

Mekelle University



**College of Social Sciences and Languages
Department of Geography and Environmental Studies
Post graduate study program**

Socio-economic effects of urban expansion on peri-urban communities: case study of Nebelet Town and its peri-urban areas, Central Zone of Tigray, Ethiopia

A Thesis submitted to the Department of Geography and Environmental Studies in partial fulfillment of the requirements for the degree of Master of Arts in Geography and Environmental Studies

**By: Brhanemeskel Amare
Advisor: Tesfayohannes Hailu (PhD)
Co-advisor: Misgna Gebrehiwot (PhD)**

**Mekelle, Ethiopia
September, 2025**

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DECLARATION

I, Brhanemeskel Amare hereby declare to Mekelle University that this thesis is a product my original research work, I have undertaken the thesis work independently with the guidance and support of the thesis advisor.

To the best of my knowledge this study has not been submitted for any degree or diploma program in this or any other institutions and all the resources or materials and information other than my own are duly acknowledged.

Name: Brhanemeskel Amare Signature: _____ Date of submission: _____

Thesis advisor approval

This is to certify that the above declaration made by the candidate is correct to the best of my knowledge as an advisor.

Name: Tesfayohannes Hailu (PhD) Signature _____ Date _____

Approved by Board of Examiners

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Chairman	Signature	Date
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Internal Examiner	Signature	Date

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ABBREVIATIONS

EPA: European Environmental Agency

UN: United Nation

WE: Wereda Embaseneyti

SPSS: Statistical Package for Social Science

FGD: Focus Group Discussion

CSA: Central Statistics Agency

DFID: Department for International Development

ICT: Information Communication Technology

GIS: Geographic Information System

PC: Personal Computer

SD: Standard Deviation

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ABSTRACT

Rapid urban expansion has become one of the defining socio-economic and spatial transformations in Ethiopia, bringing both opportunities and challenges for peri-urban communities. In Nebelet town, this expansion has intensified in recent years, driven by population growth, infrastructure development, and increasing demand for residential and commercial land. While such transformations can enhance urban services and create new livelihood opportunities, they often disrupt traditional farming systems and expose vulnerable groups to land dispossession and economic insecurity. Against this backdrop, the central problem addressed in this study is how the urban expansion of Nebelet town has affected the socio-economic well-being of surrounding peri-urban households.

The overall objective of the research was to assess the socio-economic impacts of urban expansion on peri-urban communities in Nebelet town, with particular attention to land-use change, livelihood transformation, and equity in the distribution of benefits and costs. A mixed-methods research design was employed. Data were collected through household surveys, key-informant interviews, focus group discussions, and GIS-based land-use analysis. Quantitative data were analyzed using descriptive statistics and regression models, while qualitative evidence was examined through thematic analysis.

Findings indicate that rapid conversion of farmland and communal areas into residential plots, roads, and business establishments has reshaped the local economy and livelihoods. On the positive side, some households benefited from improved access to services, increased land values, and new income opportunities in trade and construction. On the negative side, many farmers experienced reduced farmland, tenure insecurity, rising living costs, and social disputes. The effects were unevenly distributed: wealthier and well-connected households gained more, whereas smallholders and female-headed households faced significant losses. Factors such as land tenure security, access to serviced land, education, and proximity to infrastructure were decisive in determining household outcomes.

The study concludes that without inclusive and participatory planning, urban expansion in Nebelet risks undermining peri-urban livelihoods and widening social inequality. It recommends strengthening land administration systems, ensuring fair and timely compensation, safeguarding productive agricultural areas, and promoting livelihood diversification through skills training and enterprise development. Participatory governance and effective grievance-redress mechanisms are essential for making Nebelet's growth more inclusive and sustainable.

Keywords: Urban expansion, peri-urban livelihoods, land conversion, tenure security, Nebelet town, Ethiopia.

CHAPTER 1: INRODUCTION

1.1 Background of the study

Urbanization is the shift of population from rural to urban areas that corresponds with the decrease in the proportion of people living in rural areas and the ways in which societies adapt to this change. Urbanization is the process by which large number of people become permanently concentrated in relatively small areas; forming cities. Such process is a worldwide phenomenon. The world urbanization level is increasing from year to year. Urbanization; the process of urban expansion; may involve both horizontal and vertical expansion; on physical structure of urban areas and results in loss of agricultural lands; natural beauties; range lands; parks and sceneries (Minwuyelet, 2004).

Urbanization began in ancient Mesopotamia in the Uruk period (4,300 - 3,100 B.C). Urbanization rapidly spread across the western world. Although level of urbanization in developing countries is low; the rate of urbanization is at fastest rate. Approximately, 30% of African population lived in urban areas and the continent's population lived to increase to 47 percent by 2015 and to double by 2050 (Thou, 2010).

Ethiopia is characterized by low level of urbanization even by Africa standard with only 23.2% of the population lives in urban areas. However; such a high growth rate is not often accompanied by development in socio-economic, services and infrastructure (Tell and Assefa; 2010). Urbanization and urban growth are considered as a modern way of life manifesting economic growth and development. However; urbanization and urban development in Ethiopia also resulted in a number of socio-economic problems (Tegenge, 2000). The main cause of urban expansion are population pressures (Brhanu, 2005) and the migration of rural population towards urban centers.

The only agricultural activity is the main livelihood of the peripheral communities. The main reasons for increasing level of urbanization are; therefore; natural increase, rural-urban migration and the geographical expansion of urban areas through annexation of the peri-urban areas (Cohen; 2006). Urbanization is a process of increasing of modernization system and the driving force for economic growth and development which modifies the socio-economic activities of the people (Rimal, 2011).

In Ethiopia in general and in Tigray region in particular, urban expansion has diminished the physical assets; particularly livestock and farmland holdings of the dispossessed farm households. Studies indicate that economic development, industrialization and rural-urban migration are responsible for major transformation of urban centers in world to grow beyond their usual administrative spheres (Tsega; 2012).

Nebelet Town is one of the growing urban centers in the central part of Tigray. This ongoing expansion process captures the views of peripheral farmers who are forced to leave their farmland and property. Therefore; the effects of this process of urban expansion on the surrounding farming communities needs to be clearly studied in order to reduce the negative effects of the expansion. Hence; the expansion of the town is becoming irregular; fast and creating displacement of farming communities. This study analyzes the rapid urban expansion of the town and its effects on the peri-urban farming communities.

1.2 Statement of the Problem

In many of the developing countries of the world; urban expansion is a spontaneous condition that results into spontaneous growth displacing neighboring rural farm communities (Tegegne, 2002). Urban sprawl is so significant in developing countries than that of developed countries. The reason for this is that majority of the people in developing countries are concentrated in peripheries of urban areas. This affects the base for their livelihood on peripheral urban farm with fragmented land holding. Therefore; horizontal urban expansion leads to displacement of peri-urban peasants with small scale economy by necessitating restitution. However; in developing countries like Ethiopia land ownership belongs to both government and the public; the amount of restitution paid to displaced farmers depends on government is good-will and commitment of program implementers with no or minimum pay off. .

The socio-economic effects of urban growth have positive effects for the majority of urban dwellers. However; serious negative effects would occur for much of the nearby farmers (Nebiyu, 2000).

Land is the most important property and fixed asset. Hence; it is the base for the lives of the farm communities in the expansion areas of Nebelet town. The urban expansion results in serious effects on their way of life, agricultural production, consumption and social structure.

Therefore; it is important to identify the specific effects of horizontal urban expansion on socio-economic and the livelihood of the peri-urban farm communities of Nebelet town. Nebelet town is surrounded by fertile lands. However; the expansion (growth) of the town causes loss of fertile lands and changes into urban lands. This process highly affects the living standards of the peri-urban peasants. The peri-urban peasant communities do not get adequate restitution from the urban administration.

Generally; the study was mainly focused on the peri-urban problems resulting from the outward expansion of Nebelet town towards the surrounding farm lands. The study paid more emphasis on the extent of the problems caused by urban expansion. The study was conducted with the aim of investigating the extent of urban expansion, the size of farmlands expropriated, the number of displaced peri-urban farm communities and resulting socio-economic effects. The study also assessed the available opportunities of restitution packages to mitigate the problems. Urban expansion is an inevitable process; however, it must be practiced without affecting the wellbeing of the peri-urban farming communities.

1.3 Objectives of the study

1.3.1 General objective of the study

The general objective of the study is to assess the socio-economic effects of urban expansion on the peri-urban farming community of Nebelet Town and its surrounding areas in the Central Zone of Tigray, Ethiopia.

