The influence of land management on the prevalence of informal settlement and its implication for environmental management in Bahir Dar city, Ethiopia

by

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Dedication

To my wife and children, who shared my pains
DECLARATION

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I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

Signature

Date: July 2018
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ABSTRACT

Bahir Dar is one of the rapidly growing Ethiopian cities characterized by the rise of informal settlements. The expansion of spontaneous neighbourhoods in Bahir Dar is, among other things, conditioned by land management policies and practices. Thus, the intention of this research was to explore the influences of land management on the prevalence of informal settlements in Bahir Dar city, Ethiopia. So as to meet the study targets this research employed mixed method approach, and the data were gathered from various sources by applying different methods. The quantitative data was drawn from 156 random samples through household surveys. It was collected from four FGDs, interview of eight community elders, sub-cities and municipality officials and code enforcement professionals. Furthermore, case studies, published and unpublished documents, photographs, and satellite images were used to enrich the analysis. To analyse quantitative data, SPSS statistical software was used to extract descriptive statistics, to test hypotheses and to draw tables and various types of graphs. Content analysis was employed to analyse qualitative data. It was found that expansion of informal settlements in Bahir Dar was caused, among others, by Poverty of inhabitants, rural-urban migration, limited capacity of the city to deliver basic services, low housing supply and high housing demand, and limitations in land lease laws, as well deficiency of essential amenities like water, sanitation and electricity. The influences of land management policies and practices that resulted to prevalence of informal settlements were found to be the subjective implementation of housing and land leasing policies, harsh government farm expropriation and very low compensation payments, weak governance practices in land administration, frequent demolishing of houses and precarious security of tenure. Even though informal settlements help to address the housing shortage in the city and contribute to environmental management in some areas of the city, it is largely intimidating environmental management, deteriorating the livelihoods and thus brought about the unsustainable city development. In order to address the challenges of informal settlements, it was suggested that legal framework to formalize informal settlements, develop an effective and efficient land administration system, improving good governance in land administration, establish land and housing policies favouring low-income population, and bring about attitude change favourable to urban development are essential.

Keywords: Bahir Dar; Demand; Environment; Housing; Informal settlement; Land; Land management; Policy; Sustainable; Tenure; Urbanization.
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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Urbanization is one of the most prevailing and seemingly irreversible forces in the world. It is foreseen that roughly 93 per cent of the future population growth will take place in urban territories in Asia and Africa, and to a lesser degree in Latin America and the Caribbean. Our planet today is in a new urban epoch so much so that most of its human inhabitants live in towns and cities (UN-Habitat, 2013).

In 1950, the world’s urban population accounted only for 30 per cent, which grew to 54 per cent in 2014; however, by 2050, 66 per cent of the world’s population is anticipated to be urban (UN, 2014). According to forecasts, the world’s urban population grows by 2.5 billion urban residents between 2014 and 2050 such that almost 90 per cent of the increase will be concentrated in Asia and Africa (UN-DESA, 2015). In other words, the urban areas of the world are anticipated to engross almost the entire expected population rise over the subsequent thirty years, particularly in the cities of developing countries. As a result, population growth is primarily an urban phenomenon that accumulates in the less developed countries.

While cities dictate an ever more predominant part in the world economy as a centre of both production and consumption, fast urban expansion all over the developing countries is enormously surpassing the capability of most metropolises to deliver sufficient amenities for their inhabitants. Many international organizations have yet to satisfactorily identify either the predicted fast growth of metropolitan areas or the worsening living situations of the urban poor, particularly those living in informal settlements (Yasin, et al., 2012). The problems of attaining reasonable urban development will be especially alarming in Africa (Cohen, 2006).

However, as urban communities grow, managing them becomes progressively challenging. The magnitudes of change cities undergo in developing countries
present considerable difficulties in almost every aspect of life. Of specific concern are
the threats to the adjacent and encompassing neighbourhoods, to the environment
and thus to good health, to public unity, and to private freedoms. The leading trouble
is certainly the massive increment in the quantities of the urban destitute living in
informal settlements and slums. Research shows that in the majority of the world's
poorest nations, the percentage of the urban poor is expanding quicker than the total
rate of urban population growth: “an anticipated 72 per cent of the urban population of
Africa nowadays live in slums. The percentage is 43 per cent in Asia and the Pacific,
32 per cent in Latin America, and 30 per cent for the Middle East and Northern Africa”
(Cohen, 2006).

Fast urban progress all over the developing countries has completely exceeded the
capability of most metropolises to deliver essential urban facilities that should be
immediately forwarded to their inhabitants: lodging, amenities, employment
opportunities, and sustenance for an escalating amount of poor-urban residents.
Furthermore, informal settlements stem from insecurity of: holding and its
consequences, such as lack of access to legitimate bank credit (De Soto, 2000),
upgrading the housing conditions, congestion, insufficient municipal services and the
spread of communicable diseases. In other words, rapid urbanization affects urban
land management, particularly in informal settlements.

Compared to other African countries, Ethiopia has a low urbanization rate. According
to Population Reference Bureau (2014), Africa is 40 per cent urbanized, whereas
Ethiopia was only 17 per cent urbanized in 2013. It is estimated that the current level
of urbanization in Ethiopia will increase to 52 per cent by 2050, indicating an annual
growth rate of 3.54 per cent over the next 37 years (UN-DESA, 2017, p. 3). Of the
total urban population in Ethiopia, 70 to 80 per cent lived in slums and informal
settlements, a total of 11.3 million people (UN-Habitat, 2008a; UN-Habitat, 2008b),
which is alarmingly high compared to the average of developing regions, 43 per cent
(UN-Habitat, 2003).
The urban population in Ethiopia has increased fivefold in the last 40 years, and the current 18.3 million people are moving rapidly to urban areas to settle. An estimated 70.5 million people will be concentrated in urban areas over the next 36 years (UN-DESA, 2015). Where will the other 52 million people live? Will cities be able to integrate these 52 million additional people over the next 36 years? In order to accommodate the additional population in urban areas, 13 new cities the size of present-day Addis Ababa, with about 4 million people, are needed. If the current growth rate of population in urban areas of Ethiopia continues in the coming 36 years, about one-third\(^1\) of the additional urban residents, i.e., 12 million people will join the informal settlement. The question is: “Are we ready to accommodate this huge urban population taking into account the current urban land management practices in our urban areas. If not, then what could be the possible policies that can be undertaken to resolve the impact of such rapid rate of urbanization on the welfare of the urban poor, particularly on the informal settler?” One can easily imagine the consequences of this huge population on existing scarce urban services such as health, housing, and employment.

This research was conducted in Bahir Dar city, which is one of the largest and among the fastest growing cities in Ethiopia. Currently, Bahir Dar is the third largest city in Ethiopia with a population of 329,318 and population growth rate of 5.5 per cent (CSA, 2013a). The city is growing rapidly, partly due to its high potential for urbanization caused by its rich agricultural hinterlands, good transportation links by highways, water, and air. It is also a tourist centre due to its beautiful landscape and its proximity to ancient churches and monasteries, the source of the Blue Nile River, and the Tis Isat falls.

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\(^1\) Urban population that lacks access to sufficient housing, drinking water and public health in Ethiopia is estimated by UN-Habitat (2008b) at 70 to 80 per cent, which includes slums and informal settlements. But those living in informal settlements are about one-third of the total urban population.
Accompanied to rapid urbanization, the phenomenon of informal settlement in Bahir Dar is widespread and increasing. Finding ways to deal with issues of informal settlement is a challenge that concerned authorities are facing. These urban growth processes are on-going and require monitoring so that new knowledge can help improve land management operations. In general, given the above facts in the urban areas of Ethiopian cities, urgent decisions and planning are needed to ensure that state officials and city managers maintain at least some mechanism for addressing the growth of informal settlements.

The rationale for doing this research has stemmed from practical problems, policy issues and the will to contribute knowledge to the field of land management as regards informal settlements in urban Ethiopia. Environmental problems associated with urbanization are increasing, particularly in developing countries. Studies indicate that large indigenous peoples exert massive pressure on natural capital and impose “ecological footprints” on the urban fringes (Rees & Wackernagel, 1994; Rees, 1992). For instance, urbanization results in the apparent extension of metropolises and leads to land use changes that in turn see urban inhabitants accrue fertile rural land for housing or profit-making intentions. Studies show that agricultural and wetland transformations for housing intentions have undesirable costs on food security, water supply as well as the public health, in both urban and urban fringe areas (Rees & Wackernagel, 1994; Rees, 1992).

Many urban populations are influenced by depressed hygiene that intimidates their management. Rivers and waterways that cross metropolises are polluted with faeces, garbage, and toxicants (UNEP, 1986). Daniel (2011) observed a similar

\[2\text{An Ecological Footprint is a “measure of the amount of bio productive land and sea required to support a person’s lifestyle. It includes the land needed to grow their food, dispose of their waste and absorb their carbon emissions” (Calcott & Bull, 2007, p. 1)\]
environmental degradation in an area called Weramit in Bahir Dar. An area covered with forest, Weramit is now affected by massive water pollution, deforestation, and environmental pollution. Particularly its western part is dotted with houses in the middle of the forest. This area is overall facing a threat of deforestation by immigrants.

In general, improving the quality of lives of informal dwellers, employment creations through small-scale enterprises and urban good governance have received emphasis on Ethiopian development policies and strategies. However, in practice, the informal settlements are full of bottlenecks. So this study would give policymakers insights into dealing with the issues of informal settlements, identifying strategic gaps and solving implementation problems observed on the ground. To this end the researcher explored the influence of land management on the prevalence of informal settlement in Bahir Dar city, Ethiopia. It is worth noting that this study has an underlying assumption that that improved land management processes and better access to information will lead to better service delivery and will enable the municipality with the opportunity to provide transparent and responsible administrative functions. What is more, the results of this study are hoped to provide the city and its authorities with some foresight of urban land management mechanisms to support low-income groups in their struggle for decent shelter. This may in turn give authorities lessons on formal as well as informal processes as regards entitlement and access to land and housing in a manner that is consistent with their financial capacity and needs.

1.2 Statement of the Problem

This study revolves around and seeks to tackle the land-use and urban settlement realities and assumptions in Ethiopia. It is particularly instructive to note that the study investigates the following interrelated statements that capture and highlight the major challenges and assumptions in Ethiopia in relation to land management in general and to informal settlement in particular.
1. There has been little effort to understand the causes of informal settlement called “YeChereka Betoch” (literally means ‘moon houses’ referring to the fact that people construct such houses at night in clandestine mode), in the study site. On the other hand the causes of informal settlements particularly in developing countries are well known (UN-Habitat, 2003; World Bank, 1999; UNCHS, 1996). However, most of the causes of spontaneous settlements are specific to each country’s culture, land tenure system, level of urbanization and development, among others.

2. Formal and informal land management policies and practices with respect to informal settlements of Bahir Dar are not well understood.

3. The influences of land management policies and practices on the prevalence of informal settlements in the study area are not well known.

4. Whether the expansion of informal settlement exerts positive or negative effects on environmental management of the study site is not well recognized.

In addition to factors like rapid urbanization and accompanied deficiency of basic services as well as poverty of inhabitants, expansions of informal settlements appear to be conditioned by land management policies and practices. In this study land management policies and practices include land tenure (particularly access to land, land delivery and tenure security), land related policies like housing and leasehold, legal frameworks related to land such as valuation and compensation laws, and land governance. The major hypothesis of the study was that unfavourable land management conditions increases the expansion of informal settlements in the study area.

Land management is the process of managing the use and development of land resources and the process by which a country’s resources are put to good effect (UNECE, 1996; Williamson, et al., 2010). The organizational structures for land management differ widely between countries and regions throughout the world, and
they often reflect local cultural and judicial settings. More to the point, the definition that Williamson, et al offer runs the gamut of land management from policy to right to monitoring and evaluation. For them, land management is about land policies, land rights, property, economics, land use control, regulation, monitoring, implementation, and development (Williamson, et al., 2010, p. 10). Land governance, on the other hand, means the spatial dimension of governance that relates to land, property and natural resources. In other words, it is the governmental side of land management while land administration is the operation aspect of land management.

Land management can be classified as formal and informal. Formal land management or administration systems in many countries are not satisfying the needs of society at an appropriate level. The evidence and reasons for this situation are manifold and vary in different parts of the world (Molen, 2003). In developing countries, the formal systems are based on statutory land law inherited from the colonial era or imported from Western jurisdictions. These systems are centralised, expensive, inflexible, and involve complex legal requirements and technical procedures (Augustinus, 2004; Molen, 2003). They are inaccessible to many people especially to those in rural areas and low-income residents of urban areas, not to mention to informal settlers. The poor economic performance and weak institutional frameworks in these countries cannot sustain these systems at satisfactory level. The low levels of cadastral coverage in developing countries, particularly in Africa, clearly illustrate this point (Deininger, 2003).

Informal land development itself presents a number of challenges to the urban land management process. For example, where the informal land tenure systems are not recognised, authorities do not provide sufficient tenure security to residents of informal settlements (UNHSP, 2004). Since the latter are not part of the official urban management system, little or no land information is collected in the settlements, and they are left out of the urban development planning process (Sliuzas, 2004, p. 3). Yet these settlements are home to increasingly large proportions of urban populations in developing countries.
Inappropriate policies and legal instruments, coupled with severe limitation in both managerial and institutional capacities mean that even the limited stock that is made available is mismanaged, thereby distorting access and encouraging speculative activities (Garba, et al., 1990). The speculative activities in turn push up the value of land in the open market and make it unaffordable to low-income households, particularly to informal settlers (Garba & Al-Mubaiyedh, 1999). In areas where there is a restriction on the free transfer of landed property, a black market in land ensues. In addition, illegal occupation and development of land are both manifestation and result of the inadequate supply of land to informal and low income households in urban areas (Garba & Al-Mubaiyedh, 1999).

United Nations Task Team on Habitat III (2015) noted that informal settlements and slums are caused by a range of interrelated factors, including population growth and rural-urban migration, lack of affordable housing for the urban poor, weak governance, particularly in the areas of policy, planning, land and urban management that in turn result in land speculation and grabbing. According to this study, informal settlement is also interrelated with economic vulnerability and underpaid work, discrimination and marginalization, and displacement caused by conflict, natural disasters and climate change (United Nations Task Team on Habitat III, 2015, p. 2).

Compared to other urban dwellers, people living in informal settlements and slums suffer more spatial, social and economic exclusion from the benefits and opportunities of the broader urban environment. They experience constant discrimination and extreme disadvantage characterized by geographical marginalization, basic service deficits, poor governance frameworks, limited access to land and property, precarious livelihoods, high vulnerability to the adverse impacts of poor and exposed environments, climate change and natural disasters (United Nations Task Team on Habitat III, 2015, p. 2).

In view of the above global experiences in relation to urbanization, land management and informal settlements, the case in Ethiopia in general and that of Bahir Dar is no exception. The rationale for undertaking this very study itself stems from two sources:
1) from international and local experiences documented in literature from which research gaps identified, and 2) from the researchers’ lived experiences and observations of local realities of the issue. To wit, globally, the United Nations forecasted that the majority of the total world’s population growth within a reasonable time-frame is anticipated to proceed in urban areas of non-industrialized countries (UN-DESA, 2015). By 2040, about 60 per cent of the population in developing countries will live in urban areas. The great extent of urban change facing the poorest countries in Africa is particularly disturbing. On the other hand, while the requirement for thorough systematic and practical knowledge to shape urban policy in Africa is fine, the condition of urban study including informal settlements in the continent has been seriously diminishing in quality and quantity since the 1970s (Stren, 1993).

Informal settlements in Ethiopia have been developed under conditions of public ownership of land, where people have unlimited use right in rural areas (FDRE Proc. No 456/2005, 2005), and are awarded 99 years of residential land use in urban areas (FDRE Proc. No 271/2011, 2011). Therefore, one may wonder why people build their homes on unauthorized lands and suffer the consequences. The answer to such questions is essentially tied to land management policies and practices in informal settlements.

In recent years, Ethiopia’s economy has grown rapidly, with an average rate of 10.6 per cent between 2004 and 2011 (World Bank, 2012). The country is committed to halving by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation and, by 2020, significantly improving the lives of slum dwellers (United Nations, 2013). However, apparently there are no tangible improvements in the lives of people living in informal settlements.

Even though many studies are done in Ethiopia and in other places on informal settlements (Fekade, 2000; Wehrman, 2001; Kombe & Kreibich, 2002; UN-Habitat, 2003; Rakodi & Leduka, 2004; Degefa, 2008; Daniel, 2011; Jones, 2011) there are very few studies (Aguilar and Santos (2011), and Arimah and Branch (2011) done on the influence of land management on the prevalence of informal settlement and
implications on environmental management. This is probably because the link between informal settlement and land management are complex and multifaceted phenomena, the understanding of which required dealing with a multiplicity of factors related to nature, society and state, as well as the ways with which these factors are interrelated.

Generally, rapid urbanization of developing cities such as Bahir Dar is considered to be accompanied by the expansion of informal settlements. A study by Prime Consultant (2009) estimated that about 30 per cent of the houses in Bahir Dar were informal, excluding slums. Thus, the influence of land management on the prevalence of informal settlement and implication for environmental management need closer scrutiny and exploration.

In short, this study addressed, among other things, the potential solutions that the municipality can offer to a dilemma that is currently the most important: how do we harmonize the protection of environmental management with the needs for informal settlements in urban areas? This is based on the belief that new models of urban development consider measures to reduce the local, regional and international environmental costs of the urban poor.

1.3 Research Aim and Objectives

The aim of the study was to explore the influence of land management on the prevalence of informal settlement and its implications for environmental management in Bahir Dar city, Ethiopia.

This study was specifically designed to achieve the following specific research objectives:

1. To identify the major causes of informal settlements in Bahir Dar,

2. To evaluate formal and informal land management policies and practices with respect to informal settlements in the study site,
3. To discern the influences of land management policies and practices on informal settlement in Bahir Dar city,

4. To assess the implications of the expansion of informal settlement for environmental management in Bahir Dar.

1.4 Research Questions

The study intended to answer the following interrelated questions:

1. What are the reasons for the expansion of informal settlements in Bahir Dar?

2. What are the existing formal and informal urban land management policies and practices linked to informal settlements in the study area?

3. Do the existing urban land management policies and practices result in the expansion of informal settlements in Bahir Dar?

4. What are the implications of the expansion of informal settlements for environmental management in Bahir Dar?

1.4 Scope of the Study

This dissertation dealt with the process of urbanization by considering the problems that informal settlements are facing and attempted to seek land management solutions. Studied also by different disciplines such as geography, sociology, land use planning and land management, among others, informal settlement is a very wide concept that includes many complexly interrelated elements and variables, an exhaustive examination of which is impossible in a single study. The research thus focused only on such key variables as the problem of providing affordable housing, barriers to access to land and social services, tenure insecurity, evictions, and failures of policy and planning.

Land Management is also another discipline that deals with the process of efficient use of land resources (UNECE, 2006). Therefore, it is the management of tenure, land value and land use. Land management is a key to urban development owing to
its impact on social, economic and municipal environmental management. Issues of urban land management are many, important ones encompass, according to Garba and Salisu (1995), the provision of an adequate supply of land for urban productive activities, including the provision of basic services; the facilitation of good urban planning that minimizes the use of resources relative to social and economic benefit; the attainment of better equity in wealth and earnings, including access by low-income families to land and housing; achievement of an equilibrium between urban development and environmental management, taking into consideration relationships amongst land use, poverty, and the environment.

1.5 Limitations of the Study

Informal settlement and land management are complex and multifaceted phenomena, the understanding of which required dealing with a multiplicity of factors related to nature, society and state, as well as the ways by which these factors are interrelated. This had an important bearing on the current study in that understanding theory in each discipline and finding the way they are interrelated in required a lot of reading and much time. It is thus hard to claim that an exhaustive and comprehensive interplay of theories has been made in the study, not to mention the scarcity of studies done so far linking the two disciplines.

Households and informal communities are the main units of analysis used in this research. However, in some chapters, the thesis has attempted to carry out analysis of national, regional and city levels, particularly in matters related to laws and government policies.

Furthermore, despite the fact that greater than 30 per cent of the urban population lives in informal settlements in Ethiopia, these settlements are not guided by government laws and policies. Rather city authorities are threatening at will the very existence of such settlements through a series of evictions. When data were collected for this study, informants were not always responding to our inquiries freely due apparently to fear of exposing their illicit settlement. As a result, every time the
researcher carried out interviews and focus group discussions, much time was wasted to convince and encourage respondents to provide genuine replies.

1.6 Structure of the Dissertation

The dissertation is organized in seven chapters. The First Chapter presents the reader with the statement of the research problem and analyses the context of the problem being studied. It also presents the objectives of the study, research questions and the rationale of the study. Chapter Two focuses on the review of the theoretical and empirical literature. The Third Chapter provides a general description of the research methodology. The unit on research methodology covers the research approach, the design, and methods of data collection and analysis. The background to informal housing developments is presented in Chapter Four while Chapter Five discusses the causes of informal settlements in Bahir Dar. Chapter Six focuses on urban land management practices, expansion of informal settlement and environmental management, and Chapter Seven presents conclusion, study contributions, and policy recommendations.
CHAPTER 2

REVIEW OF THEORETICAL AND EMPIRICAL LITERATURE

2.1 Introduction

In developing countries, approximately one billion people (30-70 per cent) live in disgusting, generally overpopulated and unhealthy areas, the so-called informal settlements, with the poorest physical facility, socioeconomic situations and ecological deprivation (Cortemiglia, 2006). It is expected that this amount will upsurge to 1.5 billion by 2020 and 2 billion by 2030, if not urgent action is taken. In some countries, the percentage of people living in unauthorized settlements is far greater than in official land and housing markets (UN-Habitat, 2003). A remarkable number of inhabitants in urban and rural areas have no option but to settle in ridged iron sheds or mud-and-thatched huts lacking interior water system, power, and other amenities, with little or no right of entry to education, healthcare and other public facilities. Each informal settlement, though, is distinct in that it has its specific history, community, and distinctiveness, and it is hence not easy to generalize about a subject that concerns all developing countries nearly without exemption.

This section is divided into six portions corresponding to the purposes of the research. The first portion deliberates on the perception of informal settlements, the second section on the reasons for informal settlement, the third part on the relationship between informal settlements and sustainable urbanization, the fourth part on the relationship between informal settlements and urban land management, the fifth part on the empirical review and the sixth part of the analytical framework.

2.2 Informal Settlement

It is difficult to find a clear definition of informal settlements. Various synonyms have been used in the literature to denote informal settlements. These include "spontaneous, irregular, unplanned, marginal and squatter settlements. In some of these works, the term "slum areas" and "informal settlements" has been used
interchangeably” (UN-Habitat, 2003), while a flawless meaning of informal settlements remains vague. Some organizations have given explanations of informal settlements and slums. The UN-Habitat (2003) categorizes informal settlements into two: “Squatter settlements - settlements where land and/or buildings have been occupied without the permission of the owner, whereas Illegal land development - settlements where initial occupation is legal, but where unauthorized land developments have occurred (e.g. Change of land use that breach zoning plan, building extensions without building permits, subdivisions without regard to services and infrastructure, etc.)” (UN-Habitat, 2003, p. 82).

UNCHS offers a similar description. Informality denotes (1) unlawful occupation of land (2) non-conformity with building codes and infrastructure standards (3) both the illegality of the land in which a house is constructed as well as non-compliance of the house to building standards and codes (UNCHS, 1996). In many countries, informal housing is observed in squatted or on peri-urban areas that are divided illegally. The settlements are identified by different terms in different countries: Barridas (Peru), KachiAbadis (Pakistan), Camping (Indonesia), shanty towns (English-speaking Africa), Favela (Brazil), Bidonville (French-speaking Africa), etc. What is common for all informal housing, regardless of their country, is:

- They are built by residents themselves with very little public support, often despite eviction threats from public authorities. The houses are built with intentions of owner occupation, renting or both.
- They are largely built by low-income urban residents who see prevailing formal channels that offer them barely any convincing choices.
- Houses are mainly built with informal financing techniques, i.e. loans from friends or family, inheritance, land or jewellery sales and savings in informal credit unions (Malpezzi & Sa-Adu, 1996).
- Use local building materials, skills, designs and home-grown know-how.
- They do not follow formal/legal building codes and regulations, especially during the early stages of the establishment.
• They show significant variations in building types and quality. Some houses are of high quality, built with concrete blocks, corrugated iron, aluminium, zinc or tin. Others may consist of traditional rural building materials.
• They are built in steps, which guarantee the flexibility of the builders/owners.

World Bank differentiates slums and Informal settlements (IS). Slums comprise older areas of existing cities undergoing deterioration and decay but IS also includes the poor and precarious housing and environment near the CBD, within the city or on the city fringes or other areas where lands are vacant, accessible and affordable. They constitute an expression of poor urbanization and poverty of city dwellers as well as "... failed policies, bad governance, corruption, inappropriate regulation, dysfunctional land markets..." (World Bank, 1999).

Since this research is primarily concerned with land tenure and land management, the term informal settlement is preferred. The definition of informal settlements that is adapted for the purposes of this research is unplanned settlements and areas where housing is not in compliance with current planning and building regulations i.e. unauthorized housing. Informal, or spontaneous, settlements are settlements whereby persons assert land rights to or occupy for exploitative land which is not registered in their names, or government land, or land legally owned by other individuals (Kibwana, 2000).

Due to the inherent unauthorized status of informal settlements, the needs of the communities living in these settlements are enormous. Informal settlements normally experience low levels of services and infrastructure such as water, sanitation, electricity, roads, drainage, schools, health centres, marketplaces, etc. Water supply, for example, to individual households in informal settlements may be absent completely, or available from few public or community standpipes. Informal settlements are consequently areas of increasingly high risk with regard to health, fire, and crime.
Perry, et al., (2007) cited in Fransen and Pieter (2008) classified informality into two, exclusionary informality, when businesses and households are driven into informality by poverty; and voluntary informality, when businesses and households opt to be informal, based on a cost-benefit analysis (Fransen & van Dijk, 2008).

2.3 Causes of Informal Settlement

In most developing countries, the formal market mechanism has systematically failed to satisfy the rapidly increasing housing needs of the population. It is estimated that between 30 and 70 per cent live in ‘irregular’ settlements with a growing tendency (Durand-Lasserve, 1997), according to UNCHS (1996, p. 337), 64 per cent of the housing stock in low-income countries and up to 85 per cent of newly produced housing is unauthorized. Self-help housing has long been seen as detrimental to sound urban development and orderly Planning. In the last two decades, it is increasingly recognized as the only means available to fulfil the immense demand for mass housing in the cities, and thus a solution rather than a problem (UNCHS, 1996).

According to Van Asperen and Zevenbergen, growing lack of land for low-cost housing, due to the rate of urbanization and commercialization of agricultural economies, resulted to informal tenure (Van Asperen & Zevenbergen, 2007). In Melanesian cities and towns and Nairobi, the origin of informal settlements was related to colonial laws that restrict movement and suspension of this law after independence and poor performance of the economy afterward (Chand & Yala, 2008; Lamba, 2005).

For Berner (2001) it is economic restructuring driven by global competition and often accompanied by Structural Adjustment Programmes, which is destroying many of the jobs and forces an increasing number of people to eke out a living in the informal sector.

Cities still serve as safety valves for rural economies which are doing even worse: “Most people flee to the cities because no matter how life there may be, it is generally better than the rural one they are leaving behind. Their new homes may be squalid
shanties without plumbing or heat. But at least in the cities, they have an opportunity” (Berner, 2001, p. 227).

Poverty and informal settlements are inextricably linked as it is widely acknowledged that poverty is a major driver of both the establishment and entrenchment of informal settlements, with the majority of the urban poor located in informal settlements (see, for example, (UN-Habitat, 2009; Jones, 2011). Informal settlements have originated from difficult problems of housing, immigration rates, politics, physical planning, landlessness, and unemployment in urban areas. In particular, they originate from the existing gap between the number of regular dwellings supplied and the need (Yapi-Diahou, 1995). There is a strong correlation between informal settlements and informal economic sectors as well (Badshah, et al., 1991).

The urban fringe pressures on landowners and families, some as unwilling partners as they are consumed into the growing urban footprint. Pressures include land speculation and opportunism, leading to the ‘sale of lands’, often without the consent of wider clan and family members. In this setting, informal and formal land dealings are used as a conduit to earn income and appease short-term poverty and day-to-day hardship concerns (Chand & Yala, 2008).

People who migrate to urban areas face considerable incentives to locate in informal settlements. For example, such settlements often have unregulated access to water and electricity, and land prices are considerably lower than what the formal settlements require. Informal urban settlements with the poorest households are often located on marginal land, including river banks, steep gullies, and mangrove swamps, and/or on land with disputed ownership. The implicit value of such land relative to its immediate surroundings is low and so the perceived risk of eviction by the landowner(s) is low. Settlements in such locations, however, are at a greater risk of being affected by natural disasters such as flooding (Chand & Yala, 2008).

There are several complex statutory requirements for establishing a formal settlement in major urban areas such as Port Vila, Honiara, Port Moresby and Suva (Jones, 2011). Not surprisingly, the private sector has not taken up the challenge of making
land available for housing for low-income households. The costs of registering land and building in compliance with statutory requirements for residential housing is well beyond the capacities of the average citizen.

Nabutola (2004) stated that ineffective housing policies, among others, have contributed to the expansion of informal settlements in Kenya. In some cases the policy may not adequately address issues of housing for the poor, at other times government may attribute the problem to severe budgetary constraints, delays of implementation and lack of commitment.

Results of a study done in Ethiopia on urban land and informal economy reveal that urbanization and deficiencies of the public land management (especially the land allocation process) have led to the evolution of informal housing markets (Gondo, 2010). Major determinants of informal housing in this analysis include chronic poverty, shortcomings associated with the social housing programmes, unrealistic urban land use regulations and standards, bureaucratic tendencies as well as the informal economy itself.

Dowall (1991, p.2) in Fekade (2000) stated that informal settlements are manifestations of problems pertaining to government’s public policies. The policy ambiguity, procedural complexity and the prohibitive cost involved in obtaining documents (titles) which legalize ownership of urban land has forced the urban land market to further proceed in an ‘informal' or ‘illegal' way.

2.4 Influences of Urban Land Management on expansion of Informal Settlement

Land Management is the process by which the resources of land are put to effective use (UNECE, 1996). Dale identifies three key attributes of land that every country must manage - its tenure, value, and use. He further states that access to information on the ownership, value, and use of land helps to achieve the social and political objective. In ensuring that land management is practiced; land administration is key (Dale & McLaughlin, 2000). The UNECE (1996) defines land administration as ‘the
process of determining, recording, and disseminating information on ownership, value, and use of land when implementing land management policies’.

Land management is a key to urban development due to its influences on the social, economic development and urban environmental management. Land and housing are important sectors as urbanization and urban development accelerate.

In the words of Plessis (2008) land use management is utilized to establish an orderly and well-regulated development. Land use management ensures:

- Security of use (through the right recorded in the municipality’s land use scheme);
- Security of investment (through regulating all land uses in the development to ensure orderly, harmonious development that does not have any negative impacts);
- Security of tenure (through a proper land allocation system such as township establishment); and
- Value (the rights recorded in the municipality’s scheme add value to a property).

In rapidly growing cities of developing country, distorted land markets and ineffective urban land management often have resulted in the degradation of environmentally fragile land; occupation of hazard-prone areas; loss of cultural resources, open space, and prime agricultural land; and excessive urban sprawl. An important challenge is to achieve a balance between urban development and environmental protection, taking into account linkages among land use, poverty, and the environment (Büthe & Milner, 2008).

Weak land administration and in particular inefficient land registration processes, corruption and red tape make urban land unavailable for about half of the urban dwellers and businesses. Hence, the phenomenon of parallel informal land allocation is widespread and is responsible for the alarming rate of informal settlements and related loss of revenue to the municipality (Serbeh-Yiadom, et al., 2008).
2.4.1 Limited land supply and urban land management

Limited supply of land in urban areas of developing countries arises because of several factors. The first is the rapid increase in urban population. The increase in population means an increase in demand for land for productive activities, and a competitive demand for land between agriculture, needed to feed the extra population, and for other productive uses (Garba, et al., 1990).

The land has certain characteristics which, however, influence its supply and market. The quantity of available land is fixed. The supply of land can only be increased by converting fringe land to urban uses. Land location is also specific. Increase in demand means a competition for land in the most suitable and accessible location. The result is price increases. Natural constraints such as mountains, gullies, and rivers all contribute in limiting the supply of available land for use. The ability of most countries to also convert rural land to urban uses and to effectively manage the existing stock of land is severely limited. There is a severe limitation of financial capacity which is a product of both the scale of the land and housing problem, and of limitations in revenue earning potential. Limitations in revenue mean that land cannot be acquired and serviced in enough quantity to meet the needs of growing urban populations. Inappropriate policies and legal instruments, coupled with severe limitation in both managerial and institutional capacities mean that even the limited stock that is made available is mismanaged, thereby distorting access and encouraging speculative activities (Garba, et al., 1990).

