



WOLKITE UNIVERSITY

COLLEGE OF SOCIAL SCIENCES AND HUMANITIES

DEPARTMENT OF GOVERNANCE AND DEVELOPMENT STUDIES

**URBANIZATION AND ITS IMPACT ON FARMERS: THE CASE OF WERABE TOWN,
SILTE ZONE, SNNPR**

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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN PARTIAL
FULFILMENT FOR THE REQUIREMENT OF MASTER OF ART DEGREE IN
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MANAGEMENT)**

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Abstract

This study aims to investigate the impact of urbanization on farmers in the case of Werabe town. The general objective of this study is to assess the effect of urbanization on the farmers of the study area and the specific objectives of the study are to describe the current trend of urban expansion by losing agricultural land, analyze the social, environmental and economic impacts. In order to achieve the studies objective both primary and secondary data source were used. Accordingly, primary data were collected from multiple sources such as selective households, municipality experts and Keble administrators by random sampling techniques. In addition, secondary data were collected from library books (published and unpublished books). This study used descriptive research designed and the researcher used simple random sampling techniques from the sample size of 212 households' from the total targeted population of 450 people who are affected by urban expansion. Major findings of the study indicate that rural-urban migration, absence of land information system, population growth, housing demand and infrastructure improvements were the major cause of urban expansion and identified social, economic problems of farmers and environmental pollution in the study area. The researcher tries to convert the gathering information to percentile to compute the result. Based on the result of the study, should be recommended that Werabe town municipality and any other concerning bodies should be take appropriate measures in line with the suggested recommendation in this study.

Keywords: Urban expansion, Peri-urban household's systematic simple random sampling techniques, Social impact of urbanization, Economic impact of urbanization, Environmental impact of urbanization, Modernization theory, Land Consumption

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Urbanization is the steady increase in the number of people living in cities or urban centers. This occurrences result from the continuous mass movement of people from the villages or rural settlements to cities or urban areas. It can also result from natural increase (the excess of births over deaths) especially where this population increase take place in areas where advance technology and developmental projects are present. The definition of what qualifies a town as an urban center differs from one country to another depending on the population criteria used. In Sweden for instance, from as low as 200 inhabitants in a place could be regarded as an urbanized center; 250 persons for Denmark; 1000 persons in Canada; 10,000 in Greece,20,000 in Nigeria; while in Ethiopia, a place is called an urban when the population is as high as 20,000 inhabitants (Palen, 2008).

Urbanization in simple term is processes of transition from agricultural to industrial and services dominated economy, which involves the transfer of population from rural to urban areas, and inter sectoral reallocation of resources (Achamyeleh, 2008).

As modernization theory, urbanization results from the introduction of new things and innovations within the society through industrialization, technological application, information penetration and cultural diffusion (Smith, 1996). Considering urbanization through the lens of modernization, first, it is common to see elements of modernization (new things) in every society that has moved from the primitive era (Stone Age) to a new or modern pattern of doing things. Secondly, the importance of technology in social organization and shaping of the society is very obvious; as urbanization usually results afterwards. The present state of urbanization and development in the world today cannot be separated from its initial state at the onset of modernization (Kasarda and Crenshaw, 1991). Most developments are products of technologically driven societies, which could boost or increase economic capabilities, provide surplus food through improve agricultural system and the use of mechanical and electronic tools or machines to reduce workload on citizen; yet increasing speed and efficiency of work done (Lenski and Nolan, 1984; Nolan and Lenski, 1985). It is assumed in this context that technology

is more important than social organization of the society. Thus, the application of technology is seen as the main driving force of urbanization in the society.

Urbanization is a change or process where an increasing proportion of a nations or regions population lives in urban area. There are not however, any global agreement to what constitute an 'urban area' although there are still more rural dwellers in the world than those living urban area. In the last century in developing countries, there has been a precedent growth in the numbers and size of large cities (David Waugh, 1990).

Many towns in the world have a higher rate of vertical growth and horizontal expansion. It is widely accepted that urbanization is an inevitable phenomenon. Hence, urbanization is a development phenomenon that comes with the country's economy in general and industrialization in particular. In developing countries, many cities contribute significantly to economic growth. The economic benefit of cities is rapidly increased at the future economic growth will become dependent up on the ability of urban centers to perform necessarily service and production functions (Reddy, 1998)

The fundamental difference between urban and rural is that urban populations in larger, denser and more heterogeneous cities as opposed to small, sparser and less differentiated rural places (Clark, 1998).

Urbanization occupies a puzzling position on the one hand it is recognized as a fundamental to the multidimensional structural transformation that low income rural societies under go to modernize and to join the ranks middle and high income countries(Michael Spence,2009).

The contemporary world is an urban world. This is apparent in the expansion of urban areas extension of influence across much of the habitable surface of the planets .Today, for the first time in the history of human kind urban dwellers out number rural residents. Urban places, towns and cities are a fundamental importance for the distribution of population with in countries in the organization of economic production distribution and exchange in the structuring of social production and cultural life in the allocation and exercise of power. Furthermore, in the course of present country the number of urban dwellers levels of global urbanization is likely to increase (pacione, 2005).

Historically, urbanization has been concomitant of technological development, economic growth and human development. Urbanization is not new phenomenon Babylon (600_400BC) had an estimated population of 350,000, Rome (150BC_150AD) reached 1.1million in habitants and the population of Angkor (900_1100AD) in present Cambodia was 1.5million. While the developed World was already highly urbanized by the 1960s, and most developing countries were just starting the process (Achamyeleh, 2008).

By about 1900 Great Britain was the first country with more people living in urban than rural areas. Parts of Latin America followed and have been more urbanized than many European countries since the first half of 20th century. Over 90 percent of the population Argentina and Uruguay for instance, now live in urban areas compared to 83 percent in a country like Sweden .At the other end of the scale some Sub Sahara countries have a low urbanization level (Achamyeleh, 2008).

Currently, global urbanization trends will grow from 2.86 billion in 2000 to 4.98 billion by 2030 of which high income countries will account for only 28 million out of the expected increase of 2.12 billion(Achamyeleh,2008).

Urbanization can yield important social benefits improving access to public services such as education, healthcare and cultural facilities .But it can lead to adverse environmental effect that requires policy responses .Greater urbanization usually means, greater pollution which can overwhelm the natural capacities affair and water absorb pollutants. The other major impacts of urbanization are that it reduces the size of farming land around the country sides (the World Bank, 2003).

The impact of urbanization is a fundamental transformation of society with far reaching economic, social, cultural and political consequences. To manage rapid urban growth is a main challenge especially for poor countries with a weak institutional framework (Achamyeleh, 2008).

An impact of urbanization is in developing a country rural-urban migrating is unmanageable, rural-urban migrating is unproductive and urban growth is driven by program bias rather than economic fundamentals (Michael Spence, 2009).

Available studies have indicated that because the rate of population growth is linked to the fast expansion of urban slum areas the land that is now needed for agriculture has shifted to residential development use. This has resulted in peri-urban dwellers being seriously threatened by rapid urbanization because of the problem of scarcity of land for agricultural purposes that will arise. Farmers are often left with little or no land to cultivate and this renders them vulnerable. The study, which obtained the changes between 1966 and 1999 and 1999 and 2004 from Land sat imageries, found the rate of urban expansion over the agricultural land was 113.32 km² within the 13 year interval and 106.26 km² within the 5 year intervals respectively. This shows that the rate of urban expansion is increasing rapidly. This has resulted in the reduction of agricultural land. Generally, one can say that the higher rate of urbanization leads to a higher loss of agricultural land (Belay (2014).

Werabe is the capital town of Siltie zone. Urbanization in Werabe town has led to incorporation farmlands displacement of the nearby rural communities the socioeconomic implication of urban expansion is immense and imposes great challenges to the town administration (Werabe town administration public communication office (2021). Thus, assessing the effect of urban expansion on low-income communities requires detail studies and this study have tried to do that at its best.

1.2 Statement of the Problem

Africa's urban transition has proved different from the conventional perception of urbanization where the drivers, patterns and outcomes are not uniform and do not follow past processes (OCDE/SWAC, 2020). Recent studies in Africa revealed that poverty is being urbanized (Ravallion et al, 2007) and hence becoming an urban phenomenon (Dorosh and Thurlow, 2014). Many scholars argue that the rapid urbanization in Africa is happening without the required structural transformation (Jedwab and Vollrath, 2015; Gollin et al., 2016). This is often associated with unplanned urbanization (Ravallion et al, 2007; Elhadary and Samat, 2012) leading to expansion of consumption cities financed by surpluses generated from natural resources extraction and agriculture (Jedwab, 2012). Furthermore, in developing countries, the discerning role of governments in the urbanization process has resulted in a consistent bias giving favored cities and regions a cost advantage (Henderson, 2010).

In a country like Ethiopia where agriculture employs the vast majority of the population, land is an important economic resource for the development of rural livelihoods. Agricultural land in peri-urban areas, however, when transformed into built-up land through horizontal urban expansion has an effect on land use value (Holden et Al., 2010; Agegehu S.k Al., 2016; Muhabaw & Gashu, 2019). As stated by Tuyen (2013) and Bekele (2010) urban expansion has many positive and negative effects on farmers in peri-urban areas. However, the negative impacts are more generally highlighted because this expansion is often uncontrolled, or uncoordinated, and therefore the negative impacts override the positive ones. Particularly in developing countries, land conversion and displacement is not considered critically by any activities that have taken place on it. Yet, it can have adverse effects on displaced households in terms of livelihood disruption, and social and cultural consequences (Nigusie, 2011; Muluwork, 2014).

Mostly, urbanization is considered as the indicator of the countries development especially in the developing countries. The level of urbanization in Ethiopia is now a day at increasing level even if the urban expansion have its own socioeconomic importance it has also adverse effects on agricultural land. This is confined to the adjacent to rural areas. It may affect the annual Growth Domestic Products of the country by minimizing the productive land. Not only at the national level. In addition, it affects the individual peasant by taking their farm lands even they lost their livelihoods. In addition, it becomes urban-rural conflicts were peasant communities living adjacent to urban areas come under pressure and in most case, they were evicted. This problem is highly expanded in different Ethiopian towns. As a result, large numbers of local landholders, who mainly engage in agricultural activity for their livelihood, have been forced to lose their land rights (Adam, 2014).

A study was performed by Fenta ET. (2017)“dynamics of urban expansion and land use/land cover changes using remote sensing and spatial metrics about the case of Mekelle City in northern Ethiopia”. The results showed that in the periods 1984–1994, 1994–2004, and 2004–2014, the built up area increased annually by 10%, 9%, and 8%, respectively; with an average annual increment of 19% (100 ha year⁻¹), from 531 ha in 1984 to 3524 ha in 2014. Between 1984 and 2014, about 88% of the gain in built-up area was from the conversion of agricultural lands, which decreased by 39%. Extension of existing urban areas was the dominant growth type, which accounted for 54%, 75%, and 81% of the total new development during the periods

1984–1994, 1994–2004 and 2004– 2014, respectively. A study done by AHLAM (2017) on urban expansion and its impact on the livelihood of peripheral farming communities with a case study of Kutaber town, Amhara region, Ethiopia showed that different land use/land cover classes have changed into built-up areas. Even though many changes have been observed between 1986 and 2016, the highest negative rates of change were seen in grassland and farmland which decreased on average by 21.66 km² (25.044 %) and 14.627 km² (16.912%) respectively.

Accordingly, all of the above researchers merely focused on urbanization and its effect on minimizing the productive land. Unlike the above researchers, this study is focused on effect of urbanization on farmers particularly; at *Werabe town* and as far as my knowledge concerns there has been any study that has been conducted so far in the expansion of Werabe town and its impact on farmers. So, presently urbanization affecting on the farmland was very complex or difficult for farming communities in Werabe town.

Werabe town is found around between Butajira and Hosaina towns and the town has a lot of agricultural land is now occupied by urban settlements. Due to this urbanization almost all targeted households of this study have lost their farmland and they vulnerable to poverty and urban-rural conflicts were peasant communities living adjacent to urban areas. Because of this problem, many farmers were migrating to different Ethiopian towns in search works to fulfill their livelihood. And it becomes difficult daily laborers' instead of working on their farmlands and they become unable to self-sufficient (Werabe town administration agricultural office (2021).

1.3 Objectives of the Study

1.3.1. General Objective

The general objective of this study is to assess the effect of urbanization on the farmers living around to Werabe town.

