



IMPACT OF URBAN EXPANSION ON THE LIVELIHOODS OF THE PERIPHERAL
COMMUNITY: A CASE STUDY FROM HOLETA TOWN, OROMIA, ETHIOPIA

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THESIS SUBMITTED TO THE
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Declaration

I hereby declare that this M.A thesis is my original work and has not been presented for a degree in any other university, and all sources of material used for this thesis have been duly acknowledged.

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Acronyms

AACA	Finfine City Administration
UN	United Nation
SSA	Sub-Saharan Africa
HIV	Human Immune Virus
USAID	United States Agency of International Development
CSA	Central Statistical Agency
DFID	Department for international development livelihood
UNDP	United Nation Development Program
NUP	National Urban Policy
GDP	Gross Domestic Product
PASDEP	Program of Accelerated and Sustained Development to End Poverty
ULGDP	Urban Local Government Development Project
USD	United State Dollar
masl	meter above sea level
FGD	Focus Group Discussion
SPSS	Statistical Package of Social Science
SL	Sustainable Livelihood
ha	Hectare
HHs	Households
DB	Development Bank of Ethiopia
CBO	Cooperative Bank of Oromia
CBE	Commercial Bank of Ethiopia
OIB	Oromia International Bank
HTAP	Holeta Town Administration Profile

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Abstract

Holeta town's expansion program which had been experiencing a horizontal expansion starting from its historical expansion pattern currently implemented via expropriating peripheral land holders of earlier rural dwellers by solely decision of town administration and the investigation randomly targeted to per-urban areas like; Galgal Kuyu, Tullu Harbu and Burka Welmera from five peripheral kebeles surrounding of town. Rapid expansion of the town and in proportional expansion of town with community livelihood is a serious issue for conducting research. Thus the study investigated the impact of urban expansion on the peripheral community livelihood in case of Holeta town. Questionnaire, survey, focus group discussion and key informants interviews were tools of data collection from 313 sampled households living in sampled kebeles via systematic random sampling technique and judgmental technique for FGD and interview. The results of the study indicated that there is infrastructural improvement, socio economic growth, rapid population growth and also socio-economic problems related to urban expansion in studied area. There is great spatial and temporal land use land cover modification more towards to build up land uses. The livelihood condition of per-urban community changed to non-agricultural form but there are policy and strategy gaps of expropriating, compensating for affected community in ground implementation. The dislocation program implemented is not rehabilitative and negatively affected the livelihood of the dislocated farming community. Furthermore, the study revealed that children losses right of family inheritance in town administration. Landholder expropriated should be recompensed for equal socio-economic beneficially from urbanization and further skill oriented training for new livelihood strategy and also accessing credit and rehabilitating strategy were recommended for affected community livelihood.

Key Terms: *Compensation, Expropriation, Livelihood, Peripheral Community,*

Urban Expansion

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

The process of urban expansion is global or international phenomenon, which evented in the history of urban centers. It begins in earlier time of human civilization of Babylonians (Cermea, 1997). Urbanization is the process of urban spatial flattening or growth; this involves horizontal and vertical expansion of areal structure of urban settlements. It results with removal of farmland, natural attractiveness rangelands and vourishable life and sceneries (Minwuyelet, 2004).

Starting from 20th century during the time of most African political independence form colonialism and free from hindrance not to migrate, finding of work at different and more opportunity contributed for alarmed urbanization in Africa (Raphael, 2013). As Kitangahi (2011) pointed urban population in continent estimated to more than 3 times in coming 40 years. Comparative to rest of countries in world, that of Africa's urbanization different in character that shows fast and leading to challenges of governing situation, basic development, land governance and little industrial growth. Even though not only these, the main cause of urban expansion is over crowdedness of population. The number of population increase in Africa is too high but rate of urban growth rate is greater than that of population growth rate at national level in most of continental countries.

Berhanu (2005) also argues that, from other common factor of urban expansion high population density on limited settlement forced as African cities to be spatially flattening to the closer farm community. Fast population increase means great number of people settled in urban areas. Contiguous community urbanization included settlement shifting from rural to urban peripheral where population unpleasant crowded and few of them engaged in agriculture. As result of these, rural part of cities and towns progressively start to change into per urban character and land use of former changes from commonly agriculture to other non-agricultural activities, which are multi economic activities as soon as landscape loosened to urbanity (Kessides, 2006).

Urbanization in Ethiopia also exposed to a number of challenges because of that, unplanned settlement, and population pressure and slums seen in most cities and towns of Ethiopia. For example Finfine is one of which face such situation that caused from historical background of city's settlement first existence with ineffective urban planning due to the problem of lack of

legal land affordability to individual people, city faced with a problem of housing in Finfine during Derg regime. For the seek to answer housing needs, Derg government decided and implemented that, the edge of city's land occupied by farmers to be translated to new settlement construction by government (AACCA, 2000:10-12). The most alarmed growth rate and population trend of Finfine at world level is accommodated by changing of agricultural land and forest covered land to urban land use. This has negative effects on livelihood and socio economic situation of community formerly settled there (Tamirat, 2016).

Holeta town located at western part of Finfine at closer distance. This town is one of the towns which were on the stage of expanding rapidly by immigrant labor population those need alternative job opportunity from Finfine and the town itself. This issue might leads to great housing needs that further expropriated farmers around their own farmland and affected community's livelihood in general and their sources of livelihood strategy socially, economically and also environmentally. So, the study carried out able to analyzed the impact of Holeta town expansion to the peripheral community living at boundary areas of center by native ways of life

1.2. Statement of the Problem

According to Firew (2010), urban expansion and urban growth is cyclic phenomenon that leads to dislocating rural agricultural community. Even well planned resettlement of community has adverse effects on the livelihood of community during and after community displaced affected. This shows as displacement should detail identified and recognized to evolution in order to sustain and well advance urban development. Compared to developed world, displacing community characterized with urban expansion more visible in developing countries.

High concentration of majority people to per- urban areas is the reason for such urban expansion in developing countries more towards community engaged via agriculture with fragmented land holding due to urban expansion. Thus, urban expansion inseparably results with displacing peripheral community through small land size compensation. In Ethiopian context, land ownership is on the hand of public and government, and governmental willingness as well as interest for commitment on program enforcement there affects the amount of compensation to dislocating farm community Since compensation to community is not enough, it insecure areas resident.

For instance, research conducted in sub-city of Hawasa shows that per-urban community adversely affected by horizontal expansion of city and negatively falls in problem of less compensation to their land. Therefore, urban settlement to edge able to change way of life, production and social structure though firms become profitable at expense of farmers. These shows as urban expansion can change livelihood of per-urban community after displacement.

Nevertheless, proclamation No 455(2005) on land expropriation and compensation to its effects give mechanism through which private holding to be expropriated and how to compensation to be administered at federal level. On the contrary, there are no directives as well as legal implement to these case and these caused negative effects to peripheral community with high superior decision of Hawasa city municipality (Firew, 2010).

According to UN (2007), the strategic planning is a decisive tool to keep quite adverse effect of urban expansion. These strategies contributed to accommodate urban development with management that can provide feedback for affected groups of per urban livelihood. These strategies targeted to the following planning like: Cross sector coordination and integration, comprehending advantages of public and private in urban development and management, bargain based resolution of interest conflict among stakeholders and regular monitoring and evaluation of urban development impact to each of community members affected by changes related to urban development program.

Holeta town is well as location of federal research institutes and military academy and where agro-industries and else located due to suitability and infrastructural facility of urbanization. As soon as other town's character, the town had been revealing fast and alarmed rate of population growth by the contribution of natural increase and human made factors. This shows that there are natural and infrastructural nature of town for rapid population growth and urbanity by high rural to urban and urban to urban migrants to case study. This indicated that there are a number of man-made factors meaning that conditions aggravated urban growth and overcrowded population size.

In case of our country context, a number of researches have been conducted in cities and towns entitled of impacts of urban expansion on sub-urban community livelihoods. For instance, Firew (2010) conducted a research which assessed the horizontal urban expansion and peripheral community livelihoods with great attention of examining impacts of urbanization well.

Additionally, Feyera (2005) also conducted on related issues around Finfine sub city. But, the above mentioned researchers and other authors surveyed on related issue hadn't primarily justified status of urbanization, an extent to which expansion is happening by estimating spatial and temporal changes using land sat images and others of different years. And also no further assessment of livelihoods changes at time of investigation towards to peripheral community is done in their study. Besides to this, even if problem in such towns of Ethiopia researched and issue explored as described above, the feedback of research in such case could not be a summary impact of urbanization to all national towns' peripheral community life. Generally, there was research gaps but aimed to conduct and improved in this finding compared to those described above.

On other hand, the study as its specific objective examined peripheral community's livelihood change due to urban expansion, status of town growth, spatial-temporal land use and cover change in study area. So, gap criticized on previous finding as well as requirement of deep justification on the related issues at different time and place initiated researcher and well investigated the impact of urban expansion on the peripheral community livelihoods.

1.3. Objective of the Study

1.3.1. General objective

The main objective of the study was to assess the impact of urbanization on the livelihood of peripheral community in Holeta town.

1.3.2. Specific objective

The specific objectives were:

1. To examine the current status of urbanization in the study area,
2. To evaluate the spatial and temporal land use land cover change in the study area
3. To examine livelihood change of peripheral households related to urban expansion
4. To assess policy and strategy related constraints to urban expansion

1.4. Research Questions

Regarding to targeted research title, the last report of thesis expected to give an answers to the following questions. The questions the study responded at later were;

1. To what extent of urbanization study area currently existing?
2. Is there any change of spatial and temporal land use land cover of the town?
3. How was a livelihoods condition of community's early and then after expansion?

4. Is there any change of livelihood on peripheral households after urban expansion?
5. How was the policy and strategy of urban expansion? Are there any constraints of policy and strategy implementation in case study?

1.5. Significance of the Study

Developing countries like Ethiopia known by high rate of urbanization and recently high urbanization. Urbanization, which highly contributed by high rural to urban migration but less number of employment, leads most of cities with many socio-economic problems. These caused more emphasis of scholars, researchers and other shareholders.

Holeta is woreda town, which found along the Finfine to Naqamte road way. However, in certain consecutive years, it is one of towns expanding to edge of urban settlement and no more study has carried out there. For instance, there is a little study done concerned to impact assessment of urban expansion on community living condition. But, this study can narrow the knowledge gap through identifying positive as well as negative consequence and recommend possible solution for affected groups. Particularly, completion of this research can; develop knowledge regarding to urban expansion character that leads to certain changes to livelihood of community at the edge of urban.

Furthermore, finding of the study examined about state of urban development, spatial and temporal land use cover, strategy constraints, effects as well as recommended solutions for problems during expansion uses urban planner, private sector, urban administrator and else to take meaningful action for change. The research result can also influence certainly legal form but informal urban housing via providing assessed research result from community of sub-urban areas which means their perception and livelihood implication on them. As a whole, the used to develop knowledge on an implication of urban expansion towards peripheral community and can be the primary document for urban municipality in case study.

1.6. Delimitation of the Study

Research has its own area and content scope in which it justify researchable issues. This research also has a geographic and content boundary. Area of the study is in Holeta town located in special zone of Oromia surrounding Finfine. The study area delimited to this since town is characterized by rapid population growth and expansion because it is closer to Finfine with hope of job opportunity. This shows that research concerned only rural kebeles of town's administration to where town is expanding.

Besides to this, the group of community those included in the study was peripheral community those their ways of life is land holding based but recently expropriating and displaced. Even though legally implemented urban expanding strategy ideally sum up altogether growth of urban and per-urban community to where expansion is occurring, more assessment deals with status of urban expanding, certain change of land use cover timely and places, any livelihood changes due to urban expansion and impact of urban expansion.

On other hand, demographically research targeted to peripheral kebele household heads because case initiated researcher itself was describing any implication that expansion has on their socio-economic livelihoods due to respective geographical flattening. From its objectives, the study emphasis to investigating changes of socio economic activities, community livelihoods dynamics and its impacts on peripheral community of Holeta town. This indicates that assessment of impact on community due to urban expansion will concerns to the analysis of household head's livelihood elements particularly; physical capitals, social capitals and natural capitals with certain specific base to capitals in each forms as the scope to this study livelihood justification.

1.7. Limitations of the Study

Following the urban expansion, then, there are changes in form of geographical boundary and land uses of the pre-urban areas. This study focuses mainly on the households whose lands were expropriated and or lost land informally hence livelihood strategies get changed both by form and content. Due to this fact, the selected sample household members may not completely represent the characteristics of all affected households by urban expansion. Moreover, there has was a problem of collecting data regards to capitals of households before urban expansion mostly average livestock before a time though the researcher closely asked in form of each animals in number and changing to currency. In the same issue, illiteracy, omission of responses and non-returns or late return of questionnaire are what technically hinder accuracy and validities of the data.

In addition, as expansion is a process taking place throughout a series of time, there is a need to obtain consecutive evidences showing socio-economic growth of town information about the expansion. So, absence of timely documented report on all aspect of urban development contributed to the limitation of the study. Furthermore, since every research methodologies and designs along with the specific techniques have each of respective pros and cons.

As a matter of this fact, the methodology employed, research design developed, techniques selected as well as tools used to collect data have their own limitation on its validities and other qualities of the study.

1.8. Organization of the Thesis

This thesis paper contains five chapters. The first chapter is introduction part consisting background of the study, statement of the problem, objectives of the study as general and specific, research questions, significance of the study, delimitation, organization of the study and operational terms purposely or repeatedly used in this paper. The second chapter holds review of related literature and conceptual framework of the study. The third chapter focuses on methodology, data sources, sampling methods, sample size determination, methods of data analyzing and variables used were explained. The fourth chapter consists results and discussion and lastly the fifth chapter conclusion and recommendation.

1.9. Operational Definition

Urban expansion:- In this study, urban expansion has been used to mean that it is geographical or horizontal flattening of urban named settlement towards rural settlement or locally rural population inhabited area. Additionally, uses as synonymous with urbanization for the area of investigating problem i.e. case study.

Peripheral community: - is population or society those are in the outlet of urban settlement boundary. But locational places closer to urban and engaged through land holding based and related farming types for their livelihoods strategies.

Urban periphery: - is a place at outer zone of urban area and adjacent rural area to urban settlement. It is also has similar meaning with sub-urban in accordance to this study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. Concepts of Urbanization

According to Mcgranaham and Satterthwaite (2004), there are no internationally agreed criteria to determine a boundary of urban areas from rural areas as evidenced by varied national urban definition summaries in publication of united nation population division. Some researchers prefer to define urban depending on simple and standardized criteria like population size and density while others accepted but included some definition with cases like commuters living beyond bound of dense settlement. More or less many countries designed urban as settlement where administrative function types of economic activities engagement of great population portion.

The term “urbanization” is used here to refer specifically to an increase in the proportion of a country or region’s population residing in urban settlements, while ‘urban growth’ refers to an increase in the absolute size of a country or region’s urban population. These terms are often confused in both academic and policy circles, but it is important to recognize the difference between them, particularly in the context of sub-Saharan Africa (SSA) where urban population growth rates are generally high but overall urbanization rates relatively low (Bloch and Monroy, 2015).

Urbanization is often used more loosely, however, to refer to a broad-based rural-to-urban transition involving population, land use, economic activity and culture, or indeed any one of these. Thus, it is frequently used to refer to changes in land-use for specific areas (usually on the periphery of urban concentrations) as this land becomes ‘urbanized’ and is sold and developed for urban use (Poston and Bouvier, 2010).

2.2. Urbanization in Sub-Saharan Africa

Early of the 20th century, both Africa and Asia were poor and heavily rural. Their economies were deeply dependent on low productivity agriculture, and from the admittedly sparse data that are available, it appears that urbanization rates in both regions were less than 5% the same level as in Medieval Europe and still looked quite similar: poor and rural. Starting of the 21st century, urbanization has now reached around 40% in both Africa and Asia, which is comparable to the level attained in today’s developed countries after the Industrial Revolution (Douglas Gollin, Rémi Jedwab and Dietrich Vollrath, 2012).

Even if urbanization patterns in Africa and Asia look quite similar for the past half century, there are two striking differences. The first is that Asia's urbanization has occurred in conjunction with rapid growth in per capita income. And the second is that urbanization in Asia has coincided with a rapid movement of people out of agriculture into manufacturing and industry, whereas in Africa urbanization has been accompanied primarily by a movement into services (Douglas *et. al*, 2012).

African countries have always been highly specialized in the export of natural resources, whether mineral products, fuels or cash crops. In 1960, more of Sub-Saharan African countries and only 3 of Asian countries had more than 10% produced their GDP from natural resource exports while Asian countries developed through expansion of their manufacturing sectors with industrialization. This shows that both Africa and Asia have followed the same urbanization patterns though Africa's urban growth achieved in a period with only modest economic growth and without industrialization.

Even though urbanization is growing in both developed and developing countries, from the current status more than 90% of the future population growth will be accounted for by large cities in Africa with 3.5 % of urban growth rate in two previous decades. Most scholars in the field of urbanization argue varied views on the history of urbanization in sub-Saharan Africa (Douglas *et. al*, 2012).

For instance, Bacquicir (2004) argues that the base of urbanization in sub-Saharan Africa is significantly colonization. Before colonial period, sub-Saharan Africa has no urbanization what so ever population density is low to supply community with resource. However during the colonial period, urban centers set up for strategic purpose which means there is a little role of industrialization for the urbanization of sub-Saharan Africa. Hence unlike of many African countries, sub-Saharan Africa urbanized due to the external action rather than internal dynamics.

According to Boserup (1985) as cited by Nordhag (2012), because of Africa's low population density at initial, migrant workers were needed to maintain facilities and infrastructure brought by colonization. Gradually certain location preferred due to its proximity to raw materials and export possibilities. This condition caused population density to increase and urbanization with the dominance of indigenous farmers who used the infrastructure there. There is large variation on proportion of urban population in various regions of Africa.

For instance, sub-Saharan Africa is region with lowest proportion of urban population though recently the rate of urbanization and slum dwellers is highest. For this situation rural to urban migration and natural population growth rate are the major cause of rapid rate of urbanization and slum proliferation in Africa.

Western and Klute (2006) also stated that, the main engine of population growth in Sub-Saharan Africa is rural –urban migration which is for economic motivation since 1980s. As cities are focal point for economic growth, innovation and employment, many cities grew historically out of some advantageous location, transportation and raw material supply. Beside to this, other reason for migrating to town is personal security in countries where there is political strife and better services (Mpofu, 2013).

2.3. Urbanization in the Ethiopian Context

Ethiopia was under-urbanized, even by African standards. In the late 1980s, only about 11% of the population lived in urban areas of at least 2,000 residents. There were hundreds of communities with 2,000 to 5,000 people, but these were primarily extensions of rural villages without urban or administrative functions. Thus, the level of urbanization would be even lower if one used strict urban structural criteria. Ethiopia's relative lack of urbanization is the result of the country's history of agricultural self-sufficiency, which has reinforced rural peasant life.

The slow pace of urban development continued until the 1935 Italian invasion. Urban growth was fairly rapid during and after the Italian occupation of 1936-41. Urbanization accelerated during the 1960s, when the average annual growth rate was about 6.3 percent. Urban growth was especially evident in the northern half of Ethiopia, where most of the major towns are located (<http://www.urbanization.in.Ethiopia.org>).

Overall, the rate of urban growth declined from 1975 to 1987. With exception of Aseb, Arba Minch, and Hawasa, urban centers grew an average of about 40 percent over that twelve-year period. This slow growth is explained by several factors. Rural-to-urban migration had been largely responsible for the rapid expansion during the 1967-75 periods, whereas natural population growth may have been mostly responsible for urban expansion during the 1975-84 periods. The 1975 land reform program provided incentives and opportunities for peasants and other potential migrants to stay in rural areas. Restrictions on travel, lack of employment, housing shortages, and social unrest in some towns during the 1975-80 periods also contributed to a decline in rural-to-urban migration (Zenebe, 2010).

Urbanization is occurring rapidly throughout Ethiopia, as populations are increasingly migrating from rural areas to major cities. Over the past decade, the country has experienced dramatic demographic changes, including increased rural-to-urban migration and a “youth bulge”. About 48% of the current population is under the age of 15. Combining these trends with the already poor health statistics – including highly incongruent HIV prevalence rates (7.7% in urban areas versus 0.9% in rural), the situation seems quite disparate (Zenebe, 2010).

According to Girma (2004), urban population is concentrated in one primate city of Finfine representing 28.4% of the total urban population. At national level, the level and trends of urbanization indicates significant regional variation for example; Finfine (28.4%), Amhara (17.32%), Oromia (17%), SNNPR (15.2%), Tigray (15.2%) and Gambella (9.62%) respectively. Finfine at 100% of urbanization is most urbanized and urban population in a country and Gambella has the lowest urban population the average mean of 9.6%. So, Ethiopia is currently of the least urbanized countries in the world even in Africa. Less than one person in five is city or town dweller. However, the rate of at which the countries urban areas the growing are among the highest in Africa. Many social, economic and environment problems have accomplice urbanization in Ethiopia and have been ignored for too long.

2.4. Theories of Urban Expansion

Different authors developed various theories of urban expansion to explain more about expansion to urban areas to peripheral and also for the case of spatial expansion and land use changes of urban areas. On other hand, expansion of urban centers considered political/administrative process which means reclassification of rural areas to urban areas. The exercise of reclassification of rural areas as urban is often thought to be a productive strategy for stimulating economic development. This is based expectation of adjustments to the overall structure of the system of cities within a country have the ability to influence a country’s socio- economic composition; forwarding to supplementary growth and development.

So, increase in the number of countries in recent years implementing policies that contribute to this component are changing this trend, lifting its position as a notable contributor to urban growth. Reclassification of settlements contains three sub components. This are the expansion (or contraction) of existing urban boundaries, the capture of adjacent settlements,

and the addition or subtraction of new settlements that grow beyond a designated threshold (Farrell, 2014).

From various theories discussed with main theories of expansion depending on purpose to expand, few of them are microeconomic theory, urban economic theory economic benefits theory and urban social production theory. For instance, the microeconomic theory of land uses change and the urban bid-rent model commonly developed to postulate the geographical expansion of urban character and land use modification Spatially-explicit land use models based on microeconomic theory are influential tools for understanding the spatial and temporal dynamics of land use decisions among individual agents (Jiang and Yonghui, 2016).

According to Jiang and Yonghui (2016), the urban bid-rent model is another basis of urban economic theory and describes the accumulated outcome of urban land use change. Expansions of the bid-rent model further incorporate the influence of income, transportation, and spatial heterogeneities in terms of soil quality, climate, natural resource endowments, etc. Bid-rent model have been developed and empirically implemented in order to understand the change in spatial scale of cities, industrialization and urban expansion, and urbanization and the conversion of agricultural and natural land covers. According to this model, the common factors identified for spatial land use change in towns are population, income, transportation costs, and agricultural land rent. In view of economic benefit theory, they estimated as there are concentrations of economic activities and economies of state resulted from it. That is in order to enhance their economic benefits of production, people forced to move rural to urban areas and also from urban to urban areas. This urban population rise leads to urban settlement to expand towards exterior areas.

Contrary to this, urban social production theory argues, urban is more congested and crowded than rural marginal region and rural areas indirectly pulls the population to settle due to continuous social interaction and networking which latter causes congregation of large population at smaller unit of land (Paul *et al.*, 2000).

On other hand having economic growth and urban expansion relationship, urban growth has generative and parasitic nature which mostly varied in developed and developing countries. In case of generative urban growth stimulates economic growth and stimulates surplus in wider urban areas of developed countries while in developing counties urban expansion is parasitic in development which shows surplus is derived from the surrounding of urban though recently it is becoming generative (Paul *et al.*,2000).

With regard to generative process of urban expansion, theory explanation is mostly via central place theory, urban base theory and Keynesian theory for developed while modernization theory for developing countries. But in context of parasitic process, explanation is given by dependency theory which is implementable in both developed and developing countries.

Dependency theory holds that under laissez faire cities grow parasitically by exploiting and holding back their neighbor which means economic growth follows cumulative causation principle. This shows once established city's development promote more local development and spread effect, only at expense of urban surrounding as a whole and land owners in specific in back wash effect (Paul *et al*, 2000). From above discussed view, researcher intends to use parasitic nature of urban growth in general and particularly dependency theory as a base of this study since communities in urban centers and also rural areas of town side should directly and indirectly affects each other.