1.3.2 Specific objectives of the study

- to identify the major causes of urban expansion in the peri-urban area of Nebelet town.
- to investigate the major socio - economic effects of urban expansion on the peri-urban farming communities of Nebelet town
- to examine the existing restitution (compensation) packages provided by the town administration to the displaced peasants in the study area.
- to examine the participation of the peri-urban farming communities on decision and estimation of the compensation packages for the displaced peasants in the study area.

1.4 Research questions

1. What are the major causes of urban expansion in the peri-urban area of Nebelet town?

2. What are the major socio-economic effects of the urban expansion on the peri-urban communities of Nebelet town?
3. Are there fair restitution (compensation) packages provided by the town administration to the displaced peasants in the study area?
4. Is there fair participation of the peri-urban farming communities on decision and estimation of the compensation packages for the displaced peasants in the study area?

1.5 Significant of the study

This study would be significant because it will contribute important lessons to the administrative bodies through giving directions on what they should do while implementing peri-urban expansion. Similarly, the study is believed to produce solutions for economic and political problems of the farming communities in the peri-urban areas. Furthermore; the study is expected to contribute important policy inputs to fill existing knowledge gap in the area and motivate future researchers conduct additional studies in the peri-urban areas. It will also support as an input for the urban planners.

1.6 Scope of the study

The research primarily focuses on the socio-economic impacts of urban expansion on peri-urban farming communities in Nebelet Town. It examines key issues such as land expropriation, livelihood displacement, changes in income sources, employment shifts, access to social services, and transformations in land use patterns (from agricultural to urban uses).

The study is geographically limited to the peri-urban areas of Nebelet Town, Central Zone of Tigray, Ethiopia. It specifically targets farming households and communities whose agricultural lands have been converted into urban settlements as a result of the town's expansion.

The study covers the research process planned and conducted between September 2024 and June 2025. Within this timeframe, the analysis considers both past and present experiences of affected households to capture the ongoing dynamics of urban expansion and its effects.

A mixed-methods approach is employed, integrating both quantitative and qualitative methods. Household surveys, focus group discussions, key informant interviews, and direct observations are used to gather comprehensive data from peri-urban farmers and relevant stakeholders, such as municipal authorities, urban planners, and community leaders.

1.7 Limitation of the study

Limitations of the study might be associated with getting adequate and reliable primary data. The researcher exerted maximum efforts to make clear the purpose of the study to the respondents. However, some respondents may fail in reporting reliable information, particularly on reporting actual income of the households.

Regarding secondary data collections, problems may occur in areas including the following:

- Some government offices had certain restrictions to give the required information. Even those that are willing to give, the data could be incomplete.
- The structural reform of the public sector has also an influence on data gathering and recording.
- Government employees who were responsible for providing the desire data could be newly assigned at their position and may not know much about the issue.

1.8 Organization of the Thesis

This thesis is structured into five chapters; each logically arranged to address the research objectives and provide a coherent flow of ideas.

Chapter One introduces the study by presenting the background, statement of the problem, research objectives, research questions, significance, scope, and limitations of the study.

Chapter Two provides a comprehensive review of related literature. It highlights theoretical and empirical perspectives, key concepts, and the analytical framework concerning the socio-economic impacts of urban expansion on peri-urban farming communities.

Chapter Three describes the study area and outlines the research methodology. It explains the research design, data sources, sampling techniques, methods of data collection, and approaches to data analysis.

Chapter Four presents and analyzes the findings of the study. It interprets the data through systematic analysis and discusses the results in relation to the research questions and the reviewed literature.

Chapter Five draws' conclusions based on the analysis. It also provides recommendations for policy, practice, and further research.

1.9 Definition of terms and concepts

Urbanization: is simply synonymous to urban sprawl and refers to the concentration of more none agrarian population on a small land area. It also refers to the proportion of population living in urban area.

Urban: is an area characterized by higher population density and settled by people who depend on non-farming economic activities.

Farming community: is a community engaged in farming economic activities.

Dislocation: the change of residence as a result of urbanization.

Restitution (compensation): form of financial return, tangible services and benefits received for land and other property compensation.

Livelihood assets: assets refer to the source base of individuals. It contains of the following five categories (DFID, 1991).

Human capital: includes, labor force, health, and nutritional status, skills and knowledge.

Natural capital: includes access to land, water, wildlife and forests.

Social capital: defined as stocks assets of social trust, norms and networks that people can draw up on to solve common problems.

Physical capital: includes houses, vehicles, equipment, and livestock.

Financial capital: saving, access to regular income, net access to credit, insurance.

Livelihood strategies: refers to as the range and combinations of activities and choices that people pursue in order to achieve their livelihood objectives (Kollmair and Gamper, 2002).

Peri-urban: the place around urban areas which merges in to the rural landscape.

Urban-expansion: synonyms with urban sprawl and is the outward extension of urban settlement to its surrounding areas.

CHAPTER 2: LITERATURE REVIEW

2.1 The concept of urbanization and related terms

2.1.1 The concept of urbanization

Urbanization has no single meaning, because a number of people define indifferent ways. For example, demographers define urbanization is the increasing share of a nations population living in urban. Urbanization is a worldwide issue. It is the process of relative growth in Country urban populations accompanied by faster increase in the economic, political and culture importance of cities relative to rural areas. (NU, 2007)

The term urbanization explains an increasing human habitation related with increased per-capital energy and resource consumption and extensive land modification (Muleken, 2013).

The concept of urbanization can be viewed and perceived to mean a lot of thing by different peoples. Most commonly, it can be viewed as features of social and economic progress and international influenced both population and land use. For example, ecologists define urbanization from stand point of the built up environment (Haregewoin, 2005). Hence, Urbanization has power full social and physical change force throughout the World. It became the driving force for settlement change in peripheral land.

Urbanization in developing Countries is a defining trend of the twenty -first century, with profound economic, social and environmental consequences. While these consequences can be positive or negative depending on how urban services are managed, no Country has experienced significant development progress without a major shift of populations to cities (Glaeser, 2011). Urbanization is taking place alongside a number of other trends. ICT, for instance, is changing the way we communicate and reducing distance.

This is over all explanation; therefore, we can give the operational definition for rural farming displacement due to urban growth as persons or group of persons as a result of extends of extended urban settlements towards their areas that influence their living standard' (Dobbins et al, 2020)

The nation's population can increase because of natural rise and rural to urban migrations. For example, in 2011 the World urban population was 3.6 billion and is expected to reach 6.3 billion in 2050. In the less developed Countries, due to its rapid population growth, the urban

dwellers were 2.7 billion in 2011 and is expected to reach 5.1 billion in 2050 (UNDES, 2011 cited in Brikti, 2013).

2.1.2 The Concept of livelihood

Livelihood is defined as a set of activities essential to everyday life that are conducted over one's life span. Such activities could include securing water, food, fodder, medicine, shelter, clothing (Ellis, Frank, 2000). A livelihood is sustainable when it can cope with and recover from stress and shocks and keep or enhance its capabilities and asset both now and in the future (Chamber and Conway, 1991)

The livelihood strategies coping mechanisms: -it clarifies as a short-term response to specific shocks while **adaptive strategies** defined as an extensive term change in behavior patterns as a result of a shock or stress (Scoon, 1998). Livelihood strategies can be categorized in to **three** groups. These are agricultural intensification, livelihood diversification and migration.

Agricultural intensification: -shows the continuous dependence on agricultural (Janet, 2013) by increasing resources use through increased labor capital investment for a given land or by using more land for cultivation or grazing.

Livelihood diversification: is by expansion off-farm profit earning activities.

Migration: is through moving away for these are of a livelihood either temporary or permanently. Based on the sources of livelihood activities under take by the rural households, livelihood strategies are classified in to natural resource-based activities and non-natural resources based on activities. These includes both on -farm and off-farm activities to generate income in addition to the main household agricultural activities (Elli's, 2002; Ranton)

2.2 Urbanization and urban growth

Many arguments promote urban regeneration strategies and new intra-urban surroundings initiative in line with the compact city arguments and favors controlled direction of inevitable expansion to the peri-urban to support a full range of facilities and to the sites that causes the least environmental damage as far as the compact views of urbanization (Haregewoin, 2005).

Compact city development strategy has more recognition and recently accepted for social and economic urbanization of resources although developing Countries rarely exercise compaction. Urbanization is mostly uncontrolled that one often sees over crowding and extended unplanned settlement with acute shortage of set-up in one part and unutilized (Cohen, 2005).

Urbanization in developing Countries is a defining trend of the twenty -first century, with profound economic, social and environmental consequence (Graseser, 2011). Urbanization is taking place alongside a number of other trends. The trends of urbanization is only accelerating 96 percent of all urbanization by 2030 will occur in the developing World. This international shift towards a more World population has profound implications for a wide range of issues including food, water and energy consumption. However, the pace of transformation is dangerously rapid in the developing Countries with limited capital, physical resource, experience and skills.