1.3.2 Specific Objectives

In line with the general objective, this study intends to address the following specific objectives.

-Describe the trends of urbanization in werabe town.

- Analyze the social effect of urban expansion on evicted farming households.
- Analyze the economic effect of urban expansion on surrounding farmers.
- To identify the environmental effect of urbanization in study area.
- To examine the loss of farmland due to urbanization in study area.

1.4 Research Questions

The aim of these questions is to help and develop questioners and then to identifying and clarifying the impact of urbanization on farmers in Werabe town and to recommend alternative solutions for concerning bodies.

- What are the main social effects of urbanization on surrounding farmers?
- What are the economic effects of urbanization on the peri-urban households?
- How the current trends of urbanization affect the peri-urban households?
- What are the environmental effects of urbanization in the study area?
- What the alternative solutions are to take minimize the effect of urbanization on household livelihood?

1.5 Significance of the Study

The result of this study may fill the knowledge gap on the effects of urbanization on low income rural communities livelihood and it would help policy makers and implementers in the designing more appropriate measures that could be assists in achieving the objectives of sustainable development both for the city and affecting a farming rural communities.

1.6 Scope of the Study

The study limited to urbanization and its impact on urban in farmland activity in Siltie zone particularly in the Werabe town. Because in this area would be urban expansion affecting on the farmland was very complex or difficult for farming communities. The purpose for which is to give the alternative solutions of the impact of on farming households by urban expansion in case of Werabe town.

1.7. Limitation of the study

In social science studies facing challenges in conducting the research is known. This study also has some limitation in the process of study development. The first limitation of this study is lack

of willingness among some interviewers and respondents to give necessary information because of their work burden and negligence of respondents. Therefore, this make collecting data was difficult. Secondly, time and budget limitations, the research was required lots money to carry out collection of data, procurement of publication such as reports from Werabe town municipal and other concerning government bodies and production of maps and plans for the study area. Finally, methodological, theoretical and lack of researcher's experience are the other main problems of the study. The researcher tried to overcome the lack of willingness and negligence of questionnaire by discussing respondents that the purpose of the study is for urbanization and its effect on farmers in Werabe town. In addition to this, the researcher was tried to solve the time and budget limitations in collecting the data by employing data collectors and using his time and budget wisely

1.8 Operational definition of terms

Urbanization: Urbanization refers to proportion to the national population living in urban areas and it has different indicator include, population size, population density number and range of services and employment profiles (savage & warden 1993).

Land use: a land use is a phenomenon to provide for food, living space, recreation, infrastructure development service provision. Land use generally expands at the expense of agriculture as demand for housing grows (Achamyeleh, 2008).

Land Consumption: Land consumption the amount of land use per person is the inverse of population density the higher the population the lower the amount of land used per person (Achamyeleh, 2008).

Livelihood: Livelihood refers to a way of a person he/she does his/her work for their daily consumption and away of depending system. And livelihood contains natural resource, economic and technological result, human capital and social instructions (Scions 1998:7E leis 2000:33-37).

Periphery: refers to the surrounding border and limitation of one town (Balchin.et al, 1995:189).

Households: means all the people who occupy a single housing unit and engaged on farming activities within the city bounders (foe ken and Wangi 1998; p19).

Socioeconomic impact: refers social and economic impact or influence by affect the annual Growth Domestic Products of the country by minimizing the productive land. Not only at the national level. In addition, have affects the individual peasant by taking their farm lands ever they lost their livelihoods (Adam, 2014).

Peri-urban households: farmers/families live around the city. And peri urban land brought on by the rapid urbanization has led to the gradual squeezing out of farming as a means of livelihood in the peri urban households (Achamyeleh, 2008).

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical Literatures

In this section, the concept of urbanization in different scholars and in modernization theory, the growth of world urbanization, the causes of urban expansion and the Peri urbanization and its challenges were briefly discussed. In addition, urban expansion and livelihood strategies in urban periphery were summarized.

2.1.1 The concept of Urbanization

There is no specific theory to study the effect of urban expansion on rural farming community in the periphery. Scholars in the field of development have argued the issues of urban development and growth from different perspectives. The interaction of urban to rural was described in modernization theories of economic development. The main paradigm in this regard is the structural transformation model formulated by W. Arthur Lewis in the mid 1950s. The main focus of this model was the transfer of agricultural labor and growth of output and employment to the modern urban industrial sector through wages that is higher than subsistence agriculture. The theorist postulated that the city offers cost reducing advantages in economic, social and cultural amenities. However, this structural transformation has historically a deal of upheaval, conflict, dislocation and human degradation in which the process involves winners and losers. In contrary to this structural transformation theory the dependency theory maintains that cities grow parasitically by exploiting and holding back their surrounding regions. Established economic development in the city is only at the expense of the surrounding areas (Balchin, 2000).

Urbanization refers to proportion of the national population living in urban areas. Urbanization can be viewed and perceived to mean a lot of things depending on how it is used. It can be viewed as a characteristic of the population as a particular kind of land use and land cover, as well as characteristics of social and economic processes and interactions affecting both population and land. Physical scientists especially ecologists generally approach definitions of urbanization from the standpoint of the built environment (Achamyeleh, 2008).

Urbanization is relatively easy to classify which areas are urban and which are not urban. They are hosts of indicator available this include, population size, population density number and

range of services and employment profiles some sociologists have even claimed to have recognized distinctly urban and non-urban life styles yet these have been severely criticized while they are able to describe what characteristics are present in urban areas they are unable to isolate and identify any thing that is unique to urban areas and which can therefore be used as the basis of delineation of what is urban (Savage & Warden 1993)

Urbanization is the physical growth of urban areas because of rural migration and even sub-urban concentration in to cities particularly the very large ones. The United Nations projected that half of the world's population would live in urban areas at the end of 2008. By 2050 it is to predict that 64.1 percent and 85.9 percent of the developing and developed world respectively will be urbanized. Urbanization is closely linked to modernization, industrialization and sociological process of rationalization. Urbanization can be describing a specific condition at a set time that is the proportion of total population or area in cities or towns or term can describe the increase of this proportion over time. Therefore, the term urbanization can represent the level of urban relative to overall population or it can represent the rate at which the urban proportion is increasing.

Urbanization is a process involving two phases or aspects the first one is movement of people from rural to urban places where they engage in primary non-rural functions or occupations and second one is change in their life style from rural to urban with its associated values, attitudes and behaviors. The important variables in the former are population density and economic foundations the important variables in the later depend on social psychological and behavioral factors. The aspects are mutually supportive (Bonine, 1983).

Noted that among ecologists a wide variety of urban definitions have been used in research ranging from any human alteration of the land scape to more precise based on density and specified land use characteristics. In spite of, these variations urbanization trends are universal. Local factors can speed up or slow down the process, but it cannot be stopped. Urbanization is not necessarily bad, but the rapid change brings a lot of economic and social problems that are difficult to manage. Some agree that it is a consequence of economic development but it is also a requirement for economic development (Achamyeleh, 2008).

2.1.2 The concept of urbanization in modernization theory

According to modernization theory, urbanization results from the introduction of new things and innovations within the society through industrialization, technological application, information penetration and cultural diffusion (Smith, 1996). Considering urbanization through the lens of modernization, first, it is common to see elements of modernization (new things) in every society that has moved from the primitive era (Stone Age) to a new or modern pattern of doing things. Secondly, the importance of technology in social organization and shaping of the society is very obvious; as urbanization usually results afterwards. The present state of urbanization and development in the world today cannot be separated from its initial state at the onset of modernization (Kasarda and Crenshaw, 1991). Most developments are products of technologically driven societies, which could boost or increase economic capabilities, provide surplus food through improve agricultural system and the use of mechanical and electronic tools or machines to reduce workload on citizen; yet increasing speed and efficiency of work done (Lenski and Nolan, 1984; Nolan and Lenski, 1985). It is assumed in this context that technology is more important than social organization of the society. Thus, the application of technology is seen as the main driving force of urbanization in the society.

2.1.3 The Growth of Urbanization in the World

The acceleration of world urbanization since 1850 partly reflects a corresponding acceleration of world population growth; but urbanization is not merely an increase in the average density of human settlement (Lowry, 1990). For instance, in 1960 nearly all less urbanized regions of the world had low rates of rural out migration under 1 percent annually and high rates of urban immigration 1.5 to 3.2percent annually(Lowry,1990). With a few exceptions, urban and rural rates of natural increase were about the same, yet urban growth rates reflecting the storage effect of rural to urban migration in regions with relatively small urban sectors.

The urbanization of developing world began to accelerate in late twentieth century(Timberlake, 1987), although there was no clear trend in over all urban growth in less developed countries due to inconsistence definition of urban and the lack of quality in census data. According to United Nations, the levels of urbanization in 1995 were high across Americans, most of Europe, parts of western Asia and Australia. South America was the most urban continent with the population in all but one of its countries (Guyana) being more urban than rural 80percent of the population

lived in towns and cities in Venezuela, Uruguay, Chile and Argentina. Levels of urban development were low throughout most of Africa, south and East Asia. Less than one percent in three in sub-Sahara Africa was urban dwellers. The 20 percent in Ethiopia, Malawi, Uganda, Burkina Faso, Rwanda and Burundi as well as an estimated 40 percent of china's 1.2 billion people and 29 percent of Indians 0.96 billion people lived in cities

Accordingly, to Daniels (2005) the steepest growth rate has been in cities. In 1965, it was 35 percent, in 1990 50 percent and in 2025, it could be at least 60 percent. The world annual growth rate of urban population between 1965 and 1980 is 26 percent; but 1980 and 1990 it was 4.5 percent .Nearly all the current increase is in poor countries.

Since the 1950's cities have grown faster than rural areas in nearly all developing states. Although, Latin America, for example, has experimented substantial over population increase the size of its rural population is actually declining. Indeed, on UN projections, some 97 percent of world population increase between 2000 and 2030 will be in urban areas and almost entirely within the developing regions and countries, continuing a pattern established by 1950. In those areas collectively, cities are growing an average by three percent a year and the poorest regions are experiencing the fastest growth. In east west and central Africa for example, cities are expanding by five percent that can double their population every 14 years. Globally urban population, just 750 million in 1950, grow to 2.7 billion by 2000 and is projected to rise to 5.1 billion by 2030(Getis,2000).

The complexity and diversity urban growth, social and cultural influences in addition to economics' forces and inadequate data make the economist heavily on demographic variables and persuade him or her unavoidably to equate an increase in population with an increase in growth. It must not be assumed, however, that population growth can be related immediately to an increase in welfare congestion a higher cost of living poorer housing could be direct results of an increase in the urban population and even if the growth national product per capital rises following increased urbanization this could be attributed to higher incomes being realized in rural areas (Balchin, 1995).

2.1.4 Peri Urbanization and its Challenges

While towns' cities offer many opportunities, they also face numerous problems. Because of globalization of urban economies, increasing has competed directly with worldwide regional economies for international investments to generate employment revenue and funds for development. There are also cities that cannot compete because of low productivity economic instability, poverty, inequality and social conflict, degradation of urban environment and poor resource managements are the main urbanization challenges (Achamyeleh, 2008).

Though urbanization creates opportunities wage employment and trading for people in peri urban areas and provides them with some access to services and infrastructure it usually comes with intense competition for land, population pressures and pollution and health hazards all of with pose serious challenges to people livelihood and in turn on policy makers and implementers. The ever increasing pressure on peri urban land brought on by the rapid urbanization has led to the gradual squeezing out of farming as a means of livelihood in the peri urban communities, in addition landlessness of peri urban peasants due to the taking of land by the governments with minimal or no compensation in Africa countries like Ethiopia is one major challenges undermining the security of individual property rights. The more visible and pronounced problems in the peri urban settings of most cities of Africa have been manifold. At the heart of the peri urban problem is tenure insecurity, poor infrastructure and service, acute shortage of housing, haphazard and unregulated land development giving rise to complex organic structures in defiance of spatial planning theories, illegal and informal land transactions rapid land tenure transformation generating fears about imminent peri urban land crises, proliferation of informal settlements environmental degradation due to pollution and the loss agricultural land associated with food insecurity. These are the common threats in most peri urban areas in the third world countries. As explained above problems of peri urban areas are manifold. However, for the purpose of this study the concentrations are on land tenure transformation and its impact on the surrounding of peri urban livelihood (Achamyeleh, 2008).