2.4.1. Causes of Urban Expansion

Causes of urban growth are quite similar with those of urban sprawl. In most cases, they cannot be discriminated since both growths are more interlinked though urban growth or expansion can be observed without sprawl if there is planned growth. Whether that growth is bad and good depends on its pattern and process, there are some causes of urban expansion. Urbanization is event that more linked with modernization, industrialization and sociological process of decision making. But, mostly repeated urban sprawl in developing countries is caused by rural to urban migration.

Some of causes for urban expansion or compactness are population growth, economic growth, industrialization and demand for more living space. From those causes and catalyst of urban expansion, urban population growth is the first and peculiar role player. Rapid urban growth is an outcome of the following two factors of population growth namely; natural population increase and migration to urban centers (Bhatta, 2010).

In addition to this, movement of people from rural to urban areas in domestic country becomes a significant factor of urban expansion even though movement at international level does not have such great influence to expansion. Both of them contribute to make urban areas expand via additional area for inhabiting. The role of internal migration to expansion is expressed through pulling and pushing factors those behaved from place of destination or new place of movement and place of origin respectively (Bhatta, 2010).

According to UN report (2007), major contributing factor of urban expansion is “rural flight“ where improving living standard above hand to mouth on limited farm land particularly in case of developing world where population growth rate exceeds resource production rate. Since community couldn’t forecast the condition they meet in future, they decide to migrate towards to urban areas “rural flight”. Generally these and other population increase needs space to accommodate this population. People compete first for site and latter for resident and for investment within urban framework. Later all these cases pressurize per-urban farmers and make urbanization and urban expansion a center of problem in conversion of agricultural land to nonagricultural land use.

According to Tegegne (2001), nationally the most role player leading urban centers to expanding are in migrants (i.e. rural to rural migration and urban to urban migration) and natural population increase. Additionally, industrialization which demands housing facilities for its workers even for commerce is another factor leading to town expanding.. Such gradual transition process from agricultural to industrial employment demands more urban housing. Economic growth and demand of more living space for housing are also other causes of urban expansion.

Beside to this, Bhatta (2010) narrated that expansion of economic base such as per capital income and increase in number of working persons creates additional demands for new housing and housing space for individuals. In many developing counties, residence of the core lacks sufficient living space. These force them towards urban edge development for more living space. Since people can buy space at low cost at periphery, they encouraged to country side which directly causes the towns to expand.

2.4.2. Characteristics of urban periphery

Although it is difficult to definitely identify the characteristics of urban fringe spatially. Most literature holds an idea that per urban areas has some distinct; environmental, social and institutional character which can differ from place to place. More discussion on its main character is as follow:

Environmental characteristics

Urban outlying areas are the collections of different ecosystem of naturally productive and ecosystem affected by material as well as energy required by rural and urban community (Allen, 2003). More often, the use of per-urban environmental resources and ecological services is driven by local pressures (e.g. competition between residential and agricultural

land uses), subnational and national policies (e.g. industrial dispersal), or by international pressures and global issues such as falling prices of export crops, climate change and etc. which reduce agricultural viability of rural areas and increase the migration of impoverished farmers to per-urban locations in search of alternative livelihoods (Narain, 2010).

A number of environmental problems and opportunities arise in relation to environmental change; land use changes and; changes in the use of renewable and non-renewable resources and changes in the generation of waste and the use of the absorptive capacity of the environment. Marshall, Waldman, MacGregor, Mehta and Randhawa, (2009) noted that per-urbanization has occasioned destruction of wetlands and other ecologically-sensitive environments; diminished agricultural productivity; diminished open space; increased pressure on natural resources such as water; a lack of hygiene and sanitation infrastructure; industrial effluence; air pollution; inadequate provision of basic services and accumulated solid waste.

To the extent it is poor depending mostly on natural resources for their livelihoods, the per-urban can be seen as a degenerated environment. Achieving environmental sustainability in the per-urban has been identified as a challenge because of the complex interrelationship between social-economic and environmental systems.

Social Characteristics

According to Nairan (2010) views, urban border is space where social forms are constantly created, modified and discarded. He underscores this diversity of interests and the resulting social heterogeneity in the zone of transition by noting that small farmers, informal settlers, industrial entrepreneurs and urban middle class commuters may all co-exist in the side urban even though they harbor different competing interests, practices and perceptions which stimulate conflict and resolution.

Another distinctive social attribute of PUIs is their habitation by migrant labor that seeks employment in adjacent towns and cities. In the pursuit of better living conditions, per-urban areas often become transit points and convenient bases within the ambit of the main city for new inhabitants from rural locations. He also argued that the resulting mix of the “urban” and “rural” migrants often alters the social composition of the per-urban and has several implications for both economic activities and demand for local resources.

Institutional Characteristics

A lot of per-urban research appears to suggest that per-urban contexts almost invariably lack effective regulation and municipal service delivery leading to contradictions. For instance, existence of a regulatory void entrenches and perpetuates the many antagonisms. They argue that per urban is often not a public policy priority and in some instances, its residents are not officially recognized, or better still, not entirely legal. The foregoing notwithstanding, it has been argued that the regulatory void in the per-urban facilitates economic liberalization and often encourages capitalist entrepreneurs to invest in per urban areas. Institutional multiplicity and conflict creates uncertainty which sometimes is good for the capitalist investor. One example of this is difference between various land regulations and the resulting ambiguity which effectively reduces land tenure and rights in the per-urban negotiable. This explains the phenomenon of mixed developments in most per-urban contexts (Marshall *et al*, 2009).

2.5. Livelihood Framework

A frame work is the particular way of viewing or understanding how household heads derive their livelihood by drawing on capabilities and assets to develop livelihood strategies composed in range of activities. Livelihood approach focuses on understanding the context within which people live, assets available for them, livelihood strategies they follow in face of policies and processes and livelihood outcomes intended to achieve (DFID, 2000). It is one of the most widely used rural- urban linked sustainable livelihood approach. This approach conceptualize how people operate activities with vulnerability to shocks, seasonality and else. It also draw different livelihood capitals in different combination which affected by vulnerability context, range of institution and processes.

There are various livelihood frame works for the sustainability at rural parts and rural linked urban areas. Few of them are UNDP, CARE, s and DFID sustainable livelihood frame work. But most of those approaches to livelihood sustainability have similar focus of poverty reduction though they little differ on way of implementation and spatial emphasis. For instance, UNDP and CARE use it to facilitate the planning of concrete projects and programs. For DFID, the Sustainable Livelihood approach is more of a basic framework for analysis than a procedure for programming, and it is also used to assess and review on-going projects and programs to make them more sensitive and responsive to the conditions and needs of the poor. It is an instrument to enhance the poverty orientation of different kinds of activities supported by the agency, not just SL projects or programs. Additionally, CARE supports

household livelihood security primarily at community level. UNDP and DFID work at community level, but also emphasize that tackling enabling policy environments, macro-economic reforms, and legislation is equally important for effective poverty reduction.

Thus, for DFID, although the analysis of people’s livelihoods usually takes place at a household (community) level, the aim is not just to identify constraints or opportunities that could be remedied at that level. Equally important is to get an understanding of how policies and other institutional factors, for example, impinge upon people’s livelihoods at the local level, but have to be addressed at higher, policy levels (Krantz, 2001).

Livelihood: definition of “livelihood” had been given by different academic researchers, development role player and other authors including Chambers and Conway, 1992, Bernstein, 1992, Ellis, 1998, Francis, 2000 and Lantz, 2003). According to Chambers and Conway, *et.al* (1992), livelihood defined as the compromise of capabilities, assets such as; stores, resources, claims as well as access and activities required for the means of living. This is sustainable which cope up with and recover from stress and shocks, maintain and enhance its capabilities to provide better livelihood opportunity for the next generation that makes net benefits to other livelihoods at local and global in long and short terms.

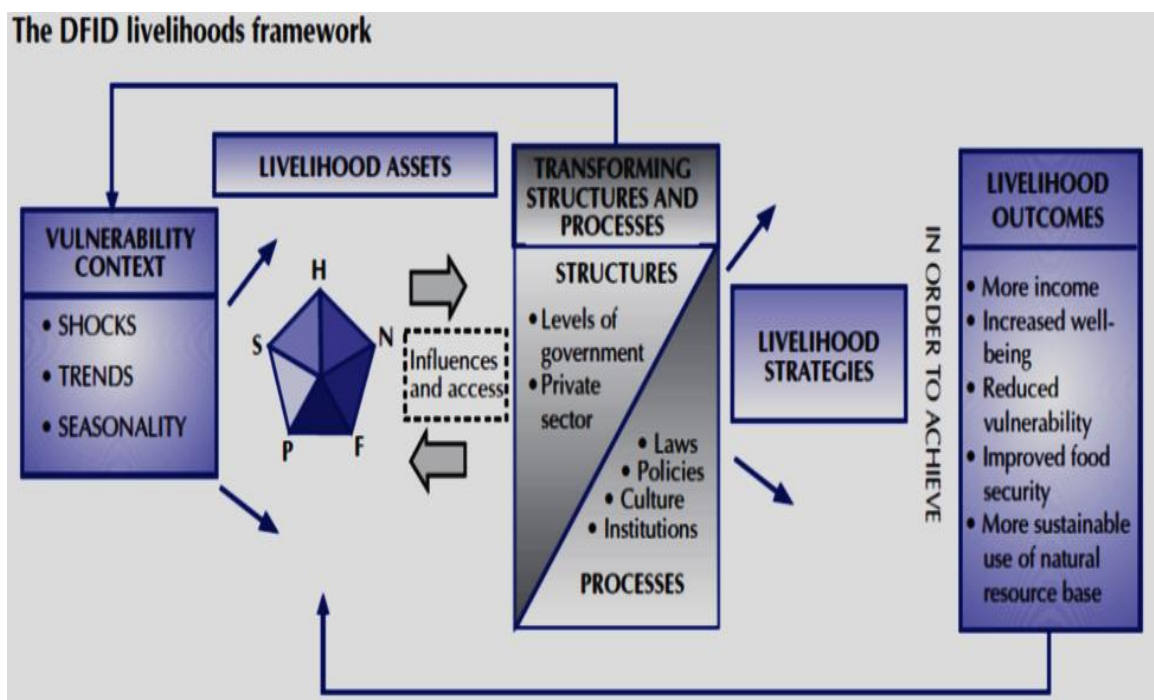


Figure: 2.1 Sustainable livelihood frame work

Source: Adopted from L. Krantz, 2001

Livelihood Assets: is an access to all livelihood strategies to be carried out locally or globally. It consists of all private and other forms of capital ownership that uses as a source of asset within livelihood frame work (DFID, 2000). Chambers and Conway (1992) elaborated that; livelihood asset can be identified via the following five main capitals. These are human, social, physical, natural and financial capital.

Human capital: is almost related to the amount and qualification of labor force availability at different background. So, at household level, it is decided by the number household size Even it varied in terms of educational background, nutrition, skill, capability or performance and health status of members.

Social capital: any asset such as rights derived from membership in a group like ability to cell on friends helps in time of needs, trade and professional supporting from association. Examples, connection, relation of trust and mutual understanding support formally and informally, shared values and behavior, common rules and sanction, mechanism of participation in decision making and in leadership

Natural capital: refers to environmental assets such as land, and common property resources (with communal management and traditional systems determining access and types of use) or ‘frees’ (open access) natural resources such as water and forests or grazing land. Natural resources are generally less used in the livelihood strategies of the urban poor, as they tend to be less available, especially in large urban centers

Physical capital -includes assets such as housing, tools and equipment that people own, rent or use and public infrastructure that they have access to. Housing is normally one of the most important assets for poor urban household heads as it is used both for shelter and reproductive purposes and for productive or income-generating purposes (renting out rooms for using the space as a workshop area).

Livelihood Strategies: are the planned activities that men and women undertake to build their livelihoods. They usually include a range of activities designed to build asset bases and access to goods and services for consumption. Livelihood strategies include coping strategies designed to respond to shocks in the short term, and adaptive strategies designed to improve circumstances in the long term.

Livelihood outcomes: are the results of women and men’s livelihood strategies and feed back into the vulnerability context and asset bases, with successful strategies allowing them to build asset bases as a buffer against shocks and stresses, as opposed to poor livelihood

outcomes which deplete asset bases, thereby increasing vulnerability (Farrington, Ramasut and Walker, 2002).

Broadly it shows the achievement of livelihood strategies, such as more income (cash), increased well-being (non-material goods, like self-esteem, health status, access to services, sense of inclusion), reduced vulnerability (better resilience through increase in asset status), improved food security (increase in financial capital derived from the combination of one or more livelihood capitals in order to buy or produce foods). Livelihood outcomes may therefore lead into either virtuous or vicious cycles (Farrington, *et.al*, 2002).

2.6. Urban Expansion and Livelihood Strategies in Per-urban Areas of Ethiopia

Compared to developed countries, economies of developing countries are growing of lower rate when compared with population growth rate. This reveals that, fast population growth of developing countries and economic challenges accelerated the problem of urban poor which rose from lack of regular employment. Due to these urban poor forced to developed several survival livelihood strategies.

Foeken and Mwangi (2004) stated that the main livelihood strategies of per-urban areas are those implemented in urban and rural. Urban strategy includes strategy of non-farming and farming those includes all income generating activities like cooking, washing economic activities those are informal open air vehicle repair and washing, metal works, carpentry, commodity trade, local brew making, prostitution and else.

On other hand, farming strategy in urban reveals economic activities those focused on farm with those has access of land in and outside of urban boundaries but basically generate income from it. But engagement of those livelihood strategies depends on basic material, socially tangible or intangible asset that people have as their own. From economic point of view, an asset that is seen as capital from which livelihood derived includes; human, financial, physical, natural and social. Urban expansion can be a constraint to dislocated community possess asset to diversify livelihood as soon as urban extends to periphery and encroaches to rural farmland (Scoones and Ellis, 2000).

2.7. Effects of Urban Expansion on Per-urban Community

Urban expansion can be occurred through horizontal and vertical expansion. The first one indicates the expanding of physical structure of the urban areas. Such process is well known globally in all history of urban centers with a result of loss of range postures and agricultural land and natural attractiveness.

Particularly, urban expansion includes both positive and negative effects however; the negative impact is visible when the way of growth is uncontrolled and uncoordinated. Specifically, positive implication of urban expansion leads to higher economic performance, opportunity of underemployed and unemployed, better life because of better opportunity and better services and life style. Thus urbanization and urban growth are considered as modern way of life and centers of varieties of human opportunity which all can highly contribute to socio economic growth and development (Minwuyelet, 2004).

Balchin, *et.al*, (2000 pp:58) pointed out that rapid urban expansion in most of developing countries is usually unplanned and uncontrolled development to periphery that requires high cost of infrastructure. Even certain evidence shows that, planned activity of infrastructural development doesn't match with large land track that develops with low density pattern. So, urban expansion has positive and negative effects.

2.7.1.Negative effects of urban expansion

Negative effects of urban expansion to surrounding per-urban areas acted in different ways especially towards displaced farmers from their own farmland up to degradation of more useful agricultural land. This is due to the fact that as urban population increase, cities forced to grow spatially to per-urban area to give varied services and accommodation for population per year. Furthermore, 2025 urban population growth rate estimated to reach 58%, 52% and 32% for world, Africa and Ethiopia respectively. This estimation to population growth predicts as urban expansion has the following effects (Wabrster, 2005).

Loss of farmland

As stated by Dayong (2004), unplanned and not leveled urban expansion can take off valuable farmland around urban centers and it can causes opposing up to conflicts among program implementers and displaced farmers from their original land. So, urbanization affects communities negatively through occupying their productive land, reducing the amount of production and forcing the number of family members to urban centers in need of job opportunity.

In Ethiopia, since most of urban centers are rapidly expanding outward; federal, regional agencies as well as municipal's frequency of land taking by regional government for that purpose from farmers is increasing rapidly. In addition, federal law on rural land expropriation and compensation, have crafted by an agencies that are taking land seen to discover that are losing land. As a result, farmers those land taken off will be exposed to

problem of unemployment, food insecurity after compensation due to the reason that, they are not pre-well aware, educated and trained rather than only depending on former agricultural production (Teketel, 2015).

Environmental pollution and land degradation

Compared to rural, urban centers produce more solid waste disposal than the amount they can absorb in its boundary. Commonly urban centers highly pollute the surrounding rural landscape by the residential, industrial and institutional waste that directly deposited towards the farmland of rural-urban areas.

These wastes are solid hazardous, plastic and medical products in its nature can degrade or formally shifts the qualification and size of production from the rural landscape (Tvedten, 2002). In addition to this, inefficient and inappropriate municipal waste collecting and disposing mechanisms are gradually being the major causes of land degradation at surrounding rural areas and affects health and quality of life of urban periphery dwellers.

Inclusion of surrounding villages to urban coverage

Tvedten (2002) pointed out that expansion of urban center is one of the basic effects of population growth to center. According to him, around 10-15% of urban growth in developing world has a base of boundary expansion or change as a cause while their livelihood for the time is agricultural, which is not core issue of administration in cities.

Over-exploitation of natural resources

People those live in urban areas have varied consumption pattern and size compared to those settled in per-urban areas. This further consumption demands leads as urbanization causes more and exploiting of natural resource of per-urban. So, demand mode by urban centers exceeds the carrying capacity of their own territory and force to exploit that of per-urban beyond the leveled status per time (Tacoli, 2004).

According to the view of kamete (2002), urban centers account 2% of the surface though highly (75%) of world resource is consumed by these centers. These reveals how much material resource of vast and scattered surrounding areas of urban exploited and urban centers depends on the carrying capacity of environment till it exceed the balanced utilization and exploitation. The situation led to over exploitation of resource to periphery, degradation and environmental pollution consecutively.

As explained above, urban consumers covers most of consumption of fire wood, charcoal, construction material, land for urban expansion and infrastructural facilitating provision which depletes rural based natural resources such as farmland, forest, wildfire and quarry sites and results with irreversible damage to human environment (Mcgranaham, 2004).

Land acquisition conflicts

From the causes of conflicts on the side of urban expanding, one is related with problems around land acquisition. These conflicts mostly found at boundary line of urban and rural on common, private and investors land. In Ethiopia, land use change from agricultural use to industries, commerce, housing and else increasing in time and being the source of rising conflict along the rural urban boundary (McGranaham, 2004).

Failure to adopt livelihood strategy

Till now, low income household heads will continue to survive in different social difficulties which can causes as isolation created among city development and sandwiched. These will accelerate the migration of adversely affected groups from particularly farming community already inhabited there. Thus, community at periphery faces problems of inability to develop their own survival strategies, solidarity networks, system of power to which social and economic activities linked to former places Mejjia, (1999: pp. 183) as cited by Feyera (2005).

Shortage of infrastructural facility

As Todaro (1997) argues that in developing countries people migrate from rural to urban areas and Centre of poor household's moves towards to fringe for urban squatting. These communities also require an access of infrastructures like roads, power line, water pipe, drainage line and other social facility. This needs high development cost that will depend on financial capacity of municipal government to fulfill. But in most cases, municipality has no such potential to provide and unfortunately, residents enforced to high cost of living. Comparatively, the challenge of survival is difficult the group dislocated and their farm land taken from since their former livelihood base is farmland.

2.7.2. Positive effects of urban expansion

Expansion of towns has a positive role on the development aspects of surrounding per-urban areas via different means. Major effects are being; Center of market area and access of employment.

Center of market area

Satterthwaite (2004) argues that as soon as communities around the edge of urban centers depends on agricultural production for own and local consumption or national and international markets, urban centers acts as an access to market which serve as pre-requisite of increasing agricultural incomes. So, closeness of such areas to urban can minimize the risk of transportable perishable agricultural product in order to produce timely and avail for market.

Access of employment

Kamete and Tvedent (2002) viewed that comparative to far rural dwellers; urban periphery settled communities have better access to be employed via urban areas invitation for job opportunity by development of small and micro enterprises and cooperatives due to their locational proximity there.

2.8. Policy and Issues Regarding to Urbanization

According to the 2009 WDR on Reshaping Economic Geography, no country has developed without city growth. “As countries become richer, economic activity becomes more densely packed into towns, cities, and metropolises”. This growth requires policy decisions which shape the rate of growth and integration between rural and urban areas, as well as a framework for how a city addresses the needs of a rapidly expanding urban population (Turok and Parnell, 2009).

In case of United Kingdom, urban policy was treated as a special initiative, separate from mainstream policies and amounting to compensation for economic weakness and market failure. It was essentially a palliative designed to ameliorate poor housing and social conditions, rather than a catalyst for socio-economic transformation and development. The Ethiopian Government also understands and accepts the positive arguments for national urban policies, and has made steady progress in short period of time after governing party starts to pursuing centralization led development with certain restriction to foreign investment and complete ownership (Turok and McGranahan, 2013).

Compared to rest of SSA countries, Ethiopia’s urbanization rate is low or only (16%) of the population urbanized meaning the current level of urbanization is only 17% although 55% of GDP is generated in urban areas and the urban economy is growing very strongly. Consequently, the urban population is growing at approximately 3.6% per year and another 42 million people are expected to reside in urban areas by 2050.

This is one of the largest absolute increases in Africa and makes it vital to prepare for large-scale urban population growth. In addition, 79% of the populations live in “slums” showing that there is a pressing need to upgrade urban conditions for instance Finfine dominates Ethiopia’s urban system with a population of about three million (UN-habitat, 2014).

United Nation report of 2014 further narrated that starting from its establishment, leadership of the governing party has been going through a transition over the last decade or so from tough rural revolutionaries who aligned themselves mainly with the peasantry and against feudalism. The younger generation of leaders recognizes the need to give greater priority to addressing the challenge and opportunities of urbanization. The process began around 1999 when one of their advisers prepared a concept paper outlining a sequence of necessary policy reforms and initiatives.

From stages of program one was reforming plan and land legislation which creates suitable environment for more coherent urban development. One of the outcomes was a new law governing the lease of urban land to allow for long leases to users i.e. 30 years for industry, 40 years for commercial and 99 years for residential. The second priority was to strengthen the technical capacity of local, state and national government officials to plan and manage urbanization (Turok and McGranahan, 2013).

Institutionally, national urban development policy framework with intention of being vehicle for implementing the urban component of PASDEP was approved in 2005 however; limited resources and capacity have hampered its implementation in practice. The program is funded by the World Bank (around USD 200 million) which administered by Ministry of Works and Urban Development able to solve the constraints. It offers a performance-based matching grant to urban local governments that meet specific performance benchmarks. For the first time, these cities have access to transparent and predictable funding if they meet their performance criteria (UN habitat, 2014).

The project is very wide-ranging in scope, encompassing 19 different secondary cities. Since its launch in 2008, these cities have made improvements in planning, budgeting, financial management, procurement, revenue mobilization and project execution. Cities are managing their assets better and improving their delivery of services and infrastructure. As they collect more tax revenues, their leeway to borrow and invest further increases. Citizens have also been given more scope than in the past to influence decisions about priority services and infrastructure in their areas.

The World Bank estimates that 2.5 million people living in the 19 participating cities had benefited from the infrastructure investments and upgrades by 2011, including new roads, drainage systems, water systems, latrines and landfills. In addition, some 95,000 jobs in cobblestone construction and other infrastructure works had been created for local residents through small enterprises. The program was doubled in size in 2011 in the light of its success (Turok and McGranahan, 2013).

Another important feature of urban policy in Ethiopia is the systematic approach to urban expansion. Local government controls the use of land and grants leases to different users and developers. The process of planning urban expansions begins with a projection of the future population 25 years hence based on the latest census data. The first priority area is then subject to a grid plan based on one kilometer square blocks.

Different blocks have different combinations of high- and low-cost housing, economic uses, public facilities and public space. The boundary of the extension area is also clearly established to prevent incursions. A process then begins to compensate existing (rural) land users for the withdrawal of their access rights and any improvements they have made, such as grazing animals or growing fruit trees. The land is then progressively serviced and allocated to developers, depending on demand. It is believed that the process of urban expansion will be largely self-financing, with the sale of the land leases generating the revenue to pay for the infrastructure and compensation of existing users (UN- habitat, 2014).