By the early decades of this century, the over whelming majority of people in almost all African Countries will for the first time in the history of human kind be living in an urban environment. Driven by demographic **expansion** accelerated by globalization of the World economy and other economic and social changes, rapid urban growth over the past literally transformed the face of our planet (Habitat, 1996.P.V).

Urbanization is a recent phenomenon in Ethiopia. It was introduced mainly after the late 19th century and 20th century. Ethiopia is largely under urbanized, even considering Africa standards. According to the very recent estimates and projection of the population Division of the United Nations, around 1975 only 9.5% of the population lived in urban areas of at least 2000 people. (Abate, 1991).

Urbanization is crucially linked to migration. In most developing countries, including Ethiopia, most rural migration to the urban has bettered themselves in comparison to their former standard of living in rural areas (UN, 2014). According to Thuo (2010), there are two main patterns of urbanization in the World:

- (1) Pattern of urbanization on the national scale; and,
- (2) Pattern of the urbanization on the regional scale.

On the national scale: -there is an increasing concentration of peoples and production in one or few places in the form of large metropolitan agglomerations. The mega polis development is occurring both in the highly industrialized and in developing Countries. But, in developing Countries it is with problems of living standards. The other reason for urban expansion is urban

population increase (Shushay, 2011). This is due to rural-urban migration and natural population on increase.

Natural population increase: is the combination of increase fertility and mortality. Feyera (2005) stated in his study; although he natural population growth is a major element in urban growth for all Countries, but rural-urban migration contributes even more in many developing countries.

According to Redman (2004) many cities are fast growing. Migration plays to fast growth of urban residents due to the economic development that attracts people to urban nuclei for commerce, employment and education. Developing regions like, Africa shows the highest urban, population growth with faster urbanization. As urban population rise there must be space to accommodate these populations. This could be the strong collaboration between the community in and outside and the administration staff. People complete for the area first for residence and second for investment depending up on accessibility within the urban farm work. The structures of local government and its policy may or may not be favorable to the public who are support to leave their place of habitat residence to accommodate the increasing population in urban settlement.

2.3 Theories of urban expansion

There are two schools of thoughts or theories that expressed about the impact of urban expansion to the peripheral areas (Janet, 2013). The first theory is that the modernization theory. This theory explains that urbanization initiates growth and development in the joining areas (Gransho, 2008). Urban areas contain modernized institutions such as school, factories, entertainment centers and advanced medical care. In addition to, urbanization has brought better living conditions for the displaced peasant by providing many potential advantages for improving their living standard via economies of scale and proximity they provide for most forms of services (Satterthwaite et.at, 2010). The second theory is that the dependency theory. The perspectives of dependency theory stated that cities grow parasitically by exploiting and holding back the surroundings. The economic development created in towns could only take place at the expenses of the neighborhoods (Bachin, 2000).

2.4 Causes of urban expansion

It is widely stated that demography and economies are the most important factors for urban expansion. Migration is one of the major reasons that contribute for the rising urban expansion. Migration occurs by push and pulls factors though varied in extent and motivational factors in developed and developing Countries but both having common destination goal that it is bringing people towards the urban site (Gayabaa et.al, 2006)

2.4.1 Economic Causes of urban expansion

The first objective of urban expansion to the outside edge is caused by the economic development projects or industrialization. Land is needed for industry, socio-economic infrastructures, communication and road networks (Xiangzheng et.al, 2013). Among many things listed by Bloom and Khanna (2007) the need for higher paying employment, better quality of life such as health, education, greater diversity of entertainment and life style are grouped as pull factors. On the other hand, migrants affected in the interpretation of urban life in media or success story of relatively previously moved to urbanities and rural poverty considered as push factors. In many developing countries comparing to developed countries, it is rural poverty that derives people from the rural areas in to the town to searching employment, food, shelter and education (Gyabaah, 2006).

2.4.2 Demographic causes of urban expansion

The rapid population increase in urban centers is causing urban expansion to the peripheries swallowing former villages and croplands and transforming them in to industrial areas, shanty towns or less dense suburban developments. This indicates that urban population increase is associated with urban land extension towards the peripheral rural farmlands in need of space for construction of houses, industrial and commercial enterprises and infrastructure that result in the conversion of extensive arable land area in to urban lands. These dramatic demographic changes in urban centers ultimately cause rapid urbanization and urban expansion to the peri-urban areas. Peri-urban refers to the emergence and consolidation of an urban-rural fringe (Ruiz,N.,)

2.5 Nature of urban expansion

Expansion has different rates among developing and developed Countries (Gyabaa et.al, 2006). Africa will continue to lead the world in urban growth followed by Asia. Urbanization and urban expansion come from different reasons. Manly it may happen from migration for better

life. Cities are the center to live and work, trade, culture, education and birth place of technological innovation (Oberai, 1993, Carter, 1995). Expansion is mostly uncontrolled that one often sees overcrowding (Slum and shanties) and extended unplanned settlement with acute shortage of infrastructure in one part and unutilized or partially developed vacant land on the other part.

2.6 Consequence of urban expansion

There is no specific adopted theory to study the effect of urban expansion on farmland in the World in general and community in the periphery particularly. Thus, scholars in the field of development have argued the phenomena of urban development and growth from different perspectives (Feyera, 2005).

The first perspective, states that interface of urban to rural is describing in modernization theories of economic development. The main paradigm in this regard is that the structural transformation model W. Arthur Lewis in the Mid 1950s (Feyera, 2005). The focus of this is the transfer of agricultural labour and growth of output and employment to the modern urban industrial sector through salary that is higher than subsistence agriculture. The theories described, the city offers cost reducing advantages in economic, social and cultural conditions. However, this structural transformation has historically a great deal of upheaval, conflict, dislocation and human degradation in which the process involves winners and losers.

The second perspective states that, structural transformation theory the dependency theory maintains that cities grow parasitically by exploiting and holding back their surrounding areas, that is, the rural tabia and nearest cities and established economic development in the city is only at the expense of the surrounding areas (Shushay, 2011).

2.6.1 Social consequence of urban expansion

Urban expansion has social impacts to the peri-urban societies that are displacement, dislocation and segregation that result in social fabrics disorder. People in the extended urban area “live still partly rural and where many of the residents live in the Country but are not social and economically of it” (Xiangzheng, et al 2013). They usually do not participate in the planning and design of resettlement and dislocation options as well as the distribution of associated costs or benefits. Since social infrastructure is concentrated in, the center people in

the extended area rely on proximity to facilities. Low income will continue to live in such severe social conditions in the periphery. There is also a possibility of isolation from the city development and pooled in between the rich creating class difference. This began to accelerate the migration of the disadvantaged group, especially the farming community who already inhabited the area. Even urban rich or middle-class income whose income permits to commute perhaps many could be attracted to the liveliness and benefits of the facilities in the center. Thus, the community in the periphery may face problem of survival strategies. Solidarity, network and systems of power to which the social and economic activities linked to their original location disrupted (Mejia, 1999).

In many developing Countries, urban sprawl comprises two main, contrasting types of development in the same city: one is characterized by large peri-urban with informal and illegal patterns of land. This is combined with a lack of infrastructure, public facilities and basic services and often is accompanied by the little or no public transport and by inadequate access roads (Brueckner, 2000). Other features typically associated with sprawl include over dependence on personal motorized transport coupled with a lack of alternatives, limited housing options and urban spaces that discourage pedestrian traffic. Most South African cities are an example of this. They are expanding primarily through development of new housing areas which, being located beyond the existing urban periphery, are relatively unplanned (Davis, 2005).

2.6.2 Environmental consequence of urban expansion

In many of the developing Countries urban expansion is at the expense of, fertile and productive agricultural farm land and plants, to extended urban residents (Hardy et al, 2001 cited by Minwuyelet, 2004).

The conversion of the earth's land surface to urban land uses leads to loss of the productive farm lands. It has also, negative effects on the other natural resources, such as wild plants and forests fertility of land and water. In different Countries of the globe, there are economical pressure groups to fight such in developing Countries, such social groups found (Shushay, 2011).

Urbanization disproportionately affects the livelihood of poor people by diminishing the natural resources available to them. The rapid conversion of land for non-agricultural uses

highly affects agricultural activities that are the main sources of livelihood for people who reside in the peripheral urban areas. Environmental changes include ecological economic, political and social, all of them take the form of sudden shocks, trends and seasonal cycles over which poor people have no control (Mara, 2009). The leading causes of biodiversity decline and species extinctions are habitat destruction, fragmentation and alteration associated with urban development (Czech, 2000).