2.1.5 Urban Expansion and Livelihood Strategies in Urban Periphery

Tomas Malthus said that, "the economies of developing countries are growing at lower rate than population growth especially, fast growing urban population and economic problems have rapidly increased the number of urban poor". Due to lack alternative means of regular

employment, urban poor has several survival strategies. The main strategies are categorized as urban strategies and rural strategies (Folken and Wangi, 1998:19). The urban strategy is divided into two non-farming strategies and urban farming strategies. The urban non-farming strategies include all income-generating activities outside income derived from agriculture. These are mainly household activities (cooking and washing) and economic activities, which include informal enterprise, metal works, carpentry, petty commodity trade, local brew making, prostitution, formal employment, house cleaner and daily labor. Similarly, urban farming strategies are activities deployed on farm those who have access to a piece of land outside or within the city's boundaries "in order to make ends meet many poor urban households fallback on farming activities, either within the city boundaries or in the rural areas" (Folken and Wangi 1998:p19). The ability to pursue diversified livelihood strategies is dependent on the basic material and social tangible and intangible assets that people have their possession" (Scones 1998 :8). From economic point of view assets that is seen as capital from which livelihoods are constructed include natural (land, water and the bio network), economic or financially or basic infrastructure, cash credit and saving, tools and technology, human (labor, skill, knowledge, ability and health) and social (instructions, affiliations, social claims and networks) (Scions 1998:7, E leis 2000:33-37). Urban expansion limits the ability of dislocated farming communities to possess assets or capital to diversify livelihood strategies. Livelihood diversification of rural people is dependent on natural capital mainly land and its resource. As urban extends to the periphery and encroaches the rural farmland, this livelihood, this livelihood means is used us.

2.2. Empirical literatures

2.2.1 Level, Trends and Urban Growth in Ethiopia

Urbanization refers to change of population living in urban areas. In Ethiopia situation, it could occur as result of internal rural-urban migration, natural increase or reclassification of place to urban growth, on the other hand, refers to the growth rate of urban areas themselves, it is the annual net addition to urban populations divided by the size of the total urban population (Freidman, J, 1996).

In Ethiopia in locality is defined as urban by the CSA if the resident population is 2000 and above in 1984. Which means 4.9 million people (or 11.4% of the total population) lived in urban areas or localities with 2000 or more inhabitants. By 1994 this figure and increased to 7.5

million (or 13.8%), the 1994 census projection show that, the 2005 total urban population will grow to 11.7 million 16% and the years 2015 and 2030 the projections of the populations of the total population living in (22.2%) respectively. Although urbanization levels and trends show steady increase, even by 2030 Ethiopians vast majority (over 75%) would still living in rural areas (Freidman, J, 1996).

2.2.2 Consequence of Urban Expansion

The effects of positive sides of urban sprawl are not always seen as harm full. Some organizations and planners see sprawl as a sign of economic vitality and not as ecological threat. They claim that for countries America with large land area there are too vast farmlands and open spaces to worry about how much land is converted. They also stress the primary advantage of sprawl, which is decentralization of employment to different parts of a city. They argue that car culture enables people to commute shorter distances at any time and own bigger homes. In addition, it is not healthy for people to live in areas with increased densities and smaller meter square of space per individual ratios since this creates psychological and health problems. Therefore, their recommendation is for people to live in bigger plots with their own green places away from city centre's and work areas (Achamyeleh, 2008).

The effects of negative sides of urban sprawl all sprawl leads to loss of limited resources, which is land. Over the years, sprawl has directly contributed to the degradation and decline of natural habitats. It also reduces farmland and open spaces. Water use and energy consumption will be increase. Sprawl leads to land use patters which are unfavorable to the development of sustainable transport modes and hence increase the use of private car that in turn result in increased tripe lengths, congestion, increase in fuel consumption and air pollution. It is in general a threat to ecology. Even though automobile and truck engines have become far cleaner in recent decades, motor vehicle emissions are still the leading sources of air pollution. As homes and businesses, spread further and further apart local governments are forced to provide for widely spaced services and infrastructure leading to higher costs and increased tax burden. It is an economic theory that productivity is much more enhanced with dense development since ideas move quickly when people are in close proximity. However, when jobs move to suburbs people follow them. This may reduce productivity in the city leading to social loss. In addition, critics charge that sprawl leads to regional imbalances, such as pulling jobs and people further away

from poor communities, increasing inequality. Sprawl also creates segregation of rich and poor or social isolation in general. The problem lays not the people who have moved to the suburbs but rather to the people who have been left behind. The low income groups are abandoned in the downtown because they cannot afford car based lifestyle. Role of transport technology can explain this social fragmentation. The much congested and deteriorated central towns end up being favorable places for crime and social unrest. In general, urban sprawl has the following negative effects. They are environmental cost, visual effects, personal effects and economic effects. Thus, urban expansion consequently results social, environmental losing of agricultural land and economic problems to the society.

2.2.2.1 Social Consequence of Urban Expansion

The urban expansion causes displacement, dislocation and segregation that result in social fabrics disorder people in the extended urban areas “live still partly rural and where many of the residents live in the country but are not socially and economically of it” (Carter, 1995:303). They usually do not participate in the planning and design of resettlement and dislocation options as well as the distribution of associated costs of benefits. Since social infrastructure is concentrated in, the center people in the extended area proximity to facilities. This involves long commute for market and other basic social needs. Low incomes households will continue to live in such sever social constraints in the periphery. Even urban rich or middle class incomers whose permits to commute perhaps many could be attracted to the liveliness and benefits of the facilities in the center. Thus, the community in the periphery could face problems of survival strategies, solidarity network and systems of power to which the social and economic activities are liked to their original location (Mejia 1999:183).

2.2.2.2 Environmental Consequence of Urban Expansion

In many of developing countries, urban expansion is at the expense of productive and fertile agricultural farmland and forest. Urban expansion is not accompanied by environmental protection system. Urban waste rely on open canals, open drains in the road side and holes in the ground as regular means of waste disposal particularly in expansion areas. This exposes the dwellers to sanitation related disease and air pollution. In addition to the farmland, environmental resources such as clean air and water, peace and quiet, access to countryside and recreational facilities are environmental values that the rural farming communities loose due to urban expansion periphery (Balchin.et al, 1995:189).

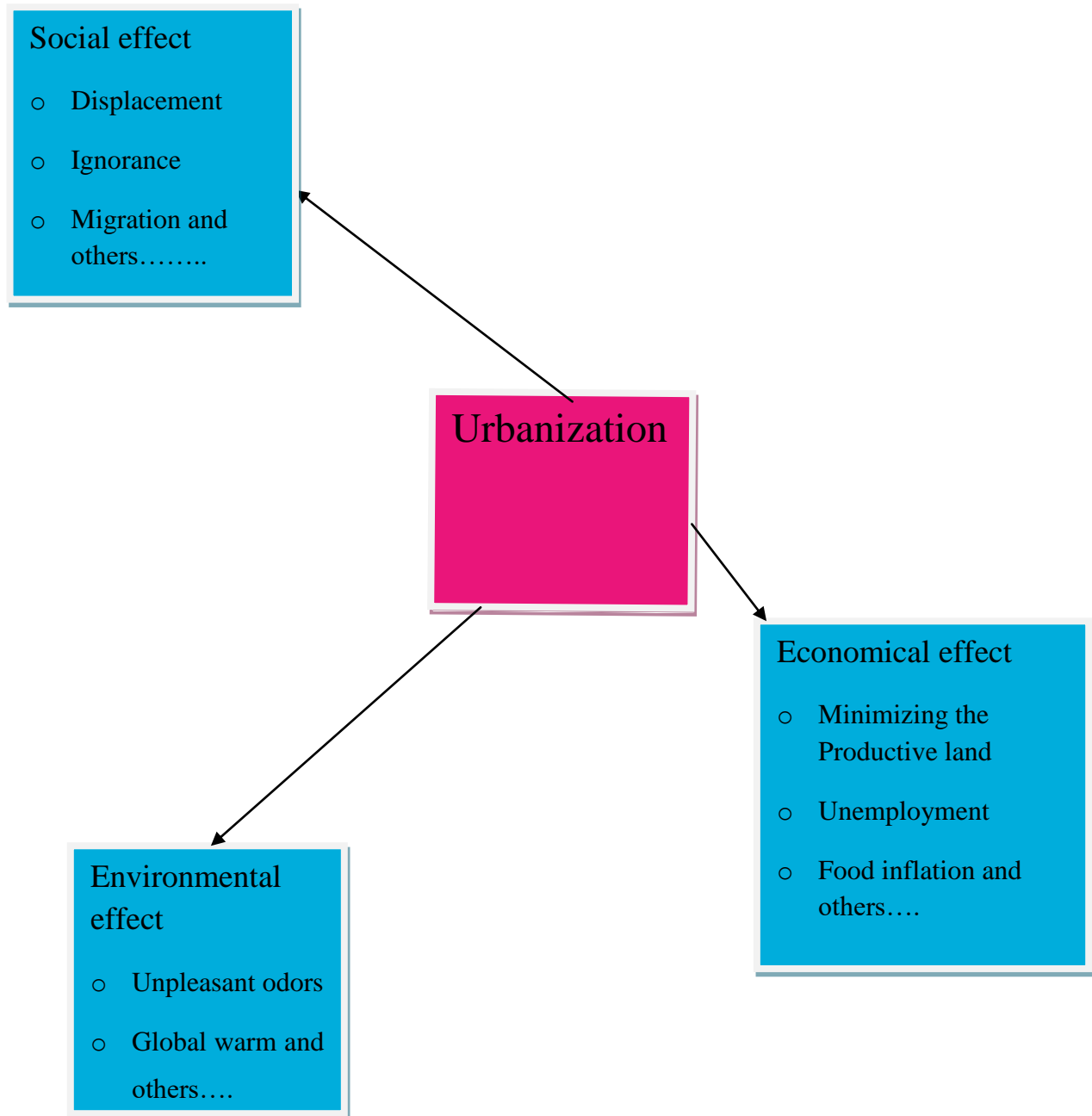
2.2.2.3 Economic Consequence of Urban Expansion

In developing countries, people are migrating to urban centers. From the center the poor move to periphery for urban sprawl and squatting. These areas need provision of infrastructure like road, power line, water pipes and drainage lines. This requires high development cost that draws on the financial capacity of the municipal government. The challenge is perhaps more intense to the dislocated and evicted farming community since they lose their means livelihood. In many cases the municipality cannot afforded to provide and people remain deficient of basic means of life. Because of this most of the resident was exposed relatively to high cost of living. There is also limited work opportunity in the area. The challenge is perhaps more instance to the dislocated and evicted farming community since they lose their means of livelihood (Abdissa, 2005).