2.9. Conceptual Framework

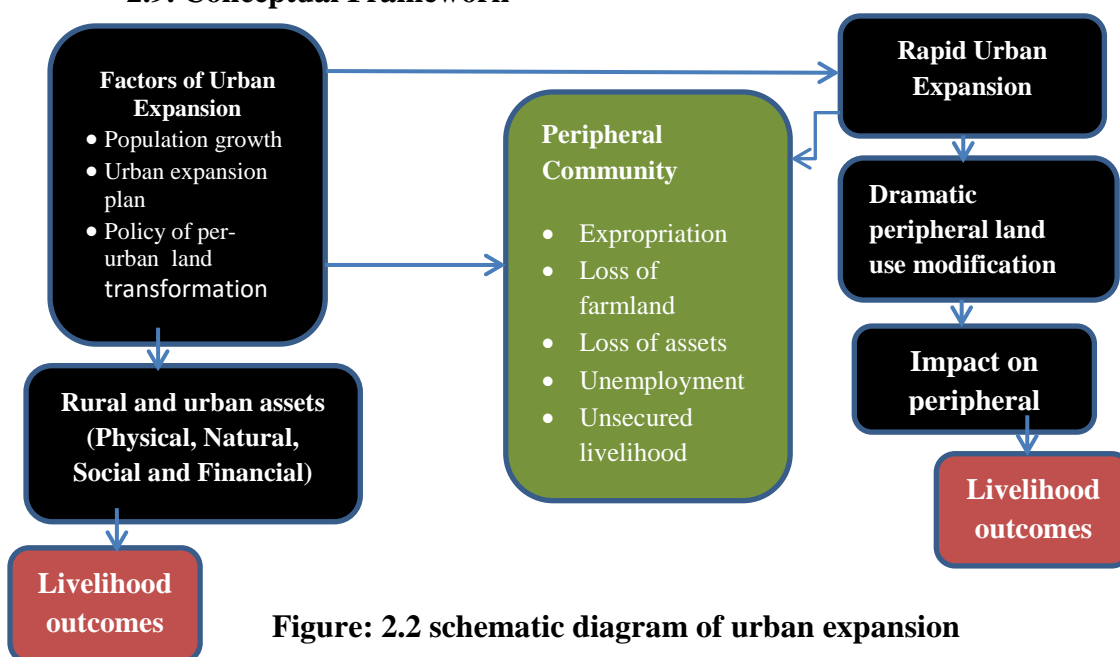


Figure: 2.2 schematic diagram of urban expansion

Source: own adopted, 2018

CHAPTER THREE

3. THE STUDY AREA AND METHODOLOGY

3.1. Description of the Study Area

3.1.1. Bio-physical Condition

Location

Absolutely, Holeta town represented by extending from 9° 1'00 " N to 9° 6'00" N Latitude and 38° 26'30" E to 38° 32' 30" E Longitude. In other word, it is located in Oromia regional state particularly in special zone near to Finfine, and 30 km from Finfine in west direction on the main road of Finfine to Naqamte i.e. in Walmara woreda as administrative towns in special zone of Oromia around Finfine.

Relatively, the study area located at west of Kolobo town around 9 km, at east of Ejere or Addis Alem town 9 km and on the left direction bounded by kebeles such as; Marfeta 1^{ffa}, Wajitu Harbu, Markos, Ciri Dobi Qore, Oddo Walmara and Coqe. Further, the town located at close distance of; Ambo, Ginci, Incini, Ejere, Sheno, Mogor, Olenkomi, Burayu, Finfinne.

Topography

Altitudinal, the study area's elevation ranged between 2300-3800 masl and average of 2450 masl covering total surface area of 5550 ha. Holeta town is located in plateaus of Shewa specifically the central topographic nature of Ethiopia. The town has plain, plateau and other landforms up to swampy land. This is to mean that, 52.3%, of plain feature, 31.58%, of plateau, 9.09%, of swampy areas and 2.9% river natured while the rest portion of town covered by declining elevation from south to north part of studied area (HTAP, 2017).

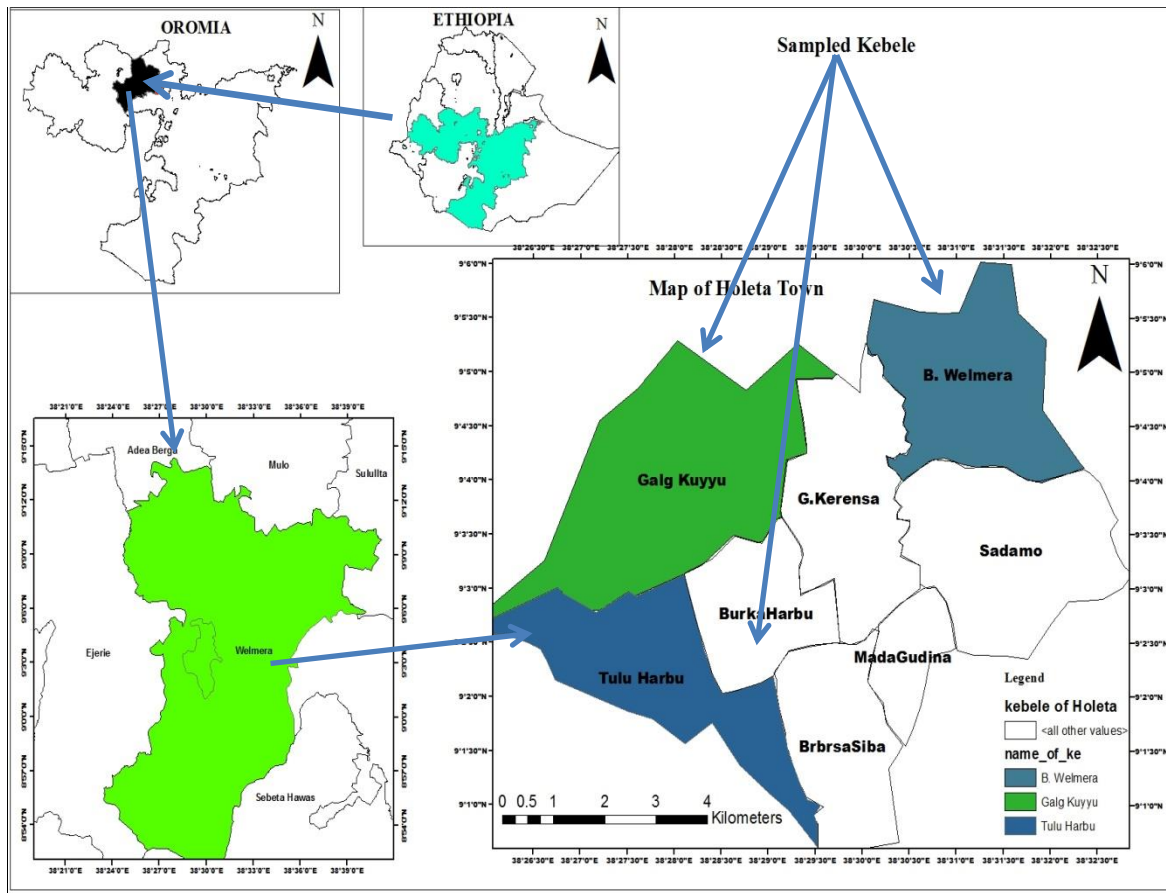


Figure: 3.1 Map of the Study Area

Source: Ethio-Gis Data, 2016

Climate

Holeta's climate is classified as sub-tropical or Woena Dega. The summers here have a good deal of rainfall, while the winters have very little. This climate is considered to be Cwb according to the Koppen's- climate classification. The minimum and maximum temperature of an area is 0.6°C and 21°C respectively. In average rainfall access in area extends from 1040 –1100 ranges. Temperature is highest on average during April, at around 17.7 °C but coldest during November, with annual average of 14.2 °C.

Most of the precipitation here falls in August, averaging, 266 mm. The variation in the precipitation between the driest and wettest months is 257 mm but an average precipitation of an area frequently 1134 mm (<http://www.climate-data.org.html>). In case of wind systems, area blown by easterly trade wind at 8 km per hour and it contains 43% moisture or humidity.

Soil and Vegetation

Geologically, the study area is younger volcanic of trashy-basalt, trachyte, ignimbrites and tuff belonging to the Wechecha Mountain ranges.

The dominant soil groups of the study area are Orthic Nitosols, Cambsols and Orthic Vertisol i.e black, red soil and others types according to local name. Generally, town covered by suitable soil types for construction and various agricultural uses ((Yirga, 2004).

The vegetation around the town is characterized by bush lands, numerous herbaceous flora, scattered trees, cultivated eucalyptus, oil crops, and horticultural crops. Except unsuitable areas like hills and /or marshy areas as well as grassland and forests, majority of the study area is covered with crops such as cereal, pulses and oil crops (Ketema, 2006). This production is highly practiced as a survival strategy of households at different direction of town for instance along the banks of the Holeta River surrounding the town showing most communities produce cabbages, carrot, potato, tomato and etc.

3.1.2. Socio-economic and Demographic condition

Demographic characteristics

According to 1994 census report of CSA, population statistics of Holeta town is 16,755, of which 5,040 are males 8,745 are females. After years, 2007 census reported 25,993 total populations and from total population, 12,605 are males and the rest populations were females respectively. The study area is inhabited by 36,325 populations of which 49.8% are male while the remaining population, 50.2% are females and mean of family size in household heads is 4.6 out of total household, 7,596 (Holeta Town Administration Profile, 2017).

Annually population size is growing at rate of 2.7 % due to the pulling factor that is its closeness to Finfine invites the large number of labor workers for the search of job opportunity within and approached towns. But, the recent data regards to population size in 8 kebeles of town shows that the study area contains around 63,139 populations of which total household heads are 10,484. Of total household heads, 4355 are females and the remaining, 6129 are male household heads. Former three kebeles of town are most populous and though population settled in reformed rural areas of; Galgal Kuyu, Burka Walmara, Sadamo, Meda Gudina and Tulu Harbu are less number. But, those areas reformed to urban administration forecasted to forecasting to where urban growth altogether with community at fringe (HTAP, 2017).

Livelihood strategy of population

Economically, most of urban dwellers are engaged via private, investment and governmental industries employment, agro –industry and other commercial activities via the contribution of certain institutes of research. But most of the urban fringe community based on farming for their livelihood. Additional situations created employment opportunity in town are horticulture, agro- industry followed by commercial and government work respectively (Fekadu, 2011).

Currently, 6.7% of population engage to agriculture related mode of life while the left mostly central area residents engaged in different non- agriculture particularly governmental work, employees of factories and other service oriented activities. Now a day, 10.39%, 6.9%, 6.7%, 0.38%, 12.47% and 21.30% of productive population respectively generating their income via activities such as; government employment, own business, farming, investment, employment in small and large industries there, service provision and own business jobs (HTAP, 2017).

Infrastructure in the study area

The town has varied infrastructural facility such as road networks, water supply and sanitation, electricity as well as others. For instance, the town has 39.8 km asphalt main road on the way of Finfine to Nekemte. Currently population accessed with newly constructed 232.16 km gravel surfaced, 30.39 km cobble stone, 19.9 km stretched ditch of flood, small bridge and 41 km Calvert. On other hand, there is an electric service via 3 stations by totally generating 45 kilo volt which estimated to 24 hours for socio-economic uses (HTAP, 2017, 2017).

The town has potential of supply and sanitation for public and economic purposes via water bank discharging of 627,528 m³ per a year from 8 deep well and 3 tankers. For the case of health condition for community, there are 43 Governmental and non-governmental health institutions and one special hospital on the stage of finishing (Holeta Town Health Office, 2017). Moreover, in the study area there are 3 colleges, 2 research institutes, military academy, numerous primary and secondary schools of government and privates (Holeta Town Education Bureau, 2017).

3.2. Research Design

3.2.1. Research approach

In this research, the descriptive research design was employed. This is due to the fact that the study primarily focused on assessing the impact of urban expansion on the peripheral community livelihoods. So, it dealt with detail identification on urban expansion condition previously and during the study time.

This feature description led as the research has a qualitative nature. Therefore, the study had a quantitative character. In general, the descriptive design of research incorporated with mixed qualitative and quantitative research via hybrid interpretation of data in both natures side by side.

3.2.2. Source of data

In order to achieve the main objective of the research that is assessed impact of urbanization towards to the peripheral community livelihoods, the researcher used both primary and secondary data sources since it was vital for the study result. From those sources, primary data collected from per-urban settlement since they were prior issues considerable groups and from municipal experts since they know more of urban expansion program.

Most of primary data sources for the study collected through implementation of tools listed under instruments of data collection below. Additionally, livelihood standard investigated in the study focused to the community's life previously and after expansion with statistical data revealing their varied types of capital levels. So, the first hand sources of data for the study were those collected from household heads in sampled kebele, elders of the community itself and experts enriched of information in municipality using below expressed methods for data collection. On other hand, secondary data sources basically required from all available reports of offices in town administration, other related published books, journals and other written or documented data also used to examine issues under investigation.

3.2.3. Sampling techniques and sample size determination

Collecting data from all population included in the study was too tiresome due to its great time, effort and financial requirement. Then selection of sample for the whole was needed. To balance size of representative population and reduce problem of sampling error, both of probability and non-probability sampling techniques were used in respective of targeted population required for relevant information to issue investigation.

Since issues of this investigation entitled with assessing impact of urban expansion on peripheral community livelihood concerned only per-urban areas of Holeta town. Geographically, Kebele framed to select sample strata focused only to the five rural-urban linked areas such as; Burka Walmara, Sadamo, Tulu Harbu, Meda Gudina and Galgal Kuyu those recently added to an administration. This is due to the fact that those areas were rural part of woreda earlier to expansion were rural area but urbanity of town gradually expanded and areas currently shifted to urban land uses rather than former feature by inborn households. Due to this reason, the researcher took sample kebeles and respondents from rural-urban transition of urban or home of households expropriated for expansion purposively or judged as geographical scope of the study.

On other hand, Burka Walmara, Tulu Harbu and Galgal Kuyu were places where urban expansion was severe and or more of land use there shifted its nature towards urbanization and place of new population settlement parts of case study. So, occupation of vast areas for varied urban land uses at most extremes of town and rapid rate of expansion, researcher determined three of kebeles purposively i.e. via judgmental sampling technique. This indicates that sampled household heads under investigation for all tools of data collection nominated from sampled strata of study area. Since community in peripheral areas more or less share homogeneity of livelihood conditions, strategies and matured or aged, proportional sample size allocated from each sampled kebeles via systematic random sampling technique.

Additionally, key informants sampled by judgmental technique since interview requires household heads having timely events on occasions like; urban expansion trends, participation, livelihood condition and any livelihood changes after urban expansion's influences in their life. So, the researcher interviewed elder household heads of area and experts of municipality. Similarly, FGD samples were another participant for discussion on issues studied. To sample participants for these tools, researcher firstly asked elder resident in transect walk and randomly selected participants from aged households for in depth interview.

In order to calculate enough sample size from the total household heads under the study, there is standard statistical approach equation. For this case, equation of Yamane (1967) was in use. So, $n = \frac{N}{1+N(e^2)}$ Equation of Yemane

Where n=Sample size N= Total number of HHs e =Estimated precision of data

Total household heads in sampled kebeles=1506, Level of error/ confidence =0.05 / 95%

$$\text{According to him, sampled size (n)} = \frac{N}{1+N(e^2)} = \frac{1506}{1+1506(0.052)} = 313$$

Using this scientific determination, 313 household heads selected for questionnaire survey. Proportional to the total household heads in scope of study i.e. affected community, sample size selected using systematic random sampling technique at an interval of $n^{\text{th}} = 1506/313 = 5^{\text{th}}$ along the listed household heads in each of sampled kebeles..

For the inclusion of both male and female respondents, proportional allocation of gender properly done in accordance of total gender sampled in all sampled kebeles. So, for this study, 211 male household heads and 102, female household heads selected as the respondents of the survey.

Detail information regarding represented household heads is as below in table 3.1. Additionally, there were 8 key informants from those purposively targeted elders and experts and 12 FGD participants out of the elders and experts. Generally, sampled household heads for study are the summation of sampled household heads for questionnaire, key informants interview and FGD participants.

Table 3.1: Distribution of sampled household heads in sample kebeles

S.N o	Sampled kebeles	Total Household heads			Sampled Household heads		
		M	F	T	M	F	T
1	Burka Walmara	577	240	817	120	50	170
2	Galgal kuyu	327	200	527	67	42	109
3	Tulu Harbu	112	50	162	24	10	34
Total	household heads	1016	490	1506	211	102	313

Source: Holeta Town Administration, 2016

3.2.4. Data collection tools

As a tool to generate the most relevant information for the study, the researcher implemented tools like; questionnaire, in depth interview with key informants, FGD and personal observation during data collection in accordance of time and place required.

Questionnaire

The researcher employed questionnaire containing closed ended and open ended question to gather decisive data in case of qualitative and quantitative analysis of results on, current status of urban growth, livelihood changes to per-urban households, impact of urbanization and the constraints relating expansion respectively. Since most of community residing in the study area spoke “Afaan Oromo”, written questions for data collection prepared in” Afaan Oromo”. This certainly supported them to understand and responded without confusion.

Key informants interview

Interview with key informants additionally carried out with samples selected purposively from different management hierarchy official experts and randomly selected elder representative from community in range of adverse impacts of urbanization. To converse on question which needs further information for instance deeply policy and strategy gaps, researcher arranged guide lines for sampled interviewees from its frame described in previous section.

Focus Group Discussion (FGD)

Focus group discussion (FGD) of 5-6 participants selected from each of sampled kebeles particularly affected household heads and experts of town municipal judged as a sample. This tool more or less applied on detail discussion of critical issues investigated based on reflection of open ended questions by a researcher as chairperson of discussion.

Personal Observation

First hand data of the field in eye view is more accurate comparative to else. Critically observable features recorded on time of data collection from field. In context of issue studied, investigator able to assess livelihoods condition of community, livelihoods strategies and effects of expansion using camera during data collection.

3.2.5. Data analysis techniques

However the study has both qualitative and quantitative approach of analysis, prior of any data analyzing techniques data from survey questionnaire was collected, recorded, coded and filled into computer as input of processing and analyzing in SPSS software. Primary data concerned to livelihood condition, livelihood change, strategy gaps and other related data analyzed through descriptive techniques like frequency, percent, mean and standard deviation.

To make question survey result strong, FGD and interview results analyzed via narrating responses by statement. In addition to this, more of questions regarding to urban expansion impact assessment of livelihood i.e. different assets of community before and after an event numerically collected and analyzed by using statistical tool specifically repeated measures or dependent t-test of significance. Then, result of analysis in SPSS software presented inform of tables, pie chart and bar graphs followed by brief discussion based on result representing facts of the studied area and previous studies.

The demarcation of time for livelihood assessment before and after urban expansion assigned to 2005 E.C. This is due to the reason that Holeta town till 1999 E.C has only three kebeles under its administration however proclamation No 65/1999 and revised 2003 reformed town by including rural parts described above under town’s administration. So, by considering 2 years for data effectiveness to prior condition, 2005 E.C assigned as transition time of before and after community livelihood assessment.

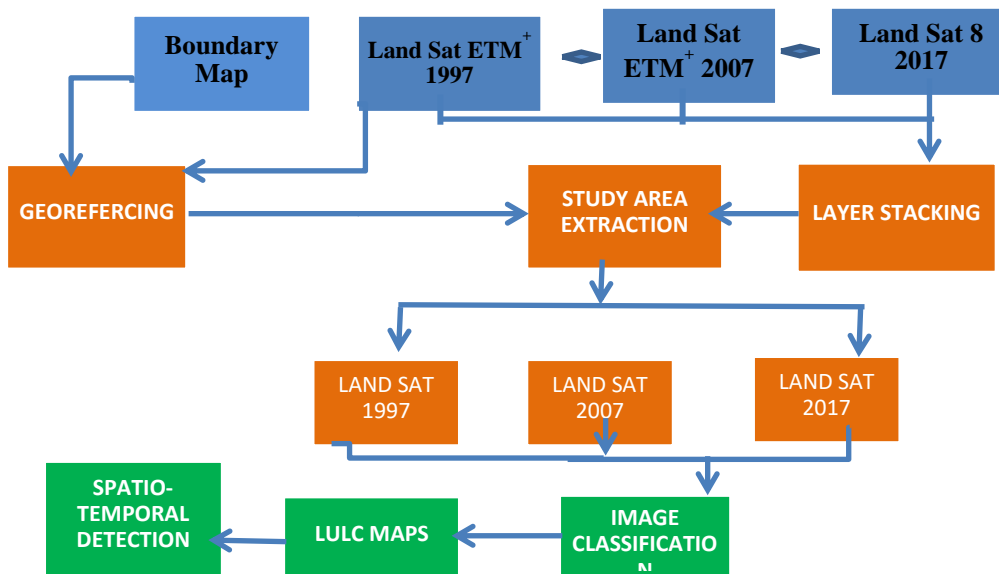


Figure:3.2 Flow chart of Gis and remote sensing data analysis

Source: compiled by researcher

In order to achieve the second objective, the researcher used and or processed data from satellite images of 1997 – 2017, GPS, base map of area and personally observed features using software such as Arc Gis, Erdas imagine, 2010, MS Excel and others. In short figure 3.2 above displaying data analysis is in accordance of above chart.

3.2.6. Ethical consideration

Conduction of the study for masters of degree fulfillment has permitted by Arba Minch University, school of graduate studies. So, morals of researcher and community handled by the research kept quiet. This indicates that firstly populations in the scope of the study have full right to participate or not to participate. Conduction of this research doesn't has any harm to their social, economic, environmental, moral and psychological nature rather since it focused on assessing the case of urban expansion to their homeland, it can find out unknown situation and can directs stakeholders to solve a problem if there is related matters. So, all basic information obtained from population during survey used only for research and security of household's all aspect had been notified for situation clearly and closely as ethics of the study at initial stage of data collection.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

4.1. General Background of Respondents

By default background of the respondent is a body of finding which might had a correlation with issues of investigation. So, this thesis tried to analyze and also presented data primarily concerning to households information basically; gender, age, educational background and family size of respondents.

4.1.1. Sex of respondents

Within the total respondents, there is proportional representation of both male and female. As Table 4.1 below displays that 67.4% of sampled respondents were male while the left 33.6% female which indicates one to one respondents from community. So, result implies that both gender groups were surveyed for urban condition before and any livelihood implication after urban expansion on both genders.

Table 4.1 Sex of the Respondents

Gender	Frequency	Percent (%)
Male	211	67.4
Female	102	33.6
Total	313	100

Source: Field survey, March 2018

4.1.2. Age of the respondents

Data collected from sampled respondents shown that almost there were communities in all age categories. For instance, around 71.5% of household heads are in age range of 40-60 years. On other hand, 25.9% and 2.6% represents household heads less than 40 years and > 60 years, respectively (see Figure 4.1). It shows that most respondents or almost total respondents are economically productive, they know more about historical expansion in town and their livelihood strategy before and subsequent to urban expansion in scope of study.

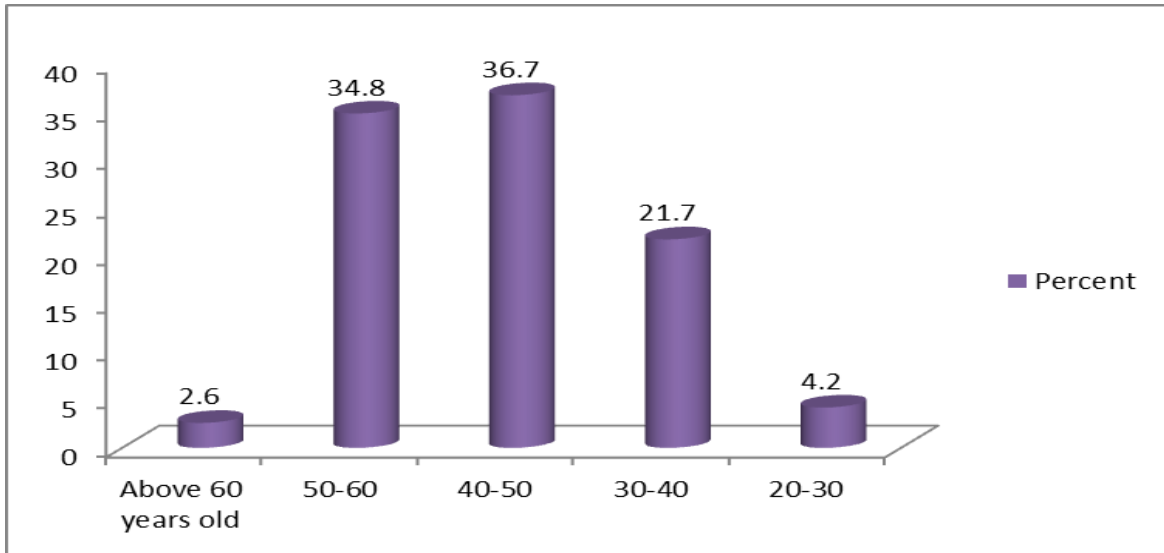


Figure 4.1: Age of the Respondents

Source: Field survey, March 2018

4.1.3. Educational background of respondents

Population in varied education status was one of the respondent's background and determinant for livelihood strategy he/she follows. Specifically, from total household heads 38.9%, 18.2%, 1.9% and 0.3% were those of read and write, elementary, secondary and above educational backgrounds. Figure 4.2 displays that more than half of respondents were literate of "read" and "write" up to elementary while above 30% are illiterate respondents. So, the number of respondents in educational level decreased from the illiterate to tertiary status of education.

