.

The researcher assessed the current housing provision problem on Adama city and factors affecting housing provision. The study and gathered data focuses on examining the government land provision for housing, house provision for organized union especially government employed peoples and the current housing provision problems in the city and the key factors that constraints this practice and its impacts or consequences assessed accordingly. Based on the method conducted above, as well as the findings of the housing provision challenges are identified which are:

Household condition: the average family size of the sample houses with an average of 3 people per household it requires the supply of adequate housing. the majority of the respondents 63.9% they spend between 3000 Birr to 8000 Birr in house rent this indicate that households spend a significant portion of their earnings on housing rent.

Management related: 93.1 percent of the sample, made an attempt to get land for housing from the municipality accordingly 60.1% of the respondents they unable to obtain land for housing for more than five years due to house is very expensive, they cannot afford it and luck of government attention on providing land for housing and Scarcity of urban land are the major reasons.

Land provision trends and Policy: since most of the respondents are dissatisfied with the current rented house adequacy condition majority 88.8 % found it difficult to get other option for housing in the city. insufficient open space for housing and an imbalance between the supply and demand of housing. Ineffective plan of the municipality to provide housing and there is no effective option

in Providing solution. inadequate compensation payment in replacement land for housing is found as major challenge.

Generally the weakness of city governments to provide sufficient land and infrastructure for residential purpose are found as challenge, The weakness of city governments to provide sufficient land and infrastructure for residential purpose, Illegal management of urban and peri-urban land by illegal real estate developers, brokers, peri-urban farmers, and corrupt bureaucrats and administrators lead to land provision dalliance are surmised on the research finding.

## **5.2. Recommendation**

From result of this study; the following recommendation was given to increase the housing provision:

1. Considering low income of the people concerned body to implement housing program with affordable incentive framework, the Affordable Housing Bonus Program, cooperate housing program, to be established in a carefully-calibrated manner for low- and middle-income households.
2. The city administration has to evaluate the existing land policy effectiveness and to strengthening existing good trends.
3. devised a new plan to revise the existing compensation payment made on property valued by state fixed price. calculation of compensation payment to be fair through taking into account the different acceptable variables.
4. The town administration needs to increase its capacity in order to effectively handle the huge demand for housing that exists today. To do this, sufficient financing, sufficient open space, and major legislative changes that make it easier to acquire land for housing solutions are required.
5. Due to the fast-growing urban population has worsened the shortage of housing in the city it advised to make change in development of the city vertically to provide solution for all housing demand and to get the benefit of the available limited land resources.
6. In order to generate and implement innovative ideas to reduce the cost of building new homes, develop policies and carry out creative alternatives to housing in collaboration with the private sector (individuals, cooperatives, and real estate developers) and non-governmental organizations (NGOs).

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## APPENDICES

Adama Science and Technology University  
School of Civil Engineering and Architecture  
Architecture Department  
Structured Questionnaire

### 1. Survey questionnaire for local community

Questioner \_\_\_\_\_

I am a master's student in urban planning and design program at Adama science and technology university School of Civil Engineering and Architecture, Department of Architecture. It aims to collect information related to the Challenges of urban housing Provision in Adama City, Ethiopia. The information given in this questioner is for academic purpose only and will be treated as very confidential. Any form of support is greatly appreciated.

I am undertaking a research entitled “Challenges of urban housing Provision in Adama City, Ethiopia”. The study aims to examine the Challenges of urban housing Provision. I would like to thank you for your information and data provision.

#### Instruction

Fill your answer on space provided or Please put (X) on the box for the answers you choose.

#### 1. Personal Information

| Sex                                                              | How old are you?                                                                                                                                                                                                                            | Education Level                                                                                                                                                                       | Marital Status                                                                                                                                                 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Male <input type="checkbox"/><br>Female <input type="checkbox"/> | Under 18 <input type="checkbox"/><br>18-24 <input type="checkbox"/><br>25-34 <input type="checkbox"/><br>35-44 <input type="checkbox"/><br>45-54 <input type="checkbox"/><br>55-64 <input type="checkbox"/><br>65+ <input type="checkbox"/> | a. Degree and above <input type="checkbox"/><br>b. Diploma level <input type="checkbox"/><br>c. High school <input type="checkbox"/><br>d. Elementary school <input type="checkbox"/> | (a) Single <input type="checkbox"/><br>(b) Married <input type="checkbox"/><br>(c) Separated <input type="checkbox"/><br>(d) Divorced <input type="checkbox"/> |
| Total family member of the h.h                                   |                                                                                                                                                                                                                                             | Do you own or rent your current residence?                                                                                                                                            | Own <input type="checkbox"/><br>Rent <input type="checkbox"/>                                                                                                  |
| Total Household income                                           | < 2000 Birr <input type="checkbox"/><br>2000-5000 Birr <input type="checkbox"/><br>5001-10,000 <input type="checkbox"/><br>>10001 Birr <input type="checkbox"/>                                                                             | If your current house is rental how much did it cost per/months                                                                                                                       |                                                                                                                                                                |
| Phone Number (Optional)                                          |                                                                                                                                                                                                                                             |                                                                                                                                                                                       |                                                                                                                                                                |