2.2.2.4 Losing of Farmlands

The loss of farming land/agricultural land to urban sprawl means not only the loss of fresh local food sources but also the loss of habitat and species diversity since farms include plant and animal habitat in woodlots and hedgerows. The presence of farm on the rural landscape provides benefits such as green space, rural economic stability and preservation of the traditional rural lifestyle (<http://www.springer.com/978-3-642-05298-9>, April 2015 Saturday 8:30)

2.2.4. Conceptual Framework of the Study



Source: Ahlam Y. 2017. Urban expansion and its impact on the livelihood of peripheral farming communities:

CHAPTER THREE

METODOLOGY OF THE STUDY

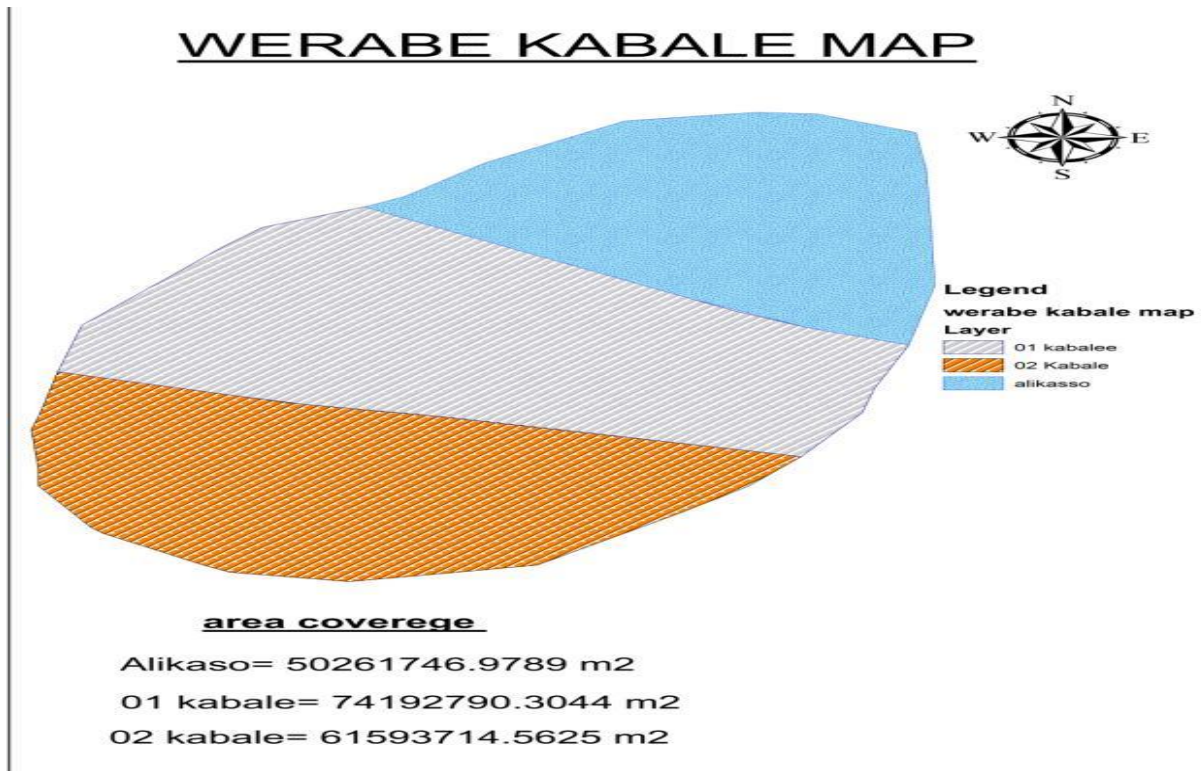
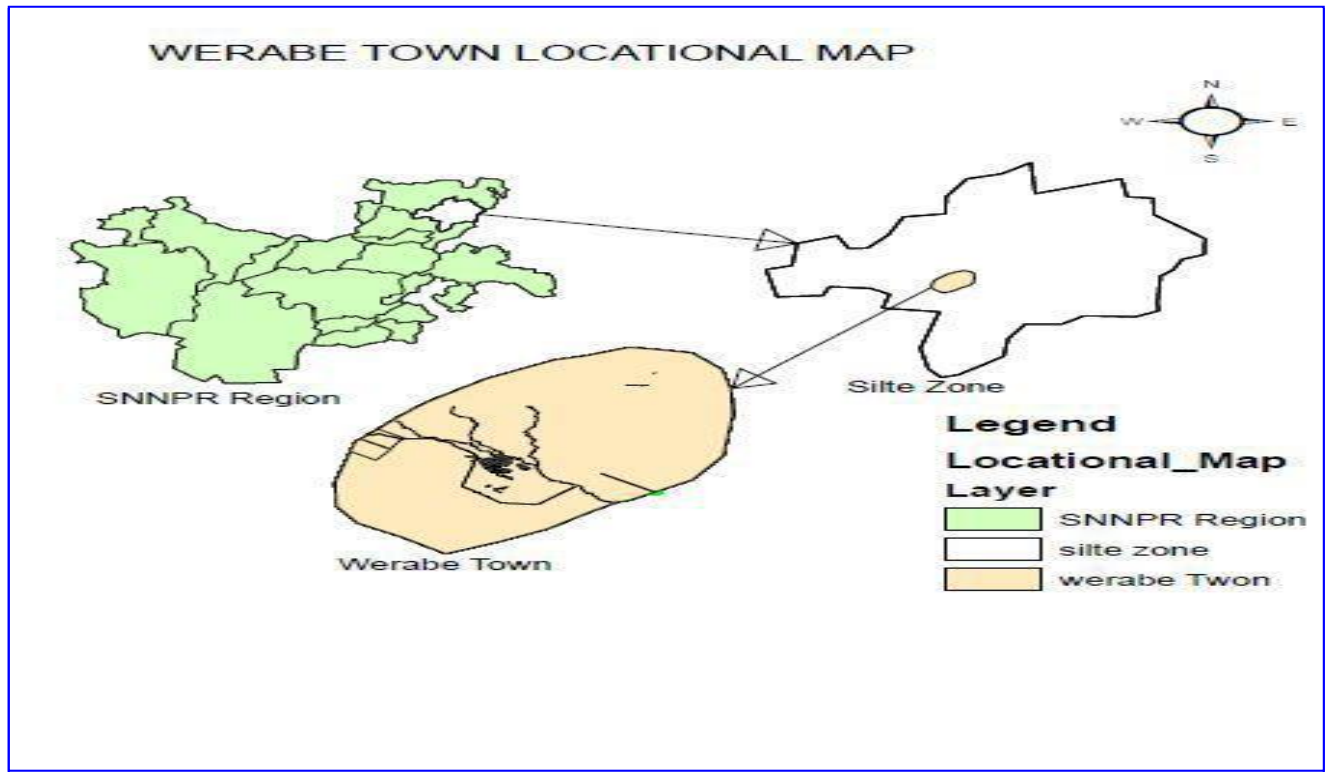
3.1 Description of the Study Area

This part presents the research methodology which encompasses the description of the study area, research design and methodology, research approach, sources of data, target population, sample size and sampling techniques, data collection instruments, procedures of data collection, method of data analysis, and ethical considerations

Werabe is the capital town of Siltie zone which is found that the Southern Ethiopia with the capital city of SNNPR regional state of Hawasa is 187 kilometer distance and 170 kilometer from Addis Ababa. It has 8 latitude and 38 longitudes and an elevation from 2080 to 2100 meters above mean sea level and the relative location of Siltie zone is from East Oremia region, west Hadia, north Gurage and south Alaba zone. Werabe town has 3 Keble and area of 15,000 hectare (Werabe town administration, public communication office, (February 2014).

The population of Werabe town is estimated to be totally 84,512 of which 41, 454 were females and 43,058 were males to show in 2000 Ethiopian calendar statistics. However, currently now estimated above 100,000 people live in Werabe town. This population of the town includes the population that dwells around the peri urban-rural Keble of the town that were incorporated to the administration of the town. As regards the population composition of the town, though the Siltie population is predominant other nations and nationalities also dwell in Werabe town. The population composition of the town at present is as follows 99.3percent Siltie and 0.7 percent is others. As regards the religions of the population of the town, 97 percent are followers of Muslims, 3% are others, like Orthodox, kale hiwote and others (Werabe town administration plan office, February 2014).

3.1.1 Location map of Werabe town



Source: Werabe town Municipal

3.2 Research Design

Concerning the research design, C.R.Kothari (2004) stated that the matter of better research design is associated with the purpose or objective of the research and with the nature of the problem to be studied. The researcher employed a descriptive research design, which enabled the researcher to keep track of the research activities and helped to ensure that the ultimate research objectives were achieved. As point out by Bryman,A and Bell,E (2003) the descriptive studies were only restricted to fact finding but may often result in the formulation of important principles of knowledge and solutions of significant problems. As a result, this study used descriptive research design so as to assess the impact of urbanization on farmers, the case of Werabe town.

3.3 Research Approach

In this study the researcher used a mixed approach which comprises both qualitative and quantitative approaches. Mixed approach is preferred to describe the nature of the problem under this study that is, impact of urbanization on farming households. Thus, the researcher conducted by using descriptive research methods to collect qualitative and quantitative /mixed/method of data. Qualitative technique helps to analyze primary data and to undertake in-depth study through exploring attitudes, behaviors and experiences by using such instruments as questionnaire, key informants, focus group discussion, document analysis while, quantitative research technique was used to analyze secondary data which was collected from different sectors that generates statistical and produces numeric data through survey instruments such as questionnaire. In addition to this, the researcher focus on desk review documents from Werabe town public affair office, Agriculture office, from municipality and the researcher used books and other media like internet. To this end, both primary and secondary data are gathered using both quantitative and qualitative data collection instrument

3.4 Sampling Technique and Sample Size

A sample is a smaller group of subject drawn from the population in which a given study was conducted for a purpose of drawing conclusions about the population targeted. For example, Kothari (2004) argued that the result from the sample can be used to make generalizations about the entire population as long as it is truly represented. The researcher used systematic simple random sampling techniques from the lists of former farmers but now they are living in urban

area and who are affected by urban expansion of all land from Werabe town municipality office and Keble administration to form sampling frame. Because this type of method is easy and simple way and also it used to avoid biasness. And acts as the main agent by giving all appropriate information about the urbanization and its impact on farmers and plays significant role to the success of the research objectives.

The formula for the sample was given in equation at the confidence interval of 95% with significance level of 5%

The Formula for sample size:
$$n = \frac{N}{1+N(e)^2}$$

Where:

n = Sample size to be studied

N= Population size

e = margin of error

Depending on above formula, the researcher selected 212 sample sizes from the targeted population of 450 people. From those 55 are females and 395 are males and their occupation was farming before they are evicted and now they are engaged in tread and daily labor.

The researcher used systematic simple random sampling method to select respondents for the questionnaire. Because it was proportional to their number in order to give equal chance for all samples size.

3.5 Data Type and Source

The study obtained information from both primary and secondary data. Primary data employs questionnaire, field observation, and interview. All this information collected or source from the municipality officials, other official administrations and Keble residents who were affected by urbanization. Secondary data type was written documents. These were sourced from library books, municipality documents internet sources to supplement of the primary data. Therefore, the main tools that, the researcher used in this study are questionnaire, interview, group discussion and field observations.

3.6 Data Collection Instruments

Four instruments were used in the process of gathering the necessary data for the study. These are questionnaire, unstructured interview, group discussion and document analysis.

3.6.1. Questionnaires

The first data collecting instrument to be employed in this study was the questionnaire. This questioner aims to identify and clarify the social, economic and environmental impact of urbanization on farmers in Werabe town and to recommend alternative solutions for concerning bodies.

As the researcher mentioned above in sampling techniques size and based on Kothari formula, from 450 targeted populations, 212 self-develop questionnaires were prepared and distributed for 212 residents (pre-farmers) in two (01 and 02) Kebles and used systematic simple random sample and select as information sources. Questionnaire was decided to be used in collecting the data because the numbers of respondents in these four groups were large. Secondly, open ended questions are included because it gives respondents a freedom to give their extended views on the issue. Finally, Close ended questions used for their easiness in tabulation, objectivity and suitability to keep respondents on the subjects of discussion. All above question type were prepared to respondents and to experts respectively for the matter of prepare data collection in the study area.

3.6.2. Interview

Interview was the second important data gathering instrument in this study. This data gathering instrument was selected with the belief that deeper information was obtained on issues critical to the study underway. It also used to cross-check the responses obtained through questionnaire and it let the interviewee to express her/his feeling freely and knowledge of people in a program in depth (Best and Kahn, 2003). In order to obtain deeper information related to the study area, a semi structure interview consisted with two groups of respondents: six sample municipality officials and six Keble residents were interviewed to reflect on some guiding questions related with the practices and challenges of urbanization in family livelihoods in the study area. These two groups of respondents were selected for interview in the ground that more information obtained from them due to their position in the municipal leadership and Keble residents daily engaged in the core activities. In addition, it was believed that they were very close to the day to day challenges exist in the town.

3.6.3. Focus Group Discussion (FGD)

Focus Group Discussion (FGD) sometimes it is preferable to collect information from groups of people rather than from a series of individuals. So the focus group discussion conducted with those who have sufficient knowledge about expansion of Werabe town and its impact on farmers. There were two groups that the researcher made the discussion with.

3.7 Procedures of Data Collection

First, the researcher visited the Werabe town education office and discussed the purpose of the study and showing the letter of cooperation from Wolkite University and asked the Werabe town Municipal office to write a letter to Keble administration office. Then the researcher visited the Keble administrator and residents and discussed the purpose of the research with administrators showing the letters from the University and the Town Municipal Office which later their copies distributed to each office. Then the researcher clarified the objective of the research, and asked whether the respondents are willing to the interview or not. After that the researcher used semi structured interview so as to let the interviewee to express her/his feeling freely, let the researcher used the ideas from other source (in contrast to the well structured one)and at the same time more convenient for analysis purpose than unstructured interview(Wragg,2002). The researcher also distributed the questionnaires to the respondents and office head after he selected them and give enough time to fill the questionnaires.