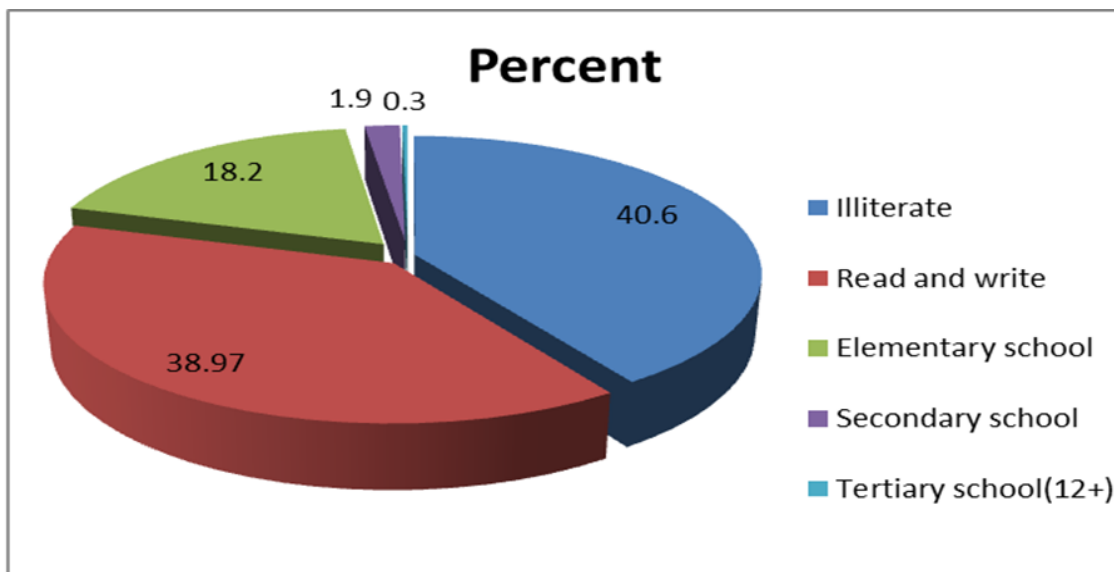


Figure 4.2: Educational background of Respondents

Source: Field survey, March 2018

This suggests that the number of professionals residing area are infrequent and their probability to join non-farm practice meaning that community expropriated by expansion enjoys difficulty of job opportunity and skill to adopt and or advance their livelihood even if expansion of town interrupted their former livelihood condition.

4.1.4. Family size of the respondents

Table 4.2 above indicates the number of male and female family members under household heads. This table shows that total family size of respondents is 1944 of which, 943 male and 1001 were female, respectively. Regards to male family size of households, 40% of households have family size of 1-2, 29.45% of 3-4 family and 28.1% of 5-6 of male family, respectively. But percentage of households administering above 7 members are a little. On other hand, household's female family size, 1-2 accounts 33.1%, 3-4 accounts 38.75 while 22.6% of households have 5-6 female family members.

Generally, mean female and male family of surveyed respondents were 3.2 and 3.01, respectively. In other word, the average total family size was around 6.21 under each of household heads in the study area which is extreme size above average of national level. So, it is difficult to feed even if there is enough farmland and crop production. Similar to land expropriation and fragmentation of farmland; high family members itself can let to livelihood failure and food insecurity.

Table 4.2: Respondent's family size

HHs Family size	Male			Female		
	Frequency (No)		Percent (%)	Frequency (No)		Percent (%)
	HHs	F. size		HHs	F. size	
No family member	3	0	1	6	0	1.9
1-2	126	159	40.2	101	161	33.1
3-4	92	304	29.45	121	426	38.7
5-6	88	452	28.1	71	360	22.6
>7	4	28	1.3	14	98	4.5
Total	313	943	100	313	1001	100
Mean family size	3.01			3.2		

Source: Field survey, March 2018

4.2. Status of Urban Development in Study Area

4.2.1. Historical expansion of town

According to focus group discussion participant's narration, establishment of Holeta was by Emperor Menilik II particularly at currently called as Birbirsiba kebele. Till the recent time, this town covers small area i.e. only three kebeles. But after a while opening of federal and regional institutions like research center as well as its requirement for government followed with gradual population resettlement at different sides of town. Even if more of our rural residents didn't hope to migrate to here but others became mass. Exceptionally, participants guessed as the time after Ethiopian millennium, 2000 and town's reformation by urban proclamation.

In addition to this primary data, documents from municipality also support participant's idea that Holeta town established in 1948 E.C but covers around 1550 ha up to 1990s though expanded to 5550 ha via reforming proclamation No 65/95 implemented in last of 2000 E.C. Actually, the starting point of Holeta town expansion was from B/Siba local administration though currently expanding in almost all direction except south and south west extremes due to unsuitable topography for settlement. For instance, on north east direction following the main road of Finfine to Wellega, on north following construction of Holeta to Mogor road way and on east approaching to Finfine because of topographic suitability and better infrastructural coverage till now (Holeta Town Municipality, 2017).

Qualitative data from respondents also supports numerically assessed spatial expansion of town. For instance, researchers viewed questioned of whether Holeta town is rapidly expanding or not. Almost, 99% of respondents agreed on the idea that town had been expanding rapidly though community's attitude towards to expansion program differed. Since, socio-economic situation, population size trend and investment situation increases timely, town reformation starting from 1999 E.C caused enlargement from 1550 ha to 5550 ha (55.89 km²) coverage including close rural parts considering as response area of housing demand stretched via increased population size and all together development of areas (HTM, 2017). In the same view, Alemu and Amare (2015) justified that similar to other several African countries, urban expansion or growth in Ethiopia is occurring at a more rapid rate and competition for land between agriculture and non-agriculture is becoming intense in the per-urban areas.

On other hand, further pulling factor for expansion also surveyed. Regards to this, respondents presented more than one causes as follows. This shows that 58.1%, 57.8%, 29.4% and 11.5% of sampled respondents replied that investment program implementation, geographical proximity of town towards to Finfine, climatic suitability of town for settlement and high natural population increase of town were pulling factors intensified expansion of town, respectively (see Table 4.3).

From those causes, principal causes of urbanization were implementation of investment program and geographical founding of town at close distance from Finfine while natural population increase and topographic nature of town are least pulling factor. In review part of this researcher, Bhata (2010) pointed that some of causes for urban expansion or compactness are population growth, economic growth, industrialization and demand for more living space. Therefore, establishment of many agro-forestry and other factories and its geographical location are few of decisive factors highly invited labor force, new residential plots and urban expansion program in Holeta town.

Table 4.3: Factors for rapid urban expansion in study area

S. No	Items	Frequency	Percent
1	Investment program implementation in town	182	58.1
2	Geographical proximity of town to Finfine	181	57.8
3	Climatic suitability of town for settlement	92	29.4
4	Suitable topography for settlement	36	11.5
5	High natural population increase of town	25	8

Source: Field survey, 2018

4.2.2. Demographic condition of town

Population size is one indicator to measure the status of urbanization for one urban settlement. Population size in town at different census and municipality report depicts urbanization. For instance, the total Number of population lived in 1999, 2005 and currently 2009 E.C, were 25,593, 37,850 and 63,139 populations, respectively. This shows that within former two periods report, 1999 and 2004; almost population size increased by 10,000 and from 2005 to 2007 increased by 2000 population and the same change till now. Out of current population size, great percent were urban dwellers (52045) but only 11,094 from recently bounded per-urban areas.

From current total population, 32,201 were female and the rest (30,938) are male. Furthermore greater than half of populations, 57.8% are adult age groups while the rest are young and elder (HTM, 2017).

From this data we can interpret that doubling time of population in settlement is too short; higher rate of growth as well as urbanization though level of urbanization is even nationally lower. This means that in accordance of town’s report population size is increasing rapidly as soon as urban growing or expanding to rural parts. In supporting this result, UN-habitat (2010) and Toulmin (2008) articulated that unprecedented growth of urban population in Africa is causing an exceptionally rapid increase in the demand for urban land. The rising demand for urban land therefore tends to be met primarily by converting per-urban agricultural land at the periphery of the existing built-up area or urbanization in centers.

So, current demography implies that rapid rate of population growth and urbanization in the former areas of town enforcing town to expand towards to the neighbor rural kebeles as well as urban growth even if more of populations are economically inactive.

Table: 4.4 Population size of Holeta town from 1999 – 2009 E.C

Population Size	Total Population Size (1999 -2009 E.C)					
	1999 E.C	2004 E.C	2005 E.C	2007 E.C	2008 E.C	2009 E.C
Total size	25,593	35,845	37,850	42,842	60,256	63,139

Source: Holeta Town Administration, 2017

Moreover, household heads replied different population category newly settled and exaggerated rate of growth and urbanization in studied area. Table 4.5 below shows that 50.5% of the respondents responded as immigrants come from closer town around Finfine were major group for town’s urban population growth while 47.92%, 38% and 20.6% said; people came from surrounding woredas of town, peoples came from adjacent rural areas to enjoy better jobs and population growth of town itself respectively. In support of this finding, Tegegne (2001) pointed out that nationally most role player leading urban centers to expanding are in migrants from rural and urban, natural population increase and industrialization which demands housing facilities.

So, such gradual demand of land and housing leads to urban expansion but unbalanced with economic growth. This result reveals that the first most inhabitants alarming the rate of urbanization are immigrants resettled from the nearby towns while the second and third most influential population groups are from surrounding woredas and closer rural areas. But, natural population growth of town and populations in rural part of town are not such much determinant groups accelerated urban expansion or growth.

Table 4.5: Group of population accelerated urban population size

S.N	Items	Frequency	Percent
1	Population came from rural areas of woreda	119	38.0
2	Population came from other surrounding woredas	150	47.9
3	High population growth of town itself	65	20.8
4	Immigrants from closer town around Finfine	158	50.5

Source: Field survey, March 2018

4.2.3. Infrastructural condition of town

Situations that facilitate growth of economy parallel to urban growth or expansion were infrastructural facility. UN report of (2007) pointed that urban growth occurs naturally from individual and corporate efforts to reduce time and expense in community and transportation while improving opportunities of jobs, educations, and housing and transportation status. For this study, infrastructural facilities assessed are access of; transport, water and sanitation, communication and others.

From its history before a decade, the town crossed by 39.8 km asphalt main road on the way of Finfine to Nekemte. Beside to this, 60 km of gravel surfaced and no more of cobble surfaced internal roads mostly in central (core) of town. Now a day, there were better road types of different category such as; asphalt, gravel smooth, normally surfaced and coble surfaced roads in all direction of town than former rural condition. So, infrastructure constructed able to contribute economy and job opportunity for peoples. For instance, the town newly constructed 232.16 km gravel surfaced, 30.39 km cobble stone, 19.9 km stretched ditch of flood, small bridge and 41 km calvert (HTAP, 2017). In line to this, Mandere (2010) identified that expansion of town to per-urban areas has led to the newly establishment of infrastructures such as electrification, telephone services, new schools and

health centers. This development has created new employment opportunities and thereby increased immigration to the area.

This result displays that comparatively there is better access of internal road extended in all direction to rural parts though coverage of roads and terminals for socio-economic purpose in town until now is inadequate comparative to demand of facility. And also extensions of those internal road types are not well distributed or regionalized in all direction for altogether beneficially of per-urban community.

Another infrastructural facility accessed in case study was electric service as root of multiple activities. There is electric service via 3 stations by totally generating 45 kilo volt. But access even before 2 years was only from 2 power terminal. Even though municipality says there is an access for almost 24 hours, there are problems like; lack of transformer, experts as needed, inefficiency of power line along newly built up area, unfitness of line power with urban master plan and so on. Currently the service coverage for dwellers and economic user estimated to 68% (HTAP, 2017). From this point, we can interpret that number of community in coverage is advanced however current capability below amount required enhancing economic and social aspects of town.

The town has different water resources and supply from deep well and others for sanitation revealing high potential of supply and sanitation but unutilized for socio-economic requirements. For instance, town has 5 deep well and 2 water tankers serving more than 5,060 households before ten years. Currently, the town has water bank discharging of 627,528 m³ per a year from 8 deep well and 3 tankers conserving 150 m³, 300 m³ and 800 m³ respectively Walmara area, Dobi area and new 2nd Dobi stations (Holeta Town Water Supply and Sanitation Office, 2017). So, we can conclude that even though there was improvement making 6,529 households user and enlarged service coverage to 70% of population in administration, till now there is certain lack of water sanitation access for all.

Municipality providing education services for generation in private and governmental organization. Before 5 years there were around 37 education institutions and federal institutions like research center, military academy and colleges. Currently, there is 24 KG, 2 primaries, 13 private and governmental elementary, 2 secondary, 1 preparatory, 1 technical and vocational training center, 2 research institute and 2 colleges. Gradual increasing of population size due to expansion let to high school enrollment chance of community (Holeta Town Education office, 2017).

Mohamed (2014) also described that Africa's rapid urbanization is expected to increase enrollment, especially at primary level. Indeed, the nature of cities appears to provide incentives for investment in education by residents. So the result suggests that all schools of lower up to higher education centers with exception of university enrollment to education opportunity are wider currently than else.

Health institutions providing services in Holeta town are gradually increasing from time to time. More of drastically increases are along private institution while less of governmental side. Data from town's administration reveals that there were only 29 private and governmental institutions in 2005 E.C but service centers increased to 38 of 2008 E.C including clinics, health stations as well as pharmacy shops. At this time, town has 43 health institutions and one special hospital on the stage of finishing (Health Office, 2017). The study of Mohamed (2014) also concluded to that towns have access to health and sanitations. Health care service more concentrated to urban areas as residents increase for better health performances than those in rural areas.

This denotes that there is gradual rise of service coverage in urban settlement as soon as area expanded and more population settled though the current coverage is not enough at all. Since expansion of town and population growth causes additional demand of facility fulfillment, moderate coverage of service by little of government in municipality but mass clinics of profit oriented owners show capital inadequacy to fully access.

4.2.4. Economic condition of town

Even if residential crowdedness or high population statistics of respective core kebeles engaged non-farming practices, there are urban dwellers basically live via agricultural production as the income source at rural-urban linked area. According to community strategies before 1990s, most of per-urban residents in recently bounded to municipality depended on the agriculture activities such as; crop cultivation, livestock reproduction and mixed farming though more of urban dwellers are non-agricultural economy followers. Earlier document from town's finance office stated that, 8.9%, 8.47% and 5.1%, of community generated finance from government employment, investment and own business respectively while the rest population, 9.14% and 16.3% subsisted by farming practices and service oriented actions (Holeta Town Development and Finance Office, 2017).

From the current demography of town, 57.6% are economically productive population involved in various strategy of livelihood while others (42.4%) are passive and unemployed. Out of the total, (45.7%) are currently producing the finance for themselves as well as their dependents (54.3%). Contrary to this, 42.31% are economical dependents of active population (HTM, 2017). This indicates that 84 passive peoples are surviving by 100 active peoples for individual livelihood and indirect economic growth of town.

At sector level, only 6.7% of the total depends on agriculture related mode of life while the left mostly central area residents engaged in different non- agriculture particularly governmental work, employees of factories and other service oriented activities. Now a day, 10.39%, 6.9%, 6.7%, 0.38%, 12.47% and 21.30% of productive population respectively generating their income via activities such as; government employment, own business, farming, investment, employment in small and large industries there, service provision and own business jobs. Result of study demonstrates reduction of community performing common farming practices compared to previous of event which means that most of per-urban households modified their strategy from rural characteristics to urban form due to urban expansion.

Historically, there were no industries before 1990s but following 1996 proclamation on investment opportunities; a number of small, medium and large scale industries involved in production of various semi-finished and finished goods within different areas of town. Establishment of those factories and job opportunity then after made 4,542 (12.47%) of total urban residents beneficial (HTM, 2017). In support of this finding, Simon et al (2008) stated that per-urban expansion in China is the result of investments on the manufacturing sector due to deliberate dispersal of state-owned industries, foreign direct investments and domestic investments. This informs that 1,016.4 ha of total land transformed to commercial farming and various non-agricultural uses. Thus, own business, employment in government offices as well as factories and other non-agricultural activities are the common economic activities urban residents relied.

For community's daily economic actions, a town has an access of financial agents of which, 3 branches of CBE, 1 DBE, 7 private banks like Awash, Nib, Abyssinia, OIB, CBO and other micro finances. As a whole the town is providing financial service for community via 19 financial institutions (HTM, 2017).

Other than economic improvements, socio-demographic situations like rapid population growth due to high inflow of population hoping opportunity and expansion of town to fringe caused unstable economic problem i.e. high rate of unemployment in town and or adverse implication to economy. Consecutively, the number of unemployed labor had been increasing in town though few professional labors organized. Actually there was no concrete job creating strategy from town's administration and government nationally before years.

Currently, municipality emphasized to facilitating credit and performing activity like grouping of skilled unemployed labor to different small and micro enterprises or unions in various economic sectors. For example, the town able to create 603 enterprises for totally 3,488 populations engaged in manufacturing, construction, trade and urban agriculture from which 39 of them transformed to better stage of business. So, the program certainly mediated the problem of high rate of unemployment (Holeta Town Small and Micro Enterprises Office, 2017).

4.2.5. Social condition of town

In social view, key informants from municipality and others responded that growth of Holeta came with different social problems. Interviewees said our town gradually falling in the problem of peace as well as security for public day to day activity. This means that high numbers of jobless adults are currently participating on different acts. After their usage of addictive more of them employed to illegal events such as repeatedly creating conflict situation in town, engaging in to robbing or stealing the property of travelers or new comer and related public disturbances. For instance, still hanging peoples by taking towards to unknown position repeatedly heard in the town. So, we concluded that problems of unemployment, social unrest and others are the result of; population congestion, unbalanced growth between population and economy and high unemployed labor forces crowded which directly and indirectly stretched via rapid expansion.

4.2.6. Housing status and tenure of town

Since population in town rapidly increased by factors suggested above, there was high housing demand from dwellers and others newly settled labor force behind factories. But, only 14,000 households are the owner of private houses. On other hand, there are early taken kebele houses in B/Siba, G/Kerensa, B/Harbu and few in peripheral kebeles in town. Totally, there are 1,110 houses of which 1,000 houses have plan and 28 transferred for investment

purpose and public economic uses. Most of those houses rented as financial source for municipality by earning around 190,000 ETB annually (HTM, 2017).

In order to respond high demand of housing there, town is on the way of constructing 552 condominiums named 20:80. Out of the total condominium houses, only 195 houses of 1, 2 and 3 bedrooms and studio houses transferred for user via lottery form while the rest, 357 houses' construction is ongoing (HTM, 2017). In support of this result, Tameru (2010) stated that among other main issues housing development policy direction is focused on overcoming the problems of housing urban areas through urban renewal and upgrading, increasing the density of developed area, developing the construction industry and reducing the informal housing. Now, few of houseless households got condominium house though the work of municipality is below the amount demanded that means high housing problem.

4.3. Spatial and Temporal Land Use Land Cover Change of Study Area

4.3.1. Land use land cover of Holeta town

Description of land sat images

Spatial and temporal land use land cover of study area shown by the classification result of land sat images such as; ETM+1997, ETM+2007 and Land Sat 8 2017. From the images processed; coverage of land use types during consecutive images, rate of changes and accuracy assessment from recent image were derived for analysis. The key goal to analyze these images was producing land use map and detecting land use change in different years in historical expansion using ARC GIS 10.3, ERDAS IMAGINE 2010 and Microsoft Excel for Holeta town.

Table: 4.6 Description of major land use land covers

No	Class Types	Description of land uses in study area
1	Open space	Harvested area, stony areas or soil exposed and like uncultivated.
2	U. agriculture	Various cultivated grounds of crops, vegetable, fruits and other crops
3	Built up area	Industrial, Residential, commercial, infrastructural constructions and related features
4	Forest land	vegetation, shrub lands, planted, open agro-forestry like flower factories and related
5	Grassland	Grazing areas, swampy or marshy land and moist areas along streams.

Source: LULC maps, ERDAS IMAGINE 2010

Land use land cover in 1997

An area coverage and percentage of land use and land cover categories within three equal time interval of years were derived from those classified images. As Figure 4.3 below shows about 12.8% of Holeta town administration covered by grassland, 17.7% by Forest, 7.7% by Built-up, 50.3% by open space and 11.5% by urban agriculture, respectively.

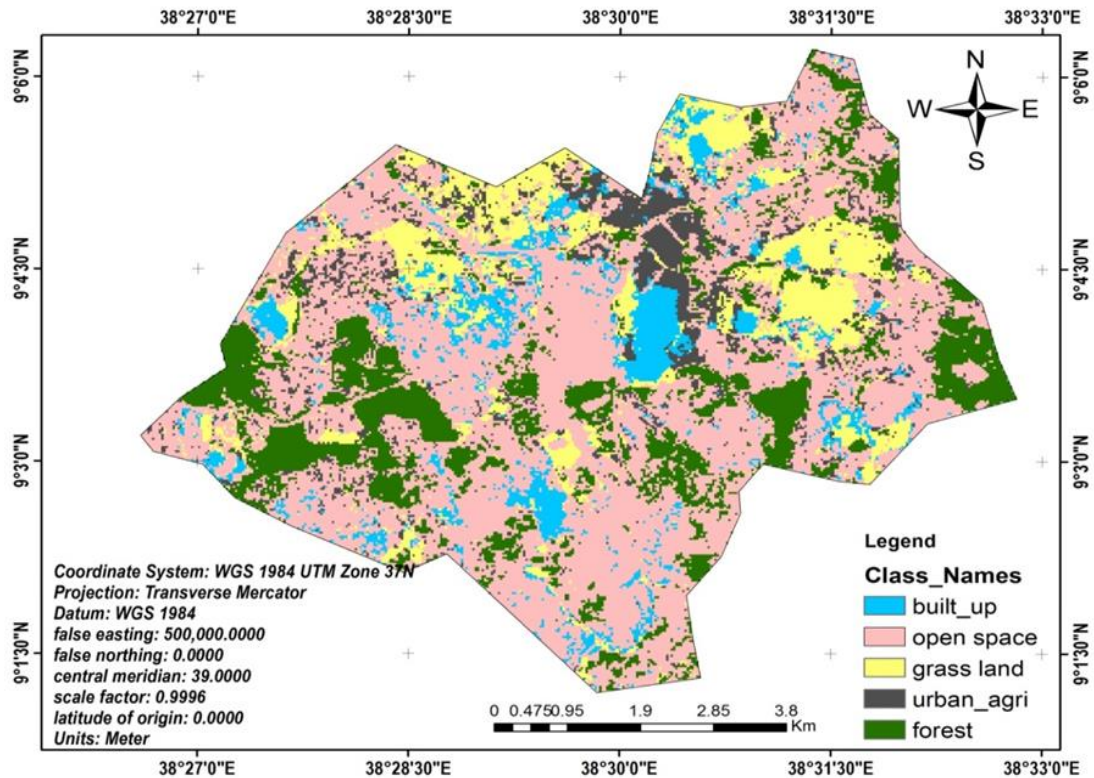


Figure 4.3: Land sat image ETM+ of 1997 showing LULC of the study area
Source: USGS / Earth Explorer, 2018

Result of Figure 4.3 above shows that the distribution of land cover of open space was found to be supreme of the land cover in the region and it covered about 2784 ha of land, followed by forest and grassland land coverage accounting of 980 ha, 712 ha, respectively. On other hand, built-up coverage accounted 428 ha while urban agriculture accounts 628 ha of the total land use land cover classes. Totally, image classified covers around 5532 ha of land. Generally, dominance of open space before 1997 as shown in the map might be due to the recent bounded rural-urban areas were no more modified to urban land use rather widely used for cultivation and other traditional uses that time.