2.6.3 Economic Consequence of urban expansion

Urban expansion leads to the change of agricultural land to uses, due to that number of farmers completely loss their farmlands and loss their sources of livelihood. As a result, a number of agricultural lists should migrate to urban areas in order to find a job and to find other supplies, like economic and social organizations; chiefly road, power, line, water pipes and drainage line. The urban areas may not provide access of job opportunities and other benefits that live in the urban areas. I addition; the farmers who migrated to the urban areas are not educated and have lack of skill and knowledge. Therefore, they are participated in the illegal street sellers, cleaners, waste collectors, domestic services or odd job laborers. As a result of this, many people exposed to economic crisis (Feyera, 2005).

Due to the decline in economic conditions of agriculture, farming community are not solely based their livelihood on subsistence agriculture. Hence, many farm families have sought alternative pathway of farm development. One alternative pathway is diversification of agricultural production such as adopting new type of crops or livestock and rising focus on quality products in response to market demand as survival strategy (Busck et. al, 2006). However, majority of farmers on area lack sufficient land and resource to purchase all the production input necessary in order to success fully exploit the possibilities offered by the proximately to urban markets. In most cases, the process of land changes plays a key role in transfer of resources (Financial and land) farm poorer farmer to the richer groups such as speculator, developer large farmer etc. (DFDI, 2009). Assets and capabilities play crucial role in the selection of positive adoptive strategies for most of poor people. The more assets and capabilities the poor own, the more options available for them in selecting appropriate livelihood strategies and less vulnerable (Mara, 2009)

2.7 Influence of urban expansion on agricultural activities

When sprawl takes place at the periphery of a certain areas, it has direct or indirect impact on other parts of the same area within its border or on a neighboring community (Cooney, 2008). The consequence of the rapid urbanization on the peripheral urban areas includes changing labour and market phenomena, changes in social loss of farmland, cultural and life styles, planning and development control becomes a problem where existing institutions are not enough structured to control consequence of the urbanization and which cut across different administrative boundaries resulting to land issues not being addressed and leading to conflicting land use planning decision (Thuvo, 2013).

The rapid urban expansion in developing Countries is usually associated with in the periphery that requires high cost of infrastructure. It is also, evident that even in planned activity that development of infrastructure usually does not correspond to the large tract of land that develops in a low -density pattern. Thus, urban expansion consequence results social, economic and environmental problems to the society (Asamoah, 2010).

Agricultural lands are the first one affected adversely from the urban sprawl, because they are spatial proximity to urban areas. In Europe, the cities have primarily expanded to the former agricultural lands in the recent years. For instance, throughout the Mediterranean region 3 percent of farmland was lost to urbanization in the 1990s and 60 percent of this land was prime farmland (EEA, 2006). Urbanization also influence on food supply drawing from the fact that, as cities grows, they affect agriculture land, because they expand in to surrounding areas of agriculture and this greatly affects food production. An immediate consequence of rapid urbanization is the crowding out of agriculture land and the reduction of agricultural capacity (Kiita, 2013). There is a shift in employment within the food system, with fewer people working in agriculture and more working in transport, food processing, retailing and wholesaling due to the need to meet the higher demand for processed agricultural products. Later scholars developed the theory, arguing that other demand factors such as consumer diets and affluence may also influence the intensity of agricultural land uses (Ewert et.al, 2006).

Market-based explanation of agrarian land use intensification differs from Bose up's theory and account for market demands and off-farm employment (Lambin, 2000), conceptual models builds that explore open economy situations in which farmers made decisions about agricultural production by replying to make demands and exogenously given commodity prices.

Angeles finds that improved off-farm employment opportunities which results in higher real wage will lead no longer follow periods and less labor inputs. Angelsen (2001) recognizes that neglecting demand factors when analyzing agricultural land use intensity is less realistic for the macro students of a region or countries. In fact, generally accepted view is that with a higher degree of the openness of economy, the intensity of agricultural land use will be less related to production and demand (Shrial, 2005 and Roberts 2006) but more dependent on production factors includes cost of land, off-farm employment and market access, and is closely related to environmental conditions.

2.8 Impact of urban land expansion on the livelihood of farm communities in the peri urban context

Urbanization has positive and negative influence on the peasant who is engaged their livelihood on the natural resources.

2.8.1 The positive impacts of urban expansion

Urban area has positive contribution on the development of their peri-urban areas via different ways. Mainly, they provide different forms of infrastructure and services such as roads, telephone services, electricity, new school and health centers (Satterthwaite et al, 2010).

2.8.2 The negative impacts of urban expansion

Urbanization has also a number of negative influences to its contiguous peripheral - urban communities, by dislocating the farmers from their farmland and losing the valuable agricultural lands. Urban centers are expanding to their nearest areas by occupying a large size of farmland and displacing the peasants from their farmlands. This leads to decrease the amount of production (Dayong, 2004). As a result, the farmers with their large family size will be unsaved to unemployment and food insecurity for the reason that they are not well educated and skilled rather than depending on their agricultural production. The expansion of urban centers consumes large amount of income sources rather than farming, the farmland is the only employment insurance that depend (Drescher, 2002). According to Tvedten (2002) assured urban areas produce more solid waste products from the industrials, settlers and other institutions. The different solid wastes, medical products and plastics are effects on the farmland of the sub-urban areas. As results of this they degraded the agricultural land and decrease the size of the farmland and the quality and quantity of production that the farmers get

from their farmlands. In addition, the inadequate and improper waste collection and disposal methods are the major source of land degradation and loss of the quality of life of the peripheral urban communities (Tacoli, 2004). Urban expansion also leads to over exploitation of renewable and nonrenewable resources of the periphery-urban areas urban settlers account for most consumption of firewood, charcoal, construction materials and land for urban expansion and infrastructural provision which leads to depletion of rural based natural resources such as quarry sites, wildlife, forests and land (Kamete, 2002).

2.9 Urban Expansion and livelihood strategies in the urban periphery

In many developing Countries of the World, economic growth is lower than population growth. Especially, fast growing urban population and economic problems have rapidly raised the number of urban poor. Due to lack of the alternative means to regular employment, urban poor has several survival strategies. The main strategies are categorized as urban strategies and rural strategies (Mwangi and Facken, 1998). The urban strategies are divided in to urban non farming strategies and urban farming strategies. The urban non farming strategies include all income generating activities outside income derived from agriculture. The urban farming strategies include all income generating activities within income derived from agriculture (Ellis, 2000).

CHAPTER 3: RESEARCH METHODOLOY

3.1 Description of the study area

Nebelet town was established at the turn of the 19th century. It has not shown significant growth since its establishment. The study would be conducted in the Nebelet town. It is the capital of Embaseneyti Wereda.

3.1.1 Physical characteristics of the study areas

3.1.1.1 Location of the study area

Absolute location: Geographically, the study area is located at 14°05`48" north latitude, 39°16'5" east longitude.

Relative Location: It is located to the east of Edaga-Arbi town, north of Hawzen town, west of Edaga–Hamus town and south-east of Ahferom town. Moreover, it is located 918 km north of Addis- Ababa and 135 km north of Mekelle. (<https://www.mindat.org>).