3.8 Data Analysis and Presentations

The researcher used both primary and secondary data. The researcher was more used/functional qualitative data than quantitative data. Because, which analyzed and summarized by using distributive statement interviews. The researcher was also used quantitative data in this research. Because to interpret conceptually using simple statically techniques. The most important issues were analyzing the general characteristics of sample respondents, changes income of communities before and after displacement, rules and regulations on expropriation and compensation of the effect of urban expansion on low-income communities' livelihood. Therefore, the researcher used new version of SPSS to support the analyzed data to be scientific and to avoid mistakes.

3.9 Ethical Considerations

As this study required the participation of human respondents, specifically professionals, certain ethical issues were addressed. The consideration of these ethical issues is necessary for the purpose of ensuring the privacy as well as the safety of the participants. Among the significant ethical issues that were considered in the research process include consent and confidentiality. In order to secure the consent of the selected participants, the researcher communicated all important details of the study, including its aim and purpose. By explaining these important details, the respondents were able to understand the importance of their role in the completion of the research. The respondents are also would advise that they would withdraw from the study even during the process. With this, the participants were not force to participate in the research. The confidentiality of the participants was also ensuring by not disclosing their names or personal information in the research. Only relevant details that helped in answered the research questions would be included.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Demographic Characteristics of the Respondents

In this section, the research provides the details of farmers, about the farmlands and their relationship with the urban centers, gender, marital status, family size, religion, age level, educational status, resident area and working conditions.

Besides other factors, which influence urban expansion on farmers' livelihood, current status and conditions are discussed and presented. The findings in this section are regard as the key variable in understanding the effect of urban expansion on farmers.

4.2.1. Gender Profiles of respondents

Below table (table 1) indicates that from the total number of 212 respondents 87.7% respondents were men and 12.3% of total respondents were women.

Table 1 Socioeconomic background of respondents

| No. | background of the respondents | | Frequency | Percent |
|------------|--------------------------------------|------------------------|------------------|----------------|
| 1 | Gender | Male | 186 | 87.7 |
| | | Female | 26 | 12.3 |
| | | Total | 212 | 100 |
| 2 | Marital status | Married | 186 | 87.7 |
| | | Unmarried | 8 | 3.8 |
| | | Divorce | 7 | 3.3 |
| | | Widower | 11 | 5.2 |
| | | Total | 212 | 100 |
| 3 | Family size | Have no children | 8 | 3.8 |
| | | From 1-5 | 77 | 36.32 |
| | | From 6-10 | 111 | 52.35 |
| | | Above 10 | 16 | 7.54 |
| | | Total | 212 | 100 |
| 4 | Educational status | Illiterates | 155 | 73.1 |
| | | Read & write | 27 | 12.7 |
| | | Grad 1-8 | 16 | 7.6 |
| | | Grad 9-12 | 6 | 2.8 |
| | | Above diploma | 8 | 3.8 |
| | | Total | 212 | 100 |
| 5 | Age of respondents | From 20-29 age | 8 | 3.8 |
| | | From 30-39 age | 49 | 23.1 |
| | | From 40-49 age | 58 | 27.3 |
| | | From 50-59 age | 57 | 26.9 |
| | | Above 59 age | 40 | 18.9 |
| | | Total | 212 | 100 |
| 6 | Occupation | Engaged in trade | 33 | 15.6 |
| | | Engaged in daily labor | 56 | 26.4 |
| | | They have no work | 123 | 58 |
| | | Total | 212 | 100 |
| 7 | Residential area | Live in urban | 212 | 100 |
| | | Live in rural | - | - |
| | | Total | 212 | 100 |

Source: Filed survey 2022

4.2.2. Marital status of respondents

According to survey data (in table 1 above) 87.6% of the respondents are married, 3.30% are divorced, 3.8% are single (not married), while the remaining 5.2% are widowed/widower. As the data above illustrates, majority of the respondents are married.

4.2.3 Household Size of Respondents

Family size seems an important factor in determining how urbanization affects farmers in degree of their family size. Accordingly, in the study are the data have shown different family size, which 36.32 percent of the respondents have between one to five family members while 52.35 percent of the respondents have 6-10 family members, 7.53 percent of the respondents reported that they have 11 and above family members . The rest 3.8 percent of respondent who have no child or they did not start a family.

This implies that most of the sample respondents have large family size. The family size coupled with low income may expose the respondents for burden and aggravate their socioeconomic problems.

4. 2.4 Respondent's Religion

All of the respondents follow Islamic religion, which means 100% of respondents are Muslim.

4.2.5 The educational status of respondents

All the respondents are born in rural area and they are adults. There is no more access to learning and the results shows almost majority of respondents or 155 respondents are illiterate and they cover 73.1%. From the respondents 27 are can read and write and they cover 12.7% and 7.6% of the respondents are learned grade 1-8 and also 3.8% are learned grade 9-12 and the rest 2.8% have diploma and above.

4. 2.6 Respondent's age

Based on above table (table 1) from the total number of 212 respondents 3.8% respondents were from age 20-29, 23.1% respondents were from age 30-39, 23.1% of respondents were from 40-49 and 26.9% of respondents were from age 50-59 and the rest 18.9% of respondents were above 59age.

Identifying the respondents by age helps for the researcher to understand the perception of respondents, and the age of respondents is one of the most important characteristics in understanding their views about the particular problems and also indicates level of maturity of individuals, in that sense age becomes more important to examine the problems.

4. 2.7 Respondent's Occupation

Based on above table (table 1) from the total number of 212 respondents 15.6% respondents were engaged in trade, 26.4% respondents were engaged in daily labor and the rest 58% of respondents were have no work.

4. 2.8 Respondent's Resident

According to survey all respondents are living in the urban territory and based on above table (table 1) from the total number of 212 respondents all of them were levied in urban area.

4.3 The trend of urbanization

4.3.1 The growth rate of the Werabe town

According to respondents the speed of the expansion of Werabe town is in fast rate because based on below table (table 2) 94% of the respondents answered that, the rate of the expansion of the town is fast. Only 4.6% and 1.4% of the respondents says medium and slow respectively.

In addition to the above survey, as Werabe town administration public communication office (2021), annual report, the town is growing rapidly especially in the industry and service sector. For example in the industry sector there are above 20 flour and other different factories, industrial sites and increasing the number of business centers. And also in the service sector there are around 15 and above hotels, lodges and vocational parks in the town.

The other indicator of the growth of the town is the increasing of the number of population those live in the town. For instance, the population of werabe town is increase from 20,000 to 84,512 and increase to above 100,000 in 1994, 2000 and 2009Ec respectively (Werabe town administration plan office, February 2014). As the population of the town is rapidly increasing from time to time, various jobs are being created and this has played a major role in the development of the town.

Table 2 the growth rate of Werabe town

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| In fast rat | 199 | 94 | 94 | |
| In medium rat | 10 | 4.6 | 4.6 | |
| In slow rat | 3 | 1.4 | 1.4 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

On the other hand, since the city was established until 2003Gc, this change has not been seen, but since the city become the capital of the zone, it is showing a remarkable change in terms of development. Especially at the moment, the construction of various infrastructure and houses, as well as the construction of various institutions in the city, has achieved better results and get reward in Ethiopian cites forum (Werabe town administration public communication office (2021), annual report, 4-24). Therefore, based on the above survey and government report, the speed of the expansion of Werabe town is going in fast rate.

4.3.2 Physical infrastructure of study area

According to below table (table 3) the fulfillment of infrastructures in this town is very slow because 75.8% of the respondents are argued and the rest 8.3% says better.

Table 3 Physical infrastructure of study area

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Better | 21 | 8.3 | 8.3 | |
| Very slow | 191 | 75.8 | 75.8 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

In line to this, the more visible and pronounced problems in the peri urban settings of most cities of Africa have been manifold. At the heart of the peri urban problem is tenure insecurity, poor infrastructure and service, acute shortage of housing, haphazard and unregulated land development giving rise to complex organic structures in defiance of spatial planning theories, illegal and informal land transactions rapid land tenure transformation generating fears about imminent peri urban land crises, proliferation of informal settlements environmental degradation due to pollution and the loss agricultural land associated with food insecurity. These are the common threats in most peri urban areas in the third world countries. As explained above problems of peri urban areas are manifold. However, for the purpose of this study the concentrations are on land tenure transformation and its impact on the surrounding of peri urban livelihood (Achamyeleh, 2008).

According to the government report (Werabe town administration public communication office report 2021), Werabe town infrastructure like electricity, health facility, education facility, road and water supply are very slow and in case of education also there is only one Pole- technique collage, three high schools and six primary schools in the city and in terms of health also, has one health centers and two health stations, so it is low coverage in terms of the number of population.

Based on above source and majority of respondent's agreement, physical infrastructure is very slow and not fulfill in developing towns in Ethiopia and in Werabe town specifically.

4.4 Urbanization and its social impact on farmers

4.4.1 Feeling of households by joining their new neighborhood

Based on below table (table 4) from the total respondents 90.09% are answered No (not happy) because of lifting their old neighborhood and moved to a new neighborhood. The rest 9.91% of respondents answered Yes (they are happy by joining your new neighborhood because they live in beater life now.

Table 4 Feeling of households by joining their new neighborhood

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| No | 191 | 90.09 | 90.09.8 | |
| Yes | 21 | 9.91 | 9.91 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

With regard to this, when households left their old social networking site like ider, iqube, mahber and moved to a new address, they faced to disposal. The social cohesiveness, cooperation, celebrating cultural holidays, wedding and any other social life are minimized. Everything becomes formal. As many of the respondents said that in the previous time if one person faces any types of difficulty, his or her relatives, intimate friends, villagers and other communities, would assist him or her. However, in the urban life such kinds of cooperation are very absent. Every individual can solve his or her challenges by his or her effort .this is very unaffordable by them. They faced unusual life style and started adapting the life style of others. The urban expansion causes displacement, dislocation and segregation that result in social fabrics disorder people in the extended urban areas “live still partly rural and where many of the residents live in the country but are not socially and economically of it” (Carter, 1995:303). They usually do not participate in the planning and design of resettlement and dislocation options as well as the distribution of associated costs of benefits. Since social infrastructure is concentrated in, the center people in the extended area proximity to facilities. This involves long commute for market and other basic social needs. Low incomes households will continue to live in such sever social constraints in the periphery. Even urban rich or middle class incomers whose permits to commute perhaps many could be attracted to the liveliness and benefits of the facilities in the center. Thus, the community in the periphery could face problems of survival strategies, solidarity network and systems of power to which the social and economic activities are liked to their original location (Mejia 1999:183).

From the view of respondents and previous literature one can reveal that, households faced difficult and obstacle life in their new reallocation place and they want to live their first life and complain about their present life.

4.4.2 Accessibility of social services in study area

Before showing the accessibility of social services like education, health facility and electric facility in Werabe town, it is better to look standards of social services in Ethiopia.

Table 5: Ethiopian MOE standard on student per classroom and school and radius of catchments area

| School level | Grade level | Standards | | | |
|---------------------------------|-------------|--------------------|----------------------|-----------------------|---------------------------|
| | | Student per school | Classroom per school | Student per classroom | Radius of catchments area |
| Nursery and kindergarten | 0 | 240 | 6 | 40 | 400m |
| Primary education | 1-4 | 200 | 4 | 50 | 2km |
| | 5-8 | 160 | 4 | 50 | |
| | 1-8 | 720 | 16 | 45 | |
| 1440 | | 32 | 45 | | |
| Secondary education | 9-12 | 480 | 12 | 40 | 3-5km |
| | | 640 | 16 | 40 | |
| | | 800 | 20 | 40 | |

Source: - MOE (2001)

Table 6: Health Facility to Population Ratio

| Facilities | Number of health facilities in Werabe town (2013) | Standard of health center with population Set by MOH | The case of Werabe town population | Space Requirement Set by MOH | The case of Werabe town |
|----------------|---|--|------------------------------------|------------------------------|------------------------------|
| Hospitals | 1 | 1:250,000 | 1:100,000 | 30,000 m ² | 1:150 million m ² |
| Health Centers | 1 | 1:25,000 | 1:100,000 | 2000-5000 m ² | 1:150 million m ² |
| Health Posts | 2 | 1:5,000 | 1:50,000 | 3000-5000 m ² | 1:75 million m ² |

Source: - MOH 2000 report and Werabe town administration plan office report (2021)

Table 7: Werabe town school, class, students and teachers number comparatively

| No | School level | Number of school | Number of class | Number of students | Number of teachers | Radius of catchment area |
|----|-------------------------------|------------------|-----------------|--------------------|--------------------|--------------------------|
| 1 | Nursery and kindergarten | 9 | 766 | 1095 | 48 | 400m |
| 2 | Primary education (1-4) | 2 | 148 | 597 | 21 | 5km |
| 3 | Primary education (1-8) | 6 | 136 | 14159 | 306 | 5km |
| 4 | Secondary education (9-12) | 2 | 28 | 2001 | 86 | 7km |
| 5 | Specialized high school(9-12) | 1 | 22 | 550 | 32 | 7km |
| | Total | 20 | 1,100 | 18,402 | 493 | |

Source: - Werabe town plan office report (2021)

According to the standard set by the MOH, one Health center is supposed to give service to 25,000 patients; however the actual coverage of Werabe town is 1:100,000. So, the crowdedness of patients affected the quality of the delivery services. In education also there is no proportionality among student with class and students with teachers as indicated in the above tables.