Land use land cover in 2007

Compared to that of 1997 classified image of study area in 2007, open space land use covered only 1533 ha of total land cover while urban agriculture account 1571 ha. The rest portion of town, 873 ha covered by grassland, 559 ha by forest and 996 ha by built up area. Percentage of area coverage by land use in 2007 displayed as 27.7% and 28.6% or greater than half of area covered by open space and urban agriculture respectively but 15.7%, 10% and 18% of areas used for grassland, forest and built up uses. Since open areas around town invited for investment and a number of foreign as well as domestic investors flow to the closer, open areas highly deduced or shifted to urban agro-processing and building activities (see Figure 4.4 below).

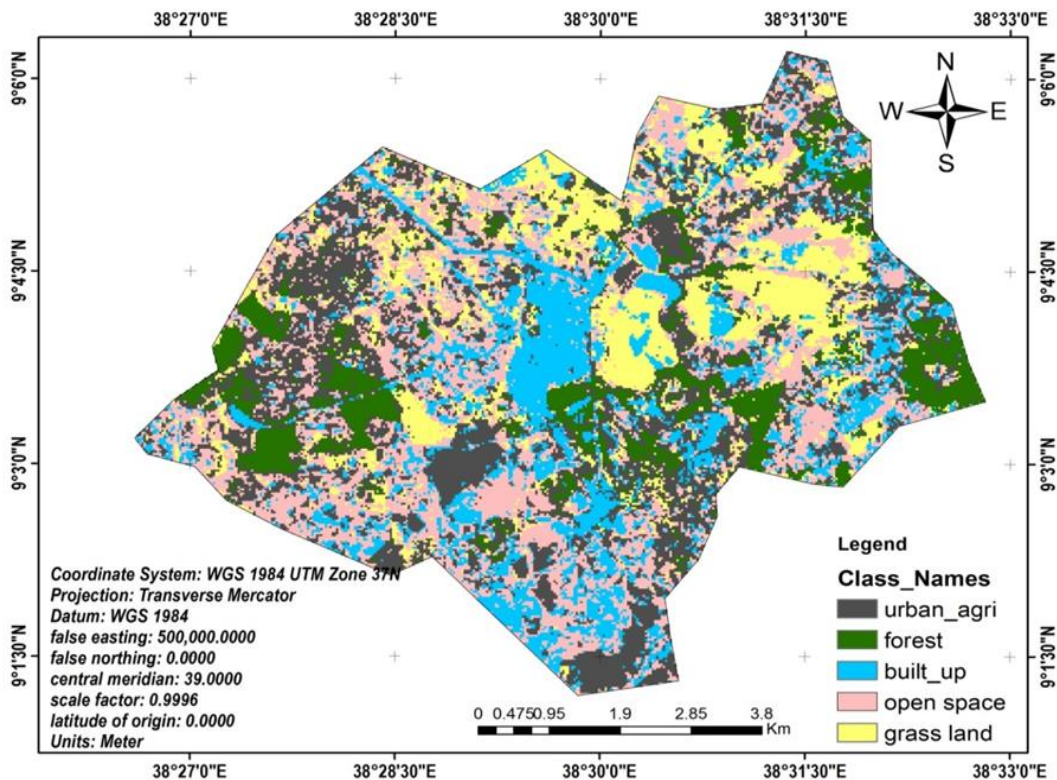


Figure 4.4: Land sat image ETM+ of 2007 showing LULC of the study area

Source: USGS / Earth Explorer, 2018

Land use land cover in 2017

Image classification of the recent time, 2017 shows great decreasing or increasing of different land cover land uses assigned in all images. For instance, Table of land cover for 2017 represents that 1993 ha of built up, 1408 ha of open space, 1080 ha of urban agriculture and almost 525 ha for each of forest and grassland.

In other word, built up and open space area coverage are 36.2 %, and 25.4 % respectively. Of total coverage, 19% by both forest and grassland, 19.5% urban agriculture. This implies that from five types of land use and covers, the dominant usage in area is for built up though the second but highly decreased from earlier is open area (see Figure 4.5).

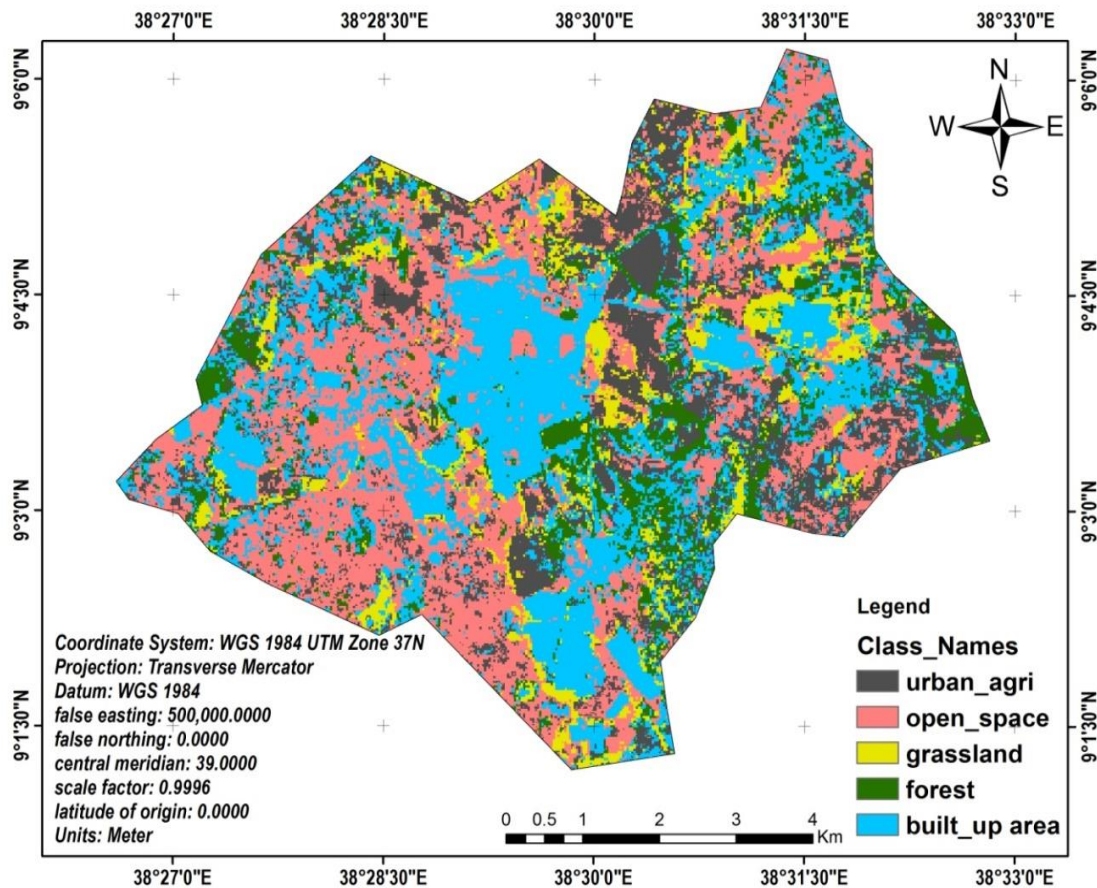


Figure 4.5: Land sat image 8 of 2017 showing LULC of the study area

Source: USGS / Earth Explorer, 2018

4.3.2. Spatial and temporal land use land cover changes

Land use land cover change (1997-2007)

Table 4.7 show that the major land cover change observed from the year of 1997 to 2007 is reduction of area in both forest and open lands i.e. from 980 ha to 559 ha and 2784 ha to 1533 ha respectively. The remaining land uses had been increased/ converted from those declined in area coverage from the year 1997 to 2007. In other word, 421 ha of former forest land as well as 1251 ha of open land in 1997 shifted to other land covers particularly to build up mostly in west part, north west following the main road and Holeta to Mogor road ways,

urban agriculture; replacement of farming of westerns by different agro-processing and related agriculture and grass lands after decade, 2007.

Generally, the land use types highly decreased from 1997 to 2007 was open space area (1251 ha) and increased was urban agriculture (943 ha) and built up area by 568 ha. Periodically, land use land coverage of studied area's image displays great change within ten year. For instance, open land and forest are land coverage which highly decreased (- 44%) i.e. by half in each of them.

From result in Table 4.7 below, we can say that percent expressed in open and forest coverage is dramatically transformed to different urban usage as soon as the expansion of town to per-urban area current surveyed more or less expropriated or assigned for urban use in year of interval. So, it is possible to evaluate as how much the modification of area into urbanity alarmed in one decade.

Table 4.7: Land use land cover change in study area from 1997-2007

LULC Types	LULC of 1997		LULC of 2007		LULC change (1997-2007)	
	Area (ha)	(%)	Area (ha)	(%)	Change (ha)	Change (%)
Grassland	712	12.8	873	15.7	161	+22.6
Forest	980	17.7	559	10	-421	- 43
Built-up area	428	7.7	996	18	568	+132.7
Open space	2784	50.3	1533	27.7	-1251	- 45
U. Agriculture	628	11.5	1571	28.6	943	+150
Total	5532	100	5532	100	0	0

Source: Analysis in ERDAS IMAGINE 2010, 2018

Land use land cover change (2007-2017)

As soon as before one decade, Table 4.8 below displays that continued reduction of open land, forest and also grassland; by 125 ha, by 32 ha and by 349 ha respectively though amount decreased from forest is comparatively less than the left two land uses. On other hand, land use type which only and area coverage for severe needs of various urban building areas extending to agricultural related at periphery of town. This situation is more visible at north western of frequently constructing residential settlement. It is widely converted at north eastern extreme and few of southern as well as south west part due to areas densely occupied by different production engaged industries followed by high willingness of housing closer to factories (see Table 4.8). In other word, there is timely conversion of land use land cover similar to the case between 1997 and 2007 images.

This implies that area covered by open land, forest land, grassland and urban agriculture in 2007 decreased by 8.2%, 5.7%, 40% and 31.2% respectively according to classification result from current image, 2017. So, all of land cover reduced or converted were changed to urban built up area (100%).

Using image analyzed and researcher's observation during data collection as an evidence, more of periphery part in most direction and central land use of earlier occupied for private purposes like residential settlement, industrial as well as other public urban land uses. So, factors such as bounding of adjacent areas to town after reformation, alarmed population flow in, many newly established investment programs after national invitation and others accelerated the rate of land use towards to urban settlement and various socio-economic aspects.

Table 4.8: Land use land cover change in study area from 2007-2017

LULC Type	LULC of 2007		LULC of 2017		LULC change (2007-2017)	
	Area (ha)	(%)	Area (ha)	(%)	Change (ha)	Change (%)
Grassland	873	15.7	524	9.4	-349	-40
Forest	559	10	527	9.5	-32	-5.7
Built-up	996	18	1993	36.2	+997	+100
Open space	1533	27.7	1408	25.4	-125	-8.2
U. Agriculture	1571	28.6	1080	19.5	-491	-31.2
Total	5532	100	5532	100	0	0

Source: Analysis of ERDAS IMAGINE 2010, 2018

Land use land cover change (1997-2017)

Even though spatial and temporal shifting of land uses of studied area discussed in above sub-topics for ten years interval, Table 4.9 below summarized decreasing and or increasing of land uses between 1997 and 2017 images as follows. Actually, percentage or area changed from each type is not identical. But, change along built up area displayed by consecutive increasing while forest and open space types show decreasing starting to ending time of image analyzed for survey. Simply, area of 453 ha and 1376 ha totally reformed to urban construction use within 20 years history of expansion in Holeta town. From those changes, 1565 ha of total change principally adjusted to urban usage.

Conversely, area early served community as means of livestock reproducing (grassland) and urban agriculture show wavering i.e. increasing and or decreasing because of various situations associated with urban expansion. As a whole, result of three images classified implies too rapid expansion of Holeta town via further expropriation and town reformation in order to respond high population flow in from different corner of town.

Table 4.9: Land use land cover change in study area from 1997-2017

LULC Type	LULC of 1997		LULC of 2017		LULC change (1997-2017)	
	Area (ha)	%	Area (ha)	%	Change (ha)	Change (%)
Grassland	712	12.8	524	9.4	-188	-26.4
Forest	980	17.7	527	9.5	-453	-46.2
Built-up	428	7.7	1993	36.2	+1565	+365.7
Open space	2784	50.3	1408	25.4	-1376	-49.4
U. Agriculture	628	11.5	1080	19.5	+452	+72
Total	5532	100	5532	100	0	0

Source: Analysis of ERDAS IMAGINE 2010, 2018

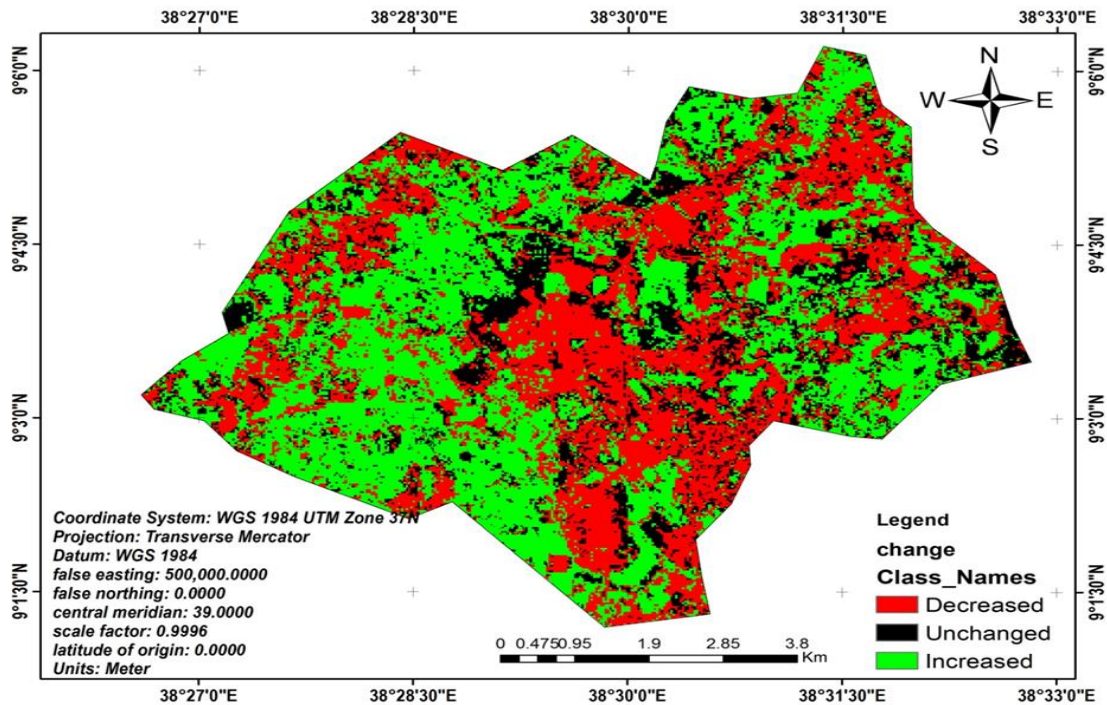


Figure: 4.6 Change detection map from 1997 to 2017 in study area

Source: Analysis of ERDAS IMAGINE 2010, 2018

4.3.3. Accuracy Assessment

Actually three images had been taken to assess land use land cover changes. But accuracy of image classified assessed by taking ground control points and understanding of researcher from field observation. This is to means that land use land cover classification map of study area in 2017 as shown in figure below had been used. The accuracy of the classified image was evaluated by constructing confusion matrices using 48 ground control points for classified image. Those control points are randomly collected from field of study.

The main purpose of accuracy assessment is to quantify the accuracy of the map and generate error matrix to correct bias in the map. For land use land cover changes, it is necessary to look at the overall accuracy of change rather than accuracy of single land cover maps. So, overall accuracy, producer's accuracy, user's accuracy and overall Kappa statistics were derived from the error matrix. In error matrix, the pixels located along the diagonal i.e. from the upper left to the lower right represents pixels that are classified into their correct category while pixels out of diagonal pixels represents omission and error matrix respectively.

Producer's accuracy derived from error omission which means by dividing the number of correctly classified pixels in each category by the number of training pixels used for that category (total row). On other way, user's accuracy calculated by dividing the number of correctly classified pixels in each

category by the total number of pixels in that category which derived from commission error (Congalton, 2000). The overall accuracy result of the study area's classification derived from both producer's and user's or by dividing the total number of correctly classified pixels (sum of major diagonal) by the total pixel assigned in all category for assessment. But, Kappa statistics informs to what the extent percentage correct values of an error matrix are from "true" agreement versus "chance" agreement. Value of this statistics extended from 0 to 1 to give meaning poor or best classification result, Lillesand, 2004 (cited by Teketel, 2015).

Since overall accuracy of the classification was 95.71% with Kappa statistics of = 0.9422, it represents 94.42% or better accuracy of supervised classification than using unsupervised random classification. Different articles like Landis (1977) stated that it is excellent classification of land use land cover poor classification when $K > 0.75$ and thus agreement from various authors; kappa coefficient value (0.9422) concluded to that classification result of LULC of current image has excellent accuracy.

Table 4.10: Error matrix for classification validity by land sat 8 of 2017

Classified Data								
Class type	unclass	Grass land	Forest	Built up	Open space	Urban agricult	Tota	User's accuracy (%)
Unclassified	22	0	0	1	0	0	23	-----
Grass land	0	4	1	0	0	0	4	100
Forest	0	1	2	0	0	0	2	100
Built up	1	0	0	22	0	0	24	91.67
Open space	0	0	0	0	13	0	13	100
U agriculture	0	0	0	0	0	4	4	100
Total	22	5	3	23	13	4	70	
Producer A. (%)	----	80	66.6	95.65	100	100		
Overall classification Accuracy = 95.71% Overall kappa statistics = 0.9422								

Source: Analysis of ERDAS IMAGINE 2010, 2018

4.4. Livelihood Change of Peripheral Households in the Study Area

To assess household's livelihood change after expansion, specific investigation regards to livelihood condition before expansion, livelihood condition after expansion, income sources of households after the event, comparison of the strategic reaction, determinants of strategy changes and its implication on community surveyed consecutively as follows.

For impact assessment, before and after technique of analyzing was in use. In this finding, before expansion termed for capital comparison representing situation before 2005 E.C as before expansion while that of till now represented for after urban expansion. So, livelihood of households assessed via measuring significance of the difference between capitals of the same group at a different period of time using 2005 E.C as a transition time due to the reason specified in data analysis technique of previous chapter.

4.4.1. Livelihood condition of community before urban expansion

For respondent’s livelihood strategy earlier of urban growth; common income sources of agricultural and also non-agricultural participants, level of their satisfaction and else included under this sub-topic of an objective.

Primary income sources of community before urban expansion

Concerning to economic sector communities relied, 79.9% of participants responded as they depended on jobs in the category of agricultural sector. But, 20.1% of household heads had been engaged under jobs of non-agricultural character (see Figure 4.7). This reveals that, 79.9% of residents performed different agricultural activities which need wider land but currently reformed for urban land use.

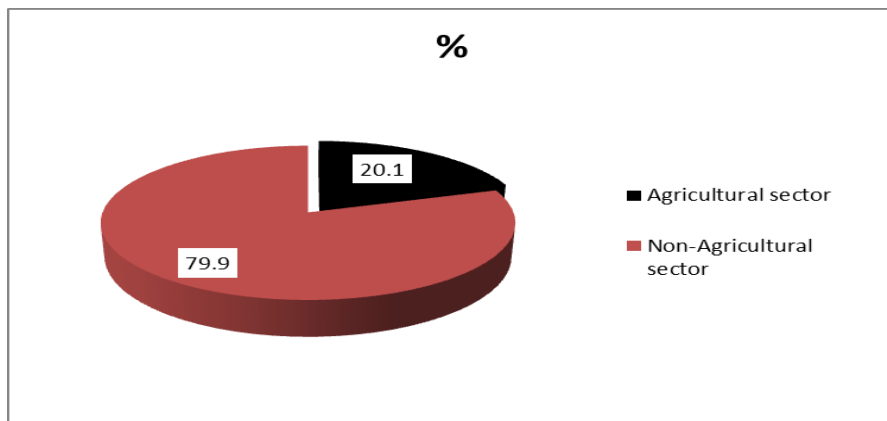


Figure 4.7: Economic sector of households before urban expansion

Source: Field survey, March 2018

From household heads trusted by agricultural economic sector, source of income or jobs they participated for their day to day life condition were described in accordance of respondents’ actual work before the expansion of town. In that case, there were household heads made an income from more than one jobs.

As a result, Table 4.11 below shows as most households (97.6%) generated their income for livelihood through crop production. Besides to this, 26%, 16% and 2.4% respectively performed jobs like; livestock rearing, production of crops for market and forestry. But no household heads achieved their livelihood by fishery. This data denotes that the income root community extensively involved using early experience is farming activities which directly correlated with access of farmland.

Reviewed literature also stated that the main livelihood strategies at urban periphery are farming practices focus with those has access of land in and outside of urban boundaries but basically generate income from it.

Table 4.11: HHs engaged in agricultural incomes before expansion

S.No	Items	Frequency	Percent
1	Livestock Rearing	65	26
2	Crop Production	244	97.6
3	Forestry	6	2.4
4	Cash crop production	40	16
5	Fishery	-	-

Source: Field survey, March 2018

Other than agricultural activity dependents, there were household heads trusted through non-agricultural activities which more or less requires small land. Particularly, 31.74%, 31.74%, 17.46%, 11.11% and 7.93% of non-agricultural category participants respectively derived own finance for consumption and other uses through jobs such as small business (producing Tella, Hereke), employment in private sectors there, working in some ones' house and street vender. Such few groups of respondents reasoned that because their land possession or tenancy even earlier of expansion was too less and also currently secured by non-agriculture activities (see Table 4.12).

The result states that only few of sampled households performed diverse works of non-agricultural sectors however those opportunities are not significant to advance livelihood of population. But, regularly operated income activities along most of peripheral community is that of farming types like; crop cultivation and certainly livestock rearing on the other side.

Table 4.12: HHs engaged in Non-agricultural incomes before expansion

S.N	Items	Frequency	Percent
0			
1	Small business (Tella, Hereke and others)	20	31.74
2	Employment in private sector	20	31.74
3	Daily labor force	11	17.46
4	Working in some one's house	7	11.11
5	Street vender	5	7.93

Source: Field survey, March 2018

Reaction of households on livelihood condition before urban expansion

Regards to level of satisfaction, household heads asked on whether livelihood status of community before expansion at homestead was better or not. Accordingly, 49.5% and 37.7% of respondents responded “best” and “moderate” living condition though few respondents, 12.8% replied merely subsistence and below hand to mouth stage (see Table 4.13). This suggests that most community was satisfied to their livelihood condition even by traditional farming practices which mean no difficulty of livelihood.

Table 4.13: Household's satisfaction to livelihood before urban expansion

S.No	Items	Frequency	Percent
1	Best Living condition	155	49.5
2	Moderate Living condition	118	37.7
3	Low/ Survival living condition	36	11.5
4	Very low Living condition	4	1.3

Source: Field survey, March 2018

4.4.2. Livelihood condition of households related to urban expansion

Household heads' source of income after urban expansion

Since jobs for income generating was basic thing for all human beings to live, all respondents accepted as they engaged in at least one job though the main activity they relied varies from respondents to respondents. There were households performing their daily and consecutive livelihood by participating on both agricultural and non-agricultural economic sector.

Similarly, Firew (2010) pointed that most of expropriated landholders started to engage on non- agricultural activities as coping strategy with the new life after the expansion of urban areas over their vicinity and few now itself performing farm practices.