In all restrictions on land supply reduces the access of low-income households to land. Usually, the restriction results in speculative activities which pushes up the value of land in the open market and makes it unaffordable to low-income households (Garba & Al-Mubaiyedh, 1999). In areas where there is a restriction on the free transfer of landed property, a black market in land ensues. Illegal occupation and development of land are both a manifestation and a result of the inadequate supply of land to low-income households in urban areas (Garba & Al-Mubaiyedh, 1999).
2.4.2 Instruments and requirements for an efficient land management system

The wide variety of factors influencing the formulation of land policies and the establishment of a land management system makes it impossible to develop a prescription or have a perfect recipe for an effective land management system. There appears, however, to be a consensus in the most literature on land on the instruments and requirements for an effective and efficient system (Garba & Al-Mubaiyedh, 1999). These instruments and requirements are generally used to achieve the following broad objectives of land policies; Dunkerley and Hallet have, however, identified some of the objectives generally put forward for the creation of an effective system. The objectives include: the provision of an adequate supply of land for urban productive activities, including the provision of basic services; the facilitation of good urban planning that minimizes the use of resources relative to social and economic benefit; the achievement of greater equity in wealth and income, including access by low-income families to land and shelter; and a spatial distribution of population and activities at regional and national levels consistent with general national priorities (Dunkerley & Hallet, 1983).

The inadequate supply of and inequitable access to serviced land in urban areas of developing countries is the most important factor militating against the supply of housing to urban low-income households. Inadequate supply and inequitable access stem, in most countries, from the use of poor and inappropriate frameworks for the management of urban land.

2.4.3 Improving tenure security

The most important element of land management is tenure security. Land tenure security can be defined to exist when an individual perceives that he or she has rights to a piece of land on a continuous basis, free from the imposition or interference from outside sources, as well as the ability to reap the benefits of labour and capital invested in that land, either in use or upon transfer to another holder (Place, et al.,
1994). The current situation in informal settlements in Africa with respect to tenure security is concluded by (Rakodi & Leduka, 2004):

- Informal land delivery systems are in part a continuation of earlier land administration practices and in part a response to the failures of the formal tenure and land administration systems. Informal systems of land delivery are the main channels of housing land supply.

- Informal land delivery processes are often effective in delivering land for housing, because of their user-friendly characteristics and social legitimacy.

- Urban growth and development increase the pressure on such social institutions, and in some cases, they weaken and break it down, leading to increased tenure insecurity.

Tenure regularization is seen as one part of the solution to improve the livelihoods of landholders in informal settlements. Ooko Midheme defines tenure regularization as a deliberate process aimed at bringing the informal and unauthorized settlements within the official, legal and administrative systems of land management. There are three main types:

- **Formalization**: the political or administrative acknowledgement or recognition of informal settlements in the official city administration, like anti-eviction laws or designate informal settlements as special planning areas.

- **Legalization**: the process of providing legal backing to the existing tenure systems on community or municipality level, like provision of tenure security to residents of informal settlements and the improvement of housing, infrastructure, and urban services.

- **Titling**: this refers to the registration of individual or group rights into a land register, often combined with the cadastral survey (Ooko Midheme, 2007).

The above-listed types of regularization are state driven. Additionally, communities themselves can also act to improve the security of tenure whereby they serve as regulators under the existing legal framework.
2.5 Implication of Expansion of informal settlement for environmental management

The rapid urbanization is often associated with the cost of the valuable ecosystem. Moreover, if the current and future urban areas continue with the same resource consumption practices without regarding the future needs, serious environmental, social and economic problems are expected (Daily, 1997). Therefore, international organizations (e.g., UN-Habitat, World Bank, and OECD) have committed great efforts in promoting the mission of sustainable urbanization practice and currently the mission is widely addressed among different disciplines.

Priority areas within which National governments may draw their development strategies to achieve sustainable human settlements include - Provision of adequate shelter for all, improved human settlement management and promote the integrated provision of environmental infrastructure- water, sanitation, drainage and solid waste management.

One of the consequences of unsustainable urbanization in Africa is a proliferation of informal settlements which are characterized by lack of social justice and environmental sustainability. Urban policies have generally failed to address the fundamental determinants of informality and have evidenced a lack of orientation for the purpose of mitigating the impacts of social and economic vulnerability among the urban poor and meeting their basic needs (Aguilar & Santos, 2011).

As regards environmental impacts, several different changes and processes characterize peripheral urban spaces. Some important processes related to the environment are: encouragement of a scattered pattern of urban occupation for housing and infrastructure; the emergence of informal settlements for groups of poor inhabitants with precarious dwellings and a deficit of public services; disposal of solid and toxic waste; extraction of building materials and surface water and groundwater; and alteration of river courses; flooding and landslides; and environmental stress in conservation areas, green areas or recreational spaces (Douglas, 2006).
According to Aguilar (2008), the decay in the urban glitches such as environmental impairment has been derived from the inability of local governments to manage rapid urban growth, to offer public goods and services to all social groups, and to indicate suitable technical and political capacities (Aguilar, 2008). On this issue, two relevant questions arise: first, how are cities moving towards more ecologically sustainable patterns of production and consumption and land-use policy? Second, how can zone and development controls be used not only to protect environmental quality for the rich and powerful but also for the most socially deprived groups? In short, it is obvious that conventional approaches to informal settlements need to be transformed. As McGranahan, et al., (2008, p. 93) points out, looking to the future it is clear that steps need to be taken now to avoid a new generation of informally housed settlements from forming, not by halting urbanization, but by accommodating urban growth more efficiently and equitably; local governments should stop regarding informally housed settlements as a symptom of over-urbanization and stop utilizing land-use policies as a means of curbing urban growth (McGranahan, et al., 2008, p. 93).

The UN-Habitat (2010) confirmed that sustainable urban development is vital to both national economic growth and poverty alleviation, and an equitable urban land use and management system is a key to this end. Large-scale inequalities within cities, reflected in the land ownership structure and in the existence of vast informal settlements, can lead to conflict and social instability, which in turn can have negative impacts on the national economy (UN-Habitat, 2010).

On top of that without appropriate land administration and land record system, it will be very difficult to undertake city-wide delivery, and given that most cities are around 60 per cent informal (or are not seen in the land records), it will be necessary to develop a roadmap to merge the formal and informal over time. Ultimately it is about creating and integrating sustainable urban systems such as land records, planning, governance, services and infrastructure in the short, medium and long-term and thereby moving from small-scale slum gradually to slum prevention as well (UN-Habitat, 2010).
In many African cities, the urban land market is skewed against the poor. The rising costs of urban land and other factors prevent poor people and other vulnerable and disadvantaged groups from gaining access to suitable land, which poses economic, environmental or health risks to the residents (e.g. proximity to polluting industrial facilities, inappropriate geographical conditions or susceptibility to natural disasters). Bringing the development of urban areas into harmony with the natural environment and the overall system of settlements is one of the basic tasks to be undertaken in achieving a sustainable urbanized world (UN-Habitat, 2010).

2.6 Review of Empirical Literature

In this section researches made in Ethiopia in general and in Amhara and Bahir Dar city, in particular, are reviewed. Most of these studies are on the causes and consequences of informal settlements. There is a scarcity of literature on the relationship between informal settlement and land management as well as environmental management.

2.6.1 Causes of informal settlements

United Nations Task Team on Habitat III (2015) noted that Informal settlements and slums are caused by a range of interrelated factors, including population growth and rural-urban migration, lack of affordable housing for the urban poor, weak governance (particularly in the areas of policy, planning, land and urban management resulting in land speculation and grabbing), economic vulnerability and underpaid work, discrimination and marginalization, and displacement caused by conflict, natural disasters and climate change (United Nations Task Team on Habitat III, 2015, p. 2).

There is a relationship between the growth of informal settlement and slums and the lack of adequate housing and land. While private sector investment in housing has been steady over the years, this investment has not translated into pro-poor, affordable housing. Some studies suggest that the affordable housing gap now stands at $650 billion a year and is expected to grow. Furthermore, governments are increasingly disengaging from a direct role in the provision of affordable housing,
posing major implications for the urban poor as the housing sector is susceptible to speculative forces that tend to end up benefiting more affluent urban residents change (United Nations Task Team on Habitat III, 2015, p. 4).

Ethiopian Urbanization Review by the World Bank (2015) also stated that large minimum lot sizes for residential and commercial use, coupled with limitations on land plot coverage and building heights, discourage high-density formal multi-family inhabitation within any given formal plot, making formal land and housing unaffordable for many residents. This results in a trend of horizontal, low-density urban expansion. In addition, the fact that the government is the sole supplier of land has resulted in a number of unintended negative social, economic, and spatial consequences (Ethiopian Urbanization Review by the World Bank (2015). The report also stressed that land is an important input in housing production and constraints on land tenure rights and transfers increase the cost of housing. The inability to satisfy the demand for affordable land through formal channels, high and costly standards lead to a growing number of informal settlements in many if not most Ethiopian cities.

There is strong unmet demand for land from people of all levels of income, the poor in particular, but also from businesses. The government, holding a monopoly on land supply, yet constrained by limited capacity and financial resources, has not been able to satisfy the demand for land supplied with the required basic services. Simply put, for many people, there is no place to turn to except to informal settlements due to limits on the circulation of land available for development, which drives up the cost to build and purchase housing.

Moreover, because of the split between urban and rural land rights, incentives exist for informal development outside the city boundary. As soon as previously rural territory is planned for urban expansion, its inhabitants become the subject of “default” expropriation, with compensation only in cases where they have legal rights to the land, and at prices that are many times lower than farmers can fetch on the informal market (Table 2.1). This incentivizes many rural residents on the urban fringe to pre-empt such processes and subdivide and sell the land, helping to satisfy the
demand for land and housing not met through formal channels within the city and further encourages the expansion of informal settlements.

**Table 2.1: Comparison of Land Pricing in Expropriation and on Informal Market in some Towns of Ethiopia.**

<table>
<thead>
<tr>
<th>City</th>
<th>Typical compensation prices paid by local governments to farmers for expropriated land, birr/m²</th>
<th>Anecdotal data on a price range farmers can receive for land on the informal market, birr/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ababa</td>
<td>190</td>
<td>550 - 800</td>
</tr>
<tr>
<td>Bahir Dar</td>
<td>13</td>
<td>250 – 300</td>
</tr>
<tr>
<td>Kombolcha</td>
<td>16</td>
<td>150 - 300</td>
</tr>
<tr>
<td>Dessie</td>
<td>17</td>
<td>450 - 600</td>
</tr>
<tr>
<td>Jimma</td>
<td>20</td>
<td>350 - 550</td>
</tr>
<tr>
<td>Assosa</td>
<td>30 - 50</td>
<td>300 - 600</td>
</tr>
<tr>
<td>Hawassa</td>
<td>31</td>
<td>550 - 750</td>
</tr>
<tr>
<td>Shashemenne</td>
<td>12-18</td>
<td>At least 3 times higher than the compensation</td>
</tr>
<tr>
<td>Dire Dawa</td>
<td>56</td>
<td>No data found</td>
</tr>
</tbody>
</table>


Melesse (2005) study on city expansion, squatter settlements, and policy implications in Addis Ababa indicate that high building standards of the legal houses, delayed responses and procedural problems of the legal land provision, and high housing rents in the city centre were identified by respondents as the causes of squatting in the study area. In addition, less government control of open spaces, the limited capacity of the code enforcement service to control illegal house construction, lack of a comprehensive legal response towards the problem of squatting, and the practice of land sale by land speculators as a means of making profit are other factors that have contributed to the emergence and proliferation of squatter settlements. Similarly,
Tegenu (2013), Daniel (2006) for Addis Ababa and Bekele (2014) for Burayu arrived at similar causes for the expansion of informal housing in different urban centres in Ethiopia.

Daniel (2006) stated that informal settlements have been expanding at an alarming rate in the expansion areas of Addis Ababa. For instance, from 1984 to 1994 such settlements had been growing by 15.7 per cent and the figure rose to about 30 per cent in 2001 (ORAAMP, 2001, quoted in Daniel (2006)). The same source reveals that the total informal housing units in the expansion areas alone are estimated to be 60,000 and housed a total population of 300,000. In a similar manner, the total area supposed to be occupied by informal settlements is about 2000 hectares with the plot size generally varies from 200-2000m².

Daniel (2006) found that informal housing is caused, among others, due to limitations of the present regulations, high and expensive building standards, poor land delivery system; long procedures to obtain housing finance from institutions coupled with lack of institutional capacity. However, as informal settlements in the expansion areas of Addis Ababa are concerned, it is very difficult to conclude whether they are “poverty-driven or not”. This is because of the fact that some of these settlements do not have a sign of poverty (rather they are good housing, have a large compound and full services) while others are suffering from lack of services, are highly crowded and located at environmentally sensitive areas. Besides, lack of proper land management, corruption, the absence of clear housing policy, the limited plot of land delivery and bureaucracy are some of the causes of housing problems.

Bekele (2014) study showed that contrary to many studies conducted on similar areas, the root cause for development and expansion of squatter settlements in Burayu town is not the economic poverty of the squatter households. It is rather the cumbersome procedures and very poor performance of land development and management agency to deliver the land to the aspirants.

Achamyeleh (2013) identified two causes of informal land rights in Ethiopia. First, the bifurcation of the land administration institutions into urban and rural, typical to the
Ethiopian context, has created a favourable ground for the emergence of informal settlements in the transitional peri-urban areas. The loose coordination between the two land administration institutions and lack of clarity on the matters of peri-urban land has created room for local peri-urban landholders to subdivide and sell their land on the informal market. The creation of a power vacuum peri-urban zone would entail an opportunity for peri-urban farmers to transform their agricultural lands into residential plots by subdividing and then selling the plots without any interference from government bodies.

Second, the growth of informal settlements in the transitional peri-urban areas was driven by both pull and push factors. As a pull factor, the local peri-urban landholders’ behaviour and interest in selling their land on the informal market have attracted large numbers of low-income households from the inner city and other parts, seeking an alternative source of shelter. Informal plots which were subdivided illegally by local landholders are relatively cheap and affordable to low-income groups, which have drawn these groups of people to the peri-urban areas. The deficiency of the formal land and housing delivery system in the urban areas as well as high and increasing housing rent in central areas of cities are important factors which have been pushing low-income groups to peri-urban areas to find shelter.

Berhanu, Rohan, and Jaap (2014) in their study on Bahir Dar city concluded that informal settlements are outcome indicators of weak urban land governance. The empirical results he presented also demonstrate that informal settlements are spatially and temporally increased in Bahir Dar.

He further explained that the causes of the spatial and temporal expansion of informal settlements identified in this research are the result of weak urban land governance. These causes are characterized by different weak governance principles including: dispute (political uncertainty), poverty (economic crises), inefficiency (inefficiency of local government, improper implementation of urban housing and land policies), informality (low price of urban land in the informal land market), non-effectiveness
(weak urban land use planning and cadastre system) and poor services (shortage of houses at affordable rental price).

### 2.6.2 Consequences of the prevalence of informal settlements

HABITAT III Issue Papers on informal settlements (2015) noted that the conditions in informal settlements and slums are a risk to inhabitants’ health and make them more vulnerable to communicable disease outbreaks, and this has dramatic effects in slum dwellers’ life expectancy. While the poorest 20 per cent of cities struggles to reach 55 years of age, the richest 40 per cent goes well beyond 70 years. Similarly, among the poorest 20 per cent of the world’s urban dwellers, the under-five mortality rate more than doubles that of the wealthier urban quintiles (United Nations Task Team on Habitat III, 2015, p. 4).

Getalem and Yenew (2014) stated that inhabitants who live in the unplanned housing units of Bahir Dar are often exposed to health risks associated with environmental problems. As a result, the existence of illness by infectious diseases among informally established housing units was found to be 39.5 per cent compared to 10.8 per cent among formally established housing units. The prevalence of illness among informally established housing units were more than formally established housing units. Diarrheal diseases, malaria, typhoid, and typhus were the most infectious diseases found to be prevalent in informally established housing units.

Daniel (2011) indicated that informal settlements in Bahir Dar have the potential of creating environmental pollution and land degradation, being sources of health problems, crime, and urban violence. They will be a social liability unless assisted and rescued from such living conditions. Similarly, Moosavi (2013) stated that environmental health issues are some of the most visible symptoms of the challenges facing informal and slum settlements in Tabriz, Iran. Sprawling slums litter, and polluted waterways are prevalent in most urban slums, and health and development statistics quantify in some detail the massive impact of this situation on the quality of life of the population.
Bruce (1996) revealed that the development of squatter and other informal settlements in Montego Bay (Jamaica) helps individual low-income households (although not the poorest) solve their shelter problem. However, the informal settlement also exacts tremendous costs to neighbourhoods and the city as a whole, largely in the form of environmental problems that threaten the household health and the region’s main economic base, the tourist trade. These environmental costs come in the form of inadequate or no provision for paved roads, piped water, sanitation, and garbage for a high proportion of those living in informal settlements. When these costs are taken into account, the informal settlement is no less expensive than formal-sector development. Thus, informal settlement helps solve the individual household’s shelter problem but creates great environmental impacts and public costs, often borne by the government.

Evidence from other regions also suggests that informal settlement exacts tremendous costs at least comparable, and often greater than those necessary to provide basic formal sector solutions. A thorough study of the upgrading investment necessary for Caracas barrios, for example, results in a figure of US$ 5,000 per unit, about the same amount as a government-sponsored 40 square metre expandable units. This finding has crucial policy implications. Governments do economize short-term when they allow unguided informal settlement to take place. The upfront cash costs of upgrading are less than those of serviced sites. However, governments reap great public costs from the resulting informal settlements mid and long-term. Subsequent administrations end up extending infrastructure and urban services via upgrading projects that, nevertheless, result in lower environmental and health quality than if basic formal sector development were undertaken to begin with (Bruce, 1996).

2.7 Analytical Framework

Expansion of informal settlements has implications for environmental management such as congested and substandard housing, prevalence of unhealthy environment, polluted waterways, and prevalence of infectious diseases.
Figure 2.1: Informal settlement and urban land management

Drawn from the very problem of the study and from review of related literature, this analytical framework (Figure 2.1) helps synthesize major variables and the relationships between them. It illustrates that urban land management policies and practices influence the proliferation of informal settlements, and expansion of informal settlements in turn has implications for environmental management.

Besides, the review of related literature presented in this chapter describes that informal settlements are caused by, inter alia, rapid urbanization, deficiency of basic services, poverty of inhabitants, ineffective housing and land lease policy and land laws, as well as weak land governance. In other words when factors influencing land management policies and practices are favourable, there would be prevalence of informal settlements and vice versa. Indicators of poor urban land management are, among other things, poor access and tenure insecurity, weak land governance, ineffective and inefficient land policies and land laws, and unregulated development.
2.8 Summary

In the first section of this chapter attempts were made to define the concept of informal settlements, classify them as exclusionary and voluntary and describe their attributes. Distinction was also made between slums and informal settlements. The concept of informal settlements used in this research refers equally to the illegal occupation of the plot on which a shelter is erected and the violation of the erection to construction principles. Unauthorized settlements are characterized by unavailability or scarcity of services and its consequences on the health of its inhabitants and the environment.

In the second section causes and evolution of informal settlements were reflected based on the experiences of various countries. It is revealed that informal settlements are caused, among other things, by virtue of increasing absence of land for decent dwelling, chronic poverty of spontaneous settlers, and economic restructuring driven by global competition which is destroying many of the jobs. Furthermore, the origin of informal settlements are related to Rural ‘push’ factors including the shortage of arable lands, family disputes, and individual and family aspirations in regard to the potential gains from schooling and engagement; and Urban ‘Pull’ factors relate to community, management and schooling amenities.

In the third section, an attempt has been made to analyse influences of land management on expansion of informal settlement. It has been observed that the informal land allocation, distorted land markets and ineffective urban land management often have resulted in the degradation of environmentally fragile land; occupation of hazard-prone areas are responsible for the worrying level of informal settlements.

The fourth section focused on four issues: the concept and trends of land management, the role of land in urban land management, instruments and requirements for an efficient land management system, and improving tenure security. Many of the informal settlements are irregularly scattered, no systematic
scheme of roads has ever been laid down, and the huts are packed along irregular and narrow lanes. Effective urban land management stimulates sustainable urban development.

There are several restrictions on land supply which includes rapid increase in urban population, a limited quantity of available land for use, severe limitation of financial capacity to convert rural land to urban uses, and inappropriate policies and legal instruments, coupled with severe limitation in both managerial and institutional capacities to effectively manage the available land. Usually, these restriction results in speculative activities which pushes up the value of land in the open market and makes it unaffordable to low-income households thereby results to informal occupation and development.

Implications of expansion of informal settlement for environmental management were presented in fifth section. Lack of Effective urban land management results to various land management problems such as a poor urban land delivery system for the urban poor, informal land transactions; expansion of squatters in regions liable to risk, land speculation and land use conflicts (see the theoretical framework at the end of this section). The next chapter will present the study area and research methodology.
CHAPTER 3

THE STUDY AREA AND RESEARCH METHODOLOGY

3.1 Introduction

Research methodology answers the question of how the research problem is addressed. According to Goddard and Melville (2001, p. 1), “research involves not only collecting data but also “answering unanswered questions” or establishing a new quest for knowledge”. Research methodology is a specific technique received by the analyst to assemble data and to answer the planned research questions (Goddard & Melville, 2001). In this unit, the research site was briefly introduced as well as the research methodology was described.

3.2 The Study Area

Bahir Dar metropolis is situated in the North-Western portion of Ethiopia, 560 km from the centre Addis Ababa. It is located on the coast of Lake Tana, the biggest freshwater lake in the country and the wellspring of the Abbay River (Figure 3.2). Bahir Dar is located between 11°33'20" N and 11°37'20" N latitudes and 37°2'20" E to 37°26'40" E longitudes. Currently, Bahir Dar is the third biggest city in Ethiopia with inhabitants of 329,318 (CSA, 2013a). Bahir Dar represents an outstanding potential for future urban development of the Amhara Region, because of its urban nodes, its transport, energy and research infrastructures, its economic assets, the high fertility of its hinterland as well as its cultural heritage and beauty of the landscape.

Like many cities in developing countries, Bahir Dar has been encountering the rapid population growth associated with urbanization, which is one among the main impetuses for the proliferation of spontaneous neighbourhoods on the edge of the city. An estimate by the city authority shows that about 30 per cent of the urban inhabitants' lives in spontaneous settlements, excluding those living in the inner city slums (Daniel, 2011). The growth of these impromptu settlements has been related to many environment-interrelated challenges. The scarcity of potable water and public
health amenities, congestion and disposing of huge quantity of wastes into the lake are some of the serious environment-related problems.

Therefore Bahir Dar City was chosen as the study site for this research because of: its rapid urbanization and accompanying expansion of informal settlements, occurrence of poor formal and informal urban land management practices as well as consequences of prevalence of informal settlements on environmental management were observed by the researcher.

![Study Area](image)

Figure 3.1: The study area.

For administrative purpose, Bahir Dar is grouped into nine urban Sub-cities and four peri-urban agrarian *kebeles*³ found instantly outside the city limits. Sub-cities have

³ *Kebele* is the lowest administrative unit in Ethiopia.
been further divided into zones (A, B, C, D, and F). The core city has an estimated area of 16000 hectares. The four prompt peri-urban agrarian kebeles are Addis Alem, Weramit, Dishet Abaraji and Zenzelema (see Figure 3.1). Among the four peri-urban kebeles, namely Weramit and Dishet Abaraji, and two adjacent sub-cities, namely Shimbit and Belay Zeleke were chosen as case study sites. Most of the sample of this study is collected along transitional areas between sub-cities and peri-urban rural kebeles, specifically, Shimbit means areas in Shimbit bordering Weramit and Weramit kebele bordering Shimbit sub-city. Similarly, Belay Zeleke includes Belay Zeleke sub-city and some areas in Weramit bordering Belay Zeleke sub-city. In Belay Zeleke an inner informal settlement area was also considered for close scrutiny.

These sub-cities and peri-urban kebeles are situated in the southern and western portion of the city, respectively, and the land in the two peri-urban kebeles is mostly utilized for farming activities. But, the peri-urban kebeles are under increasing pressure from urbanization and thus continuous rural transformation and urban development have been observed along the interface.

Furthermore, among the peri-urban rural kebeles, Weramit and Dishet Abaraji have experienced the prevalent development of informal housing development in recent years according to an estimate by Bahir Dar city administration. This is why they were chosen to be the samples of this research.

3.3 Research Approach
The choice of any particular research approach should always be determined by the nature of the research topic, the particular characteristics of the research problem, and the specific information sources used (Walliman and Baiche, 2001). In fact, it is often appropriate to first determine the type of analysis – quantitative or qualitative – required to investigate the research problem, and then determine the type of data to be collected in order to make that analysis (Yin, 2003). Thus, the data collection and analysis methods employed in this research were selected after careful consideration of the sources and availability of the required data. Accordingly, it was determined to use the mixed-method research approach. The decision was initiated on the idea that
blending the quantitative and qualitative approaches gives a superior comprehension of study issues than either approach alone (Andrew, et al., 2009).

This better understanding outcome is on the grounds that blended strategies offer qualities that balance the shortcomings of individually employed quantitative and qualitative research techniques. It also inspires “the collection of more comprehensive evidence for study problems helps answers questions that quantitative or qualitative methods alone cannot answer, and reduces adversarial relationships among researchers and promotes collaboration” (Andrew & Halcomb, 2009, p. 197). Furthermore, mixed methods allow multiple forms of data drawing on all possibilities and enables statistical and text analysis of the data.

3.4 Research Design

The research design chosen for study was the convergent parallel mixed methods Design (Creswell, 2014, p. 276). In this design qualitative and quantitative data was gathered simultaneously. In simultaneous examinations, qualitative and quantitative data are collected at the same time. The choice of the execution order is made on the basis of the character of the study question and the logic for gathering each set of data. When qualitative and quantitative data are being gathered for affirmation, it might be conceivable to gather the information in the meantime (simultaneously) (Andrew & Halcomb, 2006). In this dissertation, quantitative and qualitative information was gathered in the meantime.

A different concern for picking a design is whether one of the techniques (qualitative or quantitative) will have primacy or more notable accentuation than the other in the research. Ultimately, primacy suggests to the relative weight relegated to the qualitative and quantitative research segments (Kroll, et al., 2005). In exploratory research, where the ideas, factors, and connections among them are for the most part vague, more noteworthy primacy is frequently relegated to qualitative components that reveal the ‘pool’ of factors and connections among them that might be hence contemplated quantitatively. Then again, in exploratory research where qualitative research is for the most part employed to substantiate results produced in
a population level study, primacy is for the most part allotted to the quantitative segment.

In this study, priority was given to qualitative approach following Andrew and Halcomb (2009, p. 36). The benefit of adopting this research design enables the author to get an unambiguous comprehension of the foundations of spontaneous settlements in Bahir Dar metropolis in the context of accessible compiled literature. This fact together with the results of this research empowers the analyst to give a thick account of the issue being considered (Maxwell, 2004). Furthermore, this design was preferred because the data that was used for assessment is largely qualitative and is more suited to describing causal linkages rather than statistical analysis.

Plausibly the most critical, however, least deliberated normal for blended techniques study is the 'blending' of qualitative and quantitative segments. Genuine blended strategies outlines incorporate a deliberate integration of qualitative and quantitative techniques. Integration can happen in different phases of the study procedure. Integration ideally occurs amid the data gathering, data scrutiny stages yet it might likewise happen in the discussion stage of a report/thesis/journal article. The choice on when and how to incorporate the information relates back to the research question, including how it is defined and whether optional inquiries have been expressed (Kroll & Neri, 2009, pp. 31-49). In this research, integration happened in data interpretation or discussion phases.

3.5 Sampling Technique

In household survey data were collected from random samples. The target populations from which the research sample was drawn included the informal settlers in the urban neighbourhoods. Systematic random sampling was adopted to select informal settlers from the list of informal settlers in sample sub-cites. The sample frame for this study was 2400 informal households, of this 722 were from Belay
Zeleke and 1678 were from Shimbit. About 156 samples\(^4\) were randomly drawn from two sites, old and new informal settlements.

Community elders, sub-cities and municipality officials were used as sources of the purposive sample. In purposive sampling, the researcher selected the research participants that appear to have expert knowledge of the problem at hand (De Vos, et al., 2005). The random samples drawn were proportional to the size of the population in the two sites. Both male-headed and female-headed households were included in the sample (See Table 3.1).

**Table 3.1: Location, Number of Households and Gender in the Study Area**

<table>
<thead>
<tr>
<th>Location</th>
<th>No of households (HHs)</th>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Belay Zeleke/ Dishet Abaraji</td>
<td>47 (30.1 per cent)</td>
<td>Male</td>
<td>121 (77.8 per cent)</td>
</tr>
<tr>
<td>Shimbit/ Weramit</td>
<td>109 (69.9 per cent)</td>
<td>Female</td>
<td>35 (22.4 per cent)</td>
</tr>
<tr>
<td>Total</td>
<td>156 (100 per cent)</td>
<td>Total</td>
<td>156 (100 per cent)</td>
</tr>
</tbody>
</table>

\(^4\) It depends on Daniel (1999) formula, \(n = \frac{z^2pq}{d^2}\), Where: \(n = \) the desired sample size, 
\(z = \) the standard normal deviate set at 1.81 which corresponds to the 95 per cent confidence level, 
\(P = \) the proportion of behaviour under study set at 50 per cent, 
\(q = 1 - p,\) 
\(d = \) level of significance set at 0.05, and \(2\) is the rectification factor.

The desired sample size when the population is less than 10,000 are estimated from \(f_n = \frac{n}{1+q} \), where \(f_n\) is desired sampling size when the population is less than 10,000, \(n\) is desired sampling size when population is greater than 10,000, \(N\) is the estimated population size/ sample frame, in this study it is 2400 households.
3.6 Methods and Instruments of Data Collection

To comply with the research objectives, the study generated data from various sources. Data were collected through documents, interviews, focus groups, household surveys and direct observations.

3.6.1 Documents

The official and unofficial documents examined in this research include the notes of the assemblies; local data on informal settlers; regional and national newspapers that publish issues related to the purpose of the study; working papers, strategies and regulations for federal, regional, kebele and sub-city issues.

The documents also include the literature review. The researcher has obtained some of the journal articles from the UNISA online library (http://www.unisa.co.za). Other documents on the study area were obtained from different studies conducted in Ethiopia at different scales. Google Earth 2016 was also used to show the distribution of informal settlements in Bahir Dar in general and in the study area in particular.

The advantage of using documents as instruments of data collections includes: it can be accessed at a time convenient to the researcher, and it saves a researcher the time and expense of transcribing. On the other hand, materials may be incomplete, and the documents may not be accurate are some of the disadvantage.

The documents were used to collect data that helped achieve the first and second specific objectives of this research (Table 3.2).
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Data collection methods</th>
<th>Sample questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>To identify major causes of an informal settlement in Bahir Dar</td>
<td>Documents</td>
<td>How do you get access to this place? For how long you lived in this place? Where you lived before? Why you preferred to live here? What is the size of your parcel? What is the size of the built-up area? How many rooms are in your house? Do you have a separate kitchen, bedroom, living room, and toilet? Where do you dispose your solid and liquid wastes?</td>
</tr>
<tr>
<td></td>
<td>Interview</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Focus group discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Case study</td>
<td></td>
</tr>
<tr>
<td>To evaluate formal and informal land management practices with respect to informal settlements in the study site,</td>
<td>Documents</td>
<td>Do you know rules governing informal settlements? For how long you have known the existence of such rules? Do the rules are accessible, transparent, and balances the interests of the state and the settlers? What are the overall objectives of such rules?</td>
</tr>
<tr>
<td></td>
<td>Interview</td>
<td></td>
</tr>
<tr>
<td></td>
<td>focus group discussion</td>
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<td></td>
<td>Household survey</td>
<td></td>
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<tr>
<td></td>
<td>Case study</td>
<td></td>
</tr>
<tr>
<td>To discern the impact of land management policies on informal settlement in Bahir Dar city,</td>
<td>Interview</td>
<td>Do you believe that informal settlements contribute to solving the housing shortage in the city? What is the overall level of landholding certainty in spontaneous neighbourhoods? etc.</td>
</tr>
<tr>
<td></td>
<td>Direct observation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Case study</td>
<td></td>
</tr>
<tr>
<td>To assess the implications of the expansion of informal settlement on environmental management in Bahir Dar.</td>
<td>Interview</td>
<td>Do you think that informal settlements contribute to environmental management in the city? How? Observed environmental management or degradation in the study site, if any</td>
</tr>
<tr>
<td></td>
<td>Direct observation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Case study</td>
<td></td>
</tr>
</tbody>
</table>
3.6.2 Interviews

Interviewing, according to Greef in De Vos, involves the respondents’ individual accounts of the issue at hand and the author’s impression on information exchange by the interviewee. The impediment of employing interpreters in this data gathering technique (interviews) is that interpretation may upset the precision of the respondents’ answers, as information will not be deciphered precisely as the interviewees communicated it (De Vos et al., 2005). To build the prominence of data acquired, the author took field notes and discerns any non-verbal correspondence communicated by the respondents amid the sessions of the meeting.

Semi-structured interviews were employed in this research. Semi-structured interviews are those conversations articulated in connection to the research issue, while as yet giving flexibility of interpretation to the study partakers (Greef, in De Vos et al., 2005, p. 292). Semi-structured interviews initiate it conceivable for the author to draft the inquiries that should be responded in due order regarding the reason for the study, while in the meantime it gives members a chance to add anything they think applicable to the study.