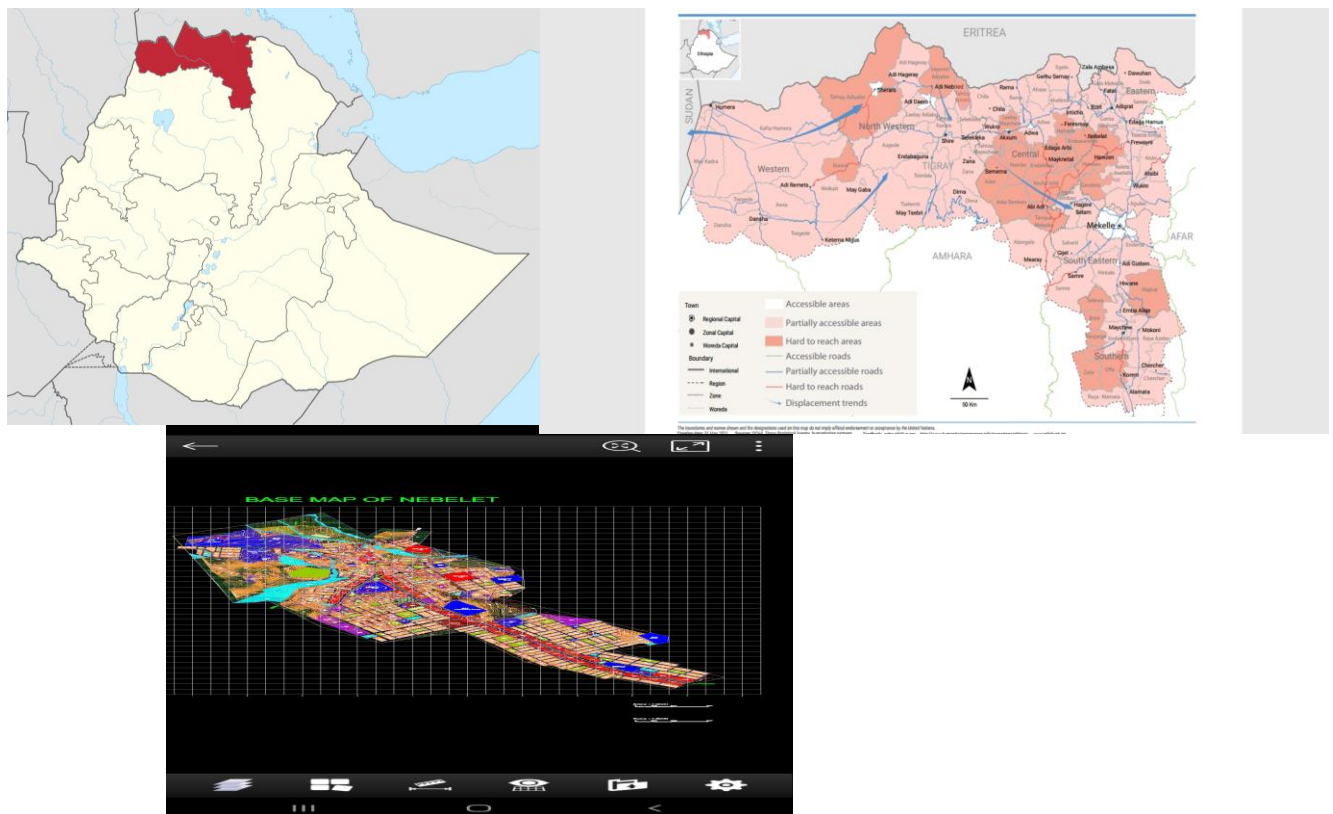


Fig 3.1: Boundary map of the study area

3.1.1.2 Topographic characteristics of the study area

The town lies along ragged topography with an altitude (elevation) ranging from 1987 to 2018 meters above sea level. The town has the following relief features: 85% plateau, 20% mountain and 10% valley and hilly land features (<https://www.mindat.org>).

3.1.1.3 Climate condition of the study area

The climate condition of Nebelet town is generally temperate and semi-temperate.

Temperature: It is Kola agro - ecological zone with annual temperature ranging from 12°C to 25°C. In Nebelet town temperature varies from season to season, from month to month, and from day to day.

Rain fall: Nebelet has received rainfall mostly at summer season. It has annual rain fall ranging from 759 to 1500 in mm (Embaseneyti Wereda Rural and Agricultural Development Bureau, 2023: unpublished data source).

Vegetation: Around the town, there are different agro-ecological zones. These include temperate, sub-temperate and tropical ecological classifications which are very suitable for the growth of diverse vegetation species. Among the trees that grow in the study area include acacia, conifer trees, olive trees, eucalyptus trees, etc. (Embaseneyti Wereda Agricultural Bureau, 2023: unpublished data source).

Soils: The town is characterized by different types of landscapes dominated by plateau lands, highlands and low lands. These geographical phenomena contribute a lot to the existence of different soil types. The types of soils in the town include sandy soils (60%), silt soils (35%) and clay soils 5% (Embaseneyti Wereda Agricultural Bureau, 2023).

3.2 Socio-Economic characteristics of the study

3.2.1 Population (Demographic) characteristics

According to the Tabia data statistics (2023), the Town has estimated total population of 5,327. Out of these, 2,806 are males and 2,521 are females. The annual growth rate of the Town is 1.6%. It has a total area of 154.45 km² (15,445 hectares) with population density of 30 per kilo meter square (Wereda Central Data Agency, 2023).

3.2.2 Economic activities

In Nebelet town, the major economic activities are mainly related to selling and buying agricultural products and retail trade of consumable goods and some wholesale goods, petty

trade, daily labor and urban agricultural activities such as dairy farming, irrigation, and poultry. Metal and woodworks are also the major income sources for many of the Town residents to sustain their life.

Table 3.1: Total area coverage of the study area

No	Types of land use	Area in hectare
1	Settlement	9023
2	Grazing land for animals	1500
3	Cultivated land use	2005
4	Vegetation land	2015
5	Other land use	902
6	Total land use	15,445

Source: Embaseneyti Wereda Office of Land Desk, 2023

3.3 Research Methodology

3.3.1 Research Design

The researcher employed cross sectional survey type of the study. Because cross sectional survey helps to collect data in order to answer questions concerning the current status of the study area. Besides, it explains the method used to collect the data and how respondents were selected. The researcher used primary data directly collected from sample households about socio-economic effects of urban expansion on peri-urban farming communities. He also used secondary data from various sources related to the study. The researcher employed both qualitative and quantitative data.

3.3.2 Data Sources

3.3.2.1 Primary data: The primary data include all information gathered from the field through the administration of the questionnaires, focus group discussion, interview schedules, checklists and photography made during the study, key informants and filed observation.

The filed observation enabled to assess the effect of the urban land expansion on the livelihood of the peri-urban households. Questionnaires distributed and collected from randomly selected respondents and from households whose farmlands expropriated were the major sources of primary data. An in-depth interview conducted with the key informants about the size of land expropriated by the town supported to indicate the resulting effect on the livelihood of the peri-urban households. Separate focus group discussions were conducted with concerned bodies by

selecting one from each Tabia. The focus group discussion was carefully managed by the researcher to gather valuable information about the amount of compensation for displaced peasants. During the focus group discussion, the participants extended their opinion briefly on the effects of urban expansion on peri-urban farming communities.

3.3.2.2 Secondary data

The secondary data for the study were obtained from different offices of the municipality of Nebelet town and from Embaseneyti Wereda Rural and Agricultural Development Bureau (2023: Un published data source) Further more; the secondary data for the study were obtained from other sources such as local and international documented sources on socio-economic effects and District Development Plan of the Wereda.

3.3.3 Sampling techniques and sample size determination

3.3.3.1 Sampling techniques

The researcher adopted the probability sampling technique to determine the desired sample size for the study like simple random probability sampling. The objective is to investigate the problems caused by the ongoing urban expansion on the peri-urban areas of Nebelet town and the resulting effects on peri-urban farming communities. This technique ensured that each household of the population to have an equal chance of being selected as a sample.

3.3.3.2 Sample size determination

The researcher selected the sample households from those who are affected by urban expansion in Nebelet town. The purpose is to investigate the problems posed by the ongoing urban expansion to the peri-urban areas of Nebelet town and the resulting effects on peri-urban farming communities. The Town consists of four Tabias such as Adarash (01), Hibret (02), Dibla (03), and Edaga (04). Out of these; the researcher selected the representative samples of households from the dislocated peri-urban farming communities. The researcher had purposively selected two Tabias: Hibret and Edaga. This was due to the fact that the majority of the displaced farming communities are from these two Tabias. The total number of dislocated households of the sample Tabias from 2017 - 2023 are 250. Out of these, 135 are male households and 115 are female households (Tabia Administrations of Nebelet town; 2023).

In order to determine the sample size; the researcher employed the formula developed by Yemane (1967) as follows.

$$n = \frac{N}{1 + N (a)^2}$$

Where, n = the desired sample size

N = the total targeted population

a= level of precision

Based on Yemane's formula; the researcher estimated the desired sample size with estimated error of 6%. $n = \frac{250}{1 + 250(0.06)^2} = n = 131$ sample size.

Table 3.2: Number of sample households of the study by Tabia

No	Name of Tabia	Total households dislocated			Total sample households			Sampling technique
		M	F	T	M	F	T	
1	Hibret	76	65	141	45	25	70	asimple random sampling
2	Edaga	59	50	109	40	21	61	Simple random sampling
Total		135	115	250	85	46	131	Simple random sampling

Source: Nebelet Town Administration, 2024

3.3.4 Data collection tools

For this study; both primary and secondary data were collected. The following sections provide a brief account of each tool of data collection.

3.3.4.1 Questionnaire: The researcher used both structured and unstructured questionnaires to collect data from sample households. The questionnaires were translated from English into Tigrigna. The questionnaire filling was carefully supervised by the researcher.

3.3.4.2 Interview: The researcher prepared check lists (unstructured questionnaires) for interview with experts from the municipality, community leaders and Tabia administrators.