In order to identify job they involved, further survey concerned to job types was carried out. For that question; crop production, own business other than cultivation, working in some one's house and daily labor force were respectively foremost jobs of 39.9%, 21.7%, 13.4% and 12.1% sampled household heads as table shows us. The rest respondents involved in such of works by going too far rural areas from settled area, government employees and small business activities like Tella, Hereke and else (see Table 4.14).

In line to this finding, Mandere (2010) noted that most of per-urban households have adopted non-farm income activities as income source. In addition, a number of new migrants to the per-urban region particularly those lacking the farming skills and those without access to farming land, are mainly engaged in non-farm income generating activities like business activities, professional employment, non-farm wage, and farm wage labor on the nearby agricultural farm. When we compare with strategy former to expansion, respondents involved to crop cultivation before accounted 79% while only 39% now after urban expansion.

Most of key informants and discussion participants strengthen the data collected via questionnaire. For instance, Key informants from Galgal Kuyu reflected that most households at urban fringes had been participants of farming, prominent job before though currently many households moved towards to non-farming due to gradual decreasing landholding size via own informal farmland sale and authorized expropriation (see Case 1 below). Mandere (2010) also identified that over 85% of households were full time farmers in the 1960s but this has since fallen to 49% of the respondents after expansion, with the remaining households only cultivating their land on a part time basis due to the reason of reducing household agricultural land holding size.

From this result, we conclude that there are mass community changed their income sources from early, farming types to off-farming activities by the great influence of town expansion and reformation of strategy.

Table 4.14: Household's source of income after urban expansion

	Items	Frequency	Percent (%)
1	Crop cultivation	125	39.9
2	Own business	68	21.7
3	Government employment	8	2.6
4	Daily labor force	38	12.1
5	Working in some one's house	42	13.4
6	By migrating far to other rural area	26	8.3
7	Small business (Tella, Hereke)	6	1.9
	Total	313	100

Source: Field survey, March 2018

Furthermore, probability of job opportunity along respondents varies however access might relate to skill requirement. Particularly, 31% of respondents gave an answer as the chance to get job now a day is easier and somebody can enjoy jobs while 69% respondents disregarded the case that current access to job is challenging than before expansion of town. On the same view, Feyera (2005) investigated that job opportunity in which affected community engaged is decreasing from time to time. In addition, the dislocated farming communities have no means and capacity to adapt to a new way of life and create in an alternative means of livelihood for themselves.

From this result, it is possible to say that since the per-urban community surveyed mostly prolonged their life by farming; they primarily lack labor specialization to join works in town repeatedly. This means that transformation of rural land uses due to urban expansion once force them to adopt low wage activities other than primary jobs.

Case 1: Livelihood Strategy and Urban Expansion

I engaged via economic activities of agricultural sector such as crop cultivation and livestock rearing simultaneously at former. I had enough farmland and also livestock. Land is our back bone; I mean we have no other skill. Now day it self I depended on crop cultivation and domestic animals rearing simultaneously. But households most close to town, those farmland removed and haven't farmland currently engaged to non-agricultural sector of income source such as employment as keeper in private organization, daily labor force and else. However, we depended on back warded agricultural job opportunity earlier,

Continued

our livelihood condition was not such much worst for survival rather it is moderate condition. Again currently even if there is households highly lost farmland by expropriation, my livelihood condition was not severely changed. But there are those highly affected by the expansion. No more of us have capital as earlier. They also have livestock now days though amount and situation after expansion restricted their livestock reproduction. For example I had around 5 oxen and above 10 cows earlier. But now I have only 2 oxen and 3 cows as basic. That is because we don't have grazing land as earlier. The area of grass before taken for investment, lease. No common land we early reserved for our livestock. Look the difference. I have family member married, they have right to get a little piece of farm in accordance of rules and local adaptation. So, I divided crop land for family married and few crop lands formally and informally transferred for others. Not only me, there are households sold their farmland for "caraqaa" housing which means squatter settlements. We do this for future fear of government may take off. They sold for private user at high cost. But couldn't use finance and employed to other work. They simply consumed. Now they are on the situation of seeing some one hand. Why for they inefficiently wasted and no future life consideration. No awareness, training farmers for job engaging we got from government. You know money without business. Gradual amount decline meanwhile we have only cash we received for everything. Households are becoming family of worst living status even deficiency of basic needs. That is why neighbors are working in some one's house (My key informant of "Galgal Kuyyu Kebele", March 2018).

Determinants of household's livelihood change related to expansion

For household heads preferred livelihood mechanism of before expansion than after, the following events are common factors. In this finding, livelihood strategy for 60.18%, 46.15%, 30.76%, 30.76% and 11.76% of household heads respectively affected by; inability to adopt urban related livelihood, limited farm land due to removal and fragmentation, inefficiency of finance compensated, inadequate access of capital for job opportunity and lack of labor specialization (see Table 4.15).

Community at periphery faces problems of inability to develop their own survival strategies, solidarity networks, system of power to which social and economic activities linked to former places (Feyera, 2005). From those factors, most respondents' current employment determined

by inability to adopt urban related livelihood, more prominent. In line of this finding, Firew (2010) pointed that low availability of the job itself, as well as the lack of experiences in searching and absence of skill for job access in urban setting affected community's livelihood strategies. This response denotes that by the role of factors described above and similar then after urban expansion, most of household heads' current livelihood condition had been changed to lower qualification though no fluctuation in case of few on their livelihood.

Table 4.15: Determinants of livelihood strategy change due to expansion

S.No	Items	Frequency	Percent
1	Inability to adopt urban related livelihoods	133	60.18
2	Limited farmland due to dispossession and fragmentation	102	46.15
3	Inefficient finance from compensation	68	30.76
4	Inadequate access of capital for job opportunity	68	30.76
5	Lack of labor specialization	26	11.76

Source: Field survey, March 2018

Reaction of households towards newly adopted livelihood strategy

However most of household heads believed that there is livelihood change, level of their happiness to newly developed strategy was different. As Table 4.16 depicts, only 28.5% of respondents responded high to moderate satisfaction. Conversely, household heads (45.7%) unsatisfied of newly adopted life approach. Specially, 27.8% seriously responded as they had been living below hand to mouth. So, around 74% of households reacting unsecured livelihood condition they engaged after urban expansion.

Relatively, Firew (2010) pointed that livelihood of 90% dislocated households was unsecured from strategy after urban expanding to their residence. Difference in percent of unsecured among two finding might be due to the variation of fixed assets or property they lost during expropriation.

Generally, if we consider family size, income sources and reaction of household's livelihood condition before and then afterward of expansion, there is great change of livelihood condition and strategy on the side of peripheral community around case study.

Table 4. 16: Household's reaction to newly adopted livelihood condition

S.No	Items	Frequency (HHs)	Percent (%)
1	High Satisfaction	49	15.7
2	Moderate Satisfaction	37	12.8
3	Low Satisfaction	140	45.7
4	Below hand to mouth	87	27.8
Total		313	100

Source: Field survey, March 2018

4.4.3. Impact of urban expansion on the peripheral communities' assets

Livelihood is the means to gain different currency as well as other basic and luxury material. This entire requirements need source of income from what they stored in different form of asset as ever livelihood and income base from varied job opportunity. Assets are stocks of capital considered as basic building blocks upon which households depend to generate the means of survival which includes natural, physical, human, financial and social capital (Ellis, 2000 pp:31).

For this livelihood assessment, natural, physical and social asset of the peripheral community has been examined as discussed below. But, financial assets like farm, non-farm and annual incomes and expenditures haven't used since households might not remind that of before expansion as well.

Urban expansion and natural asset

To examine any change of household's livelihood due to urban expansion, communities' assets as an element of livelihood strategy like natural capitals forms such as; farmland size, forest covered or planted land and else in previous and after expansion was compared.

Firstly, household heads asked if there was any change of farm land size and forest covered land or not. Of households, 70.9% responded that there was a change of farm land size and also forest coverage from the former time to current. But the rest, (29.1%) opposed any change of natural assets they might use for livelihood.

According to result in Figure 4.8 below, 42%, 28% and 24% of household heads respectively owned farm land ranged from 1-3, below 1 and 4-6 ha. So, most of household heads occupied the land category of 1-3 and below ha as soon as the major economic opportunity means of

crop production before town expansion. Along all respondents, the average farm land of respondents was 3 ha. Farmland size of the same groups of households but different response of farm land size after urban expansion is collected as follows (see Figure 4.8 below).

From this Figure, we able to read that less than 1, 1-3 and 4-6 ha farmland were owned by 43.2%, 40% and 16.5% of respondents respectively. Currently, there are no household heads possessed farmlands of greater than 7 ha and more of respondents' cultivable land size decreased by certain amount. An average farmland now a day on the hand of peripheral community is 2.41 ha. So, mean difference of farmland among two observation times decreased by 42.2% compared to former size in hectare showing high loss of farmland for expropriation. Local per-urban landholders or indigenous small farmers are largely lost their land where their livelihood is based upon in the process of urbanization (Alemu, 2015).

In order to conclude significance of difference, result in paired t test of SPSS in Table 4.17 such as; sig-value (0.05) prior estimated, t-value (-16.606) and p-value (0.000) had been used. So, since $p < 0.05$ and rejection of no difference hypothesis, mean difference of the same groups is statistically significant or not by chance. In other word, mean difference of both events at demarcation of urban expansion (1.76) represents deduction of farm land size on the hand of households after expansion which implies adverse effect of expansion on household's landholding size and livelihood of peripheral communities proportionally.

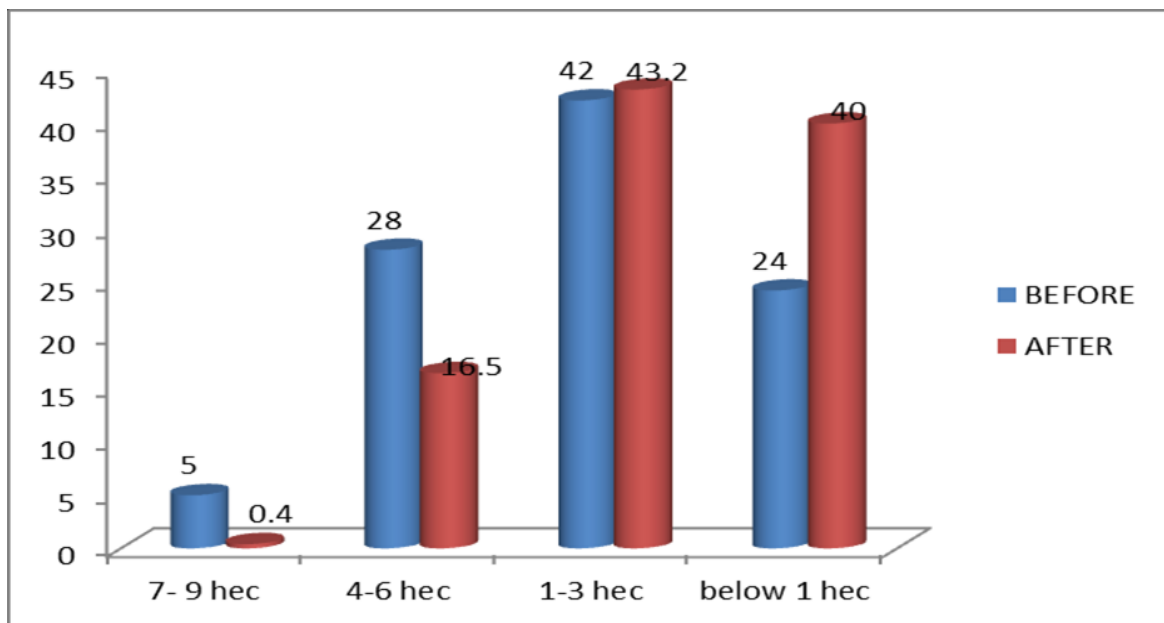


Figure 4.8: Percentage of HHs owned farm land size before and after expansion

Source: Field survey, March 2018

Another natural asset used for study was if household heads has forest and also afforested land for future hope to income source. Majority of household heads in survey, (51.1%) and (30.7%) respectively possessed forest and or plants covered of less than 0.5 and no at all even though few of total possessed up to 0.75 ha as shown below. Mean of planted area occupied by each household for socio-economic usage is 0.35 ha. After urban extended to closer rural residents, possession of forest or planted area around 0.5 ha was only on hands of 2.2% household heads while others; 25.9%, 71.9% respectively preserved little below 0.5 ha and completely no asset. Currently an average forest ownership of groups surveyed is 0.20 ha (see Figure 4.9 below).

By comparing stock of before with after, 51.1% early holders of 0.5 ha fall down to only 25% and the rest participant haven't. This represents mean declining by 42.8% from former coverage. To sum up change both variables paired t-test results, statistical significance at 95% confidence interval and p-value < 0.05 disproved no difference assumption rather there is statistically significant modification of forest area due to urban expansion (see Table 4.17). This result tells that implementation of urban expansion program and situation then after commanded households to loss forest land. Therefore, urbanization has an adverse impact on natural assets of peripheral communities in studied area.

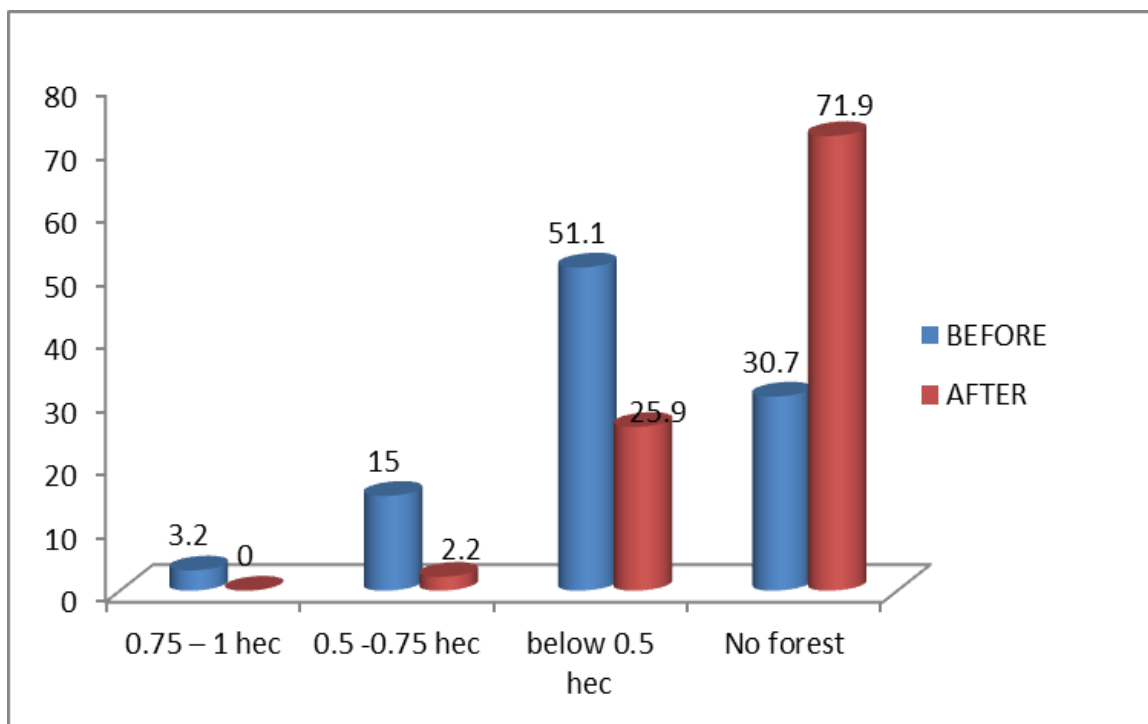


Figure 4.9: Percentage of HHs owned forest /planted area/ before and after expansion

Source: Field survey, March 2018

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	sig (2 tailed)
				Lower	Upper			
				1 what amount of farmland did you have before expansion of town(hectare) - what amount of farmland did you have after urban expansion (hectare)	-7.28			
2 What amount of land covered by planted and or forest did you have before urban expansion (hectare) - What about the size of land covered by planted and or forest did you have after urban expansion	-6.04	.672	.038	-6.79	-5.29	-15.9	312	.000

Table 4.17: Paired samples test of natural capitals

Source: Field survey, March 2018

Urban expansion and physical asset

From types of physical assets further estimated as base of community's income source or livelihood strategy and affected by urban expansion are number of house room and native animals (oxen, cows, sheep and poultry). But, other livestock were rarely used stock for residents in studied area. Response for any change of those stocks or saving form at opposite time of urbanization is that almost, 70% of respondents agreed to existence of change and the rest responded no change of house rooms after urban intervention. Particularly, house rooms before urban expansion more than 80% had been preserved house with less than 3 rooms.

Specifically, house with 1-2, 3-4 and above 5 classes respectively constructed and served of 82.4%, 16.9% and 0.6% of household heads (see Figure 4.10 below). In average, each of household heads almost had 1.8 classes.

Result concluded to that more of household heads didn't have more classes for economic use rather than shelter. To examine meaningful change of house rooms after, current number of classes by the same groups presented as below.

Accordingly, 49.8%, 34.5%, 14.4% and 1.3% of respondents had been possessing house with 3-4, 1-2 and above 5 classes respectively. Currently, half of respondents have house rooms in range of 3-4. Average class of household heads living now days is 3.145. For this finding, mean difference of the two measures (1.4) currently increased by 64.28% approves change of

an asset. Similar to this, Firew (2010) summarized that affected community had the average of 1.51 houses in room before urban expansion over there. However, this average has ascended to 3.86 average rooms after the expansion of the city then by showing the difference of 2.35. But a little variation of average rooms between two observations might be due to housing status even before urban expansion among areas of previous and this study area.

In Table 4.18 below, statistical test; mean difference (0.636), t-value (15.041) and p-value (0.000) as soon as p-value < 0.05 and mean difference is not zero. Thus, we rejected no difference assumption rather there is statistically significant difference. This implies mean of house class later is larger than or positive impact of urbanization towards to adjacent peripheral residents. So, payment for expropriation and incurring for basic needs, modernity of shelter but rare for economic purpose advanced housing after urban expansion and indirectly mean difference of capital led to improved livelihood of peripheral communities surrounding town.

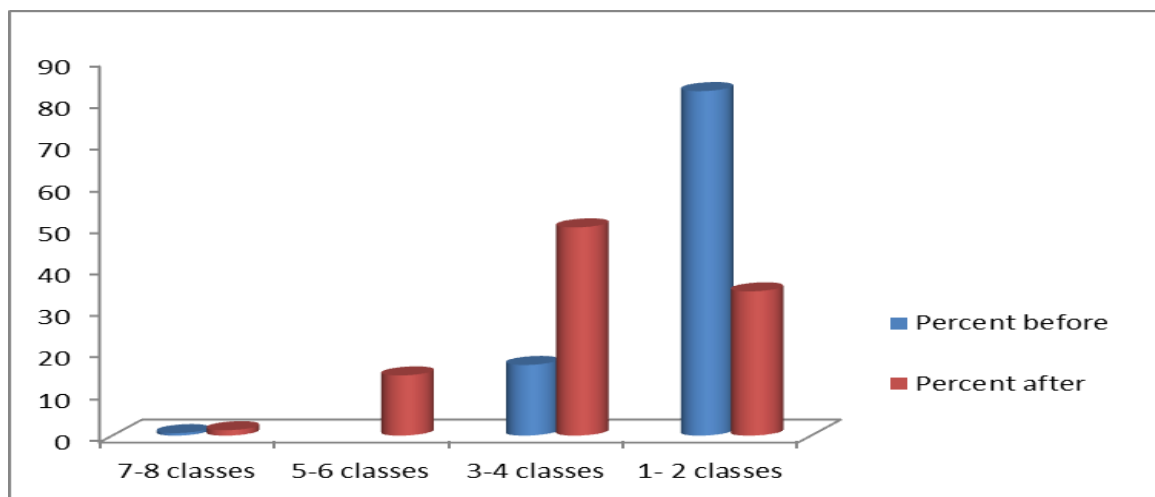


Figure 4.10: Household's house rooms possession before and after expansion

Source: Field survey, March 2018

Furthermore, respondents answered about causes for the increase of house rooms/classes parallel to urban expansion. Respondents agreed about change of physical asset reasoned various condition of why for. Few of factor for classes increasing they listed are; additional house demand with family size, advancement of houses itself as urban settlement, house for renting purpose in order to adopt urban livelihood mechanisms and usage of finance compensated for housing. Firew (2010) elaborated that poor investment on the construction of house had reduced the potential it will be income these households were to gain from renting them.

VARIABLES PAIRED	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	sig (2 tailed)
				Lower	Upper			
				what amount of house room/ classes did you have before urban expansion - what amount of house room/classes do you have now after urban expansion	.636			

Table 4.18: paired t-test table of house rooms/ classes of community

Source: household survey, 2018

Another form of physical capital surveyed for any influence of expansion on peripheral community livelihood was amount of domestic animals' possession previous and later of an event. For instance, livestock such as oxen, cows, sheep, hens and else are stocks or assets for rural community till now. So, amount of livestock ownership in this study supposed as strong indicator to assess livelihood effect due to urbanization.

In Table 4.19 below, 37.1% and 25.9% of respondents had stock of 1-2 and 3-4 oxen respectively while the rest few households above. The maximum number of oxen possession was 8. Average oxen each household possessed was 3 however current ownership among the same respondents was no more than 2 oxen even 14.4% of them haven no ox. From this data we can say that, 34% of household heads didn't have oxen even for farming purpose yet around 14.4% before expansion. In other word, households' oxen possession early to after expansion declined by 52% which mean 1.56 oxen.

Table: 4.19 Oxen respondent's had before and after urban expansion

Items	BEFORE		AFTER	
	Frequency	Percent	percent	Percent
No at all	45	14.4	107	34.2
1-2 Oxen	116	37.1	147	47.3
3- 4 Oxen	81	25.9	54	17.3
5- 6 Oxen	50	16	2	0.6
7- 8 Oxen	21	6.7	2	0.6
Total	313	100	313	100

Source: Field survey, March 2018

In case of cow as livestock before expansion; 44.7% and 24.3% were the owner of 4-6 and 1-3 cows respectively but few of respondents have above (see Table 4.20 below). So, majority of participants were the owner of cows in range of above 4 to 6 cows. During their early welfare without town intervention household heads possessed a mean of 6 cows. After urban expansion, majority of families (44.4%) owns 1-2 cows however 18.2% of respondents haven't at all.

Even though the number of household heads was less, there were respondents those kept great number and also smaller. In average, each of household heads in the study scope was the owner of approximately 3 cows. Further to this, two observation mean result represent as cow ownership at current time declined by 50% from that of before urban effect. Similarly, Firew (2010) concluded that an average cows' possession households had before diminished to the current stock by more than half times.

Table:4.20 Cows respondents had before and after urban expansion

Items	BEFORE		AFTER	
	Frequency	Percent	Frequency	Percent
No one	27	8.6	57	18.2
1-3 Cows	76	24.3	139	44.4
4-6 Cows	140	44.7	75	24
7-9 Cows	12	3.8	6	1.9
10-12 Cows	5	1.5	33	10.5
Above 13 Cows	43	17	3	1.0
Total	313	100	313	100

Source: Field survey, March 2018

Moreover, data concerning to number of sheep at early of expansion plan summarized in table. Respectively, 39.9% of household heads had no any sheep while 22.7% of them had 4-6 sheep. Simply, mean of sheep sole proprietors used for varied target before expansion of town is 4.84. By situations after expansion, household head's possession dropped down to no sheep at all i.e. 46.3% of respondents. But there are few of household heads possessing sheep though their percent is small. Mean of sheep later to urban horizontal growth is 3.13. Generally, mean difference among two situations (1.73) indicate falling down by 32% from the former size of livestock.

Table:4.21 Sheep respondents had before and after urban expansion

Items	BEFORE		AFTER	
	Frequency	Percent	Frequency	Percent
No at all	125	39.9	145	46.3
1-3 Sheep	2	.6	42	12.5
4-6 Sheep	71	22.7	70	22.3
7-9 Sheep	49	15.7	35	11.1
10-12 Sheep	54	17.9	18	5.7
Above 13 Sheep	12	3.8	3	0.9
Total	313	100	313	100.0

Source: Field survey, March 2018

Moreover, poultry ownership along household heads is another income source for peripheral community. Accordingly there were households those possess maximum, 20 hens and also nothing, the least.