The author directed one-on-one conversations with the subsequent partakers: the community elders, sub-city and municipality officials of the Bahir Dar city. This method offers participants reasonable degree of privacy, thereby granting them the freedom required to express themselves. In a way that the researcher obtains detailed information. However, one-on-one interviews have certain disadvantages as it is devoid of participants the chance to share ideas from fellow interviewees and as it is time intensive as equated to focus group discussion (Greef, in De Vos et al., 2005, p.292). The interview was carried out from 15/09/2015 to 15/11/2015. The interview guide was used to carry out the interview for purposely selected informants of the study (see Annex F).

The interviews were used to collect data that helped achieve the first, second, third, and fourth specific objectives of this research (Table 3.2).
3.6.3 Focus group discussion

For the informal settlers focus group discussions have been performed. Unlike the one-on-one method, which is directed at an individual person, with focus group interviews the study questions are directed to greater than two partakers. The benefit of employing a focus group for these partakers is that it spares the author’s time, instead of going to every member on a different timetable. It will likewise empower the analyst to comprehend the general sentiments of the group members with respect to the exploration issue in so doing guaranteeing the trustworthiness of the data given, having equated with the members’ reactions (De Vos, et al., 2005, p. 300). The restriction of undertaking a focus group interview is that the partakers can readily impact each other’s reactions or confine every other’s flexibility of articulation.

Two focus group discussions (FGD) were conducted in this research, one FGD for each study sites. In each FGD five respondents were involved. The participants in an FGD were chosen in view of their insight, background, and long stay in the study sites. Interviews and focus group discussion were employed to gather data that helps to accomplish the first, second, third, and fourth objectives of the study (see Table 3.2). Focus group guide was used to carry out focus group discussions for purposely selected informants of the study (see Annex C and F).

3.6.4 Household Survey

The questionnaire was considered an appropriate tool to conduct household survey, as it enabled the researcher to obtain elaborated answers from respondents. The contents of the questionnaires were focused on the opinions, feelings and preferences of local communities regarding on-going informal land management practices and its impact on informal settlements. As stated in the literature, questionnaires and interviews have proved to be very useful and appropriate instruments for collecting data on facts and personal opinions (Denscombe, 2010). Household surveys are relatively easy to develop and administer, capable of collecting data from a large number of respondents and giving extensive flexibility in
data analysis. The limits of the surveys include lack of memory on the subject, willingness to provide information and lack of understanding of the questions, among others.

After the completion of preparing the questionnaire, a pilot test was carried out on twelve informal households in the research area to test the relevance and clarity of the questions. The pilot testing was instrumental to ensure the simplicity of the messages, message harmony, and the clarity of questions for the intended respondents. For the purpose of simplicity, the questionnaires and interview questions were prepared in English and translated into the local language (in to Amharic). Since the majority of the respondents are illiterate and some of them may be reluctant to fill out a questionnaire, data collection was managed in the form of personal interviews in which enumerators/assistants asked questions and recorded answers from the respondents. The data collectors or assistants, all with a background in similar types of studies, were recruited and provided orientation on how to administer questionnaires.

A 32 item questionnaire was administered to randomly selected 156 informal settlers in old and new informal settlement sites (see annex A). The sample was drawn from 2400 sample frame in the two sites. The representativeness of the sample was checked by employing Daniel (1999) formula. The household survey was carried out from 15/09/2015 to 15/11/2015. The questionnaire was employed to gather data to attain the first and second specific objectives of the study (see Table 3.2).

3.6.5 Case Study

Case study method empowers an analyst to thoroughly scrutinize at the facts contained in a particular setting. As a rule, a case study method chooses a little topographical territory or a restricted number of people as the foci of research. Case studies, in their actual spirit, examine and inspect current genuine marvel through itemized logical examination of a predetermined number of occasions or conditions, and their connections. Yin (2006, p. 23) characterizes the case study research
technique “as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.”

In this study five residents, three from Belay Zeleke and two from Shimbit were chosen in light of their awareness and experience to describe and explain for how long and why they have lived in informal housing, advantages and disadvantage of living there, their housing conditions, accessibility to infrastructure, challenges they are encountering and practical solutions to the challenges.

3.6.6 Direct Field Observations

Observation is the manner of collecting statistics through viewing manners, occasions or taking note of bodily traits in their normal venue. Direct/partaker observation is the facts gathering technique that calls for the analyst to be available at, concerned in, and recording the usual everyday deeds with individuals within the field placing. It provides an opportunity to observe realities in the study communities, either something new or repetitions of previous experiences. Critically observing and recording them provided first-hand information, enabling deeper insights into the issue under consideration. Direct observations were carried out by walking around and informally talking with people in different contexts. This made it possible to gain information regarding the biophysical environment, conditions of the informal housing, peoples’ lifestyles, neighbourhood relations, distribution of infrastructure (roads, schools, and health posts) and impacts of an informal settlement on the environment. Many photographs showing housing conditions, layout of paths, drainage conditions, congestions, etc. were also taken during the fieldwork. Repeated observations during the fieldworks enabled corroboration of the data and considerably helped to avoid unnecessary speculations and generalizations.

Since many respondents are illiterate, they could not provide technical information and some were reluctant to state how their plots were acquired. However, direct field observation enabled the researcher to obtain such information. Observation guides in
which topic areas were pre-specified but the analyst communication in reaction to the partaker which may differ were used to carry out direct field observation (see Annex B). In addition, photographs showing the different events and characteristics were captured in the field. Direct field observation was employed to gather facts that assist to attain the third and fourth objectives of the study (see Table 3.2).

3.7 Dependent and independent variables of the study

The dependent variable of this study is the prevalence of informal settlements. The independent variables, related to land management identified in this study, which are influencing the prevalence of informal settlements are land tenure, land policies and land laws, land administration and land governance. The major hypothesis of the study is that unfavourable land management conditions increases the expansion of informal settlements in the study area. Indicators of unfavourable land management conditions are briefly described below.

1. Land tenure: It is the manner in which land right are held. It determines access to land and security of tenure. Reasonable land tenure is when all income groups are getting access to land with greater tenure security. So unfair access to land and insecurity of tenure increases the expansion of informal settlements.

2. Land policy: It consists of the whole complex of socioeconomic and legal prescriptions that dictate how the land and the benefits form land are to be allocated. Sound land lease and housing policy ensures impartial allocation of land and encourage development of affordable housing for low-income population. Unfair land lease and housing policy encourage the expansion of informal housing.

3. Land administration: It is the way in which the rules of land tenure are applied and made operational. Land administration is the operational component of land management. Land administration deals with determination of rights, the cadastral surveying, its detailed documentation, provision of land title and relevant information in support of land markets. Efficient and effective land
administration decrease the transaction cost of land related activities particularly determination of rights, carrying out cadastral surveying, registration of rights and issuance of titles or certificates to right holders. So, inefficient and ineffective land administrations encourage the expansion of informal settlements.

4. Land governance involves a procedure, policies, processes and institutions by which land, property and other natural resources are managed. This includes decisions on access to land, land rights, land use, and land development. It is the governmental side of land management. Good land governance assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It aims to protect the property rights of individuals and enterprises as well as of the state. Thus, weak land governance increases the expansion of informal settlements.

The purpose of identifying dependent and independent variables of this study were not to apply statistical methods and test hypothesis. But rather to clearly identify issues which the author was addressing, that is prevalence of informal settlements, land management policies and practices as well as environmental management. The major arguments were land management policies and practices influences expansion of informal settlements, and expansions of informal settlements in turn have implications for environmental management in the study area.

3.8 Analysing Mixed Methods Data

In exploring specific approaches for investigation of mixed methods data, the analyst change from those methodologies in which the facts and the examinations are kept separate until the point of discussion and conclusion, through consolidating facts for synthesis or comparison, to procedures which include mixing strategies to deal with analysis of facts, normally including transformation starting with one frame then onto the next.
Content analysis was employed to examine subjective data gathered through focus group discussion and interview. The content analysis contrasting to numerical analysis does not calibrate or determine arrangement. It depends on translating suppositions and viewpoints of different subjects. Hsieh and Shannon (2005, p. 1278) defined content analysis as a 'research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns'. Five steps were employed to examine qualitative data of this study: preparation of data - the data collected was transcribed from Amharic to English, classifying the content into themes, create sub-classes and coding plan for the scrutiny, outlining implications on the premise of coding or themes and present the results under each theme.

To analyse quantitative data SPSS statistical software was used to extract simple measurements such as mean, median and average deviations from the mean as well as to test hypothesis. The software was also be used to draw tables and various types of graphs.

Since this research is founded on the integration of verbal and numeric data (mixed approach), triangulation is one of the strategies that was employed in the course of analysis to detect the level of convergence in the results, i.e., triangulation for confirmation and completeness. In this study both instruments of data are analysed separately, then both data types were combined for synthesis or comparison and conclusions drawn on all sets of data.

3.9 Confirming the Trustworthiness and Consistency of the Study

The author guaranteed the trustworthiness of the qualitative data of this research by making sure that data was assembled from partakers that were purposefully chosen, in view of the perceived level of expertise they had in the area with regard to the study subject.

The analyst showed participant inspection by associating the data that was acquired from the diverse members with a specific end goal to build up the shared traits
between the facts. For instance, facts that were assembled from the groups of one investigation place were contrasted with set up whether these members concur or differ on certain comparative issues.

The author guaranteed the unwavering quality of the quantitative data of this study by drawing random samples through cautiously examining the sample frame from which the samples were drawn. On top of that, ensuring a representative sample also contributes to the reliability of this study.

The author likewise triangulated the results of the present study with the results of other authors who had led investigations linked to the investigation theme. The purpose behind this is to decide if the difficulties, as well as effects of the issue identified by former authors, were like what was found by the present author.

At the same time findings from different instruments of data collection within this study was also triangulated. This way the researcher aims at figuring out whether the current results are relevant to different circumstances with comparative issues. In the event that such relevance holds, at that point, the genuine worth of the research is additionally settled. Furthermore, professional encoder was employed for qualitative data.

3.10 Ethical Considerations

As indicated by Strydom (in De Vos et al., 2005, p.56), analysts have two essential classes of ethical accountability: accountability to the study partakers who are participating in the examination study; and accountability to take after the offered system, to be free from mistakes and genuine in giving their input on the examination study.

To guarantee that the author meets his obligation to the examination partakers, he requested that every member partakes in the investigation willingly. The members who consented to participate in the examination were acquainted of the objective of the investigation and the procedure that would be taken after amid the examination and comprehended their part and the objective of the investigation and also the way
in which the investigation would continue. If a partaker consented to participate in the investigation by methods for verbal input, the author requested the partaker to record the verbal understanding together with the conversation session.

The partakers were tolerated to end their collaboration whenever amid the conversation and support for the investigation was absolutely wilful. The author additionally ensured that the confidentiality of the examination members was ensured and that the members were acquainted with who might approach their data. Finally, the author ensured that the study procedure was as per UNISA’s code of ethics. The researcher already acquired UNISA’s ethical clearance before data collection.

3.11 Summary

In this chapter, the study area, Bahir Dar city, is briefly introduced and the research methodology is portrayed. Bahir Dar has been encountering the demographic wonder of urbanization, which is one of the main thrusts for the growing of spontaneous neighbourhoods to a great extent on the edge of the city. An estimate by the city consultant demonstrates that around 30 per cent of the urban population lives in spontaneous neighbourhoods. Evolution of these spontaneous neighbourhoods has been associated with numerous environment-linked issues. The scarcity of drinking water and public health services, congestion and disposing of huge quantity of squanders into the Lake are some of the serious environment-linked issues.

Among the four peri-urban kebeles, two of them, in particular, Weramit and Dishet Abaraji, and two adjacent sub-cities, namely Shimbit and Belay Zeleke have selected as case study parts.

This study employed mixed method research strategy. The study plan used in this investigation acknowledged that subjective and numerical data are collected simultaneously with qualitative data gathering and examination given priority and integration of subjective and numerical data occur in data discussion phases.

To gather quantitative data 156 samples were randomly drawn from two sites, old and new informal settlements. The samples drawn were symmetrical to the
magnitude of residents in the two sites. Qualitative data were collected from community elders, sub-cities and municipality officials which were used as sources of purposive sample. With a specific end goal to achieve the research aims, the research explored data from diverse sources. Data were gathered using published and unpublished documents, interviews, focus group conversations, case study, direct observation, and household surveys.

In this study data generated from interviews and focus group discussions were examined with content analysis. To analyse quantitative data SPSS statistical software was used to extract descriptive measurements. The software was also used to draw tables and various types of graphs. Triangulation is one of the strategies that were employed in the course of analysis to detect the level of convergence in the results. In this study both instruments of data are analysed separately, then both data types were combined for synthesis or comparison and conclusions drawn on all sets of information.

The researcher ensured the reliability of the quantitative data of this study by drawing random samples through cautiously examining the sample frame from which the samples were drawn. On top of that, ensuring a representative sample also contributes to the reliability of this study.

The author additionally triangulated the fallouts of this research with the fallouts of different authors who had done research linked with the research theme. In the meantime findings from different instruments of data collection within this study was also triangulated. Furthermore, professional encoder was employed for qualitative data.
CHAPTER 4

BACKGROUNDs TO INFORMal HOUSING DEVELOPMENT IN
BAHIR DAR: ETHIOPIAN CONTEXT

4.1 Introduction

This chapter of the dissertation attempts to lay a foundation for the causes and practices of urban land management as well as an unauthorized housing development in Ethiopia. It also intends to respond to the second specific research objective of the study. The chapter begins with portraying the brief history of urbanization in Bahir Dar. It illustrates how the rapid urbanization in Bahir Dar through rural-urban migration and a high natural increase of population become one of the causes of informal housing development. It is followed by demonstrating the Ethiopian urban leasehold system, valuation and compensation laws and their practices as well as their effect on housing land supply for the low-income population. The last section presents how past and present housing policy of Ethiopia affects informal settlements. A brief history of housing, policy and legal frameworks related to housing, housing stock, and tenure will also be elaborated.

4.2. Urbanization in Bahir Dar

Ethiopia, which has the second largest population in Africa with a total population of 94.4 million in July 2017, a level of urbanization of 20.3 per cent and a yearly growth rate of 2.45 per cent, is undergoing a mean annual urban growth of 4.89 per cent per annum between 2010 and 2015 (CSA, 2013a). Thus, the Federal Democratic Republic of Ethiopia has one among the highest urbanization rates in the world. This, among other factors, is causing a significant transformation of the urban landscape whereby secondary cities are exhibiting the fastest population growth, although Addis Ababa continues to be the primate city. The secondary cities that mainly constitute the regional administrative centres, like Bahir Dar, Mekele, Hawassa, etc. have
benefitted from infrastructure and related investments that followed their designation as regional capitals.

Metropolitan Area of Bahir Dar is found in the Bahir Dar Zuria Woreda. It is specifically situated in the intermediate part of Amhara National Regional State encircling the periphery of Lake Tana's southern tip. The metropolitan area of Bahir Dar stretches about 25 km radius from the centre of Bahir Dar city proper. Bahir Dar, the city proper, is located at the centre of the metropolitan area; its astronomical position is at about 11°37' north latitude and 37°25' east longitude. Bahir Dar is located at a distance of 565kms via Bure and 460kms via Motta from Addis Ababa while the air flight distance from Addis is 45 minutes.

According to Tana Forum (2015), Bahir Dar city got its name during Emperor Yikuno Amlak. In the reign of Yikuno Amlak, monks, who donated Holy Arks and established churches, on their journey from Gorgora to Lake Tana Islands wanted to establish a church with just a Holy Ark remaining at their hands. One monk asked "where shall we establish the church?" another monk replied, "Let it be near the sea/lake". Then the name of city consequently was derived from this response. Bahir Dar in the Amharic language means "near the sea/lake". Moreover, legend tells us that the Holy Ark was named Mary Saviour Church which was established at the beginning of 14th century.

Metropolitan vicinity of Bahir Dar is normally portrayed by means of flat topographic scenery even though; there are a few wallets of land with peaks, notched and rolling features. The height of the metropolitan neighbourhood runs between 1650 metres above sea level and 2100 metres above sea level. The normal height of Bahir Dar city is envisioned to be as low as 1786 metres above ocean level close to the lake shore, and as high as 1886 metres above ocean level close Bezawit knoll.

The advancement of Bahir Dar as a contemporary urban hub was related to the period of Italian invasion and occupation of Ethiopia. In May 1936, the Italians arrived in Bahir Dar and build their army installation. They afterward supplanted the ecclesiastical organization by a materialistic one. Italians remade the town by
wrecking more seasoned houses and redesigned the seepage framework by dehydrating the swampy zones. The time of Italian occupation additionally saw some vital new improvements in Bahir Dar. The Italians improved the water transportation framework on the Lake Tana. They presented an engine street transport and constructed an extension along the exit of Blue Nile from Lake Tana called Kanfaro Abbay. They likewise presented current correspondence frameworks like telegram and mail station however it was totally restricted to the Italian neighbourhood of settlement (Seltene, 1988).

The Italians built up their neighbourhood sector from St. Gorge to the present Tewodros stadium which the inhabitants call yatalian kambo (Italian camp). The nigid safar or business quarter started to crop up contiguous the Italian quarter with the introduction of different shops, tailor shops and coffee bars overwhelmingly keep running by Arabs and Somalis. The main bars and cafeterias, which are the harbingers of the present contemporary lodgings were started to bud in this quarter, predominantly keep running by non-military Italian personnel (Seltene, 1988). The mashata bet or local refreshment savouring houses in Bahir Dar is considered as predecessors as well as options of the contemporary bars and inns in light of their still vibrant presence, however, pushed to edges of the town.

It was in 1948 that the Ethiopian government launched the planning process of Bahir Dar, by which roads of the city were improved by constructing new ones and also by upgrading the old ones. The first full-fledged master plan was prepared by a team of German planning experts in 1965. Subsequently, the then Ministry of Urban Development and Housing prepared detail plan in the late 1970s. In 1996 a master plan was also prepared by National Urban Planning Institute. The latest one is prepared by Federal Urban Planning Institute in 2006 (FUPI, 2006). According to the 2004 classification of urban centres of the Amhara National Regional State (ANRS), Bahir Dar has acquired a status of Metropolitan City Administration.

Bahir Dar with an annual growth rate of 5.5 per cent is one of the fastest growing cities in Ethiopia. According to urban population projection made by CSA in 2013 for
the period 2014-2017, Bahir Dar, with a population size of 329,318, is the third biggest metropolis in Ethiopia in 2016 and 2017 (CSA, 2013a).

Bahir Dar is one of the foremost tourist terminuses in Ethiopia, with a diversity of fascinations in the close-by Lake Tana and Blue Nile River. Dek is one among numerous islands in Lake Tana that are home to medieval monasteries. On the Zege Peninsula, the Ura Kidane Mihret monastery is known for its elaborate, colourful murals. The Blue Nile River meanders southeast of the city toward the towering cliffs at the Blue Nile Waterfalls. The city is branded for its wide-ranging streets fixed with palm trees and an array of cheerful blossoms. In 2002 it was granted the UNESCO Cities for Peace Prize for tending to the difficulties of fast urbanization.

Bahir Dar is supposed to be in a dynamic condition of development, particularly since the city was chosen as the capital of Awraja, a managerial unit or chain of importance subsequent to a region employed amid the Imperial Haile Selassie, in 1948. Subsequent the ascent to power of the present Ethiopian government in 1991, Bahir Dar was chosen to be the headquarters of the Regional Government of the Amhara National Regional State, which has an anticipated aggregate population of 20.7 million\(^5\) people in 2017 (CSA, 2013a). This growing enlargement, in any case, has postured genuine risks to the incomes of the encompassing low-income landholders who win their living by cultivating the prolific farming terrains situated at the urban periphery.

As indicated by the Population and Housing Census fallouts acquired from the Ethiopian Central Statistical Authority (CSA, 2008), the aggregate population of Bahir Dar was 11,900 in 1965 - 66 (Jerver, 1984), 54,766 in 1984, 96,140 in 1994, 180,094 in 2007, and 313,997 in 2017 (Figure 4.1) (CSA 2008 and 2013b). Together with its surrounding 4 rural peri-urban *Kebeles*, the current population of Bahir Bar Metropolis is 362,297 (CSA, 2013a). This means the population of Bahir Dar increased by more

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\(^5\) CIA World Fact Book estimated the population of Amhara at 27 million in July 2017 based on Ethiopian population of 102.4 million.
than 5 folds between 1984 and 2017 (33 years) excluding the population of peri-
urban rural *Kebeles*.

![Population growth in Bahir Dar from 1965 to 2017](image)

**Figure 4.1:** Population growth in Bahir Dar from 1965 to 2017.

Bahir Dar is in a state of rapid horizontal areal expansion; according to Haregeweyn,
et al. (2012), it increased from 279 ha in 1957 to 4830 ha in 2009, at an average
growth rate of about 31 per cent (88 ha per year). In other words, Bahir Dar had
displayed an areal expansion of more than 17 times between 1957 and 2009 (52
years). At least 2878 farm households had farmland expropriated for urban expansion
purposes from 2004 to 2009 alone.

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Haregeweyn, et al. (2012, pp. 4-5), it enlarged from 279 ha in 1957 to 4830 ha in
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words, Bahir Dar had shown an areal enlargement of greater than 17 times between 1957 and 2009 (52 years). At least 2,878 farm families had expropriated agricultural land for urban development from 2004 to 2009 only.

The fast growth of urbanization in Bair Dar has been initiated, among other things, by high rates of rural-urban migration, which represents 56 per cent of the entire growth (MoUDHC, 2015, p. Appendix 1.13). When the migrants arrived in the city, they find no or scarce housing facility, no serviced land, scanty employment opportunities and high housing rent. As a consequence, these migrants are forced to build their houses on government land, or buy a plot from informal sellers and build a house or rent a house from informal settlers.

Within Bahir Dar city administration, there are two administrative subdivisions: the first one is the current built-up area where there are 9 sub cities and the second in the rural part or city expansion area or peri-urban area where there are 9 rural kebeles and three satellite towns. The study areas, Belay Zeleke and Shimbit sub-city are situated in the North-western and Southern portion of the Bahir Dar City (Figure 3.1).

A study by Prime Consultant (2009) estimated that about 30 per cent of the houses in Bahir Dar is informal. This contributed to houses with little or no basic infrastructure like water, electricity, health and education facilities. The houses are also characterized by low standards where there are no toilet facilities, no separate living and cooking room, houses made from low-quality building materials like wood and chika⁶.

### 4.3 The Present Urban Landholding System

This section demonstrates the Ethiopian urban leasehold system and its practices, as well as its effect on housing land supply for the poor. Although much emphasis is on the urban land law, the rural land law is also described briefly because of the interaction within both areas. In towns and cities, plots of land can be seized merely

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⁶ Chika is a mud and hay mixture used on the houses to build in Ethiopia. Chika houses are mud-plastered houses.
by means of the lease arrangement. In accordance with the recently executed urban land leasehold declaration, inhabitants are permitted to secure plots of land just by means of competitive sale (lease). It is merely under extraordinary conditions that plots of land might be awarded by an assignment.

4.3.1 Land laws for urban and rural areas

The two basic land enactments that surfaced with the disintegration of the majestic government in 1974 had an impressive effect on housing supply and demand in Urban Areas of Ethiopia. The earlier was proclamation 31/1975 that reassigned all rural land to the command of the government (FDRE Proc. No 31/1975, 1975) while the later one progressed toward becoming proclamation 47/1975 that places each urban land and spare dwellings in the arms of the government (FDRE Proc. No 47/1975). The urban land declaration assumes control over all urban land and spare rentable houses with no reward to the owners. The declaration denies the deal, home loan, rent, and legacy of the urban land. It likewise banned the building of spare residences at a similar plot (FDRE Proc. No 31/1975, 1975, art. 11). These two declarations have aggravated the deficiency of urban housing stock in the nation.

The Federal Democratic Republic of Ethiopia (FDRE), which came to power in 1991, has exhibited no substantial policy shift on land right in the nation as compared to its predecessor, the Derg. The Ethiopian Constitution certifies that “the state and public ownership of land in Ethiopia and thus the land is not liable to sale and exchange” (FDRE, 1995, p. Art. 40(3)). Presently municipal land is managed by the lease proclamation (FDRE Proc. No 271/2011, 2011). This was sanctioned after the nullification of its forerunner proclamations No. 272/2002 and No. 80/1993. The lease law offers that urban land would be converted into lease arrangement and each holder of urban land would get land from the government through lease adjustment. In urban regions, lease land can be held essentially through competitive sale and negotiation (FDRE Proc. No 272/2002, 2002, p. Art. 4). However, the utmost common approach of land allocation to the normal and low-income native in the nation is through lot or lottery. As per this approach, the land is allotted free of charge to
individuals or associations of persons for residential purposes. The issue with the most vital kind of land allocation, i.e. land grant, is that it does no longer occur so regularly in relation to the call for of the general public.

From a perspective, it is also imperative to observe the policy hassle that occurs in our rural land regulation. The Constitution and the Rural Land Administration and Use Proclamation guarantee rural farmers the right to get to land. The Constitution, in accordance with article 40(4) guarantees free land to all farmers and herdsmen (FDRE Constitution, Art. 40(4)). In addition, article 5 of proclamation No. 456/2005, which provides for the administration and use of rural areas, authorizes that anyone over the age of 18 wishing to participate in farming undertakings has access to agricultural land (FDRE Proc. No 456/2005, 2005). However, this use right turns out to be unfeasible due to another imperative in the Federal and Regional Land Laws preventing the reallocation of rural land (FDRE Proc. No 456/2005, Art. 9). These laws unconditionally forbid the distribution of rural land that has left the new generation of rural youth unemployed, particularly those who intended to migrate to urban areas. The point is that each urban and rural region creates a situation for growing population boom and, alternatively, a deficiency of city and townland for housing development.

4.3.2 Modalities of land acquisition

As indicated in the Federal and Regional leasing regulations, urban lands were acquired through five frameworks: auction, negotiation, assignment, valuation and lot (Daniel, 2013). Auctioning and negotiation were the best vital strategies for municipalities to procure revenue from land leasing transactions. In large metropolises, auctioning remains the most active strategy for exchanging land from towns and cities to developers. Plots of land were likewise allocated through an assignment to community affiliations, benevolent organizations, consulates, and global institutions. Award was used at the minimum by the land authorities in the city who engage in outstanding undertakings. The lot or lottery was a technique in which the municipality's land was apportioned among citizens with low and middle-income.
This technique was a continuation of what was executed through *Derg’s* Permit scheme.

Nevertheless, since the majority of the frameworks are characterized as dishonest procedures that allowed the gate for fraud, the legislature claimed that the law only acknowledged auctioning and allotment as two fundamental approaches of the transfer of state leasing to indigenous peoples (Article 7.2 of the FDRE Proc. No. 721/2011). Generally, all land required for residential, commercial (agricultural, industrial or service) purposes and for other purposes will be auctioned. Bidders will utilize the "reference price of the lease" as a criterion for proposing the price, and the winning bidder will be recognized in light of the "Offer price and amount of initial payment" (Article 11.5). In order to make it more direct, open and free of fraud, the law sets out additional exhaustive rulings (Articles 8-11) for the auction procedure.

The complaint that one may advance against this arrangement of land procurement is that it will invalidate the very intention of the proclamation, disappointing opportunists. This is on the grounds that wealthy people will have the capacity to pay the most astounding cost of the leasehold price and sell it later at profit. Most of the poor people will be precluded from the scheme. For instance, in the tender deal launched on the 21st of February 2016 in Bahir Dar, dwelling area whose reference value was set at 150 birr received overstated prices extending from 11,300-20,220 birr for each square metre (Table 5.8). The state attempts to maintain the concern of the poor and middle-income residents by giving them condominiums and some other comparable opportunity. In any case, the trouble with such frameworks is that it is fraudulent and incompetent (personal communication with Ato Belay Sinte).

It appears to be fair that individuals prefer unauthorized land seize (informal settlements) in the deficiency of competent and impartial land appropriation. The latest survey by the metropolis of Addis Ababa discloses that after the enactment of the lease proclamation, a large amount of land was occupied by landless inhabitants in the extension zones of the capital. The administration of the city of Addis Ababa bulldozed 7,000 dwellings and secured again 393.3 hectares of land from illegitimate
pioneers within the six suburbs. In relation to the case, 23 Woreda authorities have been expelled from their services and additional 163 are under review (Addis Fortune, 2012).
The outcomes on leasehold tender in Addis Ababa and major cities demonstrate that land lease price has turned out to be remarkably costly. For instance, in the eleventh round land lease public sale glided by the Capital City on October 19, 2015, the land located at various regions of Addis Ababa, for which information is promptly accessible, was sold at a cost extending from the bottom 1027 Birr in Akaki-Kaliti Sub-City to 305,000 Birr for each square metre in Addis Ketemma Sub-City (Addis Fortune, 2016). This demonstrates growth in three to four folds. The floor offer cost for these zones has been settled at 191 to 935 birr for every square metre.
Likewise in Bahir Dar lease prices of plots in various locations of the city expanded from 4,000 to 23,000 Birr for each square metre in the course of the most recent four years. At business regions lease prices ranges from Birr 50,000 to Birr 70,000 for every square metre contingent upon area (Personal communication with a staff of Bahir Dar City Administration, 2016).

4.4 Informal Settlement, Valuation, and Compensation
The major motivation of this section is to explain valuation and compensation laws and practices in Ethiopia and clarify how it is one of the major reasons threatening peri-urban farmers to subdivide and sell their farmland illegally, which in turn encourage informal housing development.
The valuation procedure, whereby compensation is settled by law, is by and large the most troublesome, tedious, and contested piece of the expropriation procedure (Kitay, 1985). An appropriate valuation procedure is a crucial phase for the land proprietor as it is the way to achieve a fair recompense. In Ethiopia, the vast majority of the grievances and prosecutions linked with government land taking are identified with the deficiency of compensation and the abnormalities took after amid the valuation procedure.
4.4.1 The Principle of compensation

The Ethiopian principle of compensation lacks clarity. One situation to mention, however, is that it does no longer correspond to the precept of indemnity which supplies an identical or equal quantity for the loss suffered by the proprietor of the assets that has suffered.

The current Constitution of the FDRE, pursuant to Article 40 of sub-article eight, offers for a prior charge of a “commensurate” compensation/ recompense for the loss of personal possessions. However, the Constitution does no longer accept land as personal assets. What is well-known as non-public belonging in the Constitution is every other belonging this is implanted or raised within the field through the person's expertize, labour or capital (Sub-article 1). Consequently, the items of reimbursement beneath this legal order are homes, plant life, and other comparable matters, above the basement or at the land itself. This indicates that the valuation of compensation does no longer bear in mind, inter alia, the value of the location of the site, which considerably reduces the volume of compensation due to the holder.

This misconception is the result of contradictory sub-articles of Article 40 of the FDRE Constitution. The Constitution, on the one hand, brands the common land title of the people and the state; on the contrary, it refuses to the holder a compensation based on the market if the state takes the land.

4.4.2 Valuation method

According to Rattermann (2009, p. 15), “there are three fundamental valuation strategies: the sales comparison approach, the income capitalization approach and the cost approach”. The decision as to which of the evaluation strategies are appropriate will be contingent on the motivation behind the assessment, the kind of enthusiasm evaluated, the nature of assets, the physical and different aspects of the assets, access to pertinent information, and state directions.
The valuation strategy used in Ethiopia to estimate the volume of recompense or compensation is the "cost method" (FDRE Proc. No 455/2005, 2005, p. Art. 7(2)). In this method, the value is assessed as what it would cost to substitute the building. Nevertheless, in Ethiopia the laws plainly specify that irrespective of the kind of assets dispossessed, the volume of remuneration should be decided simply based on replacement cost of the property (FDRE Regulation No. 135/2007, 2007, p. Art. 7). The economic explanation of the above arrangement infers that replacement cost approach computes the current cost of constructing a structure that is identical or comparable to the erection to be valued, through a deduction from accumulated depreciation from the current overall expenses of the replaced construction. Property appraisers subtract the amortization margin after obtaining the cost of a new structure of a comparable feature. Nevertheless, there may be no framework within the Expropriation Regulation that specifies the way to calculate accumulated depreciation. In addition, the Regulation does now not explicitly imply the destiny of the cost of the material of the destroyed structure: if it needs to be subtracted while this technique is employed for the structures.

4.4.3 Appraisers or assessors

The remaining controversy connected with valuation is the competence and capability of qualified appraisers. Current practice demonstrates that experts who exercise valuation are to a great extent insensible to essential methodologies of valuation, have no extraordinary training and have not by any means experienced short-term training on property valuation. This has made impediment in grasping different alternative routes to manage valuation. As a result of the nonattendance of training and additionally the previous assets right framework (especially the manner that non-public property had little an incentive within the midst of the Marxist period), proficient property appraisers are unrecognized within the nation. Indeed, even nowadays, twenty-six years after the fall of the Marxist administration, there may be no indication of their fact. For certain, even nowadays, twenty-six years after the collapse of the Marxist regime, there's no signal of their domain. Be that as it may, as of late the
Ministry of Urban Development and Housing started the opening of property valuation and tax assessment education programs in Ethiopian Universities at Bachelor and Masters Level. Bahir Dar and Addis Ababa universities have launched such programmes over the most recent two years.

The truth on the surface shows that valuations suffer from the current system deficiencies, which has led to insufficient compensation, fraud and an increasing number of court cases (Daniel, 2013). This means that there must be a system by which the valuation of the property can be done to harmonize public and personal interests.