3.3.4.3 Focus Group Discussion (FGD): This method is particularly important for this study in order to obtain public opinion on issues concerning urban expansion. The researcher selected

four (4) participants from each group and organized discussions with influential leaders who have more information and knowledge on the issue of urban expansion.

3.3.4.4 Field observation: The researcher spent sufficient time on observing and recording the issues on the field with the help of camera.

3.3.4.5 Key informants: key informants are people who have more knowledge about the ongoing situations in the peri-urban areas. Key informants for this study were selected from different offices of government organizations. A total of three key formants were interviewed using semi-structured questionnaires. These included the manager of the municipality of Nebelet town and the leaders of the two Tabias.

3.3.5 Methods of data analysis

The primary data collected from sample households were processed and analyzed by using some statistical techniques such as frequency distribution, percentages, tables, graphic presentations like map representation that were used to describe and analyze the different factors of urban expansion.

During data interpretation and analysis, the researcher employed descriptive statistics and likert scale. The study used descriptive method to analyze the primary and secondary data. Since the data collected from various sources were both qualitative and quantitative data, the researcher relied on both quantitative and qualitative data analyses.

In order to run the statistical analysis on quantitative data from household survey, the data were coded and entered in to a computer. The quantitative data gathered by the survey were used to determine the changes in assets, while the qualitative data from informal interviews and observation assessments carried on by the researcher used to explain such changes.

CHAPTER FOUR: RESULTS AND DISCUSIONS

4.1 Background of the respondents

This chapter presents and analyzes all the data obtained from household survey, interviews and group discussions. First, it discusses the background of the sample households covered by the survey. According to table 4.1, item 1 indicates the sex of the respondents. The highest share or 85 (64.89%) of the respondents is male and the remaining 46 (35.11%) indicates the female households. Although males take the highest share of the respondents, the females are also sufficiently represented by the survey. This reveals that both males and females who were living in the peri-urban areas of Nebelt town are affected by the urban expansion.

Table 4.1: Background of the respondents

No	Variables	Categories of respondents	Frequency	Percentage
1	Sex	Male	85	64
		Female	46	46
		Total	131	100
2	Age	18-30	31	23.66
		31-40	55	41.98
		41-55	35	26.72
		55 & above	10	7.63
		Total	131	100
3	Religion	Christianity	102	77.86
		Muslim	29	22.14
		Other	0	0
		Total	131	100
4	Education	Can not read & write	11	8.4
		Read & write	20	15.2
		Grade 1-4	60	45.6
		Grade 5-8	29	22.6
		Grade 9-12	7	5.2
		above grade 12	4	3.1
		Total	131	100
5	Marital status	Single	30	22.9
		Married	75	57.3
		Divorced	20	15.3

		Widowed	6	4.5
		Total	131	100
6	Household size	0-3	51	38.9
		4-6	69	52.7
		7 & above	11	8.4
		Total	131	100

Source: Own survey data, 2025

Table 4.1 depicts that a large majority of the sample households (85 or 64%) are male while 46 (46%) represent the female households.

As can be observed from table 4.1 above showing the age of the respondents; the large number of the respondents is the age group of 31-40 (41.98%) years old which are totally 55 respondents and the minimum number of the respondents from both sexes is the age group of 56 and above (7.63%) years old which are totally 10 respondents. The age groups between 18-30 and 41-55 are 31(23.66%) and 35(26.72%) respectively. This indicates that the majority of the respondents are in the medium age group with sufficient life experience in the study area.

As the data from table 4.1 above concerning the religion of the respondents reveals, 102(77.86%) of total respondents are Christianity; while 29(22.14%) of total respondents are Muslim. Therefore; from the above information, the majority of the respondents are Christians while the small number of the respondents represent the Muslims.

Concerning the educational level of the respondents, table 4.1 above shows that 11 (8.4) of the respondents can't read and write; 20 (15.30%) respondents can read and write; 60 (45.8%) respondents are grade 1-4; 29 (22.1%) respondents are grade 5-8; 7 (5.3%) respondents are grade 9-12; while 4 (3.1%) respondents remain above grade 12. Therefore; the majority of the respondents are grade 1-4 (45.8%). This indicates that the peripheral farming communities whose agricultural land had been expropriated and their livelihood affected by the expansion of urbanization have no sufficient educational qualification that enables find alternative livelihood options after agriculture.

Table 4.1 above indicates marital status of the respondents. 30 (22.9%) of total respondents are single; 75(57%) respondents married; 20(15.3%) divorced and 6 (4.5%) are widowed

respectively. Therefore, based on the above information, the majority of the respondents are married while minimum of the respondents are widowed.

Based on table 4.1 above, the household size of the sample respondents indicates that 51(38.9%) are between 0-3 persons; 69(52.7%) between 4-6, and 11(8.4%) of the respondents are 7 and above household members. Therefore; the majority of the household size of the respondents is with 4-6(52.7%) members. As a result, the investigator concluded that the peripheral farming communities whose farmlands have been expropriated have almost medium household size. From this, the researcher understands that there are significant number of displaced peri-urban farm communities have medium family size. These victim displaced peri-urban farm communities have now very low household income.

4.2. Urban expansion and eviction of farmlands

The data regarding to urban expansion and eviction of peri-urban farmlands were analyzed. This section includes: main occupation, major causes of urban expansion to the peripheral areas; the status of the farmlands that were evicted, size of the farmlands that were expropriated by urban expansion and the purpose of the land lost for urban expansion.

Table 4.2: Urban expansion and eviction of peri-urban farmlands

No	Variables	Responses	Before eviction		After eviction	
			Frequency	Percentage	Frequency	Percentage
1	Main occupation	Only farming	85	65	10	8
		Partially farming	25	19	75	57
		Gov.t employee	5	4	5	4
		Daily labor	16	12	20	15.3
		Private employee	0	0	21	16
		Others; specify	0	0	0	0

Source: Own survey data, 2025

According to table 4.2 above; the occupation of a large majority of the respondents (85 or 65%) before the eviction their farmlands was only farming. Those who were engaged in partially farming are 25(19%). Some; 16(12%), were engaged in the daily labor. Those who were engaged as government employee were 5(4%). Therefore; the maximum number respondents were engaged in only farming and the minimum number of respondents were engaged as government employee. This implies that the majority of the peripheral farming communities were engaged in good source of income to support their life before eviction.

According to the table 4.2; occupation of the sample respondents after eviction; the large majority of the sample respondents (75 or 57%); are engaged in partially farming; the next occupation of the sample respondents (21 or 16%) is private employment. Those who are engaged as daily laborer include 20(15.3%) while those who are involved in farming only include 10 (8%). Therefore; the maximum number of sample respondents after eviction are engaged in partially farming activities while the minimum number of sample respondents engage in government employment. This implies that the majority of the sample households are engaged in a very small source of income to support their life.

The responses from the key informants interviewed by the researcher similarly support the claims of the sample households of the displaced farming communities about the situations of occupation before and after eviction. They changed their livelihood pattern and occupation. Therefore; based on the information from the respondents, it is possible to conclude that the urban expansion induced displacement resulted in change of livelihood of the peri-urban farming community.

Table 4.3: Urban expansion and eviction of farmland

No	Variables	Responses	Frequency	Percentage (%)
1	Major causes of urban expansion to the peri-urban areas of Nebelet town	rural- urban migration	55	42
		rapid natural population growth	75	58
2	Major reasons of urban expansion to the peri-	shortage of land for housing	81	62

	urban areas of Nebelet town	shortage of land for infrastructure development	30	23
		shortage of land for other investment types	20	15
3	Current status of the farmland you lost for urban expansion	partially evicted	34	26
		totally evicted	97	74
4	Size of farmland you lost for urban expansion in hectare (ha)	0.5-1 ha	25	19
		2-3 ha	90	69
		4-5 ha	16	12
5	Previous purpose of the farmland you lost for urban expansion	all irrigated	0	0
		partially irrigated	0	0
		all rain-feed	131	100
		other	0	0

Source: Own survey data, 2025

According to table 4.3 above, the survey results regarding to the major causes of urban expansion to the peri-urban area is urban population growth due to rural-urban migration (42%) and natural population growth (58%). This implies that the majority of respondents ensured that the major cause of urban expansion to the peri-urban areas of Nebelet town is rapid natural population growth while the second cause being rural-urban migration.

One key informant from displaced farmer households also reaffirmed that they were displaced as a result of urban expansion induced by rapid natural population growth. Therefore; based on the responses of the sample respondents, it is possible to conclude that the major cause of urban expansion to the peri-urban areas of Nebelet town is rapid natural population growth.