For example, 39.6% and 35.2% of them respectively owned 6-10 and 1-5 hens however 22% of respondents completely haven't. The rest population separately accounted less than 10% by owning various poultry. Previous to expansion each of households in average possesses 5.44 hens. After expansion, 38.9 % and 26.8% of respondents owned 6-10 and 1-5 hens respectively while only 11.5 % haven't compared to early possession. Now a day an average household head's possession (7.03) is greater than that of before expansion by almost 3 hens or enlarged by 29.23% (see Table 4.22 below).

Table: 4.22 Poultry respondents had before and after urban expansion

	Items	BEFORE		AFTER	
		Frequency	Percent	Frequency	Percent
1	No one	69	22	36	11.5
2	1-5 Hens	110	35.2	84	26.8
3	6-10 Hens	124	39.6	122	38.9
4	11-15 Hens	10	3.1	41	13.1
5	Above 25 Hens	-	-	30	9.5
Total		313	100	313	100

Source: Field survey, March 2018

Moreover of data before and after among all livestock, probability showing level of statistically difference of paired groups checked by t-test tools as follows. Result of paired repeated measures on domestic animals except poultry shown that mean of before is greater than that of later urbanization (see Table 4.23 below).

Since lower and upper limit value for all livestock is out of zero and also p-value in paired variables was < 0.05 , variation of mean observed is statistically significant. In case of poultry, mean of hen before and after expansion has wide gap i.e. the current mean is higher than previous number. Similar to other livestock's test of realizing statistical variation p-value, non-zero of mean difference between observation extremes and test result infers statistically significant change.

From this statistically significant result, we can infer that town expanding to adjacent rural areas certainly determined community's livestock size and livelihood condition since community's former farmland and open land in service of rearing, grazing and other usage had been taken off. So, physical capital of community statistically decreased to small number by an influence of urban expansion as well as situations related to urban expansion. Except poultry, urban expansion has negative implication or impact on household's livestock ownership and proportional to life.

PAIRED VARIABLES	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	sig (2 tailed)	
				Lower	Upper				
				1	Number of oxen Respondents have before urban expansion - Number of oxen Respondents have after urban expansion				1.620
2	Number of cows Respondents have before urban expansion - Number of cows Respondents have after urban expansion	2.339	2.961	.167	2.009	2.668	13.972	312	.000
3	Number of sheep Respondents have before urban expansion - Number of sheep Respondents have after urban expansion	1.709	2.673	.151	1.412	2.006	11.315	312	.000
4	Number of Hens Respondents have before urban expansion - Number of Hens Respondents have after urban expansion	-1.588	8.114	.459	-2.490	-.685	-3.462	312	.001

Table 4.23: Paired sample test of domestic animals

Source: Field survey, March 2018

Urban expansion and social asset

For peripheral community livelihoods via social assets under this survey; social relationship and its values (customs, get-together during enemy and ceremony) at different condition had been used. So the study recorded how the social wellbeing was with neighborhoods early settled before and with newly settled urban residents. Result in Figure 4.11 interpreted to that most of studied community's social relationship and values were in the category of "very high" and "high" social relationship.

Specifically, 44.7%, 43.8% and 11.5% respectively lived with “very high”, “high” and “moderate” relationship as well as values. Finding of Firew (2010) also concluded that 36.5% and 62.8% of per-urban residents around Hawassa city had a social relationship leveled to “high” and “very high” respectively sooner than the city’s expansion over their vicinity.

So, respondent’s reaction shown us they were in best coordination, get together characters like membership of “Idir”, “Iqub” and respective customs and values among each of the neighborhoods. Mean of community’s relationship (1.67) before urban expansion represents high level of social correlation.

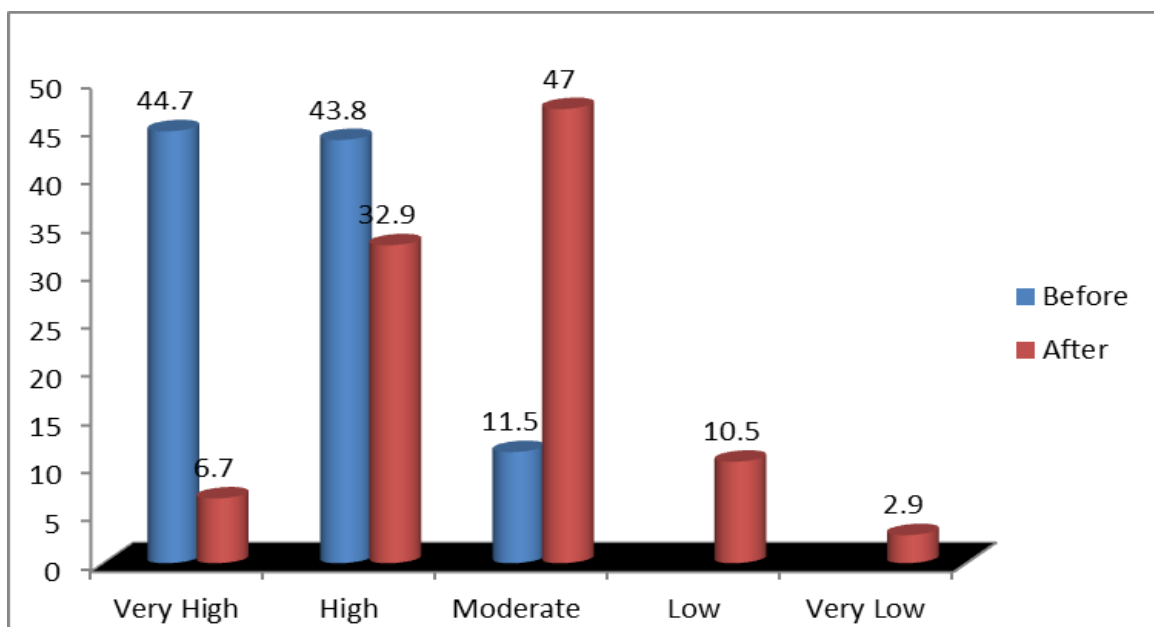


Figure 4.11: Household’s reaction to social relation before and after expansion

Source: Field survey, March 2018

Contrary to before expansion, only 6.7% and 32.9% of participants respectively accepted as they have “very high” and “high” social relationship with residents recently settled adjacent as Figure 4.11 shown us. But, majority of household heads, 47% and 10.5% of sample respectively enjoyed “moderate” and “low“ social relation and values. In other case study, Teketel (2015) pointed that majority of household surveyed as almost 60 % responded as the level of social relationship and values estimated to moderate and low relation among peripheral community around town.

From both observation's, mean asset at two opposite time summarized that more of peripheral communities lived in the character of almost high social coordination before expansion but currently not as such with newly settled urban residents even if it is moderate. Moreover variation of social association and values between the same groups but unique situation of observation was not random difference rather statistically significant difference (see Table 4.24 below).

In other words, mean of social relation before is higher or better linkage than mean after because town's expansion and subsequent events modified to urban social character but discouraged aged community's social coordination get-together and other social character with each other. Accordingly the lower social relation now a day is due to the negative intervention of urbanization on the peripheral communities around case study.

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	sig (2 tailed)
				Lower	Upper			
1 How will you express your social relationship and its value before urban expansion - What about social relationship and values after urban expansion	-1.032	.912	.052	-1.133	-.930	-20.0	312	.000

Table 4.24: Paired t-test of social capitals before and after urban expansion

Source: Field survey, March 2018

4.5. Policy and Strategy Related Constraints of Urban Expansion

Ethiopia has different policies and strategies for its implementation along different aspects like social, economic, political, environmental and other developments. National and regional policies were claimed differently for specific aspects regards to area it concerns. For instance, the country has urban development and or urban expansion policy and strategy which highly concerns to the way of achieving the sustainable urban socio-economic developments.

From those policies, the study focused to assess policies and strategies in case of urban expansion concerning to livelihood of per-urban community and the prime goal, achieving urban development. So, procedures of per-urban land expropriation, compensation, house

affordability in town and condition of informal settlements are few of policies and strategy identified for its implementation in accordance of country’s proclamation.

4.5.3. Land expropriation and issues

For question whether respondent’s farm land was expropriated or not, 43% of sampled household’s farmland had been taken off for urban expansion program planned by Holeta town administration while the left, 57% said no piece of their land expropriated for geographical extension to periphery (see Table 4.24 below).

So, loss of farmland is one of the negative effects of urbanization towards to peripheral community livelihoods. In line with this, Dayong (2004) specified that unplanned and inadequate follow up of expansion expels valuable farmland around urban centers and it can causes opposing up to conflicts among program implementers and expropriated farmers from their original land. So, result shows as program of urbanization affecting communities negatively through occupying their productive land, reducing the amount of production and forcing the number of family members to urban centers in need of job opportunity.

Moreover, households questioned if any pre- notification there to expropriate them. Out of those households, 80% haven’t got legal information as part of their land to be taken off for public use and awareness and be readiness to displacement based on agreement. But, 20% of them agreed that there was pre-awareness to release land and receive compensation after limited time. For this case, Proclamation No 455/2005 of expropriation in Ethiopia stated that where Woreda or an urban administration decides to expropriate a landholding in accordance with Article 3 of this Proclamation, it shall notify the landholder in writing form, indicating the time when the land has to be removed and the amount of compensation to be paid. The period of notification to be' given in accordance with Sub-Article (1) of this Article shall be determined by directives; provided but should not be less than ninety days.

Table 4.25: Percentage of HHs expropriated from their farmland

No	Items	Frequency (HHs)	Percent (%)
1	Yes	135	43
2	No	178	57
	Total	313	100

Source: Field survey, March 2018

Further, key informants and focus group discussion shared the same idea meaning that no body from town administration noticed rather the decision maker simply told households to accept the strategy came down hierarchy to remove the determined amount for investment and other communal usage without clear information. So, Community has no accurate information regarding their displacement and relocation process rather the local urban bodies ordered them to leave immediately the area (see case 2 below).

This result illustrates that procedure of expropriating farmers from the beginning didn't alerted before program putting in practice and the situation seems evicting right to aware for why land is expropriated. Thus, mechanism of recently removing farmer's livelihood root was not applied similar to strategy developed for Ethiopian urban development.

Table 4.26: Percentage of HHs notified for expropriation

No	Items	Frequency (HHs)	Percent (%)
1	Yes	64	20.3
2	No	249	79.7
Total		313	100

Source: Field survey, March 2018

Regards to participation of landholders, Girma (2011) explained that the expropriation of land for public uses should not only be determined by the state and the latter has to do it in consultation with the local community program concerns. The law seems to be progressive in limiting the power of the state to expropriate holdings of farmers or pastoralists as it specifically declares that the state can only decide to expropriate land for public use through participation of local community only for investment in public goods.

On other hand, respondent replied that community were not a participant of discussion regarding to time of exiting farmland, readiness time proposed, how the rewarding value of property lost will carried out, 81.6% while the rest portion of affected households were participant. In broad sense, key informant from expert of municipal supported this idea by saying it is exclusively power of administration.

Generally, there was no invitation of community to discuss on necessity of the program, valuation of property and also land lease price to pay for households but advanced payment then after from investors. Amount to be compensate per km² delimited in accordance of municipality ability to pay while what households should do was only receiving payment and leaving area.

Concerns to right of aged family member's to obtain land via inheritance, FDRE Proclamation No.130/2007 particularly Article 5(5) supports peasant, pastoralist or semi pastoralist having the right to use rural land by gift, inheritance and also governmental. So, transferring land use rights through inheritance or donation of land consider family members if it is only livelihood and no other means of income; landless children of holder are entitled to acquire rural land for use through donation.

Contrary to national policy, focus discussion and individually interviewed participants told that bequest right from per-urban family extremely violated by administration. Even their children above 18 years outlawed of gaining a plot of residential land rather than indirect buying in the form of lease. To sum up the point, community dislocated and right to provide housing plot for family members justified above have kept lacking strategic priority. This implies that aged adults of landholder forced to leave area for job searching other than family getting right and unknowingly fall in to varied socio-economic unrest.

4.5.4. Rejecting Resettlement or Expropriation

Urban administrations have the power to expropriate rural or urban landholdings for public purpose where it believes to be used for a better development project to be carried out by public entities, private investors, cooperative societies or other organs. But, acceptance of expropriation for public aim is rarely observed along landholders. For instance, 74.2% of households opposed even policy of rural farm land removal though town forced for program's taking into practice. Positively, only 25.8% feels to leave if enough compensation and replacement land. But, Proclamation No. 455/2005 enacted that when a landholder who has been served with an expropriation command refuses to handover the land within the period specified in Sub-article (3) of (4) of this Article, the woreda or urban administration may use police force to take over the land.

Moreover, key informants narrated why they refuse if land for public by saying that case is they firstly perceived low value estimated for property produced as well as farmland at current market. This indicates that expropriated communities were involuntary as any piece of their land to be taken. But, this is debating with national urban development proclamation however there might be something bureaucratically restricted communities beneficial. Since urban population increase rapidly, condition forward urban situation to rapidly growing squatter settlement directly and suffering of economic growth in all aspects (see case 2 below).

Case 2: Expropriation, Resettlement and Compensation

Before ten years, we administered under former kebele, Merfeta Genet. At household level, there was enough farmland. I have large family members and base of life was only farming. Unexpectedly, we heard town expansion plan. More of my farmland was closer to town margin and municipality informed us about inclusion of area in town boundary. We have not prior information regards to case from administration but instructed to leave. After few months, town administration underlined the case and provides compensation for land and other property like planted trees. We forced to dislocate but nobody heard us for our appeal. Even if we will be advantageous, nobody dictated. Unknowingly, my husband sick and died after few months' treatment in different hospitals. All load of leading family fall on me. Look, I have 5 sons and 3 daughters. Their only life source was farmland and I feed and also teach them merely via it. I have no extra skill but extra open land for cultivation is removed. To tell you the truth, I have no interest to resettle but the decision is on hand of cabinet (local administration). Repeatedly, our speech became voiceless, nobody thinks for our livelihood. Early to that time few area required for investment and farmers asked to release land but their financial response is very low. So, we also expected the situation and actually saw though we strongly opposed the program of dislocation. When I say this, I don't mean I oppose urban development. However our land taken forcefully by saying for investment, to construct huge factory your benefits; amount compensated for property was bureaucratically low value. I think that there is somebody beneficial indirectly from amount should we get. We don't know who follows way of payment. For example, for one km² land, 3 ETB was decided. Our children aged also evicted of even getting plot of land for housing. Look, I can't provide piece of land for my child since area bounded to town, our life and futurity of family starting from this day. Even, I haven't received any compensation or replacement for around 2 "Cimdii" which she means half hectare. In my view, farmer's right to land is removed, we don't know till when we use and when we lost. So, I can say farmers are foremost loser and but other individuals from else became richer and richer (**My key informant from "Tullu Harbu" March, 2018**).

4.5.5. Compensation related issues

Oromia Regional state Proclamation No.130/2007) under Art.6 stated that “Any individual or organ whose land holding is taken for public uses shall have the right to get compensation for his properties and benefits lost beforehand. Even if there is no replaceable land for them, compensation for rehabilitation must be paid. Result presented shows, 13.5% of surveyed household heads particularly those live in Tulu Harbu loss their land without any legal replacement while majority comparatively received currency compensation. One key informant from an area narrated a situation by saying their land is transferred for varied agro-processing and related factory but they left nothing.

From this result we can conclude that eviction of community right to obtain compensation after land removal let other community refusing to accept strategy and policy of dislocating. The program indirectly influencing their livelihood which means expansion of town shaped to failure rather than altogether development of dwellers with town because of unfair expropriating procedures.

4.5.6. Compensation and validating landholders’ property

Majority, 74.1% of respondents were unsatisfied to value estimated for property they lost during dislocation while 26.9% accepted as high and moderate satisfaction of money given from all stakeholders of the program. Similar to this finding, Tamirat (2016) explained that many farmers are not happy to compensation of farmland for urban expansion. The compensation value is not enough comparing with value of the productive assess they lost and feeding a family, and sustaining life with this amount of compensation is found to be difficult. In support of respondent’s, focus group discussion participants agreed that there was strategy of paying compensation for farmers.

But, tenant highly opposed value assigning since the estimation of property value hasn’t considered market value of money rather low land lease at the town level i.e. 3 ETB per one km². For this case, specific proclamation No.130/2007 provides that “Where the land to be expropriated is located in a rural area, the property situated there shall be valued by a committee of not more than five experts having the relevant qualification to be designated by Woreda administration”. This suggests that practical policy as well as strategy of expropriation up to validating property produced was not in line of rules and regulation however there was national proclamation based guideline to apply the program.

So, continuous happening of such gaps in all home of landholder makes empty hand and no base of life rather falling of their family, economy and all social aspects due to inefficiently performed.

Table 4.27: Reaction of landholder’s towards to compensation payment

No	Items	Frequency (HHs)	Percent (%)
1	High satisfaction	24	7.7
2	Moderate satisfaction	56	17.9
3	Low satisfaction	133	42.5
4	Very low satisfaction	100	31.9
Total		313	100

Source: Field survey, March 2018

4.5.7. Post-expropriation and land for public purpose

Respondents answered that more of land holder’s expropriated land had been performed for aimed land use yet no investment actions at few area than fencing the area. Focus group discussion with elder household heads shows that those areas hadn’t invested and served community’s socio economic aspect for early five years possession. On this issue, expert of investment from municipality for instance case 3 informant expressed the condition that few of whole land occupied for public left outside of programmed according to lease agreement among administration and investment programmer (see case 3 below).

Case: 3 Post Expropriation and Land of Public Purpose

Really there is land expropriation. Compensation also comparatively paid by Municipal follow up from investors. For instance, there is large ha of land occupied by different flower factory in Tulu Harbu and Burka Walmara. Till now, it left without use or investment activity. After lease agreement with town administration now it is for around 5 years. Investors reasoned that high cost of material reverse to their business plan at agreement time and lack of enough capital hindrances. No action to solve done from town’s administration further than informing. Currently, supreme follow up by regional administration and viewed as no improvement there in accordance of lease agreement decided by blocking consensus of the area with organizations and transferred for farmers firstly taken off. For all this year, there was no close follow up of land expropriated. **(Key informant from “Investment Program”, March, 2018).**

4.5.8. Housing policy and strategy and related issues

As considered in previous section of urban development status, municipality planned to construct 552 condominium houses of 20:80. Currently, 195 of condominium houses had been transferred for pre-registered users in lottery form. The prime objective of constructing condominium houses in town was nationally or locally to reduce informal houses and creating job for jobless related to poverty. Edmond J. K. (2011) pointed that the aim of the program was not to move residents in poor communities out of the city but to upgrade slums and squatter settlements.

The new housing development would then be made available to those who were squatters and slum-dwellers. For this issue, expert from municipality responded condition of housing for poor income households. Key informant below narrated that administration had been constructing condominium strategy for development program. Regards to means of obtaining house, all town residents can freely registered for limited times at level they can pay lease (see case 4 below).

Moreover, participant elaborated that the number of informal houses to urban periphery consecutively increasing due to farmers informal selling of land. But, proclamation 721/2011, article 26 (4) states that all squatters or illegally occupied urban land should be vacated within seven days of the clearing order without payment of compensation. Furthermore, Gosaye (2007) reported that poor urban management, housing problems and unattractive compensation provokes informal settlement. Thus, it implies that the town municipality had been implementing the housing program as soon as else. But, there was no exceptional situation created for poor income category residents to resort informal to formal housing.

Generally, the strategy of house affording for low-income groups in Holeta lacks practical implementation even if rate of informal settlement and slum house increasing at periphery. So, unfair housing strategy in action of study area pushed towards to unplanned expansion or growth of town with negative livelihood implication to dwellers.

Case: 4 Housing, Low Income Groups and Squatter Settlement

I am an expert of urban planning in Holeta town. From earlier time, there was high demand of house. More of governmental and private workers are restricted to settle in rent house. Recently government enacted housing policy and strategy to apply. For

example, condominium construction strategy in town programmed to reduce problems like urban poverty. Our town also derived the strategy to build communal houses. For instance, there are houses transferred for user while the others are unfinished especially in Burka Harbu kebele. But town hadn't determine who should get or who shouldn't get rather of only including those registered and paying lease assigned. No exceptionality for low income households was taken. You can't primarily get chance of afford. Only if you can compete and can pay finance decided per given time. Repeatedly farmers adjacent of our town are selling their plot of land for "Caraqaa" which he meant illegal house. This is due to fear of low compensation and may remove in future as soon as previous experience. Most of those housing ways among all buyers are uncertified settlement. It didn't have municipal recognition. This is a situation highly exaggerating number of "Caraqaa" which he means squatter settlement (**My key informant from "Urban Planning Expert", March, 2018**).

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Even though urbanization is the common character of all urban centers in world, there is variation of rate and level of urbanization within countries of the world. In this finding, Holeta town rapidly expanded after 1990s of regional urban reformation particularly the town enlarged from 1550 ha to 5550 ha (55.89 km²) including close rural urban considering area as response of housing demand within a few years interval by the influence of investment program, closeness of town to Finfine and other factors.

Holeta town is showing rapid demographical, consecutive infrastructural improvements, socio-economic growth and numerous socio-economic problems such as high rate of unemployment, social instability, addiction and else. Program of urban expansion and inclusion of rural parts into urban boundary highly accelerated the urban linked area's modification to urban land use land cover in years. This is to mean that most of earlier rural land uses like open space, grass land and forest areas are severely shifted to residential, industrial and other various urban uses though that of urban agriculture displayed oscillation.

Previously, most of agricultural dependents engaged in more than one works such as crop production, livestock reproducing and rearing and others though the principal economic activities were crop cultivating, livestock rearing and crop producing for market purpose and few from non-agricultural sectors like own small business, employment in private sector, working in some one's house and street vender. Thus, most of respondents responded as their livelihood strategy before expansion was almost better and moderate livelihood strategy.

Currently, all respondents have at least one income source but most of respondent's livelihood trusted by crop cultivation, own business and daily labor force. In other word, around half of per-urban community urban expanded to recently engaging in various non-agricultural practices like working in some one's house, daily labor force, street vender and small own business (Tella, Hereke). Compared to respondents engaged in agricultural practices before, the number of farming dependents reduced by half times now a day which means their income source shifted to non-agricultural sector as soon as urban growth.

Comparative to early livelihood condition, peripheral community in studied area currently fall down in to unsecured livelihood condition because of problems like; inability to adopt urban livelihood strategy, limited farm land due to municipal expropriating and gradual

fragmentation, inefficient compensation, inadequacy of capital for job opportunity and lack of skilled labor troubled their former livelihood strategy. Generally, almost total respondents agreed on change of peripheral community livelihood condition and reflected unsatisfactory reaction now a day.

Impact assessment of urbanization on peripheral community livelihood in area reveals that physical and population growth of town adversely affected the community livelihood assets for instance natural asset (farmland, forest area), physical assets (house rooms, different livestock of community) and social interrelationship which are a base of their opportunity elsewhere. Exceptionally, urban expansion positively influenced the possession of house rooms among most respondent though the contribution of houses in their livelihood is not further than modernity of house using compensation.

Possession of household's both farm land and forest area at current time declined by half from that of before expansion showing adverse effect urban expansion to periphery imposed on livelihood strategy of surveyed community. Similarly, physical capitals of affected community particularly different livestock possession declined at different percent with exception of house rooms and poultry though assets from the two contributed a little as source of job opportunity. So, expansion of town negatively influenced livestock of community via land use modification from commonly adopted community stock, domestic animals (oxen, cows and sheep). Moreover, social capital of community before expansion declined from high to moderate social relation that means there is no such concrete relationship during their enemy or ceremony as valuable asset.

Regards to policy and strategy constraints concerning to expansion of town, there was no pre-notification to expropriate and also expropriated community haven't participated for discussion, compensation value decision and related. Few of expropriated households lost their land without compensation and also most of family members aged above 18 years outlawed from obtaining even a plot of land inheritance after the inclusion of area in town administration boundary. This displays gaps of policy and strategy applying in issue matched to expansion program.

On the side of landholders, there is no ideology of supporting the urban growth proclamation rather involuntariness to resettlement viewing negatively though government claimed all procedures of removal and requirement of area for further purpose.

Majority of respondents, key informants and focus group discussion participants responded the point as valuation of property produced and farmland lost was unfairly in contrary to nationally claimed valuation method. For instance most of landholders compensated 3 ETB per one km². So, loss of farmland, low value estimation and related issues due to in effective implementing program led livelihood of community unsecured. Municipally, no more did to give prior focus of house affording for low income and affected households. Similar to this, less emphasis of transferring informal settlement to formal and lack of follow up after expropriation are problems might hinder landholders as well as urban growth.