In fact, valuation might be “accomplished by qualified non-public or public establishments or private professionals on the premise of valuation standard approved at the nation-wide” (FDRE Proc. No. 455/2005, Article 9(1)). However the capability is not so far established, and “up until the Ministry of Federal Affairs, in discussion with the applicable federal and regional government agencies, determines the formulation of the specified competence to require an appraisal of the property. The instituted valuation system shall be executed by committees to be established” by relevant local administrations, which incorporates rural Woredas or urban administrations (FDRE Proc. No. 455/2005, Article 9(2), 10(1), 10(2)).

**4.4.4 Determination of compensation in the peri-urban area**

Peri-urban vicinity is situated in the middle of rural and an urban administration. Essentially, that is the land perceived within the margins of towns and urban communities. At the outset, the peri-urban land became a portion of the rural organisation, however because of city improvement; it became included by means of municipal society through series of government land-taking procedures. The motive behind why this situation is analysed independently is that the method of remunerating peri-urban landholders differs somewhat from that of the alternate farmers.
One of the basic characteristics of the peri-urban habitation in Ethiopia is the huge unauthorized transfer of land to opportunists within the metropolis. In expectation of the formalization of his/her holding well ahead of time, numerous city opportunists and land-poor residents purchase unauthorized plots of rural landholders. Rural landholders yet again, considering low and inefficient government repayment that they should be remunerated (with their land taking) and the higher informal income charge they receive on the open market, are possible to offer the plot. The entire procedure is uncertain for consumers, rather than suppliers or landholders because the sale of land is unlawful in Ethiopia.

A suburban void or vacuum zone is formed while the municipal government approves a reviewed plan that comprises the neighbouring croplands fail to confiscate it and incorporating it into the land bank. This appended region does not currently fall under any authority. Therefore, landholders attempt to change their rural plots to urban plots by splitting and after that marketing the plots with no impediment from government bodies. In some cases, city authorities demolish the constructed zone in fright of later conflicts with inhabitants. Regulation No. 14/2009 ratified by Bahir city administration on control and prevention of unauthorized engagements is fundamental to undermine illegitimate buildings in the city.

When reviewing compensation arrangements, landholders are remunerated for their property on the land and the enrichment they generate on land, as indicated above. In addition, landholders receive displacement compensation calculated for ten years of economic gain. But in minor and emerging municipalities, replacement land compensation is not employed. The typical exercise is simply to involve the landholders in the existence of the city by giving them housing plots in the city or anywhere in the municipal development district. The borders of urban extension stretch for urban areas like Bahir Dar are delineated by the regional council.

7 This is the common practice in many towns and cities in Ethiopia including Bahir Dar.
4.4.5 Determination of displacement compensation

Farmers who surrender a plot of land through government land taking receive the subsequent remunerations: “compensation for land ownership, compensation for land improvement, replenishment of land or (in the absence of replacement land) compensation for displacement” (FDRE Proc. No 455/2005, Article 8(1)). Among these various compensations, compensation for the loss of land or displacement compensation is the major one and needs to be explained in the following paragraphs.

A landholder who lost his holding permanently because of an expropriation practice is qualified for displacement compensation (financial pay) for his/her adversity. This is aside from the remuneration accommodated to the assets located on the parcel and the enrichments she/he realized on the parcel. Displacement compensation is not accordingly a remuneration that substitutes the asset delivered, as land is not privately owned in Ethiopia. Displacement compensation is just one type of curative care for landholders until they are ready to resume the ability to move to their initial rank. Regarding this, the proclamation delivers: “A rural landholder whose landholding has been permanently expropriated shall, in addition to the compensation payable…. [for property on and improvements to the land], be paid displacement compensation which shall be equivalent to ten times the average annual income he secured during the five years preceding the expropriation of the land” (FDRE Proc. No 455/2005, Article 8(1)).

A complete sacrifice of land frequently occurs while the land is needed for the anticipated undertaking. The presumption right here is that except the parcel is needed for short-term objectives, including construction camps, the taking would be most likely permanent. In this way, when the farmer is without land, he will be granted monetary remuneration corresponding to ten years of compensation. The extent of remuneration is settled at ten years annual financial gain, in view of the mean yearly revenue received in the last five years. The reason why this sum is established is mysterious and perhaps ridiculous. Even the legislative discourse on the adoption of
the declaration of expropriation reveals nothing of the reason why the multiplier was done for ten years and the mean financial benefit of five years.

The concern with this arrangement is that it does no longer sufficiently reimburse the landholder’s adversity. The landholder has a long-lasting right in the land with economic gains throughout his life and, in addition, the privilege of inheriting it in the years to come. The contention is that ten years of annual financial gains do not satisfactorily recompense for the damage of all the privileges listed above. This review is founded on the views of the landholders interviewed, land administration professionals and the judgment of the real compensation paid with the existing prices of food (Daniel, 2013).

In addition, the valuation framework does not consider the existing market price of production to compute the long-term damage. On the contrary, it retreats to the previous five years which are inappropriate to the current or upcoming price. The reality of yearly inflation escalations in the nation demonstrates that the price of basic products is mounting at a disturbing rate (CSA, 2013b), which makes the remuneration rate insufficient.

In Ethiopia, since the existing land policy forbids land transfer through sale, the only mechanism of land acquisition left for the state and private developers is the use of expropriation procedure. Expropriation is used as a tool to supply land that is required for all economic activities, particularly land for urban expansion, large-scale housing and industrial development.

Government compensation payments are settled by law using the valuation procedure. The valuation procedure used in Ethiopia to estimate the volume of recompense or compensation is the "cost method" which is not based on the current market prices. Furthermore experts who exercise valuations are to a great extent unqualified and incompetent. The truth on the surface shows that valuations suffer from the current system deficiencies, which has led to insufficient compensation, fraud and an increasing number of court cases. Estimate based on Table 2.1 shows
that informal market prices are on average 9.6 times the government paid compensation prices.

The consequences of existing practices is that farmers in the fringes of towns and cities, anticipating expropriation, tend to subdivide and informally sell their farm land, by realizing that the sales price is more compensating than the one paid by the state during expropriation. This is one of the reasons for expansion of informal settlements around urban areas.

4.5 Informal Settlement and Housing Policy

This section presents how past and present housing policy of Ethiopia affects informal settlements. The section, thus, begins with identifying general housing problems and how it is related to informal settlements. The brief history of housing, policy and legal frameworks related to housing, housing stock and tenure will be described.

4.5.1 Urban housing problem in Ethiopia

With less than a half of African level of urbanization, most urban centres in Ethiopia suffer from a variety of urban problems including inadequate infrastructure, housing and services, high unemployment and weak institutional mechanism for good urban governance and sustainable urban development (Tegegne & Mulat, 2005, p. 60). According to MoWUD (2008, p. 1) shelter scarcity is one of the essential issues that the nation faces in nearly all towns and cities. The Urban Sector Millennium Development Goals Needs Assessment in December 2004 assessed that the supplementary accommodation unit need in urban centres of the country between 2005 and 2015 will be 2,250,831 units or 225,000 each year. In addition to the scarcity, the prevailing dwellings are beneath qualitative standard and lack good enough space. The hassle is aggravated due to the country’s low funding within the housing sector. The country’s funding in housing production is below three per cent of GDP which is in lower condition in comparison to the six per cent advocated by the UN for developing nations (Ayenew, 1999, p. 8). But now a day there is little
improvement in some developing countries including Ethiopia. Besides, many of the housing units constructed in the country are of poor quality due to old age, limited variety and poor workmanship. The scarcity of shelter-related infrastructure, especially lack of adequate water supply and sanitation has also contributed to the poor housing condition in the country (Tsion, 2007, p. 329). One of the reasons for this problem is that there is a massive disparity amid the housing need and the housing delivery within the nation (Abraham, 2007).

As the housing supply remains at low growth rate, housing demand has been increasing due to high population growth, migration to Addis Ababa city and the deterioration of the existing housing stock subsequent to poor maintenance. In addition, other factors that aggravate the demand for housing include progressively increasing the demand for housing, lack of alternative investment and speculation (World Bank, 2009a, p. 2). Low economic development level of the Addis Ababa city, where the livelihood of a great number of the population depends on informal economic activities is the main factor that hinders the majority of the city’s population to acquire housing. Even though, there are efforts to reduce the housing problem, most on-going housing projects that are implemented in the city focus on the delivery of housing for the better-off (middle and high-income groups). Nearly all real estate projects by private developers target the middle and high-income groups. Unfortunately, these projects even could not be accessible even for the middle-class groups due to the high market price (Zelalem, 2007, p. 249).

Generally, Ethiopia’s housing problem could be grouped into four categories; the shortage of housing, the overcrowding and poor condition of accommodation unit which is in particular contemplated within the centre where owner of the houses is mostly the government, low neighbourhood infrastructure development and limited affordability of the houses mainly due to very low household income (Tsion, 2007, p. 219). Undoubtedly these housing problems in the country pushed a considerable segment of the population to informal housing options. Despite the prevalence of the problem, different measures have been pursued to tackle the problem in the country.
4.5.2 Brief history of housing in Ethiopia

Throughout the first half of the 20th-century land and housing in Ethiopia were managed by a hand-picked few people and agencies who owned and tightly managed land and housing development. The housing deliver became led by the landed elite, with much less than 1 per cent of the population proudly owning greater than 70 per cent of the arable land, of which 80 per cent had been tenants (Kebede & Jacob, 1985). Low-earning families had no preference, however, to hire lodging outside of any official mechanism or planning gadget. In 1962, for instance, 58 per cent of the land in Addis Ababa was owned by means of 1,768 people, more than 10,000 m² each (Abate, 2001) and 55 per cent of the houses had been rented housing (Kebede & Jacob, 1985).

Even as government urban housing and land approaches had been deliberated and recorded at length, they did no longer realize into constructed initiatives to resolve the formidable housing call for (UN-Habitat, 2007). The authorities demonstrated little nationwide dedication to the land and housing development for the low-earnings section and there has been no comprehensible strategy or motion in the direction of land and housing delivery. Consequently, short-term rules and approaches predominated and spontaneous, unauthorized housing flourished (UN-Habitat, 2007; Mulugeta, 1995).

Throughout the late 1980s, the ‘Derg’ loosened its command of housing delivery through permitting non-public house owners and tenants of public premises to transact their homes even though in reality the authorities devolved very little command and maintained its role as the key driving force of housing delivery. Proclamation No. 292 of 1986 certain that “residential homes could be produced best by using state companies, municipal governments, housing cooperatives and people who construct dwellings for his or her private consumption” (Mulugeta, 1995, p. 71), successfully blocking large-scale non-public sector housing builders to cope with the huge call for.
Due to low public sector manufacturing of housing, the *Derg* coordinated and supervised housing cooperatives to interact with housing necessities. To inspire the development of the cooperative framework, it intervened with an extensive variety of incentives consisting of allocation of land without fee for the erection of proprietor-occupied housing pieces, subsidizing building materials and bank loans below the market charge were also provided on a subsidized basis to cooperatives (Martha, 2006, p. 20). Regardless of this package of incentives, overall housing production satisfied only a small proportion of the call of the time.

The majority of the urban residents that the *Derg* claimed to stand for could not benefit from the land reform where urban land was granted free of charge, because their earnings were too low to erect the smallest preferred living shelter (Gutema, 1994). He also claimed that the housing development approaches that were implemented by the *Derg* were unable to successfully address the neediest, which are mainly the low and lower middle-income group.

The shelter stock kept on being portrayed by high rates of the rental dwelling. In the mid-1980s, rental dwelling represented 60 per cent of the aggregate shelter stock in Addis Ababa (Mulugeta, 1995, p. 96). The low rental rates brought about next to zero investment in a dwelling which prompted a further worsening of housing condition. The dwelling situations were the poorest in the focal point of Addis Ababa. As indicated by the 1985 inquiry report by the Municipal Technical College for the Teklehaimanot Upgrading Structure, the normal house had a surface area of 20m², 35 per cent of all houses had just a single room, and 39 per cent of the urban population lived in packed dwelling that needed fundamental amenities, for example, potable water and sanitation (Kumie, 2002). Similar conditions prevailed in Bahir Dar as well.

Since the downfall of the ‘*Derg*’ by the current Ethiopian Government in 1991, the country has been experiencing market-orientated transformations, decentralization of administrative structures, and series of rural reforms. The federal system of administration required to decentralize urban planning duties and to inspire
secondary urban communities to draw rural migrants to ease pressure on the previously constrained dwelling accessible for urban inhabitants living in Addis Ababa and other major urban regions (Acioly, 2010). In spite of extensive subsidies and land offered at exceedingly financed rates, the private cluster has neglected to convey reasonable dwelling at the huge scale required. Throughout this time dwelling costs fundamentally mounted making it unusually demanding even for experts, for example, medical doctors and legal counsellors to get to moderate lodging (UN-Habitat, 2010).

The current Ethiopian Government likewise devised a different tenure framework for urban Ethiopia. Leasehold as a land tenure framework was presented in 1993 and after that renewed in 2002 and 2011. With the intention upkeep the housing market, the state has additionally given different motivating forces, including the allotment of urban land at exceedingly financed rates or cost-free, and endowments to counterbalance the cost of building materials. However, these motivations eventually fulfilled just a little bit of the dwelling request, and the private section unsuccessful to convey reasonable lodging at a large scale (UN-Habitat, 2010). As per UN-Habitat (2013), the post-1991 dwelling sector, can consequently, be characterized by the succeeding four qualities:

- The private dwelling part has not been adequately drawn in and, consequently, has not taken care of the enormous shelter demand.
- The routine with regards to low-priced government possessed rental dwelling keeps on being the predominant low-wage dwelling scheme.
- The lodging stock is of a low quality, is inadequately kept up, and needs either substitution or huge redesigning.
- The informal spontaneous dwelling has flourished because of high urbanization, constrained dwelling supply, and the restricted cost-effective formal dwelling.
4.5.3 Policy and legal frameworks related to housing

Until currently, in Ethiopia, there has been no particular regulation that perceived residents’ entitlement to housing or which imposed an obligation on the authorities to perceive that entitlement (Zelalem, 2012). Indeed, even nowadays, there are few countrywide strategies concerning shelter and urban development. In 2005, the Council of Ministers of the FDRE articulated and authorised a consolidated urban development policy to connect together the small-scale endeavours made with the aid of regional governments and cities since 2000. They additionally formed the national Ministry of Works and urban development (MWUD) to monitor the general development of the country’s urban places and leading research on its urbanisation patterns (UN-Habitat, 2008b).

Within MWUD, the National Urban Planning Institute is in charge of making physical urban development designs, the Housing Development Bureau performs concerning the execution of the Integrated Housing Development Program (IHDP) including the MSE Development Programs, and the Urban Development Support Services manage financial setting, human resources, and capacity building.

The IHDP has four major objectives: “1) to increase housing supply for the low-income population, 2) to address the problem of urban slum areas and mitigate their expansion in the future, 3) to increase job opportunities for micro and small enterprises and unskilled labourers, which will, in turn, provide income for their families and enable them to afford their own housing, and 4) to improve wealth creation and wealth distribution for the nation” (MoWUD, 2008, p. 5). The initial goal of the programme, 2006 – 2010, was to construct “400,000 condominium units, create 200,000 jobs, promote the development of 10,000 micro - and small - enterprises, enhance the capacity of the construction sector, regenerate inner city slum areas, and promote homeownership for low-income households” (MoWUD, 2008, p. 5).

The IHDP has been fruitful in numerous regards. It has erected 142,802 dwelling units in the vicinity of 2006 and 2010 and 167,680 units during 2011 and 2016.
(MUDHCo, 2014); or an aggregate of 310,482 dwelling units in the two rounds (Addis Fortune, 2016). In Bahir Dar alone 3700 condominium units were constructed and all of them transferred to the beneficiaries before 2015 (MoUDHC, 2015). This is a critical accomplishment in view of the already constrained capability of the Ethiopian dwelling section. The program has enormously expanded the number of homeowners that could never generally have claimed a home within their lifetime, and, in parallel, has profited the dwelling market by expanding the supply of proprietor-possessed dwelling and rental units. The program has likewise improved the capability of the construction section, tended to the current shantytowns, and been a noteworthy generator of job prospects (UN-Habitat, 2010).

In spite of energetic exertion by the government towards enhancing access to dwelling in the nation, the Ethiopian urban dwelling circumstance mirrors a melancholy image. The Urban Sector Millennium Development Goals Needs Assessment: Improving the Lives of Slum Dwellers in December 2004 evaluated that the extra dwelling units will be required because of population growth in the vicinity of 2005 and 2015 will be 2,250,831 units or 225,000 every year. But if we take the current condominium construction of 310,482 units in 10 years we will get the average pace of 31,048 units per year, less than half of the expected turn out. According to this pace to fulfil the current housing demand in urban areas of Ethiopia it requires 72 years. This clearly shows the magnitude of the housing shortage and a substantial effort that is required from the state supported by private unit and civic involvement.

Various researchers also criticized the IHDP on a substantial challenges it shown on spatial and socio-economic levels: the program has ineffective to give far-reaching modest dwelling to the focused low-wage clusters; it has created spatial and social isolation; it has encouraged reliance on imported materials; it lacks scheme features and spaces that mirror neighbourhood ways of life and everyday needs; and it has hastened the fringe extension of the city (Delz, 2016). Moreover, there are worries that the financing methodology of the program is unsustainable in the long period. Mota (2015) also indicated that the program has disrupted established social
networks and vernacular patterns of inhabitation. The focus on condominium housing, which is also seen as a land saving strategy, and the limited supply of land for construction by other actors is reckoned to have brought about the expansion of spontaneous neighborhoods in the city.

Recognizing the serious challenges of housing in Ethiopia, the MUDHCo has as of late declared a National Housing Development Policy and Strategic Framework (NHDPSF) in 2014. The MUDHCo has additionally distinguished key issues and their indications alongside underlying factors and identified policy guidelines to address the issues incorporated in the NHDPSF. The succeeding summarizes the key difficulties in improving gets to spontaneous lodging in urban places alongside policy alternatives formulated by the government to beat the key difficulties (MUDHCo, 2014, pp. 60-61).

1. The broader gap between dwelling needs or demand and supply

1. Development of informal and unauthorized plots of land

1.1 causative influences

- Development of informal and illegal plots of land in urban areas;
- Limited availability of plots of land with services; and
- Local urban administrations with limited performance capability

1.2 Policy Guidelines

- Improving capabilities of urban inhabitants of taking financial risks in the hope of profit and sparing
- Improving preclusion of unlawful land development undertakings;
- Improving better provision of urban land by means of capability development of urban management; and
Improving the capability of urban management employees through the improvement of their execution capabilities

4.5.4 Housing stock and tenure analysis in Bahir Dar

Growing shelter inadequacy and low physical condition distinguish the existing condition of the dwelling unit in Bahir Dar. In 2017, the population of Bahir Dar was projected at 362,000 (CSA, 2013b). Average household size in Bahir Dar is 3.4. While there were 53,093 families in 2007; 92,181 families in 2014; and 101,650 families in 2016, it was projected that there will be 106,558 families in Bahir Dar in 2017 (CSA, 2013b). Then again, there were 51,744 dwelling units in Bahir Dar in 2007 (CSA, 2007). Nevertheless, employing the UN-HABITAT slum description, the Ministry of Urban Development and Housing MoUDH (2014) revealed that only 40 per cent (or 21,237) of these dwelling units are liveable or in reasonable condition. This implies the dwelling shortage would be about 32,395 in 2007. Considering high population growth, high relocation of people from rural to urban areas, and declining affordability of the dwelling units to families, current dwelling deficit in Bahir Dar may increase by more than two-fold the figure in 2007.

With regards to physical quality of the housing units, assessment conducted by CSA (2007) indicated that 35 per cent of the housing units in Bahir Dar lack toilet facility, 82 per cent of the units are made of wood and mud (Chicka) wall while 76 per cent of the units have bare soil floors. Furthermore, 54 per cent of the entities have no ceiling and 86 per cent of the entities are without the bathing facility. On top of that 45 per cent of the domestic refuses in Bahir Dar are not assembled by municipality or private establishment, 54 per cent of the units are single roomed and 22 per cent of them are two roomed, and 60 per cent of the dwelling entities are of slum quality since they are occupied by more than three persons. Considering the fact that condensed residence per individual is connected with definite groups of diseases such as asthma and tuberculosis (UN-Habitat, 2003), a considerable portion of the residents in the urban centres covered by this study can be considered to be facing serious health risks.
Tenure suggests to the courses of action under which a family unit occupies living space. A housing unit is said to be owner-occupied if the resident family claims it and it is free from hire charge. By contrast, a housing unit is considered rented if the family unit living in it pays hire charge to a private individual, a Kebele office, the Agency for the Administration of Rental Houses (AARH), or some other organization (CSA, 2008).

As far as tenure in Bahir Dar is concerned, levels of private house ownership are low. In Bahir Dar, just around 30 per cent of houses is owner-occupied in 2011 (MoUDHC, 2015). Rental lodging is the predominant tenure style. By and large, the lodging tenure status in Bahir Dar can be grouped into five arrangements: rent, private, private rental house, housing agency and Kebele house. Table 4.1 demonstrates the pattern in lodging tenure position in Bahir Dar for the year 2007 and 2011. One can realize that rental lodging is the predominant style; the proportion of people who lived in rented houses expanded from 56 per cent in 2007 to 63 per cent in 2011. Yet, the individuals who lived in private lodging diminished from 39 per cent to 31 per cent in the comparable period (Table 4.1). In general, the city's lodging position is not just of low in quality yet in addition that the city government could not frame proper strategy that enhances the circumstance (Personal correspondence with a staff of Bahir Dar City Administration, 2016). The circumstance is winding up more awful with a fast rate of urbanization in Bahir Dar (segment 4.2 and 5.4).
Table 4.1: Distribution of Tenure Type in Bahir Dar - 2007 and 2011

<table>
<thead>
<tr>
<th>Tenure Type</th>
<th>2007</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner occupied</td>
<td>38.9</td>
<td>31.33</td>
</tr>
<tr>
<td>Rent Free</td>
<td>5.2</td>
<td>5.52</td>
</tr>
<tr>
<td>Kebele Rental</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>AARH(^8) Rental</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Rent from Organisation</td>
<td>0.4</td>
<td>55.9</td>
</tr>
<tr>
<td>Private Rent</td>
<td>48.8</td>
<td></td>
</tr>
<tr>
<td>Occupied difference rent(^9)</td>
<td>0.1</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Source: CSA, 2007: National Population and Housing Census, Table 8.13, p. 833


Focusing on units constructed on land not distributed by city administrations, according to the information obtained from the towns covered by the SESC study, informal housing units comprise a substantial share (30 per cent) of the overall housing supply. Their quantity, estimated at 137,756 in the 27 cities and 492010 in Bahir Dar in 2013 is reckoned to have resulted in significant loss of public land (1,049,377 hectares between 2011 and 2013) (MoUDHC, 2015). The number of informal houses and amount of urban land illegally occupied from 2011 to 2013 signifies the failure of urban centres to formally respond to the residential land

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\(^8\)Agency for Administration of Rental Houses

\(^9\) These are families that possess additional dwelling entity somewhere else that is hired for a smaller or larger hire charge equated to the hire charge of the dwelling entity the family inhabits at the period of inventory.

\(^10\) Total number of housing units in Bahir Dar is estimated at 69,943 in 2015 (Table 5.7). This official estimate, 4,920, is underestimated since informal settlements are not registered. Compare this figure with the estimate by Bahir Dar city administration which is 16,233 housing units.
demand of their residents in a timely and affordable fashion as well as to enforce urban planning and land development regulations.

4.6 Summary

Understanding the brief history of urbanization in Bahir Dar, the Ethiopian urban land laws (leasehold, valuation and compensation) and their practices, as well as past and present housing policy of Ethiopia and how they affect informal housing development have been the central themes of this chapter. Bahir Dar, which is a recent city, is currently in a state of rapid horizontal areal and population expansion; Bahir Dar had displayed an areal expansion of more than 17 times between 1957 and 2009 and its population increased by more than 26 times between 1965 and 2016. In 1996 a master plan was also prepared by National Urban Planning Institute. A detailed plan prepared in the late 1970s via the then Ministry of Urban Development and Housing. The latest one is prepared by Federal Urban Planning Institute in 2006. Currently, Bahir Dar is the third biggest metropolis in the Federal Republic of Ethiopia with a population of 329,318.

Urban land in Ethiopia has been administered by lease declaration since 1993. The present Proclamation No. 721/2011 was the third lease declaration after the suspension of its two forerunners endorsed after 1993. In this respect, the lease is the fundamental system of urban land residency in Ethiopia. In municipal centres, a plot can be normally secured through competitive sale or tender, which reduces the possibility to integrate into self-help associations and thus the opportunity to find a home. For this reason, it is feared that the needy will be disregarded if purely the best dealer can get to the municipal plot. Recent facts on lease prices exhibit that the price is already very high, making it insurmountable for all income groups except for the high-income groups. It appears that country lease declarations focus on procreating revenue for the government rather than making impartial gets to land for everyone in a manner that mirrors the joint rights of people and the state to the land.

The FDRE constitution promises a commensurate recompense for assets on the plot in the event of a seizure. In addition, the government land taking or seizure
declaration discloses that the assessment of an asset value intends to be established on the replacement cost method. Since the guideline of cost replacement was poorly designed, it now prompts low-level of recompense. Likewise, the legislature does not frequently refresh the material and labour costs, though inflation bolts. There is substantial value divergence between the property's deliberate offering cost and the recompense pays, and this enormous distinction demonstrates that the framework is oppressive and that the remuneration sum is not proportionate. Thus these unfavourable urban land policies, regulatory frameworks and their practices have pushed low income population to informal housing development.

Land and housing in Ethiopia can be characterized by three periods: pre-1974 or the Haile Sellassie period, the 1974 - 1991 or the Derg period and the post-1991 or the FDRE period. Each period had its own prevalent strategy of housing, achievements, and shortcomings. However, in all periods Ethiopian housing is characterized by limited housing supply and high demand, low quality, the prevalence of rentals, and the limited affordability of formal housing. Thus these housing problems in the country pushed a considerable segment of the population to informal housing options.

Similarly growing housing deficit and low physical quality, which is driven by the high growth of population, high relocation of migrants from rural to urban areas, and declining affordability of the households, portray the existing shelter condition in Bahir Dar. In Bahir Dar, rental housing is not only the dominant tenure mode it is also increasing over time. In contrary, ownership levels of private houses are already low and it decreases over time.

Recognizing the foregoing fundamental issues on history of Bahir Dar, national urban housing policy, legal frameworks as well as practices, the next two chapters will dwell on causes and urban land management practices in informal settlement of Bahir Dar.
CHAPTER 5

CAUSES OF INFORMAL SETTLEMENTS IN BAHIR DAR

5.1 Introduction

Urbanisation obviously brings challenges and benefits, yet it is elusive to find persistent economic development without urbanisation (Tacoli, et al., 2015). Even though urbanisation largely enhances fiscal advancement and subsequently improves municipal capabilities, rising townships and urban territories in poor nations frequently confront extraordinary urban dwelling, amenity and facility failures, and also different sorts of urban overcrowding. The undesirable burdens that upshot from the fast growth of population are considered risky when the urban extension is ill-conceived and urban administration is discriminatory or incompetent. Furthermore, “the land administration and planning policies, which have frequently been viewed as inflexible and insufficient to take care of consistently expanding demand for housing by the poor majority, have also been linked with the proliferation of the informal settlements” (Ali & Sulaiman, 2006, p. 9).

The absence of essential amenities – water, sanitation, and electricity – is of specific anxiety to inhabitants of the informal settlements, and ought to be a source of substantial fear to the entire state population (Chung & Hill, 2002). Nevertheless, spontaneous neighbourhoods do not have the identical attributes as far as establishment, expansion, and consequences universally. With this setting, the intent of the current chapter is to address the causes of an informal settlement in Bahir Dar as well as the surveyed sub-cities. It also intends to respond to the first specific research objective of the study.

5.2 Rapid Urbanization, Rural to Urban Migration and its Strain on Capacity of Cities

It is estimated that about 20 per cent of Ethiopia’s total population currently lives in urban areas, making it one of the least urbanized countries in sub-Saharan Africa.
(MoUDHC, 2015; CSA, 2013a). In spite of this low level of urbanization, however, the country has one of the highest rates of urbanization even according to the standards of developing countries. Recent urbanisation-related studies estimated rates of urbanization at 3.8 per cent per annum between 1994 and 2007, and which has been estimated to have increased by 5.4 per cent per annum since then (CSA, 1996a; Weldesilassie, 2014; CSA, 2007). The level of urbanization was only 6 per cent in 1960, rising to 11 per cent in 1984 and 14 per cent in 1994, which would have reached 17.2 per cent in 2013 and projected to account for 30 per cent of the total population in 2025 (MoUDHC, 2013; CSA, 2013a).

It is assessed that 20 per cent of Ethiopia’s overall population as of now lives in urban territories, making it one of the slightest urbanized nations in sub-Saharan Africa (MoUDHC, 2015; CSA, 2013a). In spite of this low level of urbanization, nonetheless, the country has one among the most amazing rates of urbanization even in line with the standards of developing nations. Recent urbanisation-related studies estimated rates of urbanization at 3.8 per cent per annum between 1994 and 2007, and which has been estimated to have increased by 5.4 per cent per annum since then (CSA, 1996a; Weldesilassie, 2014; CSA, 2007). The extent of urbanization was solely 6 per cent in 1960, rising to 11 per cent in 1984 and 14 per cent in 1994, which might have attained 17.2 per cent in 2013 and anticipated to comprise 30 per cent of the entire population in 2025 (MoUDHC, 2013; CSA, 2013a).

Table 5.1: Response on the previous area of residence by location in the study sub-cities

<table>
<thead>
<tr>
<th>Where did you live before?</th>
<th>Location</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>Rural area</td>
<td>57.4</td>
<td>49.5</td>
</tr>
<tr>
<td>City centre</td>
<td>23.4</td>
<td>18.3</td>
</tr>
<tr>
<td>born here</td>
<td>19.1</td>
<td>32.1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
In the two sub-cities of the study area 52 per cent of inhabitants in the spontaneous neighbourhoods are migrants from the rural areas, 20 per cent shifted their place to the informal settlements from the city centre and 28 per cent of them born in the informal settlement areas either from rural migrants or from those who transferred to the informal settlement areas from the city centre (Table 5.1). Some of those who transferred from the city centres are found to be speculators.

The proportions of rural migrants are more or less similar to the findings of MoWUD (2015) study. The average proportion of migrants in the 27 urban centres in Ethiopia is estimated at 49 per cent, indicating that almost half of their population were migrants (MoUDHC, 2015). The proportion of migrants varies from the lowest in Jigjiga town (26 per cent) to the largest in Semera town (above 71 per cent). For most of the urban centres, the proportion is above 50 per cent (it was 55.6 per cent in Bahir Dar), signifying that the contribution of migration to the size of the urban population is significant. Generally, those urban centres with the relatively large proportion of migrants also have higher population growth rates.

However the rural–urban migration rates in Ethiopia by and large and in Bahir Dar specifically are lower than one might expect (Table 5.1). In 2007, about 17 per cent of the population were migrants, in comparison to the proportion of migrants which was close to 15 per cent in 1984. There are more migrants in the urban centres (urban-urban migration) than in rural areas (rural-rural migration). In accordance with the 1994 census, the ratio of migrants in the urban centres was above 40 per cent (CSA, 1996a). Migrants are fascinated to move to cities because of their better infrastructure, access to services and job opportunities. However, Ethiopian society remains largely rural and migration rates are lower than in many other countries (Tacoli, et al., 2015). Given the positive effects of migration, these raise barriers or constraints to the level and pace of urbanization in Ethiopia.

The land administration system is one of such an obstacle to the rate of rural-urban migration. As a consequence of insecure land right, the bulk of the households retain the use of the right to land allocation by continuing on the farm and remaining as
residents in the rural *Kebele*. The possibilities of transferring rights to land in rural areas are limited. Latest strategies have encouraged family certainty by allowing handovers of land to household fellows, but handovers beyond the households are unusual (Dorosh & Thurlow, 2011). Directives ruling out the sale of land, loss of land rights for those leaving rural areas and registration provisions for new migrants combine to weaken the ambition to move to the city. This is analogous to China, where similar restrictions on the sale of land rights have served as an impediment to migration (Alemu & Malek, 2010).

Migration movements to urban places will largely comprise a variety of earnings groups (containing non-low-income persons and families) but will also comprise rural migrants forced to move to urban areas by famine, paucity, poverty or debt and war. These groups may have specific problems of finding housing that they can pay for. They can be crowded in the most uncertain and most horrible settlements, often in peripheral informally housed sites (Krishna, 2014). A lot of immigrant groups find themselves in slums and informal settlements, as these areas become the most affordable destination for immigrants. However, it is imperative to note that the rapid growth of people residing in informal settlements is escalating more by the growing number of people (born in cities, that have been in the city for several years, recent immigrants) who cannot afford to buy, rent or build a formal house (Table 5.1).