According to the responses given to the question “what are the major reasons of urban expansion to the peri-urban areas of Nebelet town;” 81(62%) sample households responded shortage of land for housing; 30(23%) responded shortage of land for infrastructure developments while 20(15%) respondents responded shortage of land for other investments

respectively. This means the majority respondents 81(62%) said that the reason for urban expansion was shortage of land for housing while the minimum number of respondents replied shortage of land for other investment types.

The key informants from the municipality of the town were interviewed about the major reasons of urban expansion to the peri- urban area of Nebelet town and replied similar responses as the sample respondents. That is shortage of land for housing and shortage of land for infrastructure. Therefore; the researcher concluded that the reason for urban expansion is shortage of land for housing.

Concerning the part of the farmland lost for urban expansion, 34 (26%) respondents responded partially evicted and 97 (74%) respondents replied totally evicted. This implies that majority of the respondents replied that the farmlands lost for urban expansion in Nebelet town were totally evicted while the rest were partially evicted.

The Focus Group Discussion (FGD) results disclose that significant part of the peri-urban farmlands is lost totally from productive agricultural land. The peri-urban farm households are displaced totally from their lands. From this; the researcher understands that the displaced peripheral farming communities around Nebelet town are now subjected to landlessness and livelihood problems. Therefore, their living standard is negatively affected by urban expansion. Regarding to the size of the farmlands lost for urban expansion in hectare; 25(19%) respondents said that they lost 0.5-1 ha; 90 (69%) respondents answered that they lost 2-3 ha and 16(12%) respondents responded that they lost 4-5 ha. Hence; the researcher understands that the size of the farmlands lost for urban expansion in the peri- urban communities in ha ranges that the majority between is 2-3 ha while the minimum remains between 0.5-1 hectares.

According to the responses given to the question related to the purpose of the farmlands lost for urban expansion, 131 (100%) respondents replied that all were non-irrigated or rain-feed agriculture.

4.3 Major socio-economic effects (problems) of urban expansion

Data regarding to the major socio-economic effects of urban expansion on the peri-urban farming communities of Nebelet town were analyzed. These include major socio-economic

effects of urban expansion; change on livelihood and assets possession; and the type of assets lost.

Table 4.4: Major socio-economic effects (problems) of urban expansion

No	Variable	Response	Frequency	Percentage
1	Changes on your livelihood and assets possession due to urban expansion	Yes	120	92
		No	11	8

Source: Own survey data, 2025

According to the table 4.4 above, survey results regarding to the change on livelihood and assets possession due to urban expansion, 120 (92%) of the respondents responded yes and 11 (8%) replied no. This implies that, the majority of the respondents 92% replied that the economic status and livelihoods of displaced peripheral farming communities were changed. Large numbers of farmers were forced and displaced from their agricultural economic activities with low compensation.

In addition to this; the key informants similarly describe the economic level of displaced farming community due to urban expansion is now very low. A large number of farmers were forcedly displaced from their agricultural land. They changed their livelihood pattern from production to consumption.

Therefore; based on the reports of respondents, the researcher concluded that the urban expansion induced displacements exposed the peri-urban farming communities to more economic problems and livelihood distress and deterioration.

Table 4.5: Type of assets of the peripheral farming communities

No	Type of assets you have	Responses			
		Before eviction		After eviction	
		Frequency	Percent	Frequency	Percent
1	farmlands	60	50	15	13
2	Grazing lands	10	8	20	17
3	cow & oxen	5	4	5	4
4	goat & sheep	15	13	16	13
5	beehive	5	4	2	2
6	permanent plants	2	2	3	3
7	fruit trees	10	8	17	14
8	eucalyptus trees	6	5	6	5

9	gesho, chat & coffee	7	6	9	7
10	others	0	0	27	22

Source; Own survey data, 2025

Based on table 4.5, survey results reveal the types of asset owned by the peri-urban farming households before eviction and after eviction. Of all the sample households, 60 (50%) were engaged in farming before eviction but after eviction only 15 (13%) respondents were engaged in farming activity; 10 (8%) of the respondents were engaged in grazing before eviction; however, and after eviction 20 (17%) were engaged in grazing; 5 (4%) respondents were engaged in oxen and cow rearing before eviction and after eviction the same proportion engaged; 15 (13%) respondents were responded that they engaged in goat and sheep production; but, after eviction 16 (13%) respondents engaged in goat and sheep rearing after eviction; 5(4%) of the of respondents were engaged in bee-hive before eviction and after eviction only 2 (2%) of the respondents said they engaged at bee-hive activity; 2 (2%) of respondents were responded that they engaged in planting permanent plants before eviction; but, after eviction 3 (3%) of households engaged in planting permanents plants; 10 (8%) of the respondents were replied that they engaged in fruit production before eviction and 17(14%) of the respondents were said that the engaged in fruit production after eviction; 6 (5%) of the households answered that they engaged in growing eucalyptus trees before eviction and after eviction they remained as it wass; 7 (6%) of respondents also said that they engaged in growing gesho trees; chat and coffee before eviction but after eviction 9 (7%) of the respondents replied that they grow gesho; chat and coffee; 27 (22%) of the respondents were responded that they engaged inn other economic activities such as daily labor; business activities; guards on the different organizations, etc.

From the evidences above; the researcher understands that the majority of the peripheral urban farming communities in Nebelet town were engaging in different farming economic activities before eviction; but, after urban expansion (after eviction); the majority of the peri-urban communities are now engaging in other economic activities (none-agricultural activities) such as guard on different organizations; daily labor and business activities.

4.4. Socio -economic impacts of urban expansion on evicted farm households

The data presented by the following table are about socio-economic impacts of urban expansion on displaced peripheral farming communities of Nebelet town. Some of them who are worried because of losing of farm income, loss of suitable location; becoming food insecurity due to land expropriation; living in abject poverty were analyzed properly

Table 4.6: Socio-economic impacts of urban expansion on displaced and evicted households using leaker-scale

No	Impact of urban expansion on displaced peri-urban households	Response	Frequency	Percent
1	Urban expansion causes loss of income of peri-urban farm communities	strongly agree	120	91.6
		Agree	11	8.4
		Disagree	0	0
		strongly disagree	0	0
2	Farmers evicted from suitable location	strongly agree	115	87.8
		Agree	16	12.2
		Disagree	0	0
		strongly disagree	0	0
3	Food insecurity due to land expropriation	strongly agree	111	84.7
		Agree	20	15.3
		Disagree	0	0
		strongly disagree	0	0
4	Live in abject poverty due to farmland expropriation	strongly agree	75	57.3
		Agree	30	22.9
		Disagree	26	19.8
		strongly disagree	0	0
5	Difficulty to cover rehabilitation costs	strongly agree	114	87
		agree	10	7.6
		Disagree	7	5.4
		strongly disagree	0	0
6	Low participation on small and micro scale enterprises after eviction	strongly agree	55	42
		Agree	63	48
		Disagree	10	8
		strongly disagree	3	2

Source: Own survey data, 2025

According to the table 4.6 above, survey results regarding the impacts of urban expansion on loss of income after eviction, 120 (91.6%) respondents were responded strongly agree and 11 (8.4%) were replied agree while no one said disagree and strongly disagree. This implies that urban expansion greatly affects the peripheral displaced farming communities through losing their income after eviction.

According to responses of the key informants of interviewed and the participants of Focus Group Discussion (FGD); the main impact of displacement of the peri-urban households was loss of income due to urban expansion. Therefore; based on the cumulative report revealed by the sample respondents, the researcher concluded that the urban expansion induced displacement of the peri-urban farming communities of Nebelet town exposed them to more worsening economic livelihood distress and deterioration.

According to the response given to the question about eviction and displacement of farmers from their suitable location; 115 (87.8%) respondents were responded as strongly agree and 16 (12.2%) respondents were replied agree and only one replied disagree. This means that majority (87.8%) of peri-urban farming communities were displaced from their suitable location.

Based on the explanations of the key informants interviewed and the participants of the Focus Group Discussion (FGD); the main impacts of displacement of the households in the peri-urban area due to urban expansion was losing their suitable location. Therefore; the analysis of these results tells us majority of households who were located around Nebelet town are now suffering from loss of suitable location of their farmland. This also implies that urbanization harms the economic status of the peri-urban farming communities.

Concerning the existence of food insecurity in peri-urban farming communities due to land expropriation, 111 (84.7%) respondents replied strongly agree and the rest 20 (15.3%) respondents reported agree and none of them said disagree and strongly disagree. This justifies that; the majority of respondents said that there is critical food insecurity caused by land expropriation. Therefore; based on the cumulative responses and evidences; the researcher concluded that the majority of the peri-urban farm communities are now subjected to food insecurity due to land expropriation.