1. What type of house is your present home:
  - A) Owner occupied (paying mortgage)
  - B) Private rented
  - C) Government/ Association rented (kebele housing)
  - D) Living rent free
2. Are you satisfied with the current housing currently live in?
  - E) Very dissatisfied   B) Dissatisfied   C) Neutral   D) Satisfied   E) Very Satisfied
3. In your opinion, is your present home adequate for your household's needs?
  - A) Very dissatisfied   B) Dissatisfied   C) Neutral   D) Satisfied   E) Very Satisfied
4. do you have a plan to Own a home?
  - A) Yes [ ]
  - B) No [ ]
5. How long have you been since your application process for land acquisition was unsuccessful?
  - A) Less than 1 years
  - B) 2-3 years
  - C) 4-5 years
  - D) More than 5 years
6. What makes it difficult to obtain land to build a home?
  - A) Scarcity of urban land
  - B) lack of government attention to give me access to land.
  - C) Land is very expensive, I cannot afford it
  - D) Inequality in land ownership
  - E) other specify \_\_\_\_\_
7. is there any option for to obtain cooperative housing (Condominium House) in the city?
  - A) Yes [ ]
  - B) No [ ]

## 2. Survey questionnaire for professionals

This questionnaire is prepared by a Master's student in Adama Science and Technology University, School of Civil Engineering and Architecture, Urban Planning and Design program. The study aims to assess the “Challenges of urban housing Provision in Adama City, Ethiopia”. I would like to thank you for your information and data provision.

Name of Company: \_\_\_\_\_

Respondent's profession/Job title: \_\_\_\_\_

Professional Experience

a. Below 5yrs   b. 6 – 10yrs   c. 11 – 15yrs   d. 16 – 20yrs   e. Over 20yrs

1. In your opinion, do you believe there is over demanded land request for housing

A) Strongly Disagree   B) Disagree   C) Neutral   D) Agree   E) Strongly Agree

2. As a professional rate the following statements, on a scale of 1 to 5, according to the best of your knowledge.

1. Fully agree   2. Agree   3. Neutral   4. Disagree   5. Fully disagree

| No | Variable                                                                                                                                                                                            | Rate |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1  | The weakness of city governments to provide sufficient land and infrastructure for residential purpose                                                                                              |      |
| 2  | Illegal management of urban and peri-urban land by illegal real estate developers (mafia), brokers, peri-urban farmers, and corrupt bureaucrats and administrators lead to land provision dalliance |      |
| 3  | Informal housing units becomes the challenge to obtain free land for the future urban expansion areas.                                                                                              |      |
| 4  | Federal Government existing policies and practices is one of the challenges for housing provisions.                                                                                                 |      |
| 5  | Subsidies that can be provided as part of public housing programs should target households                                                                                                          |      |

3. Use a 5-point scale to Rank the strategies to be implemented, where 1 is the lowest and 5 the highest Rank on the box provided.
- Land policy to be evaluated and revised to improve land management, governance, and land taxation. [ ]
  - Improved enforcement by local governments to stop informal settlements and improve formal housing land provisions. [ ]
  - Due to social and economic challenges the government to find alternative for affordable housing. [ ]
  - System of housing finance proportion of loans directed to housing and construction to be improved. [ ]
  - Other strategies to be implement \_\_\_\_\_
4. If you believe there is an imbalance of high demand related to land provisions, what is the main reasons?
5. Is there is any effective alternative set of housing policy instruments to provide greater supply of affordable units to an over demanded housing market?
- ☐ Yes                      ☐ No                      ☐ I'm not sure

If Yes (please specify) \_\_\_\_\_

\_\_\_\_\_

6. In your opinion, what can to be done to upsurge the housing land provisions in Adama?

\_\_\_\_\_

### **3. Interview questions for management person-professionals**

1. Is there any land provision in the city administration annual plan for the local people, who mainly request housing?
  - A) Yes [ ]
  - B) No [ ]
2. If your answer for the previous question was yes, please state the effectiveness of the plan?
3. What are the main government challenges and limitations in supplying land for housing?
4. What are the factors that affect the land policy and practices for housing land provisions?
5. What are the possible solutions to respond to high housing demand in the future?
6. Are there any adequate programs that promote affordable alternative housing in the city?