Table 5.2: Duration of stay in Informal settlement by location in the study sub-cities

<table>
<thead>
<tr>
<th>Duration of stay in the Informal settlement</th>
<th>Location</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>&lt;2 Years</td>
<td>31.9</td>
<td>20.2</td>
</tr>
<tr>
<td>2-5 Years</td>
<td>17.0</td>
<td>16.5</td>
</tr>
<tr>
<td>5.1-10 years</td>
<td>21.3</td>
<td>19.2</td>
</tr>
<tr>
<td>10.1-25 Years</td>
<td>19.1</td>
<td>18.3</td>
</tr>
<tr>
<td>born here</td>
<td>10.6</td>
<td>35.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 5.2 also indicated that 40 per cent and 53 per cent of the migrants arrived in the two sub-cities are in the last five and ten years, respectively. This revealed that the rate of rural urban migration is getting momentum in the last few years in Bahir Dar. The Table also revealed that more migrants in Belay Zeleke (nearly 49 per cent) arrived in Bahir Dar in the last five years as compared to Shimbit (37 per cent). Furthermore about 36 per cent of migrants in Shimbit born in the city as compared to only 11 per cent in Belay Zeleke. However, this observed difference between the two sites was not statistically significant at α=0.05 ($X^2 = 13$, df = 4, p=0.01). The difference is significant at α=0.01.

Table 5.3: Responses on causes of informal settlement by location in the study sub-cities

<table>
<thead>
<tr>
<th>Causes of informal settlements</th>
<th>Location</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>Inadequate formal land allocation and other poor land administration/management practices</td>
<td>25.5</td>
<td>26.6</td>
</tr>
<tr>
<td>Weak governance</td>
<td>23.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Poverty</td>
<td>29.8</td>
<td>35.8</td>
</tr>
<tr>
<td>Rapid urbanization and its strain on capacity of cities</td>
<td>21.3</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 5.3 describes responses of informal settlers on what causes them to reside in informal settlements. Accordingly, poverty (34 per cent) (see section 5.3) and inadequate formal land allocation and other poor land administration/management practices (26 per cent) (see section 5.5) are the dominant responses of the respondents followed by rapid urbanization and its strain on capacity of cities (21 per cent) and weak governance (see section 5.6).
Rapid urban growth under conditions of poverty raises massive challenges for sustainable urban development. Formal land markets are inaccessible to the greater part of the urban population. The urban poor is still precluded because plot prices in the formal sector are too high to be affordable under the given system as well as the total number of parcels delivered are far too low to meet the demand. Local governments cannot fulfil their basic responsibilities to avert market failures and the associated negative externalities to promote well-being, especially to enable the urban poor to benefit from public goods and services. Thus, to make their living in the urban environment settlers depend on and take part in the informal sector. This includes the provision of plots for the construction of houses, informal transport and informal businesses to confront the daily contest of urban life (Table 5.3, Box 5.1 and 5.2).

Rapid urbanization and its burden on urban capacity is not an exclusive challenge for Ethiopia. In Asia, 44 million people visit the city's population each year, which translates to 120,000 people every day and they need to build more than 20,000 new homes and 250 km of new roads a day. Brazil is addressing the transformation of a nation that was a predominant rural area into a nation that now comprises more than 82 per cent of the urban population (Cities Alliance Members’ Reports, 2008). In Nigeria, tackling housing deficiencies is no longer a matter of just accepting the exponential growth of the population, but it is a crisis that demands immediate attention from the inhabitants against insanity, unstructured infrastructure, overcrowding and rapid growth of marginal neighbourhoods (Ogunshakin & Olayiwola, 2008).

Interview with municipal officials in Bahir Dar has indicated that the city administration cannot provide adequate basic infrastructure and services for formal sector, leave alone the informal housing sector due to low financial, resource, and skilled manpower constraints. Basic infrastructure and services like access roads, electricity, water, schools and health centres are established long after urban dwellers completed their housing construction, ranging from three to seven years. Still, cost of infrastructure is the leading expenditure of Bahir Dar City Administration. So the
prevailing response of the city administration with regards to the expansion of informal settlements is either to demolish or to ignore for some time. If policymakers do not sufficiently understand urban challenges, the current trend of "increasing inequality and urban conflict, backed by an accelerated shortage of resources and an incalculable environmental impact" will continue (Buyana, et al., 2015).

5.3 Urbanization, Poverty, and Informal Housing

In the 1990s, urban centres of Ethiopia were characterized by a weak economic base, a high unemployment rate and an alarming incidence of poverty and slum dwelling. Urban unemployment is assessed to be 26 per cent - and up to 40 per cent in the main urban areas, including Addis Ababa. Almost 40 per cent of the inhabitants of cities live below the poverty line (MoWUD, 2006; MUDCo, 2006). The main reasons for the widespread presence of slums and informal settlements in the urban area of Ethiopia were due to low economic growth, poor housing, and inadequate urban governance, weak institutional capacity, lack of human and material resources, lack of access to credit, and insufficient strategic and planning interventions (MoWUD, 2006; MUDCo, 2006).

Table 5.4 describes the income level of household heads in the study site. The monthly income of 66 per cent the informal house builders is less than ETB 2400 (104.3 USD). The Table also reveals that all households in the study area are either living in poverty (40 per cent) or low-income (60 per cent) according to MoFED11. This

11 The MOFED official income poverty level in 2010/11 is computed based on a poverty line of Birr 3,781 per year per adult equivalent based on CPI in 2005. This is a daily equivalent of Birr 10.75 per adult equivalent (about 0.50 USD). The World Bank’s income poverty line of USD 1.25 per day offers the same figure to that of the official government figure of USD 0.50. Given the galloping inflation in the country since 2005, this is an extremely small amount of money to live on, even by Ethiopian standards. The proportion of people who are MPI poor in Ethiopia in the year 2011 is about 85 per cent, while the percentage of people below the national (income) poverty line, according to the government, is about 30 per cent (Alemayehu & Yimer, 2014).

In October 2015, the World Bank reported that it had refreshed its worldwide poverty line (IPL) and its assessment of the quantity of individuals living in outrageous neediness internationally. The IPL is modified intermittently in accordance with new information from the International Comparison Program (ICP), which is facilitated by the World Bank. The new figure of $1.90 depends on ICP purchasing power parity (PPP) estimations and utilized on 2011 information. The new IPL replaces the $1.25
is more than the current average share of inhabitants existing in the destitution of fewer than 30 per cent in Ethiopia (World Bank, 2015).

With 66 per cent of the household monthly income of <2400 ETB, it is very difficult to expect that such households save and construct formal housing in conformity with the building standard of Bahir Dar. According to Centre for Affordable Housing Finance in Africa (2016) mean earning required for the inexpensive recently erected dwelling by a legitimate contractor in 2016 in Ethiopia is 1917 USD or 44,091 ETB per year or 3674 ETB per month. About 88 per cent of the inhabitants of the study site cannot fulfil this average income. Thus, this indicates the association between informal settlement and income poverty. However, this does not mean that all informal settlers are poor; rather there are some speculators and farmers growing horticulture, coffee, and Khat using irrigation water.

The Table also indicates the relatively better income level in Shimbit as compared to Belay Zeleke (nearly 14 per cent of Shimbit households income is greater than 3600 ETB as compared to only 6.4 per cent in Belay Zeleke. Similarly, 49 per cent of Belay Zeleke households earn less than 1200 ETB as compared to 37 per cent in Shimbit). This is because Shimbit is located adjacent to Lake Tana which enabled some

<table>
<thead>
<tr>
<th>Economic status of an average household in Ethiopia</th>
<th>Monthly household income based on Birr 17.5 per person per day</th>
<th>Monthly household income based on 0.76 USD per person per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>&lt; 1783</td>
<td>&lt;78</td>
</tr>
<tr>
<td>Low-income</td>
<td>1783 – 6751</td>
<td>78-294</td>
</tr>
<tr>
<td>Middle-income</td>
<td>&gt; 6751</td>
<td>&gt;294</td>
</tr>
</tbody>
</table>

This economic status classes are based on MoFED’s income poverty line and an adjusted monthly income poverty line of an average household and 1036 USD per year as the lower middle-income threshold (MoFED, 2012; UNDP, 2015; CSA, 2011; CSA, 1996b).
households to engage in the production of cash crops like *Khat*, and horticulture. The farmers have a ready market for their agricultural products. But the observed difference of income between the two study sites was not statistically significant ($X^2=3.092$, df =3, $p=0.378$).

**Table 5.4: Monthly Income level of household heads in the study sub-cities**

<table>
<thead>
<tr>
<th>Monthly income of household heads in Birr</th>
<th>Location</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>&lt;1200</td>
<td>48.9 per cent</td>
<td>36.7 per cent</td>
</tr>
<tr>
<td>1200-2400</td>
<td>25.5 per cent</td>
<td>25.7 per cent</td>
</tr>
<tr>
<td>2401-3600</td>
<td>19.1 per cent</td>
<td>23.9 per cent</td>
</tr>
<tr>
<td>&gt; 3600</td>
<td>6.4 per cent</td>
<td>13.8 per cent</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 per cent</td>
<td>100.0 per cent</td>
</tr>
</tbody>
</table>

Table 5.5 and 5.6 explain why all households in the study area are either poor or low-income. Table 5.5 indicated that the households of the study area generate income from the farm (39 per cent), informal self-employment (30 per cent), low paid government employment (19 per cent), and daily labourers (13 per cent). Relatively more farmers and government employees are in Shimbit as more self-employed and daily labourers are in Belay Zeleke. The self-employed includes petty trading, processing of food and drink related staffs like preparation and selling of *Tella* and *Katicala*, collecting and bartering of second-hand items, street vending like *Kolo* and chickpea selling, the craft of various types are prominent\(^{12}\).

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\(^{12}\) *Tella* and *Katicala* are traditional alcohol drinks, *Kolo* is roasted barley consumed in many parts of Ethiopia. *Tella* is an Ethiopian home-brewed beer. *Katicala* is a homemade distilled drink from
Studies have shown that several of the employed destitute are already living in unauthorized urban settlements and there is no doubt that they derive their living from the informal self-employment in low-income countries, particularly in sub-Saharan Africa and India (Tacoli, 2012; Kingdon & Knight, 2007). As a consequence, informal land and housing delivery systems remain the only realistic alternative for meeting the needs of low-income households.

Table 5.5: Income earning sources of household heads in the study sub-cities

<table>
<thead>
<tr>
<th>Income sources</th>
<th>Location</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>government employed</td>
<td>14.9</td>
<td>20.2</td>
</tr>
<tr>
<td>Informal self-employed</td>
<td>36.2</td>
<td>26.6</td>
</tr>
<tr>
<td>daily labourers</td>
<td>14.9</td>
<td>11.9</td>
</tr>
<tr>
<td>Farmers/ agriculture</td>
<td>34.0</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Farmers (39 per cent) and self-employed (29.5 per cent) are the dominant occupations of informal house builders in the two study sites. Farmers are usually the landholders in the suburban areas and tend to build houses for their married son, to have extensions for a kitchen, toilets, animal sheds, to rent or even to sell. Kebele officials complain that most farmers living in the urban fringes tend to sub-divide their agricultural land and sell either to new migrants from the rural areas or to urban speculators even though land sale is prohibited by Ethiopian constitution. There is a considerable illegal land sell in many peri-urban areas of Ethiopia.

Self-employed are usually those who rented or bought houses from the landholders. In peri-urban areas due to the relatively long distance from the centre of the town, low housing standard (usually one room Chika/mud and wooden houses), scarcity of maize/barley/millet. Kolo is simply roasted whole barley grain mix, usually enjoyed between meals, while having traditional coffee or drinking Ethiopian traditional home brewed beer (Tella).
urban utilities like pipe water, electricity, and transportation (roads and vehicles) low
house rents are attractive to low-income people. Residential house rents range from
one-fourth to one-half of similar houses in the centre of the towns.

Even though many governments and private education institutions exist at both sites,
58 per cent of the sample households attended 8th grade or less and those who
attended greater than grade 12 are only about 3 per cent (Table 6.1). This appears to
be related to the rural background of the majority of the household heads as indicated
by the occupational status of household heads (more than 80 per cent of the
household heads are farmers, daily labourers and self-employed) (Table 6.1).

Table 5.6: Education Level of Household heads in the study sub-cities

<table>
<thead>
<tr>
<th>Grades attended in Schools</th>
<th>Location</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>&lt;= 4&lt;sup&gt;13&lt;/sup&gt;</td>
<td>19.1</td>
<td>23.9</td>
</tr>
<tr>
<td>5 - 8</td>
<td>34.0</td>
<td>36.7</td>
</tr>
<tr>
<td>9 - 10</td>
<td>25.5</td>
<td>14.7</td>
</tr>
<tr>
<td>11-12</td>
<td>19.1</td>
<td>21.1</td>
</tr>
<tr>
<td>&gt;12</td>
<td>2.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5.6 shows the education level of household heads in the study areas. As the
table reveals greater than half (58 per cent) of the households attended only grades 1
- 8 (first and second cycle primary school). Those who attended preparatory and
TVET (grades 11-12) and university (>12) are only 24 per cent. It is acknowledged
that most of the time the income of the person is related to his occupation and
educational attainment. Occupation also often corresponds with income and
educational attainment. The combination of income, education, and occupation
represents the socioeconomic status of an individual or group. In addition, an

<sup>13</sup> <= 4 include 7 per cent of households who cannot read and write.
assessment the socioeconomic position as a gradient or continuous variable in the study site reveals inequalities in the allocation and distribution of resources, including the right to use land, housing, infrastructure, and services. Thus informal settlers in Shimbit and Belay Zeleke are deprived and excluded from essential resources for urban habitation and the opportunities and security offered therein because of their low socioeconomic status.

In other words, Ethiopian rapid urbanisation is taking place under conditions of high level of unemployment, limited industrial job opportunities, and one of the least per capita incomes even by the African standard. According to the World Bank (2009) the present urbanization unlike the past where it typically occurred in developed countries, is now widespread primarily in developing countries. And for Ethiopia, the potential for rural-urban migration in the future could increase because the rural population is expected even to gain a population. A major and coincidental difference is that cities in today’s developing countries cannot offer job opportunities to new dwellers, as European cities could during industrialization.

Kombe and Kreibich discuss these two realities together, stating that "poverty is urbanizing in sub-Saharan Africa" (Kombe & Kreibich, 2002). This process presents major problems in ensuring that urban governments build adequate housing and land for people. At the same time, the authorities have inadequate resources to improve and renovate infrastructure and services. As a result, the lodging, management and ecological conditions are frequently very poor in informal settlements (World Bank, 2002, p. 7).

Rapid urban growth under conditions of poverty raises massive challenges for sustainable urban development. Formal land markets are inaccessible to the greater part of the urban population. The urban poor is still precluded because land prices in the formal sector are too high to be affordable under the given system as well as the total number of parcels delivered are far too low to meet the demand. Local governments cannot fulfil their basic responsibilities to avert market failures and the associated negative externalities to promote well-being, especially to enable the
urban poor to benefit from public goods and services. Thus, to make their living in the urban environment settlers depend on and take part in the informal sector (Table 5.3, Box 5.1 and 5.2). Rapidly expanding cities in low-income countries frequently confront with urban congestion due to severe urban deficiencies in housing, infrastructure, and services, although urbanization is typically contributing to economic development and, therefore, to urban capacities (Box 6.1).

The reciprocal link between migration processes, urbanization, and poverty highlights not only the complexity but also the various contexts within which they emerge in Ethiopia. The strong trends in rural-urban migration in Ethiopia indicate both urbanisation patterns and spatial disparity as the driving force of migration. On the contrary, migration is one of the most important factors contributing to urbanization in Ethiopia. Due to land and housing deficiencies and the desirability of the informal economy for low-income migrants, these immigrant communities tend to rely on and thus expand in slums and informal settlements, with harmful effects both on poverty and on the experiences and living conditions of immigrants (Sabates-Wheeler, et al., 2005).
Box 5. 1: Informal Settler Birtukan

My name is Birtukan Fekadu; I have two boys and three girls living here in Belay Zeleke sub-city. I rented in two metre by three metre Chika/ wood and mud house. I am processing and selling Tella. We have lived here for five years as you can see our house have only one room; it has no cooking place and separate bed room. We cook our food in the open air using fire wood. The main reason why we live here is because of low or affordable housing rental. In this area house rent is within our means and it is also the only place that we can afford to live. The other reason to prefer this area for living is its proximity to my husband’s working place, who is working in private wood workshop as an assistant carpenter.

The disadvantages of living in this place are lack of supply of electricity, clean water and also there is no school nearby. The community also lacks proper infrastructure like road and waste disposal facility. The main challenge we have been facing, however is access to school for our children nearby and if we got sick we also lack neighbouring government clinic, and if a fire broke out it will be impossible for the firemen to get in since our houses are overcrowded. Toilet and a place to dispose our garbage as well as lack of community playground for our kids are also our additional challenges. Furthermore, Key Dulls (code enforcement professionals) frequently come here and demolish many houses and so we are living here in fear.
Box 5.1 and 5.2 describe challenges of living in informal settlements. The cases describe high room densities of 6 to 7 persons, overcrowding of the dwellings, severe deficiency of basic services like electricity, clean water, private toilet, school, clinic, and road. Furthermore, cooking to take place in the open airs and pit-latrine toilet is shared among several households. Water is bought from formal settlers located further afield. In addition, both settlers are engaged in the informal economic activity. The only major advantage they have is low rent in the case of Birtuken and living in own house in the case of Bereket. But, both of them share high tenure insecurity, particularly, Bereket may lose all his asset of buying and building his house.

5.4 Housing Demand and Supply

The urbanization rate is directly associated with the demand for housing. It is anticipated that the more a country becomes urban, the more housing will be required to accommodate the growing population in the urban centres. However, the reality on the surface does not support this, because the increase in urbanization is not accompanied by the delivery of sufficient housing. This is one of the reasons for the expansion of informal settlements that provide realistic housing for most low-income groups (UN-Habitat, 2002). Housing affordability in developing countries is
remarkably low. Due to supply shortage and high household formation, the demand for housing is amazingly high. However, as there are few residential areas for new erection, production is incredibly low. It is this imbalance between supply and demand that drives prices that most households cannot afford.

5.4.1 Housing demand

The discussion on housing demand in Ethiopia is constrained by the challenges of acquiring up-to-date and reliable data\textsuperscript{14}. Accordingly, this section provides some information on the extent of housing demand based on the number of persons registered for public rental housing, condominium housing and residential land using information provided by the city administration of Bahir Dar.

Based on the information provided by Bahir Dar City Administration total housing demand is 155,036 units in 2015 (Table 5.7). The highest demand is for private houses (33.1 per cent) followed by condominium (29.4 per cent)\textsuperscript{15} and Kebele houses (17.8 per cent). The estimate for housing demand in Bahir Dar obtained from the city administration is much higher than the figure estimated from MoUDHC (2015) which was 46,703 housing units between 2000 and 2006 and 94,144 housing units for the present population of 345,610 in 2016.

In addition, the current poor quality of urban housing, which in the main refers to the public rental housing stock, represents additional demand for affordable housing. This is important in view of the fact that Kebele houses are a major part of the existing housing stock that is targeted for demolition in connection with on-going and planned

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\textsuperscript{14} In Ethiopia we do not have urban modern real property registration system. The recent Urban Landholding Registration Proclamation, Proclamation No. 818/2014 is under preparation for implementation. The data we have so far suffers from considerable inaccuracy and reliability.

\textsuperscript{15} Condominium is a common pool resource constructed by the government resources and initiative and transferred to individuals over longer durations (17-25 years). At the end of the loan payment by the beneficiary, condominium units become individual property. Its cost of construction is based of intensive subsidy; only labour and material cost. But privates’ houses are constructed or bought in the open market by individual owners.
redevelopment interventions in the older parts of many of the major urban centres including Bahir Dar.

**Housing needs and effective demand**

The Ministry of Works and Urban Development of Ethiopian (2008) estimated that the housing shortage was between 900,000 and 1,000,000 in urban areas of the country and that only 30 per cent of the existing residential stock was in an acceptable condition; with the remaining 70 per cent need total replacement. In Addis Ababa alone, 300,000 units (Haregewoin, 2007) and about 50,000 units in 2017 in Bahir Dar (estimation based on MUDHCo, 2014 estimation) are needed to fill the gap (MUDHCo, 2014). The housing deficit is forecast to increase in line with the expected strong growth in population and urbanization. Between 1983 and 2007, Ethiopia's population has more than doubled from 33.5 million to 81.2 million (MoWUD, 2008, p. 2) and is expected to be more than double in 2050 to reach 170.2 million. To ensure future growth, the Urban Sector Millennium Development Goals Needs Assessment (2004) estimate that, to achieve the 2015 Millennium Development Goals, a total of 2,250,831 units are needed, equivalent to 225,000 houses annum\(^\text{16}\).

There is a great demand for serviced, healthy and affordable housing. This demand derives from both the current housing deficit and the poor quality of the existing kebele housing stock which is irrevocable. However, the effective demand for affordable housing is low in Ethiopia. Effective demand is based on “the ability and willingness to pay for housing, affected by income and what households are prepared to pay” (UN-Habitat, 2011, p. 6). According to UN-Habitat (2011), affordable housing is generally defined as that which is “adequate in quality and location and does not cost so much\(^\text{17}\) that it prohibits its occupants meeting other basic living costs or

\(^{16}\)Compare this requirement with annual construction of 31,048 condominium units in all urban areas of Ethiopia between 2006 and 2016. Note also that condominium housing supplies 51 per cent of the current total housing supply (Table 5.7). Note that MDG is over and updated estimates are obviously higher.

\(^{17}\)Affordable housing is housing that is appropriate for the needs of a range of very low to moderate income households and priced so that these households are also able to meet other basic living costs.
threatens their enjoyment of basic human rights” (UN-Habitat, 2011, p. 7). The disparity between supply and demand is aggravated by very low-incomes, which leads to affordability problems, and urban residents, therefore, prefer informal settlements.

Effective demand actually consists of an "effective" demand based on those who have the needed down-payment and the ability to pay a mortgage each month and an "aspiration" demand based on those who want to own the unit but lacks savings to fulfil the down-payment. By 2014, of the total 994,788 people registered for a condominium in Addis Ababa, those who have a regular income and have the means to pay the necessary deposit, corresponding to our definition of "efficient demand", were assessed at 356,385 only (MUDHCo, 2014). This is only 36 per cent of total demand, which indicates availability is the main trouble. Similar challenges with affordability are observed in other major cities in Ethiopia, including Bahir Dar.

5.4.2 Housing supply

Based on the information obtained from Bahir Dar city administrations for 2015, different formal and informal actors contributed towards augmenting the total urban housing stock by 69,943 units. The private or owner occupier housing is the leading provider as reflected in the number (31,692) accounting for 45.3 per cent of the total (Table 5.7). Informal housing construction contributed the second largest number of housing units (23 per cent), while private rental contributed 22.9 per cent. Kebele houses, real estate developers and public rental contributed the lowest percentages of 5.6, 2.9 and 0.2, respectively.

This is also understandable as the provision of plots for the construction of villa-type housing to individual families and cooperatives has been temporarily suspended

such as food, clothing, transport, medical care and education. As a rule of thumb, housing is usually considered affordable if it costs less than 30 per cent of gross household income. A household that pays 30 per cent or more of their income on housing costs are considered to be burdened. While this figure provides a useful benchmark of housing affordability, the definition of affordability varies according to a household’s individual circumstances. Demands on the same gross income may differ significantly (Schwartz & Wilson, 2008).
(between 2011 and 2013), particularly in those towns that were implementing the IHDP, which was considered to offer opportunities for more intensive use of land. In the meantime, the government has been developing better implementation modalities for the lease policy as well as legal frameworks for establishing land management information systems as part of the national land and property registration project.

Table 5.7: Housing supply and Demand in Bahir Dar in 2015

<table>
<thead>
<tr>
<th>Housing types</th>
<th>Housing supply</th>
<th>Housing demand</th>
<th>The proportion of supply to demand (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Per cent</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Formal housing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condominium</td>
<td>3700</td>
<td>5.02</td>
<td>45521</td>
</tr>
<tr>
<td>Public rental</td>
<td>119</td>
<td>0.16</td>
<td>12561</td>
</tr>
<tr>
<td><em>Kebele</em> houses</td>
<td>3883</td>
<td>5.27</td>
<td>27657</td>
</tr>
<tr>
<td>Real estate</td>
<td>2035</td>
<td>2.76</td>
<td>17988</td>
</tr>
<tr>
<td>Private/owner occupier</td>
<td>31692</td>
<td>43.03</td>
<td>51309</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td>41429</td>
<td>56.26</td>
<td>155036</td>
</tr>
<tr>
<td><strong>Informal/partially informal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private rental</td>
<td>15981</td>
<td>21.70</td>
<td>0</td>
</tr>
<tr>
<td>Informal housing</td>
<td>16233</td>
<td>22.04</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td>32214</td>
<td>43.74</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>73643</td>
<td>100.00</td>
<td>155036</td>
</tr>
</tbody>
</table>

Source: Bahir Dar City Administration unpublished documents

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18 Private rental is categorized under partially informal since it is supplied by both formal and informal house owners. Furthermore, private rental supplied by both formal and informal house owners usually escape recognition or recording by city administrations.
It is to be noted that considerable gap is observed between housing demand and supply in urban areas of Ethiopia, in general, and Bahir Dar, in particular. Table 5.7 revealed that formal housing supplied about 56 per cent of the total housing supply and the remaining 44 per cent is supplied by informal or partially informal sector. Private or owner occupier represented the biggest supply (43 per cent) and demand (33 per cent) of formal housing in Bahir Dar. Condominium and kebele houses also contributed for 29 per cent and 18 per cent of housing demand, respectively. The higher housing demand for private/ owner occupier and condominium are associated with low construction cost and low frequency of getting access to such mode of access to land and housing (section 5.5.3 and 6.2.4). In general, both formal and informal or partially informal housing supply in Bahir Dar satisfied 52.5 per cent of total demand. A considerable part of the unmet demand or housing gap (47.5 per cent) is most likely fulfilled through informal housing since the formal means is more intractable (section 5.5). It is because of this high unmet demand that house rents are rapidly raising in Bahir Dar and a lot of people are pushed to the informal means. Interview with my focus group discussion disclosed that currently, housing rent increases from 15 per cent to 25 per cent per year.

5.5 Some limitations in urban leasehold policy

Since the first leasehold proclamation of 1993, people have had access to residential land, mostly from peri-urban areas, on the basis of 99-year leases. It was assumed that the introduction of this leasehold transfer would replace the incompetent socialist provision system. However, state-controlled expropriation and reallocation of urban land through the lease agreement has been criticised for being incompetent and fraudulent. The compensation payment to expropriated farmers are not only very low and unfair (Table 5.8 and Box 5.2) by any standard but also the payment is made

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19 Proclamation 721/2011 article 12 (1) (c) issued that urban lands may, upon decisions of the cabinets of the concerned region or the city administration, be permitted for public residential - housing construction programs and government approved self-help housing constructions. Such land is transferred to self-help housing constructions free of charge since land in Ethiopia belongs to state and people of Ethiopia. Condominium houses are subsidized by the government and land is excluded from cost of construction.
only for ten years based on the average price of produce in the last five years (for details see section 4.4). It is not clear why farmers are paid compensation for only ten years for unlimited use right they had over their holding. But, existing data point out that prices on the informal marketplace are significantly greater than offsets compensation for expropriated land, which strongly encourages informal sales (Table 2.1). Estimate based on the same table shows that informal market prices are on average 9.6 times the government paid compensation prices. On the other hand, land transfer to urban residents on lease auction is not only high but it is also increasing from year to year (Table 5.8). Thus, this is the reason why the poor, including informal settlers, have not been able to pay for housing land. Even for the middle class, it is progressively demanding to secure land through the official tender framework.

Table 5.8: Land Lease Auction Offers for residential buildings in Bahir Dar from 2014 to 2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Leasehold price offers in Bahir Dar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>2014</td>
<td>1422</td>
</tr>
<tr>
<td>2015</td>
<td>3800</td>
</tr>
<tr>
<td>2016</td>
<td>11300</td>
</tr>
<tr>
<td>Average</td>
<td>5507</td>
</tr>
<tr>
<td>Growth between 2014 and 2016</td>
<td>7.95</td>
</tr>
</tbody>
</table>

Source: Bahir Dar City Administration (Unpublished document and Annex E)

Standards in land and settlement development also appear to be very high in Bahir Dar. Examples of the high standard are found in granting building permission, and in the control of development activities. In regional capital cities like Bahir Dar, Chika
Bet\textsuperscript{20} is not granted building permission as it is considered below the standard. This is because City authorities thought that Bahir Dar is a Metropolitan city, the seat of regional government, and tourist hub of the region. Those who want to build Chika Bet should move to satellite towns of Bahir Bar like Tis Abay, Meshenti, and Zege.

An all-embracing land information system is essential to improve land management, to implement land policy and address policy objectives. In Bahar Dar, complete land information is lacking on available land and on the current housing situation to support in the current housing condition. The lack of information leaves no choice to the land management system but to resort to provisional means of data gathering for planning purposes.

The existing land management institutions in Bahir Dar are represented by an absence of sufficient capability. Both the Planning Agency and the Land-survey departments are deficient in staffing and functioning equipment necessary for them to carry out their work. For instance, a metropolitan city of Bahir Dar with a population of more than 300,000 had only 2 GPS to carry out all land surveying activities including land servicing and the personnel working on the instruments are largely inexperienced TVET graduates. This inadequate capacity discourages institutions in the exercise of their functions. It also contributes to their inability to control land right, plan and enforce land use in their locality.

A joint state and people ownership of land in Ethiopia combined with the incompetence in the functioning of the civil service has also inspired fraud in the provisioning process, reducing it to a form of backing. Over the last two decades, residential lands planned for many housing associations, as witnessed in Bahir Dar, have been delivered on the eve of elections. As a result of the assessment made following the 2016 land development and transfer process in Bahir Dar, a number of

\textsuperscript{20} Chika bet is mud and wood built house common in rural areas and low-income communities in urban areas.
illegal activities have been identified, such as leaving unassigned some plots deliberately by field surveyors (Box 5.3), bribery payments to enjoy indecorous benefits, land grabbing with payment of inadequate compensation for farmers, and sale of land for public use like green areas and entertainment sites around Lake Tana.

**Box 5.3: Are there any open plots that are left behind allocation and supposed to be transferred?**

My name is Tesfa Agumas from Shimbit sub-city. Regarding plots left unassigned by surveyors in my sub-city I witnessed the following. There are plenty of open plots with unclear holders, and even those open plots are constructed illegally and sold. Plots are allocated by surveyors for small enterprises are sometimes left behind or delayed, and remain unprocessed. Others sell for their relatives and there are those who use for themselves.

The land must be legibly allocated to the citizens. Otherwise, the practice of land segregation will benefit middlemen and corrupt professionals. This arrangement will increase the price of the land and make the land inaccessible. This puts the low-income population at risk because they cannot afford to buy land at a high price on the open market or pay bribes to public servants for formal land.

Inefficient use of land increases the cost of providing each plot with basic infrastructures such as roads, water, and electricity. For example, the broad facades of the plot increase the unit cost of servicing each parcel. Increasing costs of servicing land will further increase the cost and time of land development and thus reducing the amount of land to be supplied to citizens.

People who cannot get land and infrastructure legally suffer various obstacles. These settlers are subject to inadequate basic infrastructure, inadequate and safe housing and are often vulnerable to disease, violence and social and political marginalization (Rakodi & Leduka, 2004, p. 8); (Sclar, et al., 2005, p. 35). In addition, they cannot
improve their standard of living by using their property as a security guarantee to obtain formal loans from public credit institutions, as there is no security of tenure in property and property they own de Soto (2000)). Informal settlers also cannot obtain the many benefits offered to other legal settlers. For example, households with water and electricity metres have much lower water and energy rates than households without metres.

City dwellers that access land and housing informally are disadvantaged in a number of significant ways. They are vulnerable to disease, violence and social, political and economic exclusion (Kiwara, 2016, p. 2). They lack the benefits of adequate secure housing and tenure, entitlement to physical and social infrastructure services and safe living environments, generally afforded to those operating in the formal city domain (Rakodi & Leduka, 2004, p. 8). Additionally, according to de Soto (2000), their informal status and associated lack of security of tenure prejudices they further as they are unable to utilise titles as collateral for loans to advance economically. Informal residents are also not eligible for social packages offered by a city (Sclar, et al., 2005, p. 35).

5.6 Summary

This chapter has examined the causes of informal settlements in the study area. Poverty, rural-urban migration, limited capacity of the city to deliver basic services, low housing supply and high housing demand, and limitations in land lease laws, as well meagreness of essential amenities like water, sanitation and electricity were mentioned as imperative causes of informal settlement expansion in the study area.

The study highlights the critical component of population growth in the study site has been rural-urban migration, which constitute greater than one-half of residents in the unauthorized neighbourhoods as well as relocation of people from downtown to squatters. However, the rural-urban migration rate in Bahir Dar is lower than one might expect. This is due to limited capability of the city to deliver land, accommodation, access to services, job opportunities, and constraint of the system of land management.
Rapid urbanization in Bahir Dar is also associated to poverty. It was found that almost all households in the study area are either poor or low-income. The poverty of informal settlers is partly related to their low level of education and engagement in small-scale farming, informal self-employment and low paid government jobs. The poverty of inhabitants deprived and excluded them from land, decent housing, fundamental amenities and facilities essential for municipal habitation and the opportunities and security offered therein. Absence of public service delivery also means bigger prices and miserable quality of facility.