Table 8 Accessibility of social services

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Accessible | 15 | 7.08 | 7.08 | |
| Not accessible | 197 | 92.92 | 92.92 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

Based on above table (table 8) 92.92% of respondents say Werabe town social services are not accessible and the rest 7.08% say accessible.

Therefore, from the above source and survey one can conclude that, social services like health, educational, transport facility, road and infrastructure of electricity in study area is not accessible.

4.4.3 Family relationship and life

According to table 9 below 98.1% of respondents respond like the family relationship and life after they are evicted is not well at all. The rest 1.9% are response that moderate and they have good family relationship and life in their new address. So, as the majority of respondents argued that, the family relationship and life is in problem and they expose/faced to different challenges.

Table 9 Family relationship and life

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------|-----------|---------|---------------|--------------------|
| Well | - | - | - | |
| Moderate | 4 | 1.9 | 1.9 | |
| Not well at all | 208 | 98.1 | 98.1 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

4.4.4 Households and their neighborhood ties

According to below table (table 10) from the total respondents 90.09% are said neighborhoods are in difficult life and live in bad situation because of lifting there old neighborhood and moved to a new neighborhood. The rest 9.91% of respondents answered medium or they live in beater life. Similarly when they left their old social networking site like ider, iqube, mahber and moved to a new address, the majority of respondents faced bad situation and disposal.

Therefore based on below survey, the social cohesiveness, cooperation, celebrating cultural holidays, weeding and any other social life are minimized. Everything becomes formal. As many of the respondents said that in the previous time if one person faces any types of difficulty, his or her relatives, intimate friends, villagers and other communities, would assist him or her. However, in the urban life such kinds of cooperation are very absent. Every individual can solve

his or her challenges by his or her effort .this is very unaffordable by them. They faced unusual life style and started adapting the life style of others.

Table 10 Respondents and their neighborhood ties

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid Medium | 21 | 9.9 | 9.9 | |
| In bad situation | 191 | 90.1 | 90.1 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

4.5 Urbanization and its economic effect on farmers

4.5.1 The main challenges of households

The day to day challenge of households is unemployment, migration, and other problems because the majority respondents argued that, the family situation is in problem and they expose/faced to different challenges. According to table 11 below 82.5% of respondents faced unemployment, 6.6% are exposing to migration and the rest 10.9% are exposed to other problems like high price of food decreasing arable land and so on).

Table 11 The main challenges of households

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Migration | 14 | 6.6 | 6.6 | |
| Unemployment | 175 | 82.5 | 82.5 | |
| Other problems | 23 | 10.9 | 10.9 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

In line to this, urbanization has both positive and negative impacts on rural livelihoods. On the one hand, well-planned and managed urban growth and development can serve as a positive factor for rural livelihoods (Alaci, 2010) such as a high demand on agricultural products,

access to developed extension services, educational and medicinal facilities and opportunities for non-farm employment (Tacoli and Satterthwaite, 2003). On the other, unplanned urbanization negatively affects rural livelihoods (UN-HABITAT, 2010; Mandere et al., 2010; Gossop, 2011) as a result of changing land use and cropping patterns, decreasing arable land, increasing unemployment in farming sector, causing high price of food commodities, poor quality and scarcity of water, rural–urban migration and increasing competition between agricultural and residential uses of natural resources (Bah et al., 2003). Urbanization causes the spread of built-up areas (McGee, 2011; Simon et al., 2004), and it results in increasing poverty and environmental degradation in rural areas (Marshall et al., 2009). A study reports that about 34 km² (17.8%) forest lands of Mumbai metropolitan rural areas have been converted into built-up lands (Kumar et al., 2012). Restructuring of industries and zoning of land use have promoted the economic growth in Asian megacities on one hand and have brought severe ecological, economic and social inequalities between regions and classes on the other (Fujii, 2004).

According to the above survey data and reference, households face many challenges, but unemployment is the main problem/challenge of the respondents.

According to the reflection of interviewees, the Werabe town is expanding along the main asphalt and following larger facilities and the main cause of urban expansion in the study area is housing problem and service problem as well as to promote industrial and modern agriculture production. According to key respondents, the cause of the rapid expansion to the periphery is lack of appropriate planning intervention, limited range of functions of the city and lack of appropriate policy strategy besides natural demographic increase and migration from less remote areas. This actual aggravates the horizontal expansion of Werabe town is followed by loss of communities agricultural land deforestation, loss of environmental protection, loss of resource. The cumulative effect of population growth and the policy of the government created suitable ground for development, migration from rural to urban. According to the information from municipal office, the expansion Werabe town is the result of opening big institutions, rural-urban migration and migration from other small towns. Migrants in the study area flow from their origin towards this town because of many reasons. First, when farmers cannot afford themselves and their family members by only cultivating their plot of land, they preferred to migrate and live

in urban centers as laborers. Secondly, many farmers preferred to migrate and live in the urban centers as their economy increase for the sake of better living standards. On the other hand, to some extent investments plays the role for the expansion of Werabe town. Generally, from the municipality officer's information the flow of investment in the study area is very high. This is the result of current government policy of Ethiopia. This reveals that the urban expansion is ever going phenomenon. As the number of population, the flow of migrants and investment increases, its urban expansion is also increasing. However, both the office of agriculture and municipal bureau asserts that urban expansion is very important for farmers, if they are sufficiently compensated by the concerned body. If they get compensation, they will change their life by using more advanced agricultural technology. They can produce surplus product in a piece of land or they will engage in trading activities. Generally, the compensation is expected to transform the farmer's life from low living standard to better living standards. However, in the context of Werabe town, it is not appreciable, because the municipal office has no potential for giving sufficient compensation. This reveals that almost all of the households are forced to leave their farmland without enough compensation. As many of the respondents reported that, they dislike the expansion of urban centers. This is the result of low compensation and absence of awareness creation about the urban centers.

Sixteen discussants in two focus groups discussion described that, urbanization affects farmers and farm land and Majority of the participants believed that urban expansion does not have significance importance for their life, rather it brings many problems, such as, it affects their income by taking their farmland which they call it permanent property, grazing lands, trees (specially eucalyptus and other trees). In addition, it affects the production amount. It reduces arable and grazing land, which indirectly affects animal resources. This and other factors make the majorities of the respondents to have negative attitude for urban expansion.

Some of the respondent believed that urban expansion brought various important benefits for their life improvements. They claimed that urban expansion helps them to have additional source of income by having small shops, it creates access to market, access to light, health care, and it creates access to any other services. Households also believed that urban expansion plays the major benefits by making them for urban dwellers.

According to the group discussion, even if urbanization have many important side, but households face many challenges, such as loose of agricultural land unemployment, migration, food inflation and other problems. So, based on this unemployment is the main problem/challenge of the respondents.

4.5.2 Households land and other property before and after expropriation.

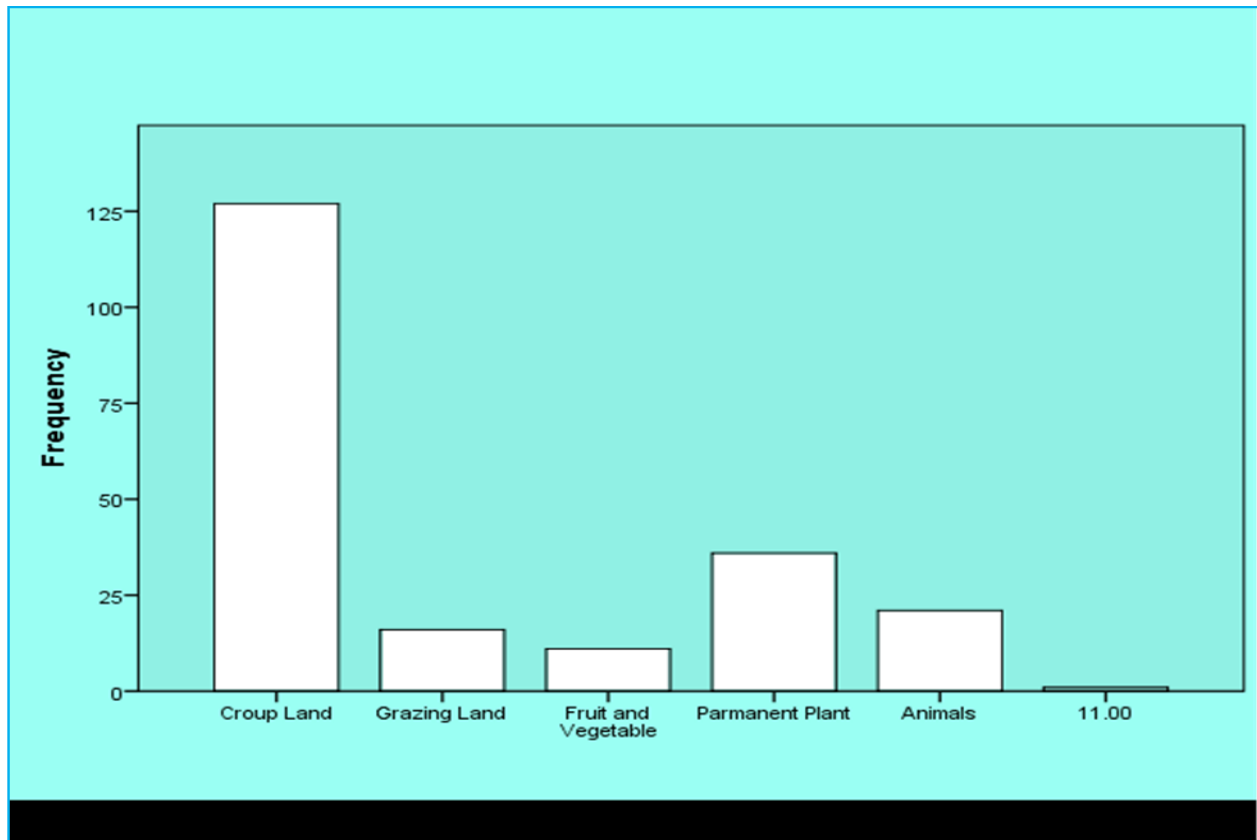
In order to understand the effect of urban expansion on agricultural land and other property as well as on individual farmlands and, it is very essential to assess the status of the households land before urban expansion. As shown from table 9 from the respondents' 59.90% of the households lost their cropland, 7.54% of them lost grazing land, 9.90% of the households lost the animals because losing their grazing land. While the remaining 5.2% of the respondents lost vegetable and fruit land and 17.46% of the respondents lost eucalyptus and other trees. Table 12 below indicates the status of households land before the urban expansion.

Table 12 household's land and property before and after expropriation.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Cropland | 127 | 59.9 | 59.9 | |
| Grazing land | 16 | 7.5 | 7.5 | |
| Vegetable& fruits | 11 | 5.2 | 5.2 | |
| EUCALYPTUS& other trees | 37 | 17.5 | 17.5 | |
| Animals | 21 | 9.9 | 9.9 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source: -Questionnaire survey (May 2022)

4.5.1 Chart display on household's land and property before and after expropriation.



Source: -Questionnaire survey (May 2022)

This reveals that, the dominant land, which was taken by the urban expansion, is cropland, which accounts 59.9% and 17.46% of the land, was used to plant eucalyptus and other trees. From this we can conclude that the urban expansion affect the income of household of the farming sector of the area general.