5.2. Recommendation

As socio-economic development, urbanization is a program over which all stakeholders in addition to peripheral community becomes altogether user and beneficial. The study result shown that newly settled population groups were beneficial while community to where town expanded ever looser or disadvantageous group. Regards to per-urban community livelihood of Holeta town, rapid horizontal expansion them and limitations of applying rules and regulations of expropriating, valuating property, stakeholder's focus of reducing informal settlement and others imposed adverse impact on livelihood. Using an identified gaps and impact on community, the following recommendations were forwarded by researcher.

1. Expansion of Holeta town towards to periphery in its history brought better socio-economic development in town. Beneficially, peripheral community is almost below previous condition. So, it is necessary to calm alarmed unplanned expansion towards to farmland at periphery.
2. An economy of most peripheral community before expansion was agricultural activities though more or less they shifted to other due to the problems suggested in previous sub topics. Since most community reflecting inability to adopt urban livelihood, stakeholder's subsidy to participated on own business via skill oriented training for new livelihood strategy and exemplary usage of finance strategy is recommended.
3. Communities currently engaged in unsecured income sources like daily labor, working in some one's house and else were dislocated households. Stakeholder expropriated communities or decision maker of the program should give an intention with accessing credit and rehabilitating strategy to cope up better livelihood strategy.
4. Really, government nationally claimed that landholder has a right to get enough compensation value via careful estimation did by committee assigned. But, all

directives as well as strategic implementation of compensation right and value was by decision of executers or bureaucratic. Following procedural value estimation and recompensing for affected community property to win - win beneficially from urbanization is recommended.

5. Actually expansion of town towards to per-urban area modified community livelihood strategy to non-farm though the only livelihood strategy more uneducated community engaged for a long period of time was farming sector. Thus, livestock as income source of affected community should be replaced by research based few livestock reproduction techniques.
6. Result from spatial and temporal land use analysis displayed as planted areas, rural farmlands occupied by residents radically shifted to urban construction types. The situation exposed community of periphery to vulnerable livelihood even food insecurity. So, comprehensive development approach in town and squatter settlement mitigation follow up should be promoted, favorable condition should be created for low income and affected community to afford house.
7. In studied area, researcher able to observe that there is policy and strategy limitations almost related to expropriation, compensation and issues even after compensation and also around house affordability above nationally proclaimed directives. So, there should be governmental enforcements and follow up of procedural implementation by administration or local stakeholder of the program

REFERENCES

- Achamyeleh Gashu. (2017). *Urbanization and the Struggle for Land in the Per-Urban Areas of Ethiopia* Bahirdar University African development bank group: Urbanization in Africa
- Addis Ababa City Administration, (2000) *the Second Five Years (2000-2004) Development Plan*. Finfine: Finfine City Administration
- Alemu Addisu, Amare Gebremedihin, (2015). *Urban Expansion and Farmers' Perceptions in Axum Town, Ethiopia*: Mekelle University,
- Allen, A. (2003). *Environmental Planning and Management of the Per-urban Interface: Perspectives on an Emerging Field*; Environment and urbanization Vol.15, No.1, 135147, April, 2003 <http://newruralism.pbworks.com/f/allen.pdf>.
- Ayele Kenea Feyissa, (2011) *Assessment of Soil Erosion Risk in the Holeta Watershed, Central Oromiya, Ethiopia*: Addis Ababa University, M Sc thesis
- Balchin, Isaac D and Chen J, (2000) *Urban Economics: A Global Perspective*. Great Britain Wales: Palgrave.
- Berhanu Zeleke. (2005). *Impact of urban redevelopment on the livelihood of displaced people and urban development in Finfine: The case study of Casanchis local development*; MA thesis submitted to Addis Ababa University
- Bhatta B. (2010). *Analysis of Urban Growth and Sprawl from Remote Sensing Data: Advances in Geographic Information Science*, DOI 10.1007/978-3-642-05299-6_2, C Springer-Verlag Berlin Heidelberg.
- Bocquier P. (2004). *Analyzing Urbanization in Sub-Saharan Africa In: Champion, T, Ed Hugo G, Ed: New Forms of Urbanization – Beyond the Urban-Rural Dichotomy*. England: Ashgate Publishing Limited. Ch. 7.
- Brighton (2012) [http://www.steps-centre.org/pdf/Per-urban online version pdf-](http://www.steps-centre.org/pdf/Per-urban_online_version_pdf-) Accessed 23rd June, 2012.
- Cermea, (1997) “Implementing the sustainable rural livelihood approach”, In Carney (ed) *Sustainable rural livelihood; what contributions can we make?* Department of international development: Nottingham, Russell press LTD
- Chambers, R Conway and Gordon R, (1992) *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*, Institute of Development Studies
- Chambers, R, (1995). *Poverty and Livelihoods: Whose Reality Counts?* Environment and Urbanization, Vol. 7, No.1, 173-204, April, 1995.eau.sagepub.com

- Congalton, R.G. (2000). A review of assessing the accuracy of classification of remotely sensed data: *Remote Sensing of Environment* 37:35-46
- Dayong N. (2004). *Several Acute Issues in China's Urban Planning: Accessed from: [http://www.Lincoln instedu/pubs/pub-detail.aspx?id=872](http://www.Lincolninstedu/pubs/pub-detail.aspx?id=872) on 20th December, 2014.*
- Department of international development livelihood, (2000) Sustainable Livelihood Frameworks
- Douglas Gollin, *et.al* (2012). Urbanization without Structural Transformation: Evidence from Sub-Saharan Africa, Department of International Development, University of Oxford, Version: November 13th, 2012
- Feyera Abdisa. (2005). *Urban Expansion and Livelihood of the Per-urban Agricultural Community: the case of Finfine*, MA Thesis: Addis Ababa University.
- Firew Bekele. (2010). *The Impact of Horizontal Urban Expansion on Sub-Urban Agricultural Community Livelihood: The Case of Tabor Sub-City, Hawassa city, SNNPRS, Ethiopia*. MA Thesis unpublished; Addis Ababa University
- Foeken Dick, Mboganie Mwangi *et.al*, (2004). *Does Access to Land have a Positive Impact on the Food Situation of the Urban Poor? A Case Study in Nairobi*, in Eastern Africa Social Science Research Review, Vol. XIV, No.1: 19-32.
- Girma Kassa. (2011). *Issues of Expropriation: The Law and the Practice in Oromia*. Thesis on Addis Ababa University
- Gosaye Bekele. (2007). *beyond the Formal Urban System; Learning from Informal Settlements in Adama city, Ethiopia. Mechanisms and Rationale for their emergence, expansion and potential*, MSc)
- Hardoy J, (2001). *Environmental Problems in Urbanized World: Finding Solutions for Cities in Africa, Asia and Latin America*, London.
- House of Peoples Representatives, (2005) Proclamation on Expropriation and Compensation pdf available at <http://www.hpr.et.gov> accessed 5 Jan 2009]
- <http://www.climatedata.org>. Html holeta
- [http://www.saciwaters.org/perurban/idrcper urban report.pdf](http://www.saciwaters.org/perurban/idrcper%20urban%20report.pdf)-July,2012
- [http://www;free encyclopedia-2010](http://www.free-encyclopedia-2010.com): Urbanization and its impacts on periphery in developing nations Accessed-15 Dec.2010].
- John Farrington, Tamsin Ramasut, J.Walker, (2002). *Sustainable Livelihoods Approaches in Urban Areas: General Lessons, with Illustrations from Indian Cases*,
- Kamete A. (2002). *From the Global to Urban Globe-Urbanization and Poverty in Africa: Implication for Norwegian Aid Policy* CMI Report 2001:2, Norway.

- Kessides C. (2006). *The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction*. The Cities Alliance, Washington
- Ketema Wogari. (2006). *Water resources potential evaluation of Holeta river catchment, MA, thesis central Oromia, West Shewa*
- Kihangah N. (2011). *Review on Problems Facing Cities Need New Thinking, Says UN-Habitat Boss the Sunday Nation*, pp. 30 Nairobi.
- Kyle Farrell. (2014). *The Rapid Urban Growth Triad: A New Conceptual Framework for Examining the Urban Transition in Developing Countries*: Drottning Kristinas Väg 30, 10044 Stockholm, Sweden; Received: 30 June 2017; Accepted: 3 August 2017; Published: 9 August 2017.
- L. Krantz. (2001). *the Sustainable Livelihood Approach to Poverty Reduction: An Introduction*
- Maria Nordhag. (2012). *Urbanization in sub-Saharan Africa: Bachelor thesis Peace & Development Studies. A Study of Contemporary Urban Population Growth in a Less Developed Region*, Linnaeus University
- Marshall F. Waldman L. MacGregor, *et.al* (2009). *On the edge of Sustainability: Perspectives on Peri-urban Dynamics*.
- Mcgranahan C. (2000). *Urban-rural change: boundary problems and environmental burdens* International Institute for Environment and Development.
- Mefekir WeldeGebrel Tessema, (2017). *Impact of Urban Expansion on Surrounding Peasant Land: the Case of Boloso Sore Woreda, Areka Town, SNNPR, Ethiopia, Wolaita Sodo Universty*. Volume 17 Issue 2 Version 1.0
- Minwuyele Melesse, (2004). *City Expansion, Squatter Settlements and Policy Implications in Finfine: The case of Kolfe keranio sub-city* M.A thesis, AAU.
- Mohamed El Hedi and Arouri, (2014) *Effects of urbanization on economic growth and human Capital formation in Africa* 2014 Halshs-01068271
- Moser C. (1998). *The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies*. In *World Development*, Vol. 26, No. 1.
- N. Mandere and Barry Ness, (2010). *Per-urban development, livelihood change and household income: A case study of per-urban Nyahururu, Kenya*
- Narain V, (2010). *Per-urban Water Security in a Context of Urbanization and Climatic Change a Review of Concepts and Relationships*: Sac waters, Andhra Pradesh IDS Working Paper

- Poston D, L. Bouvier. (2010). *Population and society: an introduction to demography*. Cambridge: Cambridge University Press.
- Proclamation No. 130/2007, Proclamation to Amend Proc. No.56/2002, 70/2003, and 103/2005 of Oromia Rural Land Administration and Use Proclamations, Preamble, Megeleta Oromia, 15th Year, No.12
- Proclamation No. 455/2005, Expropriation of Landholdings for Public Purposes and Payment of Compensation Proclamation page: 3124
- R. Bloch and J. Monroy, (2015). *Urbanization and urban expansion in Nigeria*; ICF International, Liverpool John Moore's University
- Satterthwaite (2004) the urban Part of Rural Development: The Role of Small towns in developing country context.
- Scoones Ian (1998) and Ellis F, (2000) Sustainable Rural Livelihoods: A Framework for Analysis
- Simon D, (2008). Urban Environments: Issues on the Per-Urban Fringe. Annual, Review of Environment and Resources, 33, 167-185.
- Tacoli C. (2004). *Change Rural-Urban Interaction in Sub-Saharan Africa and their Impact on Livelihood* Summary: Rural-Urban working paper 7, IIED, London.
- Tamirat Mengistu. (2016). *Horizontal Urban Expansion and Livelihood Adjustment Problem Among Ex-Farmers in the Kebeles Surrounding Jimma Town: The Case of Derba Kebele* Jimma University, Ethiopia, European Scientific Journal May 2016 edition vol.12, No.14 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431
- Tegegne Gebre Egziabher, (2000a). Perspectives and issues of urban Development in Ethiopia: Working Paper No.10, RLDS. Finfine: AAU
- Teketel Fekadu, (2015). *Urban expansion and its effects on communities: the case of Hosanna town, Hadiya zone, SNNPR, Ethiopia*. M.A Thesis unpublished: Haramaya University
- Thomas P.Z. Mpofo, (2013). *Urbanization and urban environmental challenges in Sub-Saharan Africa*: Research Journal of Agricultural and Environmental Management Vol. 2(6), pp.127-134, June, 2013 Available online at http://www.org_ISSN_2315-8719
- Todaro M. (1997). *Economic Development (6th edition)*, London: Addison Wesley Longman Ltd. England.
- Turok I, G. McGranahan. (2013). *Urbanization and economic growth: the arguments and evidence for Africa and Asia*, Environment and Urbanization, vol 25, No 2,

- Turok I, S. Parnell. (2009). *Reshaping cities, rebuilding nations: The role of national urban policies*, Urban Forum, volume, 20
- Tvedten I. (2002). From Global village to urban globe, Urbanization and poverty in Africa
- United Nation habitat, (2014) *The Evolution of National Urban Policies: A Global Overview*
UN, 2007 State Report of World Population.
- United Nation, (2007) *World Urbanization Prospects: New York* Accessed 12th June, 2011
- Wabrster R. (2005). *Shaping the future of per-urban in East Asia: an output of the research preparation project on per-urbanization in East Asia Drivers; dynamics and policy implications* The World Bank, Bangkok, Thailand
- World Bank, (2011) *Livelihood strategy in African cities: Upgrading of Low Income Settlements. Country Assessment Report*, World Bank, Washington, DC.
- Yirga Tadesse, (2004). *Ground Water Modeling a case study on volcanic water supply aquifer /Akaki well field/ of the city of Finfine, Ethiopia*
- Zenebe Woldu, (2010). *Urbanization: Market Opportunities; Prepared for the Video Conference under AAACP-funded series of High Value Agriculture Seminar*

APPENDICES

APPENDIX: 1

Questionnaire for Sample Household Heads

Dear respondents, the main goals of preparing this questionnaire is collecting the first hand data for the study or research titled with “impact of urbanization on the peripheral community livelihoods: case from Holeta town. The prime purpose of conducting the study is for the partial fulfillment of Masters of Art in Geography and environmental studies in Arba Minch University, College of Social Science and Humanities, department of geography and environmental studies. Therefor I want to thank you for your inevitable cooperative information providing for the required aims with full assurance of your each and every data using only for focused finding confidentially. **Thank you**

I. Back Ground of Respondents

1. Sex A. male B. female
2. Age A. 20-30 B.30-40 C. 40-50 D. 50-60 E. above 60
3. Level of education A. Illiterate B. Read and Write only C. Elementary (1-8)
D. Secondary (9-12) F. Tertiary (12+)
4. Household family size (in number) A. Male B. Female

II. Conditions of Urban Expansion

1. Do you believe that Holeta town is expanding rapidly?
A. Strongly agree B. Agree C. disagree D. strongly disagree
2. Which group of population highly caused for now a day built residential settlement in town? A. those come from rural kebeles C. high population growth of town itself
B. Those come from other surrounding weredas D. immigrants from closer town to
3. Which factor do you think as the cause for rapid expansion of this town? (multiple response possible)
A. Suitable topography for settlement C. Geographical proximity to Finfine
B. Climatic suitability for settlement D. High natural population increase of town
E. Investment program implementation

II. Urban Expansion and Livelihoods of Peripheral community

A. Livelihood strategy and changes among Households

1. Which category of economic activity was a base for your livelihood strategy before 2005
E.C? A. Agricultural B. Non-agricultural

2. If your answer for No 1 is 'A', which is/are the income generating activity you engaged?
(multiple choice is possible)
- A. Livestock Rearing C. Bee reproduction E. Forestry
B. Crop Cultivation D. Cash crop production
3. If your answer for No 1 is 'B', which is/are the income generating activity you engaged?
(Multiple choices is possible)
- A. Own business F. Remittance
B. Government employment G. Small business (Tella, Hereke)
C. Daily labor force H. Street vender
D. Working in some one's house I. Other specify (if) _____
E. Employment in private sectors
4. On job opportunity you engaged before 2005 E.C, what view do you have to your livelihood condition?
- A. Best living condition C. Survival living condition
B. Moderate living condition D. Worst living condition

II. Livelihood Condition or Strategy after Urban Expansion

5. Did you have job for income source now after urban expansion? A. Yes B. No
6. If 'yes' which job/s currently you engaged as income generating for your day's livelihood? (multiple choices is possible)
- A. Crop cultivation G. Working in some one's house
B. Daily labor force H. Others _____
C. Own business
D. By migrating far to other rural area
E. Small business (Tella, Hereke)
F. Government employment
7. Do you believe that you get jobs or works easily currently than before expansion?
A. Yes B. No
8. If you say "No" for question 7 above, why? _____
9. Is there any role compensating land and related benefits provided after expansion on changing livelihood condition? A. Yes B. No
10. If your answer for No 9 is "yes", which livelihood strategy/s you newly adopted by compensation and related benefits during program implementation?
- A. Own business E. No new job due to compensation
B. Small size commercial farming E. Other _____

- C. Small business and livestock rearing side by side
 - D. Shopping service
11. If your answer for No 9 is yes, what situation/s caused shifting a means of your livelihood?
- A. Farmland size decrease and unsustainability of enough crop production
 - B. Alternative job opportunity due to better development infrastructure
 - C. Replacement of farmland by financial compensation
 - D. Inadequate compensation for farmland expropriated
 - E. Absence of well-trained finance usage
 - F. Other specify _____ (if any)
12. If your answer for No 9 is "No" why for reason out if any _____
13. In general do you believe that your current livelihood strategy worse than of before 2005 E.C? A. Yes B. No
14. If your response for question No 13 is yes, which condition do you think is/are forced you to new strategy? (Multiple Response Possible)
- A. Inadequate access of capital for job opportunity
 - B. Inefficient finance from compensation
 - C. Lack of labor specialization
 - D. Limited farmland due to dispossession and fragmentation
 - E. Inability to adopt urban related livelihoods
15. By comparing to with before 2005 E.C, do you say that there is a change of livelihood condition now? A. Yes B. No
16. From the current point of view, what reaction do you have on the newly adopted livelihood strategy after 2005 E.C?
- A. high satisfaction B. moderate satisfaction C. Low satisfaction D. Hand to mouth

Impact of urban expansion on peripheral community livelihoods

i. Natural assets of households

2. Do you believe that, there is the change on average farmland and forest you currently have with early expansion? A. Yes B. No
3. In hectare what amount of farmland did you have before 2005 E.C expansion of town?
- A. above 7 ha B. 5- 6 ha C. 3-4 ha D. 1-2 ha E. below 1 ha
4. In hectare what amount of farmland did you have after 2005 E.C
- A. above 7 ha B. 5- 6 ha C. 3-4 ha D. 1-2 ha E. below 1 ha

4. What amount of land covered by planted and or forest did you have before 2005 E.C in hectare? A. above 1 ha B. 0.75 – 1 ha C. 0.5 -0.75 ha D. below 0.5 ha E no at all
5. What about the size of land covered by planted and or forest did you have after 2005 E.C? A. above 1 ha B. 0.75 – 1 ha C. 0.5 -0.75 ha D. below 0.5 ha

ii. Physical assets of households

1. Do you think that, the amount of house room, domestic animals and else you possessed at the time before and after 2005 E.C differ? A. Yes B. No
2. In number, what amount of house room/ classes/ did you have before 2005 E.C? A. above 7 classes B.5-6 classes C.3-4 classes D. 1-2 classes
3. In number, what amount of house room/classes/ do you have after 2005 E.C due to expansion? A. above 7 classes B.5-6 classes C.3-4 classes D. 1-2 classes
4. What factor caused for change of house rooms number? if any_____
5. What size of domestic animals listed below you possesses before and after 2005 E.C

	Before expansion	after expansion
A. Oxen	_____	_____
B. Cow	_____	_____
C. Sheep	_____	_____
D. Horse	_____	_____
E. Donkey	_____	_____
F. Poultry	_____	_____

6. What factor/s affected your livestock size/ number? if any_____

iii. Social assets of households

1. How will you express your social relationship and its value when you were at former altogether with your neighborhoods? A. Very high B. High C. Moderate D. Low E. Very low
2. What about social relationship and values after 2005 E.C? A. Very high B. High C. Moderate D. Low E. Very low

IV. Policies and Strategies and Urban Expansion Program

1. Is there any piece of your farmland expropriated for urban expansion program? A. Yes B. No
2. Is there local administration's pre-notification for dislocation? A. Yes B. No

3. Have you participated on discussion for land removing procedures for urban expansion program? A. Yes B. No

4. If you say “yes” for question No 1, have you got compensation for farm land taken of you lost? A. Yes B. No

5. If you say “yes” for question No 4, what reaction do you have towards to compensation you received?

A. High satisfaction B. moderate satisfaction C. Low satisfaction D. Very low satisfaction

6. In general, do you believe that all policy and strategies claimed are implementing in your town? A. Yes B. No

The End

Thank you for your cooperation

APPENDIX: 2

Interview Guideline to Municipality Experts

1. Address _____ Sub city _____ kebele _____ 2. Level of education _____

II. Question about Town Expansion

1. Do you believe that Holeta town is rapidly expanding? History of town expansion, How about the status of urban growth or expansion, infrastructural facilities, socio-economic conditions
2. What about the livelihood strategies of peripheral households at recent time; income generating activities community engaged, newly adapted livelihood strategy by households, job opportunity now a day
3. Discussion about livelihood change along per urban household around town (if any); factors estimated for shifted livelihood approach then after land expropriation
4. How do you express the landholder's expropriating procedures for urban expansion program towards to periphery; Regards to notification, participation, family members right and else
5. How was feeling of landholders during the time of expropriating; are they volunteer, any cases for their reaction (if any)
6. How was tactics of payment for property lost at expropriation; right and value estimation for property and also stocks like farmland
7. How was the administration's follow up of land removed for public purpose; are there local stakeholders attending conditions of lands,
8. Do you believe that municipality doing for housing problem; way of transferring communal built houses, consideration for low income or poor households
9. How was the situation of informal settlement around town; condition around outer part, stakeholder of informal housing, strategy of mitigating squatter settlement

Thank you for your cooperation

APPENDIX: 3

Interview Guideline to Elder Households of Periphery

1. Address _____ kebele _____

II. Questions Regards to Town Expansion

1. Discussion regards to urban growth state of town ; historical expansion of town, ,demographic situation (vocally), conditions regards to infrastructural facilities, socio-economic characteristics there before and at time of survey
2. Discussion on livelihood condition of households before urban expansion; income sources they repeatedly engaged, access of job opportunities, early reaction to strategy
3. Discussion on livelihood strategies of peripheral households now a day; income activities community engaged, newly livelihood strategies households relying now a day, reaction to livelihood condition, job opportunities
4. Discussion on livelihood change along per urban household around town (if any); factors estimated for shifted livelihood approach then after land expropriation
5. How do you express your and affected community's expropriating procedures during urban expansion program at periphery; regards to pre informing, any invitation for discussion, situation of expropriated family members right
6. How was your reaction of landholders during the time of expropriating; are you volunteer, any cases for your reaction (if any)
7. Discussion on payment for property lost at expropriation; right to compensate, value estimation for property and also stocks like farmland
8. Discussion on situation of land expropriated then after local administration lease agreement with investors, stakeholder follow up
9. How was your house affording opportunity during communal houses transferring techniques?
10. Do you believe that informal settlement is expanding at fringe; landholder informal land market, cases for selling farmland

Thank you for your cooperation

APPENDIX: 4

FGD Participant's Guideline

Warm up: - some people say that urban expansion is sign of modernity, economic and social development. Thus they support more urbanity. On the contrary, others mostly views urbanization on the opposite of its appreciation. So, which side view will you follow? Why for?

1. Discussion on livelihood condition of households before urban expansion; income sources they repeatedly engaged, access of job opportunities, early reaction to strategy
2. Discussion on livelihood strategies of peripheral households now a day; income activities community engaged, newly livelihood strategies households relying now a day, reaction to livelihood condition, job opportunities
3. Discussion on livelihood change along per urban household around town (if any); factors estimated for shifted livelihood approach then after land expropriation
4. How do you express your and affected community's expropriating procedures during urban expansion program at periphery; regards to pre informing, any invitation for discussion, situation of expropriated family members right
5. Discuss on the reaction of community towards to urban expansion policy and strategy of the town?
6. How was your reaction of landholders during the time of expropriating; are you volunteer, any cases for your reaction (if any)
7. Discussion on payment for property lost at expropriation; right to compensate, value estimation for property and also stocks like farmland
8. Discussion on informal settlement, household's informal land market,

Thank you for your cooperation