There is a huge demand for accommodation in Bahir Dar. Formal and informal or partially informal housing supply in the city satisfies only 52.5 per cent of entire demand. A substantial portion of the housing gap is most likely filled through informal housing since the formal means is more intractable. The gap between housing demand and supply is further exacerbated by the speculative tendencies of peri-urban farmers, brokers, informal real estate developers and corrupt bureaucrats.

Furthermore, high building standards in Bahir Dar, lack of comprehensive land information system, high cost of servicing land, lack of adequate capacity of the existing land management institution, corruption in the allocation process which in turn leads to speculative tendencies, strengthens the rising price propensity and hence the unattainability of the plot of land for the poor and low-income populations.
CHAPTER 6

URBAN LAND MANAGEMENT PRACTICES, EXPANSION OF INFORMAL SETTLEMENT AND ENVIRONMENTAL MANAGEMENT

6.1 Introduction

The causes of informal settlements in Bahir Dar were analysed in the foregoing chapter. This chapter dwells on three important issues: First, urban land management practices in informal settlement areas - how informal settlers are getting access to land, housing, basic services and infrastructure, describes major types of informal settlements and assesses how informal settlements are governed and nature of governances, Second, influences of land management policies and practices on the prevalence of informal settlement will be presented and Finally, the implication of expansion of informal settlements on environmental management will be discussed. It also intends to respond to the third and fourth specific research objectives of the study.

6.2 Informal Settlement and Urban Land Management Practices

6.2.1 Demographic characteristics of informal settlers

The 2007 Population projection recorded a total population of 221,991 in Bahir Dar, accounting for 1.6 per cent of the population of Amhara Region which had a population of 20.7 million. According to CSA’s projections, the city’s population had reached 345,610 by July 2016. The male and female population was 172,979 and 172,631 respectively (CSA, 2013a).

The population of Shimbit was 24,462 and Belay Zeleke 33,349 in 2015. Numbers of informal house builders were 432 and 188 households in the respective sub-cities. The informal house builders in the two sub-cities, i.e. 620 are 4.7 per cent of the household heads in the two sub-cities. From these settlers, 109 and 47 were randomly selected as a sample for this study. The total samples selected, i.e. 156 are
25 per cent of the sample frame. The small proportion of the informal house builders, i.e. 4.7 per cent is facing frequent demolitions of their dwellings by Kebele administrations. For example, in March 2017 of the total 2400 constructed informal houses in five outlying sub-cities of Bahir Dar over the past six months, about 95 per cent of them were demolished in just one week time.

Of the total sample of 156 settlers who build informal houses about 78 per cent of them are male-headed households and 22 per cent female-headed households (Table 6.1). The informal house building is a risky accomplishment and it seems that males take more risks than females. Field observations and focus group discussions revealed that most of the informal houses are demolished within a few days to six months.

The majority of the sample respondents (71 per cent) are married couples and the remaining 29 per cent is single (Table 6.1). Marriage is a universal practice in Ethiopia, i.e. everybody is expected to marry and live as a couple and thus being single is discouraged by society’s custom and tradition. Here singles constitute male and female, usually students, self-employed and daily labourers’. Singles are also those who recently arrived at the urban or peri-urban areas. Thus, most singles are renting houses from landholders at lower rental prices compared to the central parts of the city.
Table 6.1: Some demographic characteristics of household heads at Belay Zeleke and Shimbit

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sample population</th>
<th>Overall (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>Total sample household (HH) heads (N)</td>
<td>Male (37)</td>
<td>Female (11)</td>
</tr>
<tr>
<td>Sex of household heads (per cent)</td>
<td>Male (77.8)</td>
<td>Female (22.4)</td>
</tr>
<tr>
<td>Marital status of HH heads (per cent)</td>
<td>Single (23.4)</td>
<td>Married (76.6)</td>
</tr>
</tbody>
</table>

6.2.2 Access to land and some features of housing

More than one-half (51 per cent) of informal house builders have sufficient parcel size to construct their own building which ranges from 100 to 200 or more square metres (Table 6.2). This is because most of them are farmers or were farmers and only recently delineated as urban. Particularly some informal house builders in Shimbit hold larger areas planted with *Khat*, avocado, and mango as well as coffee trees. But the proportion such farmers are not more than 10 per cent of the total households in Shimbit. The size of the built-up area is usually very small, about 86 per cent of the sample households had less than 20 square metres and only 14 per cent of them had greater than 20 square metres (Table 6.2). Built houses are not only small but also made from temporary materials like wood, mud, rags, and plastics (Figure 6.1). This is partly due to insecurity among house builders, and partly due to low-income and poverty. Thus, as it is expected, the majority of the houses are either single room (71 per cent) or two rooms (22 per cent). Most of these temporary houses have also no proper waste disposal sites (86 per cent) (Figure 6.2). They throw out their wastes indiscriminately anywhere outside of their houses which later on drain to nearby flood disposing ditch or any watercourses. The few households who surrender their wastes
to waste collecting forums are those variegated with formal resolutions. Some of the informal settlers in Shimbit are using household solid wastes and cow dung to fertilize their farmyards of Khat, Avocado, Mango and Coffee trees.

Table 6.2: Landholding and housing situation of the sample population

<table>
<thead>
<tr>
<th>Items</th>
<th>Total sample population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modalities of access to land/house</td>
<td>N=156</td>
</tr>
<tr>
<td>Bought land/house from the rural landholder (51.3)</td>
<td></td>
</tr>
<tr>
<td>Rent the house (18.6)</td>
<td></td>
</tr>
<tr>
<td>Administrative allocation/own holding (12.2)</td>
<td></td>
</tr>
<tr>
<td>Inheritance and/or donation (10.9)</td>
<td></td>
</tr>
<tr>
<td>Invade/occupy by force (7.1)</td>
<td></td>
</tr>
<tr>
<td>Parcel size in square metre</td>
<td>&lt;100 (46.7)</td>
</tr>
<tr>
<td></td>
<td>100 – 150 (18.6)</td>
</tr>
<tr>
<td></td>
<td>150.1 – 200 (14.1)</td>
</tr>
<tr>
<td></td>
<td>&gt;200 (20.5)</td>
</tr>
<tr>
<td>Size of the built-up area in a square metre</td>
<td>&lt;16 (69.9)</td>
</tr>
<tr>
<td></td>
<td>16 – 20 (16)</td>
</tr>
<tr>
<td></td>
<td>20.1-30 (7.7)</td>
</tr>
<tr>
<td></td>
<td>&gt;30 (6.4)</td>
</tr>
<tr>
<td>No. of rooms in a house</td>
<td>1 room (70.5)</td>
</tr>
<tr>
<td></td>
<td>2 rooms (22.4)</td>
</tr>
<tr>
<td></td>
<td>3 rooms (7.1)</td>
</tr>
<tr>
<td>Waste disposal site</td>
<td>No disposal site and thus arbitrarily thrown out (85.9)</td>
</tr>
<tr>
<td></td>
<td>Wastes are collected and disposed of by firms (14.1)</td>
</tr>
</tbody>
</table>
Figure 6.1: Common informal houses constructed in the study areas

Figure 6.2: Liquid waste drainage in the vicinity of informal settlements
Most informal settlers are getting access to land or a house through purchase (51 per cent) and rent (19 per cent) followed by formal administrative allocation (12 per cent), inheritance/donation (11 per cent) and invasion (7 per cent) (Table 6.2). The most dominant mode of getting access to land or house in informal settlement areas is an illegal purchase of land or house from landholders. Brokers facilitate such illegal transaction between landholders, buyers and sub-city officials. Buyers are motivated to enter into such illegal transaction for at least two reasons. First, by inducing sub-city officials, they may get an approval of their house usually constructed on less than 20 square metres of land (Figure 6.1). If they get approval, they are guaranteed to get substitute parcel of at least 150 square metres and money compensation for the building. Second, inhabitants buy land or a house at lower prices to live in, to rent or even to sell with profit. In other words, there is speculation tendency among some of the informal settlers. Consistent observations were found by Achamyeleh (2014).

Some inhabitants are invading kebele land delineated under land bank when favourable occasions are available. Such incidents include the period immediately before or after an election, political instabilities, transition from one political system to the other (like from the Derg to EPRDF in 1991). Houses built by landowners without getting a building permit from the sub-city are usually substandard and their low-rents are attracting low-income inhabitants from the city centre.

6.2.3 Types of informal settlements

Informal settlements in the study area can be classified into the following three, namely inner city informality, outer city informality 1, and outer city informality 2. Each of them is presented as follows:

(I) Inner city informality

Original occupation of land is usually illegal and through time they are granted temporary and then legal residential status. This type of housing informality is old, congested, and polluted with a lot of wastes. Sudi Sefer or village where 100 square metre of land is shared among 7 or 8 households with only one multipurpose room
house is available for a household illustrates inner city informality in Belay Zeleke sub-city (Figure 6.3). Many of them are dissatisfied with the existing congested dwelling and opt for government intervention to provide them with a plot of land (150 square metres) for each household in the suburban areas and money to build on the granted parcel of land. Some writers consider this type of inner-city informality as slums. But most writers including UN-Habitat are not clearly distinguishing informal settlements and slums.  

21 See for example HABITAT III issue paper 22 on informal settlements, May 2015. In this issue paper concepts of slums and informal settlements are overlapping, sometimes descriptions such as ‘slums or informal settlements, slums and informal settlement, or sub-standard housing’ are used. In page 1 under definition of main concepts, informal settlements and slums are defined, in this definition considerable overlaps of the two terms are clearly indicated. This issue paper is derived from UN--Habitat (2003), The Challenge of Slums; UN--Habitat (2013), The State of the World Cities Report 2012/13; Issue Paper No. 9 on Land for ‘security of tenure’ definition. World Bank (2008), Approaches to urban slums; UN--Habitat (2015), Streets as tools for urban transformation in slums; Cities Alliance (2010), Building Cities; Cities Alliance, World Bank and UN--Habitat (2002), Cities without Slums.
Figure 6.3: Inner-city informality in Belay Zeleke sub-city
(ii) Outer city informality 1

This is where peri-urban farmers subdivide and sell off their farmland to other farmers or speculators. The buyers erect buildings to live in, to rent or to sell. The major reason behind subdivision may be fear of state expropriation of land due to the low payment of compensation, to donate to wedded-son, and increasing value of peri-urban land, among others. This informality is characterized by ample open spaces, with yards of vegetables, fruit trees, Khat, coffee, etc. Many of them are against any state interventions like regularization, registration, certification, etc. since they are satisfied with their present tenure status. In Bahir Dar sub-cities code enforcement team is actively controlling any subdivisions, erections, extensions, modifications of the existing settlements. Bahir Dar city administration enacted regulation No. 4/2009 mainly to monitor any of the aforementioned activities by the inhabitants. Informal buildings in this category occurs intermingled and or adjoining formal buildings or settlements (Figure 6.4).
(iii) **Outer city informality 2**

Outer city informality occurs relatively detached from the current built-up area of the city. Substantial part of the peri-urban areas are already included as part of the metropolitan of Bahir Dar. Within Bahir Dar city administration, there are two administrative sub-divisions: the first one is the current built-up area where there are 9 sub-cities and the second in the rural part or city expansion area or peri-urban area.
where there are 9 rural kebeles and three satellite towns of Bahir Dar. In most of the expansion area of Bahir Dar, rural kebele administrations are maintained and the dominant activities of the population are still agriculture22. The surveillance carried out by the code enforcement team in the inner city and outer city informality1 are non-existent here because of inaccessibility and long distances. Extensive informal housing is rather carried out in this part of the city usually following some development points (Figure 6.5). Example, the opening of the two Bahir Dar University campuses: Yibab and Medical faculty at a distance of about 4 KMs from the current built-up area of the city resulted in the evolution of two informal villages in 2013 and 2014 with about 500 – 600 housing units. Almost all Yibab villages are already demolished where the builders got a replacement parcel of land in the western part of the city.

22 In the 9 rural kebeles delineated under Metropolitan of Bahir Dar farmers are still practicing agriculture. However, administratively they are governed under city administration. To administer the rural part of the city, there is a branch administrative body under the city administration. This administrative arrangement is to facilitate the transformation of rural land use to urban land use.
6.2.4 Land rights and restrictions

In order to prevent and control illegal occupation of land and expansion of informal houses, the Bahir Dar city administration issued regulation No. 14/2009. Specifically article 4 of this regulation describes some rights and restriction imposed on farmers
living in peri-urban areas. Peri-urban farmers have the right to use their house and parcel only according to the present land use type. If they want to change the existing land use type, e.g. to renew, to build a toilet, to build a kitchen with four wooden columns and a roof, to build animal shed, to build small shop and similar buildings, they have to present written request and then get approval from sub-city land management office. However, concrete buildings and other permanent erections are not permitted on such holdings. Furthermore, when they are granted renewal rights they cannot increase the size of their building and change the building materials- e.g. from Tirar/plastic to wood/corrugated iron, from four wooden columns to reinforced wooden house plastered with mud.

Additionally, farmers demarcated within the city boundary shall be given certificates of holding for the land they use for farming and related activities. But such farmers are prohibited not to transfer any land provided for agriculture and related services to a third party for non-farming activity or for unauthorized construction. If the plot is desired by the state for any purpose, farmers are paid compensation in the form of a substitute parcel of land and money to construct a similar house. It seems that the major goal of these land use restrictions is to diminish money compensation for farmers losing their holding and to create a conducive environment for investors and urban residential constructions.

Interview with city authorities revealed that farmers are prohibited to transfer their holding for unauthorized construction since such lands are required by the city authority for future urban expansion; such transfer may cause farmers to generate inappropriate revenues or land to land compensation and forcing the city to pay more compensation, such transfer may cause brokers to make inappropriate earning from such transactions – it is against a fair distribution of national resources, and such subdivision may result in too small holdings, which may, in turn, cause congested buildings exposed to fire and other risks.
Table 6.3: perception of informal settlers about the rules and an institution enforcing the rules

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Significance level of Chi-square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal settlements should be governed by the set of rules.</td>
<td>78</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>I have known the rules governing informal settlements for the last five years</td>
<td>69.9</td>
<td>23.7</td>
<td>6.4</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>The rules governing informal settlements are accessible and transparent.</td>
<td>25</td>
<td>65</td>
<td>10</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Informal settlement rules balance the interests of the state and the settlers.</td>
<td></td>
<td></td>
<td>19.2</td>
<td>80.8</td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>The rules governing informal settlements are to demolish informal houses</td>
<td>59.6</td>
<td>34.6</td>
<td>5.8</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>There are competent legal institutions to enforce such rules</td>
<td>22.4</td>
<td>6.4</td>
<td>71.2</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>The city authorities allow the provision of basic social and economic infrastructures to informal settlers.</td>
<td>46.2</td>
<td>5.8</td>
<td>48.1</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Public land administration organizations have adequate infrastructure and resources to carry out their activities effectively.</td>
<td>74.4</td>
<td>3.8</td>
<td>21.8</td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>My house was demolished at least once in the last five years</td>
<td>84</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
</tbody>
</table>

The majority of informal builders (78 per cent) indicated that their settlements should be governed by the set of rules (Table 6.3). The Bahir Dar city administration
developed a regulation to control and prevent informal activities in the city including informal housing in 2009, Reg. No. 14/2009 (Section 6.2.5). Almost all of informal builders (94 per cent) have known the rules governing informal settlements for the last five years. The sub-city administration is giving repeated orientation and awareness about Regulation No.14/2009 for the sub-city residents. So 90 per cent of the respondents to this survey agree and strongly agree that the rules are accessible and transparent. However, 19 per cent disagree and 81 per cent strongly disagree with the proposition that the rules balance the interests of the state and the settlers. Rather, almost all of them believed that the rules are to intimidate and to demolish informal houses. Field observations, as well as expert interviews in the two sub-cities, also confirmed the feelings of the respondents. Furthermore, 71 per cent of sample respondents disagree on the existence of a competent legal institution to enforce such rules. Most of the complaints are given administrative solutions by the sub-city officials and only severe grievances are transferred to police and courts. To administer complaints of informal settlers the sub-city administration had a code enforcement office, complaint hearing committee, police, and court. However, only about 22 per cent of respondents agree on the presence of a competent legal institution to enforce the legislation.

Probably different from many informal settlements in Ethiopia, nearly one-half of such settlements in Bahir Dar (46 per cent) are getting access to basic infrastructures like water and electricity and sharing the remaining infrastructures like education and health care with the rest of the formal settlement. The remaining one-half (48 per cent) of the settlers disagree with this proposition most likely because of their outward or distant location they cannot demand social services as a matter of right. Holdings, which are getting services, are those which are already appropriated or became contained by the urban boundary because of their old age. Another reason is some of the informal settlements are fortunately bordering or encircled within the formal settlements and so access to infrastructure of formal settlements are easier or inexpensive. In such cases, informal connections to formal infrastructure and buying such services from formal settlers at higher prices are the common practices.
Most public land administration organizations in Ethiopia in general, and the study area, in particular, have a serious shortage of resources to effectively carry out their activities. For instance, in the two sub-cities, the researcher visited the 12 code enforcement personnel, including their head, have only one small office (9 square metres) with one office chair, single table, and a long bench for his staff and customers. All the files are placed on the floor since they do not have a shelf. The office workers have no bike to travel to their field sites to undertake their routine activities, even though they have already repeatedly made such requests. Even though resources are scarce, most of the respondents (74 per cent) agree that the sub-city personnel carries out their activities effectively, which means controlling and demolishing ‘illegal’ constructions.

The reason why most of the respondents agree with the proposition is that the sub-city personnel are very effective with controlling and demolishing of ‘illegal’ constructions with the existing scarce resources. According to interviews and focus group discussion and the field observation, there are houses demolished in less than one week following their construction. Most informal houses constructed are demolished in less than six months. This is why respondents feel that the sub-city personnel are effective in their activities in both sub-cities. All the respondents either strongly agree (84 per cent) or agree (16 per cent) that their houses were demolished at least once in the last five years. It seems that very few houses have escaped the threat of demolition.

In general, the responses provided by informal residents in the two sub-cities are so consistent and unwavering in almost all cases (Table 6.3). When the strength of the responses was tested using chi-square and Mann-Whitney tests, a very strong significance level of P<0.001 were obtained.

Based on foregoing discussion it can be concluded that existing land management practices as well as government regulations, such as Reg. No. 14/2009 are discouraging informal housing development. But do such government regulations and practices such as demolishing informal housing is effective to overcome the problems
of informal settlement expansion? Obviously, such practices are only discouraging informal housing constructions rather than entirely blocking the proliferation of irregular constructions or overcoming their problems. The interference of sub-city officials in the name of complaint settlement is the case in point. Focus group discussions, as well as field observations, disclosed that among houses informally constructed not all of them are demolished, some of them are regularized and have able to escape flattening by the complaint hearing committee or overriding sub-city officials. The most frequent reasons given by informal builders to escape demolitions include: mentioning that it was constructed long time ago, it was my kitchen, it was a room for my married son or daughter, and it was my toilet. Even though the aforementioned justifications are unacceptable according to existing regulations, some informal builders use gaps in the existing regulations, as well as weak governance and rent-seeking tendencies among sub-city officials; they get the approval of their illegal constructions. Brokers and fraudulent officials are playing an active role in such frauds. On the basis of this, some interviewees worried that informal settlements continue to exist whatever measures the government has taken to control and prevent their expansion.

Thus, even though Bahir Dar city has issued a regulation and establish an institution, the code enforcement officers or Kay Dullas to enforce the regulation, it is unlikely that informal housing development has never been controlled or prevented. The city administration is doing its best to control or to deter informal constructions rather than preventing the problem. The next section is dwelling on mechanisms of preventing the problem of expansion of informal settlements.

6.2.5 Working procedures of code enforcement office

As it was described earlier code enforcement is one of different offices in sub-cities of Bahir Dar. In the office, there is one head officer and more than 10 code enforcement personnel. The code enforcement personnel are assigned in different zones of the sub-cities. They are carrying out surveillance in their zone to check the erection of unauthorized buildings. Sub-city code enforcement personnel shall have the
responsibility to halt an illegal expansion and construction underway on illegally occupied land, detain and bring the builder to a police station to be accountable by law. When code enforcement personnel found unauthorized buildings, he warned the builder orally and then formally in writing. If the illegal building is not demolished according to the warning, he can fine up to 500 Birr plus demolition of the building and transfer of building materials to the sub-city (if the demolition is not done by the owner himself).

If the building is not demolished in accordance with the warning, the head of code enforcement office is reporting the case to the sub-city manager. Furthermore the head is requesting the sub-city manager for the employment of carpenters and daily labourers as well as assignment of three to five sub-city police and the Zonal manager of the sub-city. In each sub-city, there are five to ten zones depending on the size of the sub-city. In Belay Zeleke sub-city there are ten zones while Shimbit sub-city has only five. In each sub-city, there are 14 Zonal managers which are elected by the people of the sub-city. In each zone one to two managers or peoples' representatives are assigned together with one code enforcement personnel. The Zonal managers are responsible to create awareness about illegal construction, consequences of such construction, rights and duties of the residents in their respective zones. Therefore, the demolition team contains three to five code enforcement professionals, including the head, three to five sub-city police, three to five carpenters and their assistants, one Zonal manager, altogether ten to fifteen people are deployed. When such crew is deployed many unauthorized buildings are demolished and such task may extend for more than one day.

Even though the crew is deployed some of the unauthorized buildings may escape demolition. When the crew arrived some victims may present their evidence to the team or to complaint hearing tribunals that the case is in the process of scrutiny or verification. Focus group discussants and interview with code enforcement professionals confirmed that this is one of the entry points for sub-city officials and brokers to settle the case in favour of the informal builder. Many respondents in a mixed household survey complained that some houses demolished and others are
not because of mysterious reasons. Rather, many of the informal builders are encouraged to take the risk of constructing in the hope that they would get approval and certificate of holding. If a house of one or two rooms is getting approval from the sub-city, the informal builder is enjoying a range of rights such as to live in, to rent, and to get minimum parcel size of holding in the outskirt of the city plus money to construct a house.

If the illegal building is not yet demolished with all the above measures, the sub-city manager is reporting the case to Bahir Dar city code enforcement office. Then the city code enforcement office together with all sub-city administrators, sub-city managers, and sub-city code enforcement of all sub-cities discuss the issue and make a decision. The results of such discussions can be to demolish, to demolish and provide replacement parcel or even to formalize.

Consistent with the above finding, guaranteeing impartial access to land has frequently been a formidable task for many governments and the concern has sustained to be part of the international agenda (UNCHS 1996). The New Delhi conference of 1996 labelled “Access to Land and Security of Tenure as a condition for sustainable shelter and Urban Development” signalled an initial commitment by most governments to address irregularities in land access and tenure systems. Since then governments committed themselves to the objective of “Providing legal security of tenure and equal access to land to all people, including women and those living in poverty” (UNCHS, 1996, p. 40).

Despite such efforts, the situation on the ground has always shown the opposite. As Figure 5.1 section 5.6 indicated greater than one-half (51 per cent) of the sampled informal family units got access to land through purchase and renting the house (19 per cent). Documents obtained from Bahir Dar metropolitan administration also indicated that the administrative allocation of plots through lease, real estate, and cooperatives consist of only 21 per cent of the overall demand (Table 6.4). Most of the remaining demand of about 79 per cent is met through rent and informal housing. The finding of Gondo (2011) is consistent with the current finding. He confirmed that
the urban poor in Ethiopian towns have fundamentally depended on informal methods for getting to urban land. UNCHS (2000)(2001) additionally noticed that the patterns on the ground show worsening in the tenure level and access to land for poor people. Public and private formal land conveyance frameworks have neglected to adapt to the necessities of the urban poor.

Table 6.4: Housing Plot Supply and Demand in Bahir Dar between 2013 and 2015

<table>
<thead>
<tr>
<th>Types of holding</th>
<th>Land allotment/ Distribution (N)</th>
<th>Demand for housing plot (N)</th>
<th>The proportion of supply to the demand (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasehold</td>
<td>5652</td>
<td>25771</td>
<td>21.93</td>
</tr>
<tr>
<td>Real estate</td>
<td>2035</td>
<td>10500</td>
<td>19.38</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>3445</td>
<td>17000</td>
<td>20.26</td>
</tr>
<tr>
<td>Total</td>
<td>11132</td>
<td>53271</td>
<td>20.9</td>
</tr>
</tbody>
</table>

Source: Bahir Dar City Administration, unpublished documents

One of the striking scarcities of the formal land transaction framework in urban spaces of the developing world has been the development and the multiplication of informal components. Informality has disclosed itself at different sizes of the land administration framework, including land securing, land conveyance process, land titling among others.

Practical confirmation drawn from Peru uncovers that the trip toward the legitimate procurement of a plot of land is a long and befuddling one. Gets to land, enlistment of land, and inspiring consent to build up the land have regularly been tedious, unduly awkward and expensive. Thus, the predominant lawful and regulatory atmosphere has regularly upset any important endeavours by the poor to get to land resources. Peru's lawful and land administration condition is with the end goal that the adjudication procedure of state lands, take around 43 months, and is the consequence of 207 bureaucratic steps including 48 distinctive government agencies (Baken & Vander Linden, 1992).
Access to housing land in the study area is also constrained by deficient and complicated working procedures. Informal settlers in the study area were also asked to mention about hindrances to getting access to land. It was found that major hindrances to getting access to land were formal procedures (68 per cent), land-related transaction costs (16 per cent) and development control standards (16 per cent) (Table 6.5). Formal systems identifying with access to land, enlistment, and consent to develop have been tedious and defective. This has to a great extent been ascribed to bureaucratic propensities that are included and claimed debasement exercises by a few authorities. At the point when land is allotted to cooperatives, the evaluation strategies are not open and awkward in qualifying recipients. Most land provision methods, for example, the lease, depend on the tender framework which supports the well-to-do. In the meantime, high expenses and standards, wasteful and delayed processes because of lengthy and dishonoured land enlistment frameworks disappoint individuals to enlist their property, and urge them to work inside the informal land market areas.

Results of focus group discussion with land administration experts also indicated that land supply for low and middle-income housing is always sporadic to satisfy the existing high demand. Administrative allocation of land to cooperatives in Bahir Dar transpired only once in the last ten years. But leasehold auctions floated 6 times only in the last three years for higher income groups.

One of the elements restraining access to land is that the poor have a low tendency to spare and subsequently a low inclination to acquire cash from credit organizations. This circumstance has likewise been intensified by the increments in inflation levels. The general inflation rates in the single five-year time frame in Ethiopia, for example, achieved 12.1 per cent in which crests were enrolled amid 2006/07 (17.85 per cent) and 2003/04 (15 per cent) (MoFED, 2007). Moreover, the cost of acquiring cash has additionally been on the ascent, following the premium advancement toward the end of 1992 (National Bank of Ethiopia (NBE), 1994; National Bank of Ethiopia (NBE), 1992). Practical confirmation from somewhere else uncovers that the predominant methodology for financing for the poor is own reserve funds. This is viewed as a poor
methodology in a nation where the minimal inclination to spare is low (Teshome, 2008). Mituki (1996) reports that the second most vital funding for any investment in Ethiopia after own reserve funds is formal monetary organizations. Absence of deposit security by the poor living in informal settlement and high-loan fees renders this alternative unfeasible.

Table 6.5: Hindrances to get access to land and reasons of preference to live in informal settlements in the study sub-cities

<table>
<thead>
<tr>
<th>Items</th>
<th>Sample population</th>
<th>Total (N=156)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke (N=47)</td>
<td>Shimbit (N=109)</td>
</tr>
<tr>
<td>Hindrances to acquire land in the study area (Per cent)</td>
<td>• Formal processes / procedures (70.2)</td>
<td>• Formal processes / procedures (67.0)</td>
</tr>
<tr>
<td></td>
<td>• Land related transaction costs (14.9)</td>
<td>• Land related transaction costs (16.5)</td>
</tr>
<tr>
<td></td>
<td>• Development control standards (14.9)</td>
<td>• Development control standards (16.5)</td>
</tr>
<tr>
<td>Reasons of preference to live in informal settlements (Per cent)</td>
<td>• To construct an affordable house (63.8)</td>
<td>• To construct an affordable house (35.8)</td>
</tr>
<tr>
<td></td>
<td>• House rent is low (19.1)</td>
<td>• House rent is low (15.6)</td>
</tr>
<tr>
<td></td>
<td>• Close to people I know before (8.5)</td>
<td>• Close to people I know before (11.9)</td>
</tr>
<tr>
<td></td>
<td>• It will be regularized in the near future (8.5)</td>
<td>• It will be regularized in the near future (36.7)</td>
</tr>
</tbody>
</table>

Informal settlers in the study area preferred to live in squatter settlements in order to construct an affordable house (44 per cent) and they think that this area will be regularized in the near future (28 per cent), i.e., speculation (Table 6.5). Some of them (17 per cent) are attracted to informal settlements by low house rent and the neighbourhood is close to people they know before (11 per cent). This indicated that 61 per cent of the settlers preferred to inhabit in informal settlements due to economic reasons, i.e. poverty.
Comparing the two sub-cities, it is observed that about 64 per cent of the respondents in Belay Zeleke tend to prefer informal settlements to construct affordable houses as compared to only 35 per cent in Shimbit. Similarly only about 9 per cent of respondents in Belay Zeleke think that this area will be regularized in the near future as compared to 37 per cent in Shimbit. This observed difference was also statistically significant ($X^2 = 15.7$, df = 3, p=0.001).

6.2.6 Informal settlement and tenure security

Secure tenure is the right of all people and groups to viable assurance by the state against constrained evictions, i.e. under international law, —the perpetual or transitory evacuation contrary to the will of individuals, families and/groups from the home as well as the land they reside in, without the arrangement of, and access to, suitable type of lawful or other assurance. In order to consider the view of tenure security by individuals and groups, UN-Habitat broadens the meaning of tenure security by including in the definition the level of certainty that land users will not be discretionarily denied of the rights they appreciate over land and the monetary advantages that spill out of it (Bazoğlu & United Nations Human Settlements Programme, 2011, p. 5)

Guaranteeing access to land and legitimate security, thus, turns into a key essential precondition for sufficient housing in urban neighbourhoods and a promising method for breaking the endless loop of poverty (UNCHS, 1996, p. 75). Eviction can be considered as the most destructive expression of tenure uncertainty for the urban poor, yet it is not the single one: tenure uncertainty impacts likewise on access to amenities, access to credit, susceptibility to hazards and different perils.

Informal settlements in Bahir Dar also aggrieve from the constraints of insecure tenure. It is noticed that tenure informality is the final outcome of lawful, political and economic marginalization arrangements. In Bahir Dar, these marginalization practices are heightened by rural-urban immigration and urban population expansion.
The informal settlements in Bahir Dar are sharing similar pains where most of them (80 per cent) suffer from very low tenure security (Figure 6.8). They often fear demolishing and eviction. This is why they usually construct their houses from cheap and temporary construction materials like wood, mud, plastics, and rags or *Tirar*. Constructions are usually made overnight, so given the name ‘*Chereka Betoch*’ means moon houses to escape from code enforcement personnel or ‘*Qay Dulla*’ (Figure 6.6 and 6.7). One of obvious indication of low tenure security in informal settlement neighbourhoods in Ethiopia in general, and Bahir Dar in particular is that prohibition against eviction is not enshrined in the federal or regional laws. Above all the incidence of evictions is generally high (section 6.1). Rather the existing laws and institutions are to encourage eviction of unauthorized buildings in urban areas, Regulation No. 14/2009 of Bahir Dar City and regulation 14/2004 of Addis Ababa City Government are the cases in point.

Figure 6.6: Unauthorized buildings before demolition (left) and during demolition (right)
Available information worldwide indicates that there are intimate relationship and interplay between informal settlements and tenure uncertainty like circumstances in Bahir Dar. Shack Dwellers (SDI, 2012) demonstrated that globally 28 per cent of all families in informal settlements have uncertain tenure. Estimates by UN-Habitat (2008b, p. 3) propose that between 30 per cent and 50 per cent of Asia’s urban inhabitants do not have any sort of lawful residency record which qualifies them to possess that land. In urban communities like Mumbai, Karachi, Manila, and Dhaka, the extent of individuals living with no type of residency security in informal settlements is as of now substantially higher than the extent of those living on formally-acquired land (UN-Habitat, 2008a, p. 3). High land prices, wrong legislative systems, bureaucratic inactivity and political abuse perpetually contrive against ensuring secure land tenure (Payne & Durand-Lasserre, 2012).
Figure 6. 8: perception on the overall level of tenure security in informal settlement sites

Pragmatic investigations accomplished in low- and middle-income urban areas in the course of the most recent decade demonstrate that security of residency is additionally a standout amongst the best apparatuses for mitigating destitution in shantytowns and spontaneous settlements (Millennium Project, 2005, pp. 48-51). The absence of secure residency restrains the prospects for economic advancement in numerous ways. For instance:

- People living in fright of expulsion are more averse to understand their maximum capacity as labourers or as residents are probably not going to put resources into enhancing their houses and neighbourhoods;
- External venture and enhancement of additional amenities, for example, water and sanitation is probably going to be decreased; and
• Eliminating a noteworthy share of urban families from a legitimate house decreases

At the point when the unlawful land occupation is in question, one cannot expect that the inhabitants will put resources into a long-lasting house, however in the event that the family unit has a plot with a formal land title; the circumstance is to the contrary. Although an initial shelter may give a quite primitive impression which leads many architects and politicians alike to morally condemn such ‘indecent’ or ‘undignified’ housing what finally counts is the ability of the family to improve their housing and living conditions throughout the years. Unquestionably, in the early stages of self-building, livability in the new settlements is still far from acceptable. These settlements usually do not offer adequate public services, healthy environments and public security.