As argued in many studies (Azadi Et Al., 2012; Rudi Et Al., 2012; Dadi Et Al., 2016; Woldegerima Et Al., 2017), unsustainable agricultural land conversion in the urban fringes has had negative implications by reducing farmlands and crop yields which threaten the livelihoods of local people. For instance, a study done by Dadi Et Al. (2016), on the major drivers of urban sprawl and their impacts on land use conversion in the peri-urban kebeles of Dukem town, central Ethiopia, showed the total cultivated land available to grow wheat had declined from 230.82 km² in 2005 to 104.82 km² (55%) in 2011, whereas teff flour crop production shrank from 134.77 km² to 93.67 km² (30.4%) over the same period. The overall yield harvested for both crop types decreased drastically between the 2005 and 2011 harvesting

seasons. For example, the combined yield (teff and wheat) was reduced from 1280.3 tons in 2005 to 867.7 tons in 2011. This clearly shows the rapid decline of croplands over time and the growing vulnerability of rural households for whom agriculture remains the only source of household income.

Based on the above discussion, households had sufficient land, animals and other properties before reallocation and then, they lose all previous land and property. Because of this most of the resident was exposed relatively to high cost of living. There is also limited work opportunity in the area. The challenge is perhaps more instance to the dislocated and evicted farming community since they lose their means of livelihood.

4.5.3 Taking of compensation for expropriation

Based on below table (table 13) all households gain compensation from Werabe municipal for substitution of their farming land and other properties.

Table 13 Taking compensation for expropriation

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Yes | 212 | 100 | 100 | |
| No | - | - | | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

4.5.4 Satisfaction level of households on compensation

According to below table (table 14) the compensation that is given for their farmland is not sufficient and 96.7% of them are not happy at all and the rest 3.3% moderate/medium. Therefore, households claimed that because of urban expansion they faced various problems. Among the most serious problems; reduction of income, environmental pollution and unusual social relationship are some examples. Majority of the respondents asserts that their income is insufficient to support their family members. Their justification for this is that urban expansion resulted in loss of agricultural land, grazing land and forestland (eucalyptus and other different trees). At the time of urban expansion, they lost all these properties and they are not sufficient

compensation. As compared to the properties what they had before the compensation seems too low. As reported by the households there are no sufficient compensation to their farmland and other properties. The municipal gives them little amount of money.

Table 14 Satisfaction level on compensation

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Moderate | 7 | 3.3 | 3.3 | |
| Not happy at all | 205 | 96.7 | 96.7 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

As some study, the challenge is perhaps more intense to the dislocated and evicted farming community since they lose their means livelihood. In many cases the municipality cannot afforded to provide and people remain deficient of basic means of life. Because of this most of the resident was exposed relatively to high cost of living. There is also limited work opportunity in the area. The challenge is perhaps more instance to the dislocated and evicted farming community since they lose their means of livelihood (Abdissa, 2005).

Therefore, households are not volunteers to leave their farmlands, because they consider the farm as their basic property. This implies that even if they do not need to leave the farmland the government land holding system enforce them to do that the household have use right on a certain plot of land but they do not have the right to sell and change in this sense the households might not feel the ownership of the land. If they fell such as they will not give care for their farmland. So, all most all households are not happy at all within their compensation.

4.5.5 Utilization of compensation by households

As table, 15 below shows 44.8 percent of the respondents use their compensation for daily consumption and the money uses for one or two years after that the money left and the households exposed to scarcity of food. 40.1 percent of the respondents used their compensation for building their home. And the rest 15.1 percent of use the compensation for buying driven vehicle and work on that. This implies that urban expansion on the farmer places tremendous

effects. Even if the compensation is too low, respondents not effectively use their compensation. It is lack of property management or the concerned body might not help them to use the compensation in proper manner. Majority of the respondents use their compensation to fulfill their daily basic needs and they exposed to the scarcity of food and joblessness.

Table 15 Utilization of compensation by households

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Daily consumption | 95 | 44.8 | 44.8 | |
| Buying vehicle | 32 | 15.1 | 15.1 | |
| Building their home | 85 | 40.1 | 40.1 | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

4.6 Impacts of Urbanization on environmental pollution

4.6.1 Significance of urbanization for environmental instability

As many households believed that, many environmental problems are happened due to the expansion of urban centers. According to below table (table 16) all most all respondents reflect that urban expansion play significant role for the environmental pollution. Most of grazing lands are now replaced by construction. In addition, as a result of construction there are now different unpleasant odors and noise, unwanted voices that emanates from music shops, vehicle has and machines. This affects their surroundings security condition.

Table 16 Significance of urbanization for environmental instability

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Yes | 212 | 100 | 100 | |
| No | - | - | - | |
| Total | 212 | 100.0 | 100.0 | 100.0 |

Source:-Questionnaire survey (May 2022)

In line to this, river and spring water are important source of domestic and irrigation water sources to peri urban communities. However, inappropriate solid and liquid waste disposal is polluting urban and peri-urban water, soil, and the air. Based on the discussions made with peri-urban communities in the study area, due to such poor waste disposals, some peri-urban water sources become out of use. Human and livestock health problems were also reported. Gebre and Rooijen (2009) reached similar conclusions. They undertook water quality test in Great and Little *Akaki* Rivers, which is important source of irrigation agriculture in the city. They found the rivers were very/badly polluted. This shows peri-urban communities and their livestock are highly vulnerability to various health problems. As a result, some households reported they either destock or cease livestock production.

According to above table (table 16), all participants response that, urban expansion affects the whole environment. They argued that the environment is changed from the previous statuses because the air would expose to carbon eminence and many of the respondents believed that living in urban centers have great negative impact to their life.

Urban waste rely on open canals, open drains in the road side and holes in the ground as regular means of waste disposal particularly in expansion areas. This exposes the dwellers to sanitation related disease and air pollution. In addition to the farmland, environmental resources such as clean air and water, peace and quiet, access to countryside and recreational facilities are environmental values that the rural farming communities loose due to urban expansion periphery (Balchin.et al, 1995:189).

From the above discussion one can understand that, urbanization is the main cause to environmental instability by polluting air, water and soil and create global warm through carbon eminence.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Currently, Ethiopia has been experiencing a rapid urbanization process since the implementation of an economic development and privatization policy to stimulate national economic growth (ADAM, 2016).

The urban growth in Ethiopia, and likely in many African cities, is generally characterized by a lack of adequate planning or a lack of the implementation of plans, resulting in cities that often have a shortage of the necessary infrastructure and services. But, after some years urban centers in Ethiopia are highly expanding. This is the result of the current police that have emphases for the development of urban areas. However, this extensive expansion of urban centers results tremendous effects on the farming lands and reduces the size of fertile land. The effect of urban expansion is not only manifested on the farmers and agricultural sector. In addition, it affects the atmospheric condition of the area and the social life of the study area (HAREGEWEYNA ET AL, 2012).

Trends of urban expansion in the study area show dramatic changes. The town expands in alarming rate due to various factors such as, rural-urban migration, expansion of industrial area, migration from other woreda towns, expanding new residential area and investments.

Moreover, urban expansion has brought many socio economical and environmental problems, even if cultural and political problems on the farmlands and farmers. Urban expansion affects the households' social relationship. It brings environmental pollution, sound pollution, air pollution, water pollution, and other problems. Many households faced individualistic type of life which the most unaffordable to them. In Ethiopia 80 percent of the population is engaged in agricultural sector. In the impacts of urban expansion continues, as such the fate of farmers will be endanger especially farmers, which are found in the study area.

Even though, the urban expansion has various positive contributions for the development of one country, particularly in the study area, the negative influences over shadow the positive insights. Because the farmers are not managed their life in a proper way to sustain their economic status. The individual farmers faced various burden as a result of urban expansion.

Thus from the acquired results of the study, urban expansion reduces the size of arable land of the country and immediately affects the individual peasants. Moreover, it affects the gross domestic production of the country at the national level not only in the study area.

Finally, the major findings of the study indicate that rural-urban migration, absence of land information system, population growth, housing demand and infrastructure improvements were the major cause of urban expansion and identified social, economic problems of farmers and environmental pollution in the study area.

5.2 Recommendation

The government and/or any concerned sectors should give sufficient budget for the urban expansion. If towns have enough budgets, they will pay enough compensation for farmers in case of land expropriations at the time of urban expansion. In other words if the owner of the farmland sufficiently compensated the urban expansion may create better living standards.

The concerned body should be creating awareness farmers regarding the expansion of urban areas. Before the expansion of urban areas, the farmers should get preliminary information or how the urban is expanding the importance of urban area for their life and other things must be clearly explained for local community before the practical implementation of the town. This awareness creation may avoid the negative perception of farmers for urban expansion.

The government and /or any concerned body should be design policies that aimed to transform or development the rural economy and there reduced rural urban migration. Since the rural-urban migration is the major factors for population growth and urban expansion it is very important to formulate such type of polices to combat the impacts of urban growth on the peripheral areas of the town.

The municipality office should be assessing the farmers' income performance after they have lost their farmlands. This will help police makers to avoid the wrong action

To protect unwise horizontal expansion of towns, the houses that are built either for residential or any other purpose should be initiate vertical based on the stability of the land. This is very important to save the farmland to be consumed by urban expansion.

In order to curb the severity of urban expansion on farming land, the residential houses and any other industrial areas/zones should have been built on non-fertile lands. Because land is created once upon a time and no means is the land expands as much as possible, the urban centers should expand on non-arable lands. This may help to reduce the effects of urban expansion on arable land. Conducting scientific research and need assessment on the farmers' attitude towards urban areas. Based on the results of the study the concerned body should make persuasions and build positive images for farmers about urban areas. This may avoid the negative perception of farmers' attitude towards urban area.

Before the practical implementation of social services cost benefit, analysis is very essential. How the urban expansion affects the community, what are the advantages of urban expansion, and other things kept in to consideration. Therefore, consultation with the local community is very important. This may help the smooth functioning of the urban expansion.

References

- Abdissa, (2005). *Urban Expansion and the Livelihood of the Peri-Urban Agricultural Community* :(Master’s Thesis).Institution of regional and local Development. Addis Ababa University.
- Adam A.G. 2014. Land tenure in the changing peri-urban areas of Ethiopia: The case of Bahir Dar city. *International Journal of Urban and Regional Research*, 38, 6: 1970–1984.
- Adam A.G. 2016. Urbanization and the struggle for land in the peri-urban areas of Ethiopia. *Paper presented at the Annual Bank Conference on Africa*.
- Achamyeleh Gashu (2008). *Physical Planning Module*: Institute of Land Administration, Bahir Dar University.
- Achamyeleh Gashu (2008). *Peri Urban Land Tenure Transformation and its Impact on Agricultural Livelihood*: KTH Real estate and construction management, Stockholm.
- Ahlam Y. 2017. Urban expansion and its impact on the livelihood of peripheral farming communities: The case of Kutaber town, Amhara region, Ethiopia (MSc. Thesis), Addis Ababa University, Addis Ababa.
- Alaci, Davidson Sunday Ashemi. 2010. “Regulating Urbanization in Sub-Saharan Africa through Cluster Settlements: Lessons for Urban Mangers in Ethiopia.” *Theoretical & Empirical Researches in Urban Management*, 5(14): 20–34.
- Agegnehu S.K., Fuchs H., Navratil G., Stokowski P., Vuolo F., Mansberger R. 2016. Spatial urban expansion and land tenure security in Ethiopia: Case studies from Bahir Dar and Debre
- Arthur, Getis (2000). *Introduction to Geography 7th Ed*: New York st. Louis.
- Markos peri-urban areas. *Society & Natural Resource*, 29, 3: 311–328
- Azadi H., Van Acker V., Zarafshani K., Witlox F. 2012. Food systems: New-Ruralism versus New-Urbanism. *Journal of the Science of Food and Agriculture*, 92, 11: 2224–2226.
- Bah, Mahmoud, Salmana Cissé, Bitrina Diyamett, Gouro Diallo, Fred Lerise, David Okali, Enoch Okpara, Janice Olawoye, and Cecilia Tacoli. 2003. “Changing Rural-Urban Linkages in Mali Nigeria and Tanzania.” *Environment & Urbanization*, 15(1): 1–24.
- Balchin, P, N, Bull, G, H. and kieve, J, L. (1995). *Urban Land Economics and Public policy (5th edition)*: London; Machmillanpress.LTD.
- Balchin, P, N, Isaac. D. And Chen, J. (2000). *Urban Economics: A Global Perspective*, Great Britain Wales. Palgrave.