Regarding to living in abject poverty due to land expropriation; 75 (57.3%); 30 (22.9%) and 26 (19.8%) of the respondents responded strongly agree; agree and disagree respectively while no one said strongly disagree. This implies that the majority of the displaced peri-urban households live in poverty due to land expropriation and insufficient compensation from the respective municipality.

According to the explanations of the key informants interviewed; a number of displaced peri-urban households are subjected to abject poverty due to land expropriation. Therefore; based on the cumulative reports and evidences; the researcher concluded that because of the reasons stated, many peri-urban farming households live in critical poverty.

Regarding to the difficulty to cover rehabilitation costs, 114 (87%); 10 (7.6%); and 7 (5.4%); sample respondents responded strongly agree; agree and disagree respectively and no one of them replied strongly disagree. This implies that the peri-urban displaced households (after eviction) are suffering from difficulty to cover rehabilitation costs. Therefore; the researcher learned that for the reasons stated the peri-urban displaced farm households are suffering from difficulty to cover rehabilitation costs.

Regarding to the low participation (entry) on small and micro scale enterprises after eviction; 55 (42%); 63 (48%); 10 (8%); 3 (2%) of the respondents replied strongly agree; agree; disagree and strongly disagree respectively. This implies that; the majority of respondents replied that there is low participation or entry to small and micro scale enterprises after eviction. Therefore; based on the cumulative reports of the respondents; it is possible to conclude that there is low participation of the displaced peri-urban farm households on small and micro scale enterprises.

Table 4.7 Socio-economic problems caused by eviction of farmlands

No	Problems of displaced farm households due to urban expansion	Response	Frequently	Percent (%)
1	Lack of skills and knowledge of evicted farmers for adaptation	strongly agree	75	57.2
		Agree	22	16.8
		Indifference	15	11.5
		Disagree	11	8.4
		strongly disagree	8	6.1
2	Lack of good governance and existing corruption	strongly agree	50	38.2
		Disagree	70	53.4

		Indifference	5	3.8
		Disagree	4	3
		strongly disagree	2	1.5
3	Improper utilization of the compensation by displaced farmers	strongly agree	105	80.2
		Agree	10	7.6
		Indifference	5	3.8
		Disagree	10	7.6
		strongly disagree	1	0.8
4	Unfair and inadequate money for compensation	strongly agree	115	88
		Agree	16	12
		Indifference	0	0
		Disagree	0	0
		strongly disagree	0	0
5	Lack of municipal follow up and support	strongly agree	120	12
		Agree	11	8
		Indifference	0	0
		Disagree	0	0
		strongly disagree	0	0
6	Lack of providing information to displaced peri-urban farmers	strongly agree	100	76.3
		Agree	19	14.5
		Indifference	9	6.9
		Disagree	3	2.3
		strongly disagree	0	0
7	No participation on compensation decisions	strongly agree	115	87.8
		Agree	11	8.4
		Indifference	5	3.8
		Disagree	0	0
		strongly disagree	0	0
8	High urban expansion induced challenges	strongly agree	20	15.3
		Agree	23	17.5
		Indifference	9	6.8
		Disagree	65	49.6
		strongly disagree	14	10.7
9	Reduction of social bonds and social relations	strongly agree	15	11.5
		Agree	20	15.3
		Indifference	5	3.8
		Disagree	75	57.2
		strongly disagree	16	12.2
10	Loss of agricultural lands	strongly agree	123	93.9
		Agree	8	6.1

		Indifference	0	0
		Disagree	0	0
		strongly disagree	0	0
11	Expansion of crime	strongly agree	67	51.1
		Agree	39	29.8
		Indifference	0	0
		Disagree	15	11.5
		strongly disagree	10	7.6
12	Housing problems	strongly agree	45	34.5
		Agree	59	45
		Indifference	0	0
		Disagree	10	7.5
		strongly disagree	17	13

Source: Own survey date; 2025

According to the table 4.7 above, the survey results regarding the existence of lack of skill and knowledge of evicted farmers for adaptation after loss of farmland; 75 (57.2%); 22 (16.8%); 15 (11.5%); 11(8.4%) and 8 (6.1%) respondents responded strongly agree; agree; indifference; disagree and strongly disagree respectively. These responses reveal that the majority of the respondents (57.2%) strongly agreed on the limited skill and knowledge of evicted farmers for adaptation.

Based on the responses of interviewed key informants from local and municipal leaders in the town; the major problems of displaced households due to urban expansion were socio-economic problems. There were no socio-economic opportunities. Such problems include lack of good governance; improper utilization of compensation by farmers and unfair and inadequate money for compensation were among others. Therefore, based on the cumulative responses of the respondents, the researcher came to conclude that lack of skill and knowledge of evicted farmers for adaptation were among the major problems of displaced households due to urban expansion.

According to the question related to lack of good governance and corruption; 50 (38.2%); 70 (53.4%); 5 (3.8%); 4 (3%) and 2 (1.5%) of the respondents responded strongly agree; agree; indifference; disagree and strongly disagree respectively. Therefore; the majority of the respondents replied lack of good governance and corruption were serious problems in the study area.

Based on the cumulative responses of the sample respondents; the net findings in the study area, urban expansion coupled with bad governance and corruption were the problems of the mass of households.

Concerning the issues of improper utilization of the compensation money by the displaced farmer households; 105(80.2%); 10 (7.6%); 5 (3.8%); 10 (7.6%); and 1 (0.8%) of the respondents replied strongly agree; agree; indifference; disagree and strongly disagree respectively. Therefore; the findings of these results tell us the majority of households were suffering from improper utilization of compensation money by the displaced farmers. This implies that urbanization harms the economic status of the peri-urban communities and causes critical food security. Generally speaking, the responses of the respondents indicate that majority of the displaced farmers were subjected to improper utilization of the compensation money.

Regarding to the unfair and inadequate compensation money; 115 (88%) respondents responded strongly agree and 16 (12%) respondents replied agree and none of them said indifference; disagree and strongly disagree respectively. Therefore; the monetary compensation was unfair and insufficient as compared to the farmlands expropriated. Lack of the standardized valuation and methods or procedures of the farmlands led to unfair compensation for the displaced farmers. In addition to this; some displaced households sadly expressed their grievances even though the land expropriated was for the purpose of the urban community.

Relating to the question about lack of municipal follow up and support; 120 (92%) of the respondents replied strongly agree and 11 (8%) of the respondents responded agree and nobody said indifference; disagree and strongly disagree.

Based on these facts; the researcher concluded that municipal follow up and support are vital for displaced households especially after they lost their most valuable assets; however, there were no follow up and support by the municipality for displaced households after they lost their farm lands.

On the issues of lack of providing information to displaced farmers, 100 (76.3%); 19 (14.5%); 9 (6.9%); 3(2.3%) of the respondents responded strongly agree; agree; indifference and disagree respectively and no one replied strongly disagree. This implies that the majority of

the respondents strongly agreed that they have lack of information about the socio-economic problems and their solutions after they lost their farmlands. Therefore; based on the evidences revealed by the respondents; the researcher concluded that the displaced households have problems of lack of providing information how to lead their ways of life after eviction.

Concerning to the question related to participation on estimation of compensation; 115 (87.8%), 11(8.4%) and 5(3.8%) of the respondents responded strongly agree, agree and indifference respectively and no one replied disagree and strongly disagree. Therefore, the majority of the respondents said no participation on compensation decision. So, the findings simply tell us that the displaced households have no right to participate on the compensation decision.

On the issues of urban expansion induced challenges; 20 (15.3%), 23 (17.5%),9(6.8%),65 (49.6%) and 14 (10.7%) of the respondents responded strongly agree, agree, indifference, disagree and strongly disagree respectively. This justifies that 15.3% and 17.5% of the respondents replied strongly agree and agree respectively up on high urban expansion induced challenges. Whereas the majority of respondents, 65 (49.6%) replied disagree up on critical urban expansion induced challenges.

Concerning to loss of social bonds and social relations; 15(11.5%), 20 (15.3%), 5 (3.8%), 75 (57.2%) and 16 (12.2%) of the respondents responded strongly agree, agree, indifference, disagree and strongly disagree respectively. This indicates that due to urban expansion; social bonds and social relations are not seriously affected by the displacement of the households to peripheries. Therefore; the researcher concludes that the reasons stated for loss of social bonds and social relations; urban expansion was not a major problem.

In relation to the question about the loss of agricultural land, 123 (93.9%) of the respondents responded strongly agree and 8 (6.1%) of the respondents answered agree and no households replied indifference; disagree and strongly disagree. These responses show that urban expansion is a major factor for the loss agricultural land on peri-urban areas. Therefore; the researcher concluded that urban expansion is to be blamed for the