6.3 The Influences of Land Management Policies and Practices on the Prevalence of Informal Settlements

The starting point of all urban development is land (Kitay, 1985, p. 1). Land is a basic resource and an important element in urban development. Many urban problems are linked in one way or another with the operation of the mechanism for managing land. One of the key activities of land administration is ensuring inhabitants equal and fair access to serviced land. Urban areas throughout the developing world are experiencing a problem in the supply of adequate and affordable serviced land to meet the housing needs of their rapidly expanding urban populations. As a result, low-income groups who are mostly denied access to land as a result of the shortfall in supply are forced to either seek for residential land through unauthorized means or to crowd into existing low-income settlements, creating informal settlements or slum conditions.

In Ethiopia, several studies have found land to be inadequate in supply (Gondo, 2011; MoUDHC, 2015; Achamyeleh, 2013). The inadequate supply of land has led to
a rise in the level of squatting and in speculation in the limited land that is supplied for development.

Throughout the history of the existence of the informal settlements, one of the major causes has been failure or inability of the responsible institution to provide residential plots to the ever-increasing urban population, i.e. poor access to a serviced plot of land, particularly to the low-income population. While demand for residential plots in Ethiopian urban centres have been steadily increasing, the supply of the same is staggeringly inadequate, an average of between 10 per cent and 27 per cent per year\textsuperscript{23} (section 5.4.1).

Focus group discussants in the Shimbit and Belay Zeleke sub-cities were invited to describe factors for the expansion of informal settlements in their study site. They replied that the root cause for the expansion of unauthorized housing is high and growing need for land and housing. The high and growing need for land and housing led inhabitants to obtain it at higher prices and ever-increasing housing rent in the city, which in turn urged peri-urban landholders to subdivide their farmland and sell it to others (migrants from other rural or urban areas, inner city inhabitants and speculators).

The focus group discussants also revealed that existence and operation of the informal land markets have created favourable conditions for the expansion of informal land transaction. Major actors of informal land transaction involve brokers, code enforcement professionals, peri-urban landholders, and some sub-city officials who are keen to benefit from the transaction. They added that the operation of the informal land market is the indicator of poor land administration and management in

\textsuperscript{23} Compare the demand for housing with annual construction of 31,048 condominium units in all urban areas of Ethiopia between 2006 and 2016. Note also that condominium housing supplies 51 per cent of the current total housing supply (Table 5.7). Based on this figure supply of houses in Ethiopia constitute only 27 per cent of the demand. Compare also this with annul total formal housing supply of 52,953 units between 2007/8-2013/14 in the 27 SECR Cities. According to the results of the 2007 census, the urban population of the 27 cities covered by the study constituted 40.2 per cent of the total urban population in the country. Based on this figure supply of houses in Ethiopia constitute only 10 per cent of the demand.
the formal sector. The formal sector is currently delivering the very low level of land to formal house builders especially to low and middle-income people, lack housing package for low-income householders, and low payment of compensation to peri-urban landholders in the event of expropriation.

The wide gap between demand and supply is further exacerbated by the speculative tendencies on the part of peri-urban farmers, Delalas (brokers), informal real estate developers\(^\text{24}\) and corrupt bureaucrats as the discussants of focus group discussion has confirmed.

In the study site, land and business related to land is so profitable that people will find a way to get the land in any way they can. Some individuals are now willing to pay all the sacrifices, including inducements, to have access to land because they realize that urban land is an easy route to generate wealth and enrich in a short time.

According to Durand-Lasserve and Selod (2012), several factors have been crippled the competence of governments to allocate land, which includes poor governance, scarce human and financial resources, and restricted institutional capability. However, the growth of formal land markets has also been restricted by several factors, such as delicate housing finance system, extensive corruption in land management and a poor land information system, which makes prices too high for most urban inhabitants. In most developing countries, the shortfall in land supply arises not from the lack of vacant land but also partly from the use of ineffective and inappropriate land and land use policies and practices (Garba, 1993).

Land development, which is one of the components of land administration, is not just a process of transferring land from one land use to another. It is a complex process that involves many issues, such as the change in the land tenure arrangement, the

\(^{24}\) Informal real estate developer is the one who sells raw land in the market after accepting a large area of government land he claims to have built and transferred a home for the highest income group. These types of real estate developers are becoming common today.
land transaction process, the kinds of development, the regulatory measures and their application. The process of land development is not homogenous and may include rural and/or urban units; and formal or informal ways (Masum, et al., 2016).

In most developing countries, formal land development framework faces pressures such as delays in decision-making processes and costly and bureaucratic project endorsement procedures. In addition, corruption, high investment cost and the high price of serviced land (which is always beyond the means of lower income group) pose further challenges. Furthermore, corruption, high investment costs and the high price of serviced land (which are still beyond the reach of low-income groups) pose other challenges. For these reasons, the formally developed land supply cannot meet the growing needs of the urban population. As a result, the informal development of land becomes an inevitable alternative.

### 6.3.1 The income of the community and formal land delivery systems

It has been observed that the amount of money that has to be spent to gain access to land developed formally exceeds the capacity of many people who are considered well-behaved in society. Interview with land management office at Bahir Dar city administration\(^{25}\) revealed that recent land lease auction prices for residential areas ranges from ETB 4,000 to ETB 23,000 per square metre of land depending on the location of the plot and proximity to major infrastructure and services\(^{26}\). Current minimum plot size for residential purposes is 150 square metres to build G+1 or G+2 residential houses. This means the price of minimum parcel size for residential purposes ranges from ETB 600,000 to ETB 3,450,000 which should be paid to the municipality within 99 years including interest rates. Average building cost ranges from ETB 5,500 to 6,000 per square metre of land depending mainly on soil type and

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\(^{25}\) This is based on interview with Mr. Belay Sinte, head of Land Management and Development Office at Bahir Dar City Administration.

\(^{26}\) For other formal modality of land offering see section 5.5.3.
quality of construction materials\textsuperscript{27}. To get floor space of 150 square metres it costs from ETB 825,000 to 900,000. Hence, land and house price on a plot of 150 square metre costs from ETB 1,425,000 to 4,350,000. The price of a flat in a condominium varies also from location to location. The current average price of each square-metre in Bahir Dar is ETB12, 000 (US$ 531)\textsuperscript{28}. This amount of money is more than the average lifelong income of the majority including Bachelor Degree holders.

6.3.2 Lack of transparency in the provision of plots

One of the modes of land delivery to get access to land in peri-urban areas of Bahir Dar is a regularization of informally built houses as a result of informal subdivision of plots. Informal subdivision of agricultural plots and selling the raw/undeveloped land or construct \textit{Chereka Bet}\textsuperscript{29} and selling the house is a common practice in the study sub-cities. Such plots encounter two chances, either they are demolished or regularized. But the issue is why two adjacent plots with similar conditions may end up in one of them regularized and the other demolished? The answer is getting access to regularized plots of land passes through different actors and the activities are not transparent (Box 6.1).

\textsuperscript{27} Interview with Mr. Meacha Teshome private engineer consultant and architect in Bahir Dar

\textsuperscript{28} Currently an exchange rate for 1USD is 22.6 ETB.

\textsuperscript{29} \textit{Chereka bet} is a phenomenon in which people ‘illegally’ build one or more room units overnight, while everybody is asleep and literally means houses built overnight under the moonlight.
Box 6.1: Reasons for inconsistent decisions to demolish unauthorized houses

My name is Debas Yihune. I am living in Belay Zeleke Kebele around the flood and waste draining dich to Abay River. In my neighbour there were more than 60 informal houses constructed following popular uprising in 2016 (July to January, 2016). By now only 12 of those houses have survived the demolishing of February 2016. I tried to investigate why 48 houses including mine was demolished. I realized that some of the survivors had official friends in our sub-city and some from Bahir Dar city administration. I also find that few of the informal builders pay bribes to official decision makers. One of the informal builders made three unauthorized homes and hand over one of them to decision makers.

Similarly one of the informal builders incites uproar when the demolishing team attempted to demolish his informal building. The concerned sub-city official presented the case before court. Then the court ordered the informal builder to pay some fines for the uproar and he was released. After that, the illegal construction was forgotten. In the name of the case was held in court he escaped the court’s decision because of poor follow-up.

Few of the informal builders escaped demolishing because during their demolishing day, the demolishing team encountered shortage of budget to employ carpenters and daily workers who will carry out the task. As a result the work is postponed for the next demolishing season, usually after six months. Most likely in the next season new Qay Dulas will arrive due to their frequent rotation which may result to lack of clear information. This rotation is supposed to prevent the practitioners from corruption, but the staff will not have enough information about the new environment in a short time.

Some informal builders escaped demolishing since they were successful to hide their houses in a fence made from an elephant grass. In addition, they also made their buildings from old rags, old corrugated irons, and old timbers to make their houses appears to be old.

Few informal builders constructed cattle shades and kitchen with low quality building materials after they granted building permit from the sub-city. I realized that those structures with proper reinforcement were transferred to fullfledged dormitories three months after the demolishing season.
Interview with code enforcement officer\textsuperscript{30} at Belay Zeleke sub-city also disclosed that heavy workloads and diffusion of responsibility is also another reason for inconsistent decisions. The Issue of the unauthorized building is supposed to be the responsibility of plan implementation, health, and authorization and demolition committees, among others. The existing administrative structure of the sub-city is destined for impersonation, and workers lack capacity and commitment to perform their duties. When a construction permit is granted, there is no one to carry out adequate follow-up according to the given permit, which creates a gap.

6.3.3 The inefficient land delivery system

After October 2011 the leading modality of land transfer to urban residents in Ethiopia is lease auction. Lease prices are determined by who present higher lease price per square metre of land and the amount of down payment. This competitive land transaction is thus criticized for it usually serves the interests of high-income groups of the population.

The other modality of land transfer in Ethiopia is lot allocation for house builder cooperatives. In cities like Bahir Dar cooperative members are expected to save and deposit the amount of money enough to build a basement for G+ 1 house which is about ETB 80,000 to 100,000. This sum of money is released only when all members of the cooperatives completed the construction of a basement, which is a challenging requirement for the most low-income population. Furthermore, such allotments are not frequently taking place. For example in the last ten years only in 2013/2014 that cooperatives in Bahir Dar and other Amhara urban areas allotted a plot of land for house construction.

The plot of land delivery related to the formalization of informally constructed houses are usually confined to peri-urban areas and few people are getting such a chance due to the prevalence of demolishing of such settlements. According to (Addis Fortune, 2016), for instance, the City Administration of Addis Ababa has received

\textsuperscript{30}Ato Agernew, code enforcement officer at Belay Zeleke sub-city.
close to 50,000 applications for regularisation over the last two years. So far, only 6000 have been legitimised.

### 6.3.4 Clumsy approval process for land allocation

The Land Administration Offices are generally responsible for monitoring land development and construction activities in the Bahir Dar metropolitan area. Without a design and plan approved by the Land management offices, no formal development is endorsed. However, the regulatory framework that sets out the planning and development standards, regulations and administrative procedures make it difficult for low-income groups to meet the formal requirements. For instance, land management office at Bahir Dar city administration work process revealed that the approval of small-scale land development takes 15 to 30 days. But the reality on the ground indicated that there are considerable delays in the system. According to the officials, delays are related to frequent spontaneous meetings, poor capacity, and experience of experts, lack of commitment as well as rent-seeking behaviour of some concerned experts and officials. However, the officials also believe that these are man-made and solvable challenges.

Furthermore, it has been noted that the normal person is made to pay additional expenses to acquire speedy services. The consequence is that in order to escape this complication and extra payments, the poor are forced to build plots without complying with the prevailing design rules and regulations. Therefore, unauthorized land development is a working approach for the poor to acquire land in Bahir Dar, although it also carries significant risks of evictions.

The administrative distribution of public lands by sub-cities at administrative prices generally feeds an informal secondary market. The concomitance of the administrative allocation and this secondary market favours the collection of the rent at each stage of the procedure by the administration agents and the associated entities of the initial allocations. The transfer of public land to housing cooperatives in sub-cities of Bahir Dar is a good example. It is a common practice in Bahir Dar that
some of the plots allocated to cooperatives and transferred to leaseholders are not developed rather it joins the secondary market for further transactions. Since governments restrict such secondary transactions through different legislation and directives, substantial rent captures are occurring by executives of the administration and brokers. Depending on the age of the cooperatives from 20 per cent to 90 per cent of the initial allocations is joining secondary markets\textsuperscript{31}. According to (Bouju, et al., 2009) the intricacy of administrative processes for land provision, the uncertainty of transactions, delays in attaining authorizations, fraud and the central role of brokers contribute to very high operating costs for households who are trying to establish a right to the land.

### 6.3.5 Weak land governance

Land governance is basically about authority and arrangements that shape access to and exclusion from land among different stakeholders in a society particularly the disadvantaged groups. It involves the “rules, processes and structures through which decisions are made about the use of and control over land, the manner in which the decisions are implemented and enforced, and the way that competing interests in land are managed” (Transparency International, 2011, p. 2). Taken together as a system, land governance eventually focuses on how people benefit and collaborate with the land.

Effective and enforceable land governance delivers an essential basis for development and a vital security against many forms of fraud. It safeguards sustainable livelihoods that are crucial for people and countries that depend on the land. For instance, “empirical findings from more than 63 countries show that where corruption in the land is less prevalent, it correlates to better development indicators, higher levels of foreign direct investment and increased crop yields” (Transparency International, 2011, p. 2).

\textsuperscript{31} It is based on interview with Ato Belay Sinte.
Most of the informal settlers (65 per cent) in Bahir Dar perceive that gaps in government rules are an appealing condition for the expansion of *Chereka Betoch* or informally built housing. Regulation no. 14/2009 of Bahir Dar city administration has certain gaps which include the sanctions fixed to control speculative temptation of informal house builders by the authorities are low as compared to the benefit speculators generated from illegal building, the legislation is unclear on how to authorize illegal buildings, and the legislation itself is not yet approved by the Amhara regional council. Furthermore, weak institutional set up (18 per cent) and poor implementation of rules (11 per cent) are other favourable conditions for the expansion of self-help irregular houses (Table 5.8).

Furthermore focus group discussants in Shimbit and Belay Zeleke sub-cities revealed some indicators of weak governance in their study sites: even though many of the unauthorized constructions were demolished by sub-city *Qay dallas*, some of the earlier informal buildings were formalized by city and regional authorities in the name of repair permit, building permit, or land to land compensation, there were also inconsistency of decision to demolish informal erections, unfairness in grievance/complaint settlement, etc., above all, there were lack of commitment of code enforcement professionals as well as sub-city managers, and related stakeholders in the sub-city to discharge their duties efficiently and effectively on grounds of low salaries, poor facilities and depressing working environment. They also revealed that concerned stakeholders working at the two sub-cities are poorly coordinated, instead of cooperating they are contending. In general, weak land governance is one of the causes of informal housing development and expansion in the study sites.

Weak land governance likely to be distinguished by low levels of transparency, accountability and the rule of law. Under such a system, “land distribution is unequal, tenure is insecure, and natural resources are poorly managed, which results to, social stability, investment, broad-based economic growth, and sustainable development are undermined” (Transparency International, 2011, p. 1).
In the eyes of the international organizations, “good governance is characterised by inclusion and representation of all groups in urban society; accountability, integrity and transparency of local government actions; a capacity to fulfil public responsibilities, with knowledge, skills, resources, and procedures that draw on partnerships” (World Bank, 2000, p. 49). An inspection of governance performances in the unauthorized settlement areas of Bahir Dar reveals a lot of gaps in the lens of such an international good practice. To begin with informal settlers are not included and represented in decisions which affect their essential necessities of access to plots and dwelling due to their informal practices made them illegal. Rather their informal buildings are demolished most of the time. Local governments are also largely not accountable, transparent, lack capacity of implementation due to their limited knowledge, skill, resources and above all lack willing attitude due to their rent-seeking behaviour (Figure 6.9).

Focus group discussion in the study area also indicated that low-income people should be allowed to get access to a parcel of land and build their own affordable self-help housing. The minimum building standard in Bahir Dar is concrete building with a ceiling made from a corrugated iron sheet. Contrary to this provision the lease policy of the government prescribes that inhabitants should get access to urban land predominantly through lease auction and low-income people should be granted shelter from government supplied condominium units. But both the lease policy and condominium allocation practices incorporate severe limitations and deficiencies and thus cannot fulfil the demands of the low-income population (section 4.3 and 4.5.3). But governments should seriously balance the alarming shelter problems of the inhabitants, particularly the poor and low-income, with the standard and beauty of metropolises.
Figure 6. 9: Favourable conditions for the expansion of informal houses in the study site

But we must not forget that the preferred building codes must be affordable, the authorities can enforce and mirror the lifestyle and culture of the community. In particular, they should reflect the particular needs of the municipal poor in terms of lowest plot size, accumulative construction and local economic activities (Sclar, et al., 2005).

According to CIDP (2002) developments of building codes for new settlements that dictates materials and procedures of the building that poor people cannot bear are most often breached. To avoid demolition or penalties, poor communities must pay off local government building supervisors (see previous focus group discussion). The use of appropriate know-how and local construction materials, like *Chiqa bet* in Bahir...
Dar, is more likely to be affordable for the poor and to create employment opportunities for unqualified or semi-qualified people.

City planning bylaws and zoning rules in developing countries are borrowed largely from practice in developed countries. As such, they are hostile to pedestrian, hostile to the motorway and hostile to blended land use — in short, against all the things that are harmonious with the primaries and actualities of low-income groups.

Consistent to the findings of this study, the World Bank (2012) study in Ethiopia also confirmed that the Ethiopian land sector, due to its distinctive and vital role for the government, is especially at risk of fraud and rent-seeking. The World Bank study noted that majority of fraudulent activity within the land sector take place at the execution phase and this is because land management and administration is usually realized through a series of activities.

To materialize public objectives communities need, among other things, a well-defined, clear and transparent legal instrument and an institution well-equipped with instruments and skilled as well as motivated staff implementing the law. These requirements are, however, inadequate or deficient in most developing countries including Ethiopia.
There are also favourable conditions for the expansion of unauthorized constructions in the urban fringes which illuminate weak governance conditions in the study area including forced occupation on state land, peri-urban farmers’ preference to split their farmstead into construction plots and transact their land in the black market. Furthermore, the involvement of resident peri-urban farmers themselves in the building of inferior accommodations for trade, and the participation of different actors such as dealers, opportunists, and dishonest government officials in the process of the informal transaction (buying and selling) inspires such activities.

The issue here is why farmers are engaged in subdivision and transfer of their subdivided plots to different customers. As it is already presented in section 4.4 farmers have unlimited use right over public rural land use. Farmers in Ethiopia are also prohibited not only to sale and exchange their land right but also to transform the rural land use into urban land use. But the local peri-urban landholders’ expectation
of expropriation and very low compensation of their land by urban administration has
discouraged them to use the land for agricultural purpose only as it is legalized. As a
result, they usually prefer both to subdivide and sell their farmland and collect cash by
themselves or construct an illegitimate house and transfer it. Figure 6.10 indicated
that the largest proportions of informal parcels in the peri-urban areas are delivered
directly by the landholders of peri-urban areas.

Furthermore, the presence of two dissimilar and distinct institutions regarding the
administration of land and absence of lucidity in the accountability of the two
organisations on peri-urban land issues has also generated a promising condition for
the mushrooming of informal settlements in the peri-urban sections (Achamyeleh,
2013). For instance, when the urban administration approves a revised master plan
that encompasses the frontier into the urban centre without expropriating and
transferring the land into its land bank, the newly formed zone falls neither in urban
nor in rural control. Due to the formation of power vacuum peri-urban district under no
one’s authority, peri-urban landholders try to transform their farmsteads to housing
plots by splitting and then selling the parcels without any intervention from
management bodies.

6.4 The Implications of Expansion of Informal Settlements on Housing
Supply and Environmental Management

6.4.1 Informal settlement and affordable Housing supply

Most city authorities of developing countries do not appreciate informal settlements
for their contribution to solving urban housing problems. Rather, they claim that
informal housing contributes to substandard, unsightly and makeshift housing in the
cities. Government strategy toward substandard settlements in urban
neighbourhoods has generally been founded on the presumption that they are a
“cancerous growth” or an “unproductive problem areas” (Ha, 2007). However,
respondents in the study sites confirmed that the roles of informal housing are
contrary to the aforementioned proposition; rather they are considerably
supplementing to solve the housing shortage of the poor. For example, the majority
(91 per cent) of the respondents in the study sites indicated that informal settlements contribute to resolving the shelter deficiency of the destitute in the city (Table 6.6). Field observation by the author also indicated that among the reasons for building informal houses, renting the houses for low-income residents is one of the major reasons. It was also noted that informal housing contributed for about 30 per cent of the housing stock of Bahir Dar (section 4.5.3). When the informal houses are demolished the author observed poor tenants who were threatened and grieved as a result of the measures taken, particularly when their household belongings were thrown out of the houses by the police (Figure 6.3 and 6.4). Such tenants cannot rent formal houses due to their high rents. Casual settlements add to explaining the lodging lack of the poor in the city.

Table 6.6: Perception of respondents on the contribution of informal settlements to the housing shortage and environmental management

<table>
<thead>
<tr>
<th>Items</th>
<th>Sample population</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belay Zeleke</td>
<td>Shimbit</td>
<td>Overall</td>
</tr>
<tr>
<td></td>
<td>(N=47)</td>
<td>(N=109)</td>
<td>(N=156)</td>
</tr>
<tr>
<td>Do you believe that informal settlements contribute to solving the</td>
<td>• Yes (89.4)</td>
<td>• Yes (91.7)</td>
<td>• Yes (91)</td>
</tr>
<tr>
<td>housing shortage in the city?</td>
<td>• No (10.6)</td>
<td>• No (8.3)</td>
<td>• No (9)</td>
</tr>
<tr>
<td>Do you think that informal settlements contribute to environmental</td>
<td>• Yes (21.3)</td>
<td>• Yes (71.6)</td>
<td>• Yes (56.4)</td>
</tr>
<tr>
<td>management in the city?</td>
<td>• No (78.7)</td>
<td>• No (28.4)</td>
<td>• No (43.6)</td>
</tr>
</tbody>
</table>

The opinions of the city administration on the contribution of spontaneous settlements to the reduction of the housing shortage in the metropolis are contrary to the views of city dwellers. They argue that informal settlers are largely speculators and brokers, and therefore their main goals are to generate profits by creating a bad image of the city. According to their perspective, the housing inconvenience of the city is only settled by formal means, such as private housing, condominiums and real estate.
They diminish the role of the informal housing sector and forget their weak capacities and inefficiencies, particularly in the delivery of serviced land to house builders.

6.4.2 Informal settlement and environmental management

Many studies show that the relationship between informal settlements and environmental management are negative, suggesting that informal houses are worsening environmental health (Arguello, et al., 2013; Olajide, 2010; Cunnan & Maharaj, 2000; Benítez, et al., 2012; Mahlakoana, 2010). This is due to deficiency of basic services like water, sewerage, toilet, and poor assemblage and dumping of compacted and fluid squanders. This is true in one of the study area, Belay Zeleke, where the majority (79 per cent) of the respondents indicated that spontaneous settlements are the causes of environmental deterioration (Table 6.6 and Box 6.2). In parts of Belay Zeleke inner city informal houses contribute to high congestion and severe unhygienic condition, which may cause many health problems (Figure 6.2). Finding by (Landman & Du Plessis, 2007) also confirmed that congestions are usually a major cause of disease and death.

**Box 6.2: Congested houses cause direct damage to the environment and to personal hygiene.**

My name is Yitayish Alemu. I am living in Sudi neighbourhood, Belay Zeleke sub-city. Our neighbourhood is so crowded that we did not even have enough room for the shared toilets and we had to throw own urine and stool on the nearby asphalt road at night and in the evening using plastics. The pipes carrying our drinking water are in the floor of the house. There is not enough room to take a dead body from our house to a grave. Our children have no place to play. When children wanted to play football, they would be arrested since they close the road with stones to make playing ground. Most of our children are already to be addicted to *khat* and other drugs. Acute diarrhoea and vomiting, typhoid, typhus, flu, and other diseases and fire are common problems. There are many types of lewdness in the area, including pocketing, scraping, stealing, deception, and kidnapping. Since they cannot borrow with their assets, the people cannot make property and improve their living conditions.
Contrary to this, the majority of informal settlements in Shimbit (72 per cent) indicated that their settlements are contributing to environmental management as compared to only 21 per cent in Belay Zeleke. The observed difference between the two sub-city is also statistically significant ($X^2 = 31.7$, df = 1, $p < 0.001$).

Field observation of the study area also established similar perception. In Shimbit, many of the private holdings are large and implanted with fruit trees like mango, avocado, as well as coffee trees and Khat. Rather, they need household wastes to fertilize their farmyards and hence they bought cow dung from dairy farmers living in the neighbourhood to fertilize their farmyards. These households are also reluctant to subdivide and transfer their holding. Figure 6.11 and 6.12 illustrate the difference between the two sample study sites. However, the situation observed in parts of the sub-city of Shimbit is very likely to be transient. Over time as housing density increases, areas occupied by fruit trees and open spaces are shrinking, resulting in congestion and pollution.

Figure 6.11: Informal settlements in Shimbit sub-city
6.4.3 Possible solutions and prevention methods to overcome the problems of informal settlements

The government in developing countries tried different solutions to overcome or cure the expansions of informal settlements and its impact on land management in their countries with different levels of achievements. Government solutions usually range from demolition, site and services to regularization. In the study area also most of the settlers (61 per cent) suggested that regularization is the best alternative followed by consistent application of rules (28 per cent). Payment of compensation ensuing demolition (10 per cent) and demolition (2 per cent) are less preferable solutions (Table 6.7). Regularization as well as demolition measures were taken by the Bahir Dar city administration at different times and in different areas of the city. For instance, 350 to 400 informally constructed houses in the Yibab area were regularized in 2013. In 2008 more than 500 settlers in Shimbit sub-city were regularized by the order of the then president of the Amhara Region and the settlement given the name Ayalew village. About 2400 unauthorized buildings constructed in different sub-cities of Bahir Dar following the popular uprising in
Ethiopia from July 2016 to February 2017 were demolished in March 2017 (Personal communication with staff of land management and development of Bahir Dar City Administration).

Table 6.7: Respondents suggestions to solve and prevent the problems of an informal settlement on land management

<table>
<thead>
<tr>
<th>Items</th>
<th>Total N=156</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestions to solve the growing problems of an informal settlement on land management</td>
<td>• Regularization 60.9</td>
</tr>
<tr>
<td></td>
<td>• Consistent application of rules/directives 27.9</td>
</tr>
<tr>
<td></td>
<td>• Payment of compensation after subsequent demolition 9.6</td>
</tr>
<tr>
<td></td>
<td>• Demolition 1.9</td>
</tr>
<tr>
<td>Suggestions to prevent the problems of an informal settlement on land management?</td>
<td>• leadership commitment 53.8</td>
</tr>
<tr>
<td></td>
<td>• Sound land administration/management 30.1</td>
</tr>
<tr>
<td></td>
<td>• Tenure security 16</td>
</tr>
</tbody>
</table>

Although achievements so far are somehow limited, the goal of the Ethiopian federal or regional government is to get rid of informal settlements, i.e. demolition is the top priority. The federal government has the integrated housing program and the lease proclamation to achieve its urban housing goals. However, what has been achieved so far in these programs and the demand for housing is by no means comparable. In previous sections, it has already been confirmed that the supply of housing in Bahir Dar could only meet 52.5 per cent of the demands. Based on data obtained from MoUDH (2015) study in the 27 major Cities in Ethiopia during 2007/08 to 2013/14, the demand for housing was 2.7 times greater than the supply. It is also to be noted that (30 per cent) of the dwelling entities in these towns and cities were supplied by the unauthorized sector (Section 4.5.4).

Due to the current rapid rate of urbanization in Ethiopia, the demand for low-cost housing is expected to grow rapidly as compared to the supply due to government resource constraints, poor implementation, and inflexible policy, among others.
Contrary to government intention of demolishing informal settlements, most of the informal settlers, as well as respondents to focus group discussants in Bahir Dar, thought that unauthorized settlements continue to remain. They have justifications for their aspirations as it was already summarized in Table 6.5. This perception is based on the fact that their sub-city is working very hard and unwavering to demolish their settlements within a short period. For instance, document review, field observation and interview with code enforcement staff indicated that most of the self-build unauthorized houses were demolished within a period of a few days to six months.

*An ounce of prevention is worth a pound of cure.* Benjamin Franklin

What has been presented in the preceding section is the method applied by urban authorities to correct the mistake of the past; all of them are mechanisms of cure. Since curing a disease costing us a lot, prevention is always preferred. The same is true in land administration and management. When the informal house builders were asked to respond to methods of prevention, more than half (54 per cent) of them revealed that leadership commitment is the leading proposition followed by sound land administration/management (30 per cent) and land tenure security (16 per cent) (Table 6.7). These responses can be categorized under government measures and obviously, the predominant government duty and/or responsibility is working to attain good governance in society including good governance in land administration and management and strengthening tenure security. The level of leadership commitment, as indicated by Goliber (2000), affects the staffing of the program, the size of assets that the benefactors will pledge in a nation, assemble national and worldwide assets and decide the most proficient, balanced, and functioning distribution of those assets, as well as determines basic systems and schemes and assesses the expenses and efficacy of optional intercessions.

32 Leadership includes not only the handful of the most powerful people running the country but also the 5,000 to 10,000 most influential individuals running all levels of the government and the institutions of the country.
Consistent to the above finding Bell (2007) stated that good governance in land administration targets to secure property privileges of people, and of the state by presenting standards, for instance “transparency, accountability, efficient and effective public administration, the rule of law, equity, participation and effectiveness into land related public sector management” (Bell, 2007, p. 8). The public management of land, including the administration of state lands, has a high likelihood for mishandling. In numerous nations, bribery and mistreat of authoritative power have offered ascend to hindering of tenure security. As a result, this has badly blocked the business environment and economic undertakings because of inflated expenses of doing business, absence of trust in the private segment, and under-utilization of land. Simultaneously, undue expenses and wastefulness and prolonged processes because of tainted land enrolment frameworks frustrate individuals to enlist their property, and encourage them to work inside the informal land market areas. This additionally influences land charge income and decreases government spending on the delivery of municipal amenities and facility.

Certainly, reorganization of land administration in any nation is a persistent vision demanding many years of continuous duty. It is a key venture of capital and human asset and necessitates robust and stable governance to attain competent and viable results. Achievement of an effective and sustainable outcome in good governance in land administration necessitates a trustworthy and balanced legitimate system, an objective and straightforward court of law and overall predominance of the lead of law to defend property rights.

6.5 Summary
Most informal settlers are getting access to land or a house through illegal buying and renting followed by administrative allocation, inheritance / donation and invasion. Brokers facilitate such illegal transactions between landowners, buyers and sub-city officials. Less than half of the informal settlements in the study area, because of their proximity to formal settlements, are sharing basic infrastructure. But most of the
remainder had informal connections with formal infrastructure and purchased those services from the formal inhabitants at higher prices.

The Bahir Dar city administration developed a regulation to control and prevent informal activities in the city in 2009, Reg. No. 14/2009. However, the rules are to intimidate and to demolish informal houses. Furthermore, there is no competent legal institution to enforce the rules. The sub-city administrations in the study area have a severe shortage of resources to carry out their activities effectively. However, with such scarce resources, sub-city code enforcement staffs carry out their effective control and demolition of unauthorized constructions. Most of the informal houses built are demolished in less than six months. All respondents agree that their homes were demolished at least once in the last five years.

Although the city of Bahir Dar has issued a regulation and establishes an institution, code enforcement officers or Qay Dullas to enforce regulation, it is unlikely that informal housing development has never controlled or prevented. Although the squad of enforcers are deployed, some of the unauthorized buildings can escape the demolition. Informal settlements continue to exist and will continue to exist as some informal builders use gaps in existing regulations as well as weak governance and rent seeking tendencies among sub-city officials. Thus, there seems to be a mutual benefit to the vitality of informal settlements between informal builders, sub-city authorities and brokers.

Many urban problems comprising mushrooming of unauthorized neighbourhoods are also associated with the operation of administering and managing land. Inadequate land supply in the study site is accompanied with high and increasing prices of land and accommodation especially for the low-income, lack of transparency in the plots allotment process, inefficient and delayed land delivery system, and lack of commitment as well as rent-seeking behaviour of some concerned experts and officials. Above all, low compensation payments for expropriated farmers losing their landholding rights and high as well as increasing land lease prices for urban dwellers drive low-income people to flock to informal settlements in Bahir Dar.
Most spontaneous neighbourhoods in Bahir Dar suffer from the constraints of insecure tenure. The indicators are high incidence of evictions, construction of houses from cheap and temporary construction materials that are usually undertaken quickly and at night, and the prohibition against eviction is not enshrined in the federal or regional laws. Rather the existing laws and institutions are to encourage eviction of unauthorized buildings in urban areas. Furthermore demolished dwellings are not compensated on the grounds of illegality.

Contrary to the shared views, the majority of the subject households in the survey site revealed that informal settlements substantially contribute to resolving the shelter shortage of the disadvantaged group in the metropolis. It may be contended that the expansion of spontaneous neighbourhoods is intimidating environmental management in Bahir Dar. Deficiencies in essential amenities are worsening environmental health.