- Belay E. 2014. Impact of urban expansion on the agricultural land uses a remote sensing and GIS Approach: A Case of Gondar City, Ethiopia. *International Journal of Innovative Research and Development*, 3, 6: 129–133.
- Bekele F. 2010. The impact of horizontal urban expansion on sub-urban agricultural community livelihood: The case of Tabor sub-city, Hawassa city, SNNPRS, Ethiopia (Doctoral dissertation, MA Thesis unpublished)
- Bryman, A. and Bell, E. (2003). *Business Research Method*, Oxford University press.
- Cernea, M .M, (1995).*Urban Settlements and Forced Population Relocation:* in Mathur H. M and Cernea m. (eds). *Development Displacement and Resettlement focus: on Asian experience*, Newdelhi, vikas publishing house PVLTD.
- Clark, D. (1998).*Interdependent Urbanization in an Urban World: A Historical overview.* The Geographical Journal
- C.R. Kothari, (2004). A book on Research methodology, methods and Techniques, (Second Edition), Publisher: New Age International (P) Ltd.
- Dadi D., Azadi H., Senbeta F., Abebe K., Taheri F., Stellmacher T. 2016. Urban sprawl and its impacts on land use change in Central Ethiopia. *Urban Forestry & Urban Greening*, 16: 132–141
- Dorosh, P. and Thurlow, J. (2014). “Can Cities or Towns Drive African Development? Economy Wide analysis for Ethiopia and Uganda”. *World Development*, 63: 113-123.
- Elhadary, Y.A.E., Samat, N., 2012. “Political economy and urban poverty in the developing countries: Lessons learned from Sudan and Malaysia”. *Journal of Geography and Geology*, 4(1): 212-223.
- Fenta A.A., Yasuda H., Haregeweyn N., Belay A.S., Hadush Z., Gebremedhin M.A., Mekonnen G. 2017. The dynamics of urban expansion and land use/land cover changes using remote sensing and spatial metrics: the case of Mekelle City of northern Ethiopia. *International Journal of Remote Sensing*, 38, 14: 4107–4129.
- Fujii, Toshinobu. 2004. “Formation of Multi-habitat toward a Sustainable City.” Lecture presented at the 3rd International Symposium on Toward a Sustainable City, Toyo University, Tokyo
- Friedman, J. (1996). Two Concepts of Urbanization: A Comment in *Urban Affairs Quarterly*, Vol.1. June

- Gebre, G. and D. Van Rooijen, 2009. Urban water pollution and irrigated vegetable farming in Addis Abeba. Paper presented for 34th WEDC International Conference, Addis Abeba, Ethiopia
- Gollin, D., Jedwab, R. and Vollrath, D. (2016). “Urbanization with and without Industrialization”. *Journal of Economic Growth*, 21(1): 35-70.
- Haregeweyn N., 2012. The dynamics of urban expansion and its impacts on land use/land cover change and small-scale farmers living near the urban fringe: A case study of Bahir Dar, Ethiopia. *Landscape and urban planning*, 106, 2: 149–157.
- Health policy Education statistics annual abstract august 2000, Addis Abeba, Ethiopia
- Henderson, J.V. (2010). “Cities and Development”. *Journal of Regional Science*, 50(1): 515-540.
- Holden S.T., Otsuka K., Place F.M. (Eds.). 2010. *The emergence of land markets in Africa: Impacts on poverty, equity, and efficiency*. Routledge
- Jedwab, R. (2012). “Why is African Urbanization Different? Evidence from Resource Exports in Ghana and Ivory Coast”. *Job Market Paper, Unpublished*, Paris School of Economics.
- Jedwab, R., and Vollrath, D. (2015). “Urbanization without Growth in Historical Perspective”. *Exploration in Economic History*, 58: 1-21.
- Kasarda, J. D. and Crenshaw, E. M. (1991) Third World Cities: Dimensions, Theories and Determinants, *Annual Review of Sociology*, Vol. 17, pp. 467-501.
- Kumar, Manish, Pankaj Kumar, and DK. Tripathi. 2012. “Urban Growth and Its Impact on Surface Temperature in Greater Mumbai District, Maharashtra: A Geographical Analysis Using Geospatial Techniques.” *Annals of the National Association of Geographers*, 32(2): 68–79.
- Lenski, G and Nolan, P (1984). Trajectories of development: a test of ecological evolutionary theory. *Soc Forc.* 63:1-23
- Lowry, I, S, (1990). *World Urbanization in Perspective Population and Development*
- McGee, T. 2011. “Rethinking the Urban Fringe in Southeast Asia: Policy and Research Agendas.” Paper presented at the Workshop on Issues in Peri-Urban Regions and Ways towards Sustainable Peri-Urban Futures, Universities of Sains Malaysia and Penang Malaysia.

- Marshall, Fiona, Linda Waldman, Hayley Mac Gregor, Lyla Mehta, and Pritpal Randhawa. 2009. “On the Edge of Sustainability: Perspectives on Peri-urban Dynamics.” STEPS Working Paper No. 35, STEPS Centre, Brighton, UK
- Mejia, C. M. (1999).*Economic Dimensions of Urban Resettlement Experiences: From Latin America*, in Cernea M.M (Ed), *the Economics of Involuntary Resettlement Question and Challenges*: Washington D. C .the world bank.
- Michael E. Bonine (1983) .*Cities of the World Regional Urban Development*: (2nded). Cambridge. Happer and Row.
- Michael pacione (2005).*Urban Geography: A Global perspective*, (2nded.).New York, USA and Canada.
- Michael Spence (2009).*Urbanization and Growth*: Washington DC -20433.The International Bank for Reconstruction and Development.
- Muhabaw A., Gashu K. 2019. Peri-urban informal land market and its implication on land use planning in Gondar city of Ethiopia. *The Ethiopian Renaissance Journal of Social Science and Humanities*, 6, 2: 1–21
- Muluwork B.B. 2014. *An assessment of livelihood and food security of farmers displaced due to urban expansion: The case of Kombolcha town in Amhara National Regional State, Ethiopia* (Doctoral dissertation), Mekelle University, Mekelle
- Nigusie D. 2011. Rapid urban expansion and its implications on livelihood of farming communities on peri-urban area: the case of Sebeta town (Unpublished MA Thesis). Addia Ababa University, Addia Ababa
- OCDE/SWAC (2020). *Africa’s Urbanization Dynamics 2020: Africa polis, Mapping a New Urban Geography*, West African Studies, OECD Publishing, Paris.

- Palen, J. J (2008). *The urban world*. Eight editions. Paradigm Publishers, USA.
- Peter Daniels (2005). *An Introduction to Human Geography: Issue for 21st Century*. 2nd ed. London.
- Ravallion et al, (2007). “New Evidence on the Urbanization of Global Poverty”. *Population and Development Review*, 33 (4), 667–701.
- Simon, David, Duncan Mc Gregor, and Kwasi Nsiah-Gyabaah. (2004). “The Changing Urban-rural Interface of African Cities: Definitional Issues and An Application to Kumasi, Ghana.” *Environment & Urbanization*, 16(2): 235–248.
- Smith, D.A., (1996), *Third World Cities in Global Perspective: the Political Economy of Uneven Urbanization*, West view Press, Boulder, Colorado.
- Tacoli, Cecilia, and David Satterthwaite. 2003. “The Urban Part of Rural Development: The Role of Small and Intermediate Urban Centers in Rural and Regional Development and Poverty.
- Tuyen T.Q. 2013. Livelihood strategies for coping with land loss among households in Vietnam’s sub-urban area. *Canadian Center for Science and Education*, 9, 15: 33–46
- UN-HABITAT. 2010. *State of the World’s Cities 2010/2011: Cities for All: Bridging the Urban Divide*. Nairobi, Kenya: UN-HABITAT
- Werabe town administration agricultural office (2021) annual report 12-13
- Werabe town administration plan office (2022), annual report, 15-16
- Werabe town administration public communication office (2021), annual report, 4-24
- Woldegerima T., Yeshitela K., Lindley S. 2017. Characterizing the urban environment through Urban Morphology Types (UMTs) mapping and land surface cover analysis: The case of Addis Ababa, Ethiopia. *Urban Ecosystem*, 20: 245–263
- World Bank (2003). *World development Indicators: Washington’s, D.C*

APPEDIX-I

Questioner

Section one: Socio- demographic background of respondents

1. Sex A/ Male B/ Female
2. Marital status A/ Married B/Divorce C/Unmarried D/ widowed/widower
3. If you are married, how many son/daughter do you have? -----
4. What religion you follow? -----
5. Educational status A/ neither read nor write B/ read and write C/ primary school(1-8) D/Secondary school (9-12) E/ diploma and above
6. Age group: A/ 20 -29 years B/ 30-39 C/ 40-49 D/ 50-59 E/ above 59
7. Address: Woreda -----Kebele-----
8. Occupation: -----

Section two: The trend of urbanization in werabe town

1. How to look speed of the expansion of Werabe town A/ in fast rat B/ in medium rat C/ in slow rat
2. How about the fulfillment of werabe town infrastructures A/ better B/very slow C/ no at all

Section three: Urbanization and its social impact on farmers in case of werabe town

3. Are you happy by joining a new neighborhood? A/ No B/ Yes
4. How do you look the accessibility of social services like education, health facility, electricity, market, transportation and other social services in Werabe town? A/ accessible B/ not accessible
5. What is the family relationships and life like after you are evicted? 1/ well 2/ moderate 3/ not well at all
6. How about the neighborhood ties when you left your previous address or your old social networking site like ider, iqube,mahber and moved to a new address? 1/ good 2/ very good 3/ medium 4/ in bad situation

Section four: Urbanization and its economic impact on farmers in case of werabe town

10. What kind of problem you faced in day to day? A/migration B/ unemployment C/ mention any other-----

11. What was the total possession property of the house at relocation time and what is left for the household at presents?

| Before expropriation | after expropriation |
|-------------------------------|---------------------|
| Croup Land in hectares..... | |
| Grazing Land in hectares..... | |
| Oxen (no's)..... | |
| Caws..... | |
| Sheep..... | |
| Goat..... | |
| Fruit and Vegetables..... | |
| Permanent plant..... | |
| Other specific..... | |

11. Do you get compensation for your livelihood from expropriation? A/ Yes B/ no

12. If yes for the question number “17” what the types of compensation did you get?

A/Money in the form of birr B/ Another substantive farming land

C/ Urban residential land D/ if any other specify

13. If your answer for question number ‘17’ is yes how much you are happy by the compensation that is given for your farmland?

A/ very happy B/happy C/moderate D/ not happy at all

14. If your compensations in the form of money, how much sufficient is it?

A/ Excellent B/ very good C/ good D/ very poor E/ poor

15. What is the benefit of the compensation you receive?

A/Daily consumption B/ Buying vehicles C/ Buying homes

16. What was your income status before you lost your livelihood asset by urban expansion?

A. high-income B. middle-income C. low income D. very low income

17. How do you compare your current income before the urban expansion takes place?

A. the previous income was better B. the current income is better C. no change at all

18. If your answer question number '22' is "A" what the reason?

A/ Lack of agricultural land B/ The size reduction of agricultural land C/ Due to loss of forest land

Section five: Urbanization and its environmental impact on farmers in case of werabe town

19. Do you think that urban expansion play significant role for the environmental instability?

A/ Yes B/ No

20. If your answer for question number "24" is yes how farmers victim to environmental instability? A/ expose to health problem because of carbon eminence B/ by increasing agricultural productivity C/ by increasing soil filtrate

APPEDIX-II

Interview

1. How the city is going to expand and in what direction?
2. What do you think the cause of urban expansion in this city?
3. What changes have you observed on the impact of households after urban expansion?
4. What is the positive impact did you observed on social, economic and environmental aspects of the community?
5. What is the negative impact did you observed on social, economic and environmental aspects of the community?

APPEDIX-III

Group discussion

1. Do you have think expansion of Werabe town is importance for you?
2. Do you think that Werabe town expansion have disadvantage for you?
3. How do you compensate the land expropriated farming households? Is it kind/cash/both?
It is sufficient?
4. What type of measurement you have taken for their retrieval from their relocation displacement?
5. Generally, what are the challenges of urban expansion in this city especially from the land management perspective?