Gaps in government rules are a promising condition for the expansion of informally built housing according to the perception of most informal settlers in Bahir Dar. Furthermore, weak institutional setup, poor implementation of rules and rising political instability are other likely conditions for the expansion of self-help irregular houses.

Weak governance conditions in the study area including forced occupation on state land, peri-urban farmers preference to split their farmstead into parcels and conveyance their plots in the illegitimate market, among others, are also creating favourable conditions for the expansion of unauthorized neighbourhoods along the frontier of Bahir Dar.

To address the issues of existing spontaneous neighbourhoods in the research site, it was suggested that regularization and consistent application of rules are the best alternatives. Instead of curing the current problems, the best option is to prevent the proliferation of informal settlements, which includes robust government commitment, sound land administration or management as well as land registration and certification measures.
To sum up, with increasing urbanization and unfavourable land management policies and practices in Bahir Dar, informal settlements are expanding with negative implication on environmental management. The relationships among land management policies and practices, expansion of informal settlements and environmental management are depicted in Figure 6.13.

Figure 6. 13 Land management policies and practices, expansion of informal settlements and environmental management
CHAPTER 7

CONCLUSION, STUDY CONTRIBUTIONS AND POLICY RECOMMENDATIONS

7.1 Introduction

Bahir Dar is among the fastest mounting metropolises in Ethiopia characterized by the proliferation of informal settlements. Spontaneous neighbourhoods in Bahir Dar are undermining environmental management – competing with prime agricultural land, deforestation along rivers and lakes and pollution of surface and underground water. Informal settlements in the inner city are causing congestion, scarcity of infrastructure and basic services and serious human and environmental health problems. In general, expansion of informal settlements in Bahir Dar is associated with unsustainable urbanization, particularly for the poor and low-income inhabitants. Hence, this study intended to explore the influence of land management on the prevalence of informal settlement and implication for environmental management in Bahir Dar city, Ethiopia. The study came up with insights into urban development mechanisms so that the city and the authorities may find better ways of assisting the low-income groups in their struggle for decent shelter. This can give lessons for the formal processes, as well as, the informal ones as to how to get right and access to land and shelter complying with one’s financial capacity and needs.

Bahir Dar has been undergoing the demographic phenomenon of urbanization, which is one of the stimulating forces for the expansion of informal settlements on the outskirts of the city. The city is currently in a state of rapid horizontal areal and population expansion; it had displayed areal expansion of more than 17 times between 1957 and 2009 and its population increased by more than 26 times between 1965 and 2016. Currently, Bahir Dar is the third largest city in Ethiopia with a population of 329,318 and population growth rate of 5.5 per cent.
The Bahir Dar city authority estimate shows that about 30 per cent of the urban population lives in informal settlements. The proportion does not include those who live in the inner city slums. Growth of these unplanned settlements has induced quite a large number of environmental problems. Scarcity of water and sanitation services, congestion and disposing huge quantity of wastes into Lake Tana are some of the serious environment-related threats.

This chapter intends to present a summary of the most important results of the study and the conclusions drawn from the doctoral dissertation, the contribution of the study, and conclude with some recommendations for policy implications.

### 7.2 Summary and Conclusions

#### 7.2.1 Causes of proliferation of informal settlement in the study site

**Rapid urbanization, poverty and limited capacity of the city:** It was found that almost all households in the study area are poor and low-income. The poverty among inhabitants deprived and excluded them from land, decent housing, basic amenities and facilities essential for city habitation and the opportunities and security offered therein. The absence of delivery for community premises additionally leads to higher prices, and lower grade supplying.

It was noted that the rural-urban migration rate in Bahir Dar is lower than one might expected. This was due to limited capability of the city to deliver land, accommodation, access to services, job opportunities, and constraint of the system of land management.

**Huge gap between housing demand and supply:** There is a huge demand for accommodation in Bahir Dar. Formal and informal or partially informal housing supply in the city satisfies only 52.5 per cent of entire demand. A substantial portion of the housing gap is most likely filled through informal housing since the formal means is more intractable. The gap between housing demand and supply is further exacerbated by the speculative tendencies of peri-urban farmers, brokers, informal real estate developers and corrupt bureaucrats.
**High and rapidly increasing lease prices:** Leasing is the fundamental system for urban land holding. In the urban centre, land can usually be purchased from the government at auction. There is a small possibility of participating oneself into housing associations and, therefore, have an opportunity in a house. Recent data on leasehold competitive sale price have shown that the cost is really high, so it is too expensive for low-income groups as well as for middle-income ones.

**7.2.2 Influences of urban land management policies and practices on Informal settlement**

**Legal frameworks:** Most informal settlers have access to land or a house by illegally buying and renting. Brokers facilitate such illegal transactions between landowners, buyers and sub-city officials. The Bahir Dar city administration developed a 2009 regulation on Control and Prevention of Informal Activities in the City, Reg. No. 14/2009. The rules, however, in reality intimidate and destroy informal houses. Furthermore, there is no competent legal institution to enforce the regulation. The sub-city administrations in the study area have a considerable lack of resources to effectively carry out their activities. However, with such scarce resources, law enforcement officers at the sub-city level effectively monitor and demolish unauthorized constructions. Most informally built houses were demolished in less than six months.

Although the city of Bahir Dar has enacted a regulation and created an institution, law enforcement officers or *Qay Dullas* to enforce the regulations, it is unlikely that the informal development of housing has ever been controlled or prevented. Although squad of enforcers are deployed, some of the unauthorized buildings escape demolition. Informal settlements continue to exist and will continue to exist as some informal builders use gaps in existing regulations as well as weak governance and rent seeking tendencies among sub-city officials. Thus, there seems to be a mutual benefit for the vitality of informal settlements between informal builders, sub-city authorities and brokers.
Low compensation payments for expropriated farmers losing their landholding rights: There is an enormous price variation between the intentional transaction costs of properties and the government compensation values due to complications in valuation of real properties. This extensive inconsistency demonstrates that the framework is unfair and that the compensation is not proportionate. It is this discriminating and low level of government compensation which persuade peri-urban farmers to sale their land to low-income urban residents and speculators rather than waiting the government expropriation and compensation. The implication is that existing legal frameworks are encouraging informal housing development rather than formal.

Inefficient and ineffective land administration: Many urban problems involving mushrooming of squatter settlements are also related with the operation of administering and managing land which includes inadequate land supply, inappropriate building codes and standards, weak governance, poor capacity of institutions, among others. Inadequate land supply in the study site is associated with quite a number of factors which includes high and increasing prices of parcel and dwelling especially for the destitute, lack of transparency in the plots allotment process particularly when informal land/ houses are regularized, inefficient and delayed land delivery system mainly for cooperatives and leaseholders, and cumbersome land allocation approval process due to poor capacity and experience of experts, lack of commitment as well as rent seeking behaviour of some concerned experts and officials.

Furthermore, high building standards in Bahir Dar, lack of comprehensive land information system, high cost of servicing land, lack of adequate capacity of the existing land management institution, corruption in the land allocation process which in turn leads to speculative tendencies, strengthens the rising price tendency and hence the unattainability of the plot of land for the poor and low-income populations.

Tenure insecurity: Most of the informal settlements in Bahir Dar suffer from the constraints of precarious tenure security. Indicators are the high frequency of
evictions, the construction of houses from cheap and temporary construction materials that are usually undertaken quickly and at night, and the ban on eviction is not enshrined in federal or regional laws. Furthermore, demolished dwellings are not compensated on the grounds of illegality. Existing laws and institutions are rather encouraging the eviction of unauthorized buildings in urban areas. Thus, current land administration/management practices in the study site are exacerbating the expansion of informal settlements.

**Weak governance in land administration:** Most of informal settlers in Bahir Dar perceive that gaps in government rules are promising condition for the expansion of informally built housing. Furthermore, weak institutional set up, poor implementation of rules and rising political instability are other likely conditions for the expansion of self-help informal houses. Weak governance conditions in the study area are also compounded by forced occupation on state land, the peri-urban farmers’ preferences to sub-divide their farmland into plots and exchange their holdings to the informal market, the involvement of neighbourhood peri-urban landholders in unofficial construction of low-grade housing for sale or rent and involvement by different stakeholders including dealers, opportunists and fraudulent officials. In addition, overlapping organizations regarding land governance and lack of transparency in their duty has created favourable conditions for the expansion of spontaneous neighbourhoods in the study site.

Thus, current government policies and their implementation in the study area favour the interests of high-income groups rather than those of poor and low-income groups. It is this bias that excludes poor and low-income groups from formal land and housing to informal and illegal means. Partiality in implementation of housing and leasing policies, harsh government farm expropriation and very low compensation, weak governance practices in land administration and inappropriate building standards in Bahir Dar, accompanied by rapid urbanization and poverty push the poor and low-income residents to informal settlements.
7.2.3 Implication of expansion of informal settlements on environmental management

In contrast to the views shared by the municipal authorities, most of the respondents in the study site disclosed that informal settlements help to address the housing shortage in the city. Informal houses are built to live in, rent out to low-income residents or sell.

The existing relationship between informal settlements and environmental management in the study site is mixed. In Shimbit, the majority of informal settlements contribute to the management of the environment. In this site, many private farms are large and established with fruit trees and farmers are reluctant to subdivide and transfer their farms. However, this is not the predominant phenomenon in Bahir Dar. In Belay Zeleke, the proliferation of informal settlements adversely affects environmental well-being. Gaps in basic services such as water, sewage, toilets and poor collection and disposal of solid and liquid wastes are damaging environmental health.

In conclusion, with increasing urbanization and unfavourable land management policies and practices in Bahir Dar, informal settlements are expanding through countless socioeconomic disturbances that aggravate the miserable living conditions in informal settlements, including unemployment, high poverty levels, poor services and health risks (Figure 6.13). In addition, insufficient allocation of assets in critical infrastructure for transportation, water and public health may exacerbate the formation of new squatters and contribute to the health risk of informal settlers and limit economic growth. Informal settlements are, thus largely, deteriorating environmental management, livelihoods and therefore unsustainable in terms of economic, social and environmental management.

7.3 Knowledge Contribution of the Research

Informal housing in Bahir Dar is widespread and found in every corner. It is by no means confined to peri-urban areas but in inner city as well as in almost all areas of
formal housing development including cooperative housing development. The variation from one area to the other is the degree and magnitude of informal housing development such as fully or partially informal.

Informal settlements are not only deteriorating environmental management, in cases where government intervention is minimal they also contribute to environmental management as it was perceived in parts of the study site. Furthermore, the results of this research revealed that informal settlements contribute significantly in solving housing problem. The inhabitants of informal settlements are also providing support to socioeconomic development of the urban areas by providing cheap labour and products to city inhabitants, as well as in facilitating rural-urban linkage and overall development of the country. Informal housing developments are transitions to city life and formal housing developments through incremental housing development. These are some of the reasons why city officials should develop positive outlook towards informal settlers and urbanization. The McGranahan and Martine (2012) study for BRICs is consistent with this finding.

But many studies in developing countries tend to widely document negative impacts of informal settlement on socioeconomic and environmental management and considering them as threats rather than opportunities. For instance see Taleshi’s study in Mashhad in North-Eastern of Iran (Taleshi, 2009), Munyoro in Chirundu town of Zimbabwe (Munyoro, 2016) and Bhan in millennial Delhi (Bhan, 2009).

Even though the city administrations are targeting to control and prevent informal housing development in Bahir Dar, such efforts are already proved to be futile. The reasons are related to weakness and inefficiency of the formal land administration and management, weakness in governance, capacity problems (socio-economic, technical, institutional, and political), among others. Corruption is one of the most important reasons for perseverance of informal settlements.

One of the remarkable results of this research is that weak governance in land administration, such as corruption in connection with the demolition of informal settlements, is one of the most important reasons for the perseverance of
spontaneous neighbourhoods in the study site. Even though laws are articulated, institutions are established, human and appropriate resources are deployed, informal housing developments are surviving since officials, speculators and brokers are benefiting from the business.

In general, the findings of this study and its policy implications can be depicted in Figure 7.1. A recent study of urban growth in the emerging economies concluded that “cities and nations must anticipate urbanisation and accommodate urban growth proactively, so as not to be left with an enduring legacy of inequalities and lost opportunities” (Tacoli, et al., 2015, p. 14).

However, there is an urgent need to renew commitment, reorient priorities and show political willingness to achieve genuine sustainability. Perhaps any efforts in this direction would make us approach an anticipated level of sustainable urbanization in Bahir Dar (Figure 7.1).

Figure 7. 1: Relationship between land administration solutions and sustainable urbanization

Although there are two sets of land administration solutions for the problems of informal settlements and for achieving sustainable urbanization in the study area, the
emphasis should be on the preventive rather than the curative solution (Figure 7.1). The curative solution is not only costly for the government and the community, but it also takes much time and may lead to the expulsion of informal settlers. On the other hand, the preventative solution is a healthy or win-win way out for the government and the community. The preventative option mainly requires the political will, leadership commitment and positive attitude of politicians and policy makers to the inclusion of the poor and the low-income population in planning and the development process.

7.4 Policy Implications

Based on the results and the above conclusions, the following recommendations which have policy implications are forwarded:

1. Legal framework on formalization of informal settlement

With the aim of addressing the crucial impediments of informal shelter such as poverty, poor access to land, lack of tenure security, deficiency of basic social facilities and amenities, low quality and congestion; there is a critical need for legal framework to formalize informal settlements at the federal and regional levels. Specifically the following measures can be taken:

To handle the most important challenges for informal housing

- Focus available financial resources on provision of serviced land to low-income groups and informal settlement elevation;
- Streamline housing standards and enable informal housing consolidation to support the provision of reasonably priced housing and household investment in top structures;
- Safeguard tenure security in informal settlements

These measures can ensure that new resource allocations in social services to be targeted at the most disadvantaged areas. Enhanced access to social facility and amenity in these areas would raise the quality of living by improving access to water, sanitation, health care and education services and improving urban environmental
well-being. If they have access to small loans to qualified households, these infrastructure improvements could boost further investments to improve physical structures.

2. Develop an effective and efficient Land Administration System (LAS)

With the intention to address the crucial problems of informal housing related to land administration such as frequent evictions, delays in decision making, lack of transparency and corruption; there is a need to develop and effective and efficient land administration system. Particularly the following are forwarded:

- The good administration of rights requires a legal framework that supports security of tenure while ensuring efficient change of parcel structure, such as sub-divisions, and rights, such as transfer of lease or holding;
- A politically independent court system and alternative dispute resolution mechanisms that can handle land cases within reasonable timeframes is also required;
- Recognize informal land rights and if expropriated for public purposes should be accompanied by proportionate compensation;
- Develop transparent procedures for officially recognized rights and the regime's ability to implement systems that identify these rights;
- Making land related information and records public and freely accessible through a computerised and transparent land administration system hampers corruption by making it easier to detect and expose; and
- Safeguard easy and fair access to serviced land by the poor and low-income groups.

3. Improve good governance in land administration

Developing sound land administration system (LAS) is a milestone to tackle the problem faced in informal settlement areas. But to effectively realize the system,
refining good governance in land administration is essential. Accordingly the following are forwarded:

- Committed leadership should support the participation of citizens, greater public responsibility and good public management and environmental management;
- Leadership commitment is vital to properly implement LAS, policies and laws, such as lease law and integrated housing development programs in ways that support the interests of low-income groups and informal settlements;
- Committed leadership is working with incessant municipal programs that address the bottleneck in public amenities in the poorest and most subterranean neighbourhoods and that helps low-income groups to get better residential buildings to enhance the delivery of essential municipal amenities; and
- A committed leadership works in cooperation with its residents. This recognition can be extended to the central body that establishes and channels infrastructure grants and housing loans to savings groups formed by low-income residents in informal settlements. These savings groups can plan and improve their dwellings or develop new ones, identify and improve basic services.

4. Institute land and housing policies favouring low-income population

Most existing land and housing policies in Ethiopia focus on high- and middle-income groups rather than on low-income groups and informal settlements such as land access rules and integrated housing development programme.

It is believed that proactive government measures will reduce the commencement of informal settlements. Such an intervention will forecast the city's growth directions, then plan the design and provide the basic services before people come in. This minimizes the disorder that is usually visible in informal settlements. In addition, although the government does not need to be involved in direct housing construction,
it should offer development guidance and ensure conformity of the community through competent follow-up.

In order for parcels and homes to be affordable for poor households, it is recommended that mixed developments be adopted for all income groups where revenues from high and middle-income groups would be used to assist the low-income ones. The disparity in benchmark in the dimension of the plot and household building materials will also make them cost-effective to the poor. In general, although regulations should focus on ensuring security and decent construction, they should not limit the ability of the poor to build their shelter in a convenient place to generate income within their neighbourhoods.

Government should also consider investing in rental housing affordable to low-income population. These could be in the form of multi-habited dwellings or apartments constructed in areas with adequate infrastructural developments such as roads, potable water, security etc.

It is proposed that as Bahir Dar continues to demonstrate rapid urbanization, the forthcoming prospect for housing low-income urban residents should rely on strategies that allow low-income households to gradually construct their residences over some stretch of time in light of their income. In addition, it is important to motivate the use of local construction supplies and strengthen the institutional framework that creates enabling environments.

5. Bring about attitude change favourable to urban development

Ethiopia is one of the least urbanized countries in the world, even by the African standard. This is partly due to the fact that the land management system contains provisions prohibiting the transaction of land, the loss of land holding rights for those leaving the countryside and the registration requirements for new immigrants to the city to weaken the convenience of migrating to the city (Dorosh & Thurlow, 2011). In addition, limited ticket to basic amenities, shelter, plots of land and restricted job
prospects in urban areas constrains migration to the city in Ethiopia (Tacoli, et al., 2015).

Thus, city authorities had to change their relations with informal settlers. Perhaps most importantly, they needed to realize that informal settlers are not “the problem” and could generate solutions and contribute to city development.

City authorities should also realize that informal settlements are

- Evidence of inadequate allocation of resources in public amenity and exclusivity policies that make it demanding for low-income groups to gain access to the benefits of city-life.
- signalling residents struggle with the failures of planning and total discrimination
- Innovative initiatives that contribute to the city development and receive very little legitimate assistance in return.

Furthermore, even sub-optimal, cities generally offer higher efficiency and better long-term opportunities for their inhabitants, including informal settlers than rural areas. Neglecting cities and limiting their access can only have undesirable consequences: deterioration in efficiency in urban areas and "overcrowded" rural areas, which means that agriculture is barely lucrative and rural poverty is worsening.

**Further research is necessary to:**

- apply other assessment approaches and/or methods to find influences of land management on prevalence of informal settlements
- quantify and test the implications of the prevalence of informal settlement on environmental management
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ANNEXES

Annex A: Mixed Surveys for Household Heads

INTRODUCTION
This dissertation attempted to explore the influence of land management on the prevalence of informal settlement in Bahir Dar city, Ethiopia. Your involvement in this study is voluntary. The data that will be supplied amid the study will stay private and unspecified, and will be employed for the intentions of study only. Signing the consent below displays that you grasp the motivations behind this study and willing to take part in it.

General Information
Respondent's name / signature (optional)………………………………. Date: 15 /09/2015

1. Residence location (Belay Zeleke, Shimbit) (underline one of them)
2. Gender: Male, Female (underline one of them)
3. Marital status (Singe, Married) (underline one of them)
4. Age (<30, 30-39, 40-49, 50-59, >=60) (underline one of them)
5. Occupation (government employed, self-employed, daily laborer, farmer) (underline one of them)
6. Income (tick the relevant income bracket in ETB) [< 1200] [1200 – 2400] [2401 – 3600] [>3600] per month (underline one of them)
7. Level of education (1-4, 5-8, 9-10, 10-12, >12, others) (underline one of them)

Please answer the following questions in full

Causes and trends
8. What do you think are possible causes of informal settlement in your locality?
   (a. Inadequate formal land allocation and other poor land administration/ management practices b. weak governance c. poverty d. rapid urbanization and its strain on capacity of cities e. others specify
   ………………………………………………………………………………………………)
9. How do you get access to this place? (a. Bought land/house from rural land holder b. Rent the house c. Administrative allocation/own holding d. Inheritance/donation e. Invade/occupy by force……………………………………………………………………………………………)
10. What do you consider to be the two most important hindrances to access to land? (a. Formal processes/ procedures; b. Land related (transaction) costs; c. Development control standards; e. Other (specify)……………………………………………………………………………………………)
11. For how long you lived in this place? (a. <2 Years, b. 2-5 Years, c. 5.1-10 years, d.10.1-25 Years, e. born here)
12. Where you lived before? (a. rural area, b. city centre, c. other specify…………………………)
13. Why you preferred to live here? (a. to construct affordable house, b. house rent is low, c. close to people I know before, d. it will be regularized in the near future, e. others specify …………………………………………………………………………………..)

**Characteristics of informal settlement**
14. What is the size of your parcel in a square metre? (a. <100, b. 100-150, c. 150.1-200, d. >200)
15. What is the size of the built-up area in a square metre? (a. <16, b. 16-20, c. 20.1-30, d. >30)
16. How many rooms are in your house? (a.1., b. 2, c. 3, d.>3)
17. Where do you dispose your solid and liquid wastes? (a. no disposal site and thus thrown out, b. wastes are collected and disposed by firms, c. others specify…………………………………………………………..)
### Rules and public administration

<table>
<thead>
<tr>
<th></th>
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<th>perceptions</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<td>18.</td>
<td>Informal settlements should be governed by the set of rules.</td>
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<td>19.</td>
<td>I have known the rules governing informal settlements for the last five years</td>
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<td>20.</td>
<td>The rules governing informal settlements are accessible and transparent.</td>
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<td>21.</td>
<td>Informal settlement rules balance the interests of the state and the settlers.</td>
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<td>22.</td>
<td>The rules governing informal settlements are to demolish informal houses</td>
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<td>23.</td>
<td>There are competent legal institutions to enforce such rules</td>
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<td>24.</td>
<td>The city authorities allow the provision of basic social and economic infrastructures to informal settlers.</td>
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<td>25.</td>
<td>Public land administration organizations have adequate infrastructure and resources to carry out their activities effectively.</td>
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<td>26.</td>
<td>My house was demolished at least once in the last five years</td>
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</table>

### Informal settlement and land management

27. Favourable conditions for the expansion of informal houses (a. gaps in government rules b. weak institutions c. poor implementations of rules d. rising political instability, e. others specify…………………………………………………………………………………)

28. Do you believe that informal settlements contribute to solving the housing shortage in the city? (a. yes, b. no)

29. Do you think that informal settlements contribute to ecological management in the city? (a. yes, b. no)

30. What is the overall level of tenure security in informal settlements? (a. Very high; b. High; c. Moderate; d. Low; d. Very low)

31. What are your suggestions to solve the growing problems of informal settlement on land management (a. regularization, b. consistent application of rules/directives, c. payment of
compensation after subsequent demolition, d. demolition, e. others specify…………………………………………………………………………………………………………..)

32. What are your suggestions to prevent the problems of informal settlement on land management? a. leadership commitment, b. sound land administration/management, c. tenure security d, others specify…………………………………………………………………………………………………………………..)

MUCH GRATEFUL TO YOU FOR YOUR TIME AND COOPERATION
Annex B: Checklist for Guided Observation

Date of observation ------------------------

1. Composition of houses with different quality (mud and papyrus houses, concrete houses, G+ houses)
2. Estimated parcel size of land on which houses are constructed (<100m$^2$, 100 – 150m$^2$, 150.1 - 200 m$^2$, >200m$^2$)
3. Congestion/dispersion of the houses (number of housing units on a plot)
4. Number of rooms with different functions (1 room, 2 rooms, 3 rooms, > 3 rooms)
5. Availability of kitchen and toilets in the house
6. Availability of pipe water, electricity and sewerage
7. Waste disposal system (no waste disposal and wastes are …, wastes are collected and disposed by firms)
8. Overall condition of the area (deteriorating, improving)
9. The extent to which houses follow a certain pattern/order
10. Observed efficiency in proper use of the land
11. Observed environmental management or degradation, if any
12. Observed good practices in the area, if any

MUCH GRATEFUL TO YOU FOR YOUR TIME AND COOPERATION
Annex C: Questions for Focus Group Discussion

INTRODUCTION
This dissertation attempted to explore the influence of land management on the prevalence of informal settlement in Bahir Dar city, Ethiopia.

Your involvement in this study is voluntary. The data that will be supplied amid the study will stay private and unspecified, and will be employed for the intentions of study only. Signing the consent below displays that you grasp the motivations behind this study and willing to take part in it.

CONSENT
Number of people in a group………………………………………………………………………….
Location …………………………………………………………………………….
Composition of the group…………………………………………………………………….
Date: 15 /11/2015

I. Questions for focus group discussion
1. What is your understanding of informal settlement?
2. What do you think are the causes for the evolution of informal settlements (IS)?
3. Do you think that government policies, laws and administrative practices may contribute for the evolution of IS?
4. Why you preferred to live in informal settlement?
5. Do you like to continue living in this/similar area?
6. What improvements are made to your house and infrastructure since you lived here?
7. How do you evaluate availability and adequacy of infrastructure in your locality as compared to formal settlements?
8. How do you evaluate procedures of acquiring, and developing land in your locality?
9. Do you know rules governing informal settlements?
10. Do the rules are accessible, transparent, and balances the interests of the state and the settlers?
11. What are the overall objectives of such rules?
12. Do local authorities support the interests of informal settlers? Why? Why not?
13. Do you believe that informal settlements contribute to access to housing in the city?
14. Do you think that informal settlements contribute to environmental management/degradation in the city?
15. What measures have been taken by your kebele/ city administration to resolve and prevent the occurrence and expansion of informal settlements?
16. What do you think are possible remedies for the occurrence and expansion of informal settlement in this locality?
17. What do you think are possible prevention mechanisms for the occurrence and expansion of informal settlement in this locality?

MUCH GRATEFUL TO YOU FOR YOUR TIME AND COOPERATION
Annex D: Interview Questions for City and Sub-City Authorities

INTRODUCTION
This dissertation attempted to explore the influence of land management on the prevalence of informal settlement in Bahir Dar city, Ethiopia. Your involvement in this study is voluntary. The data that will be supplied amid the study will stay private and unspecified, and will be employed for the intentions of study only. Signing the consent below displays that you grasp the motivations behind this study and willing to take part in it.

CONSENT
Name of the respondent (Optional) ……………………………….
Respondent’s position ……………………………………………
Location ……………………………………………………………
Gender:  Male, Female
Age…………………………………………………………………………
Level of education……………………………………………………………
Date:  /11/2015

1. Background
1. What is your understanding of informal settlement?
2. What do you think are the causes for the evolution of informal settlements (IS)?
3. Do you think that government policies, laws and administrative measures may contribute for the evolution of IS?
3. Which year was the informal settlement established in this locality?
4. What are the physical size (in Ha), population and density of the informal settlement?
5. Have there been any upgrading/regularisation/formalisation activities in the settlement in the past ten years? If yes, explain when and the rule.

2. Land tenure and tenure security
1. What is the level of land tenure security in the settlement?
2. What moves have been made to enhance tenure security in the settlement?
3. Has the settlement be distressed any eviction / demolition pressures in the last 10 years? If yes, what was the motive for the pressures?

3. Land access and delivery
1. What are the potential channels of access to land and/or shelter in the informal settlements?
2. How land is accessible for new allotees in formal settlements?
3. Do you think that the formal land allocations are efficient and equitable?

4. General
1. What measures have been taken by your kebele/city administration to resolve and prevent the occurrence and expansion of informal settlements?
2. What do you think are possible remedies for the occurrence and expansion of informal settlement in this locality?
3. What do you think are possible prevention mechanisms for the occurrence and expansion of informal settlement in this locality?

Please indicate in case you would like to get a synopsis of the research outcomes
(Yes ---- No----)

MUCH GRATEFUL TO YOU FOR YOUR TIME AND COOPERATION

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Annex E: Interview Guide for Bahir Dar City Administration

1. Data on recent housing demand, supply and housing stock  

<table>
<thead>
<tr>
<th></th>
<th>housing supply</th>
<th>housing demand</th>
<th>Housing stock</th>
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<tbody>
<tr>
<td>Condominium</td>
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<td>public rental</td>
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<tr>
<td>Kebele houses</td>
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<td>real estate</td>
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<tr>
<td>private/ owner occupier</td>
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<td>private rental</td>
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<tr>
<td>informal</td>
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2. Demand and supply for housing plot in the last two years  

<table>
<thead>
<tr>
<th></th>
<th>Demand for housing plot</th>
<th>Land allotment/distribution</th>
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</thead>
<tbody>
<tr>
<td>Leasehold</td>
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<tr>
<td>cooperatives</td>
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<tr>
<td>real estate</td>
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<tr>
<td>other means</td>
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</tbody>
</table>

3. How often land leasehold prices floated per year in the last three years?  

4. Do land lease price have increased from time to time (over the last three years)? Data  

<table>
<thead>
<tr>
<th>Year</th>
<th>Land leasehold price in Bahir Dar</th>
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<tbody>
<tr>
<td></td>
<td>Minimum</td>
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<tr>
<td>2014/15</td>
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<td>2015/16</td>
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<td>2016/17</td>
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5. How leasehold land is developed?, procedures and time required for each procedure  

6. How housing association land is developed? (Procedures, challenges, etc. encountered at each stages)
7. How often land parcel is allocated to housing association?  
8. How much time is required to complete all the procedures?  
9. How the city administration entertains the interests of low-income population to access land in the last three years?  
10. What are the extents of beneficiaries from such interventions?  
11. How do you judge the efficiency of land administration in the city? Do you have indicators of measurements? Such as  
   - Clarity and consistency of the regulations, rules, procedures (such as approval), etc.  
   - Capacity of the institutions in terms of personnel, materials, budget, technology, etc.  
12. How do you judge the commitment of practitioners, experts, officials, etc. to discharge their responsibilities?  
13. To what extent land allotted to associations or lessee are developed by original/initial associations or lessee? Do you have a follow up system?  
14. How much is the cost of servicing each plot? How much plot of land the city administration able to service and make it ripe for development?  
15. Do you have comprehensive land information about land for effective and efficient management of land?  
16. Do conflicting mandates of existing institution is a challenge for effective and efficient management of land?  
17. Approval of small scale land development takes ------ days/months.  
18. Number of applications for regularization in a year on average in the last two years is ----  
   No. of legitimized/approved applications ----------------------  
19. Lease for private small scale residential development is paid to city administration within --------- years.  

Please indicate if you would like to get a summary of the research results  
❖ Yes......................................................................................................................  
❖ No......................................................................................................................  

Please indicate in case you would like to get a synopsis of the research outcomes  
(Yes ---- No----)  

MUCH GRATEFUL TO YOU FOR YOUR TIME AND COOPERATION
Annex F: List of Interviewed People

The interview was carried out from 15/09/2015 to 15/11/2015

<table>
<thead>
<tr>
<th>Name</th>
<th>Responsibility</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ato Belay Sinte</td>
<td>Head of Land Management and Development Office</td>
<td>Bahir Dar city administration</td>
</tr>
<tr>
<td>Ato Tadesse Dagnew</td>
<td>Vice head of Code enforcement office</td>
<td>Bahir Dar city administration</td>
</tr>
<tr>
<td>Ato Hiyalem Baye</td>
<td>Manager</td>
<td>Belay Zeleke Sub-city</td>
</tr>
<tr>
<td>Ato Degu Amogne</td>
<td>Head of enforcement office</td>
<td>Belay Zeleke Sub-city</td>
</tr>
<tr>
<td>Ato Agernew Dessalegn</td>
<td>Code enforcer professional</td>
<td>Belay Zeleke Sub-city</td>
</tr>
<tr>
<td>Ato Asnakew Meseret</td>
<td>Code enforcer professional</td>
<td>Belay Zeleke Sub-city</td>
</tr>
<tr>
<td>Ato Yirga Abeje</td>
<td>Code enforcer professional</td>
<td>Belay Zeleke Sub-city</td>
</tr>
<tr>
<td>Meto Aleqa Berhanu Tefera</td>
<td>Head of code enforcement office</td>
<td>Shimbit Sub-city</td>
</tr>
<tr>
<td>Ato Birhanu Amsalu</td>
<td>Land Management professional</td>
<td>Shimbit Sub-city</td>
</tr>
<tr>
<td>Ato Mekuanenet Lule</td>
<td>Code enforcer professional</td>
<td>Shimbit Sub-city</td>
</tr>
<tr>
<td>Ato Alelegn Bisrat</td>
<td>Code enforcer professional</td>
<td>Shimbit Sub-city</td>
</tr>
<tr>
<td>Ato Yibrie Kibebew</td>
<td>Code enforcer professional</td>
<td>Shimbit Sub-city</td>
</tr>
</tbody>
</table>
Actual names of informal settlers participated in cases which are presented from Box 5.1 to 6.2

<table>
<thead>
<tr>
<th>Pseudo names</th>
<th>Actual names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birtukan Fekadu</td>
<td>Emaway Tesfaye</td>
</tr>
<tr>
<td>Bereket Alelegn</td>
<td>Mengistu Abera</td>
</tr>
<tr>
<td>Debas Yihune</td>
<td>Desta Yihun</td>
</tr>
<tr>
<td>Tesfa Agumas</td>
<td>Behailu Anemaw</td>
</tr>
<tr>
<td>Yitayish Alemu</td>
<td>Belaynesh Wubante</td>
</tr>
</tbody>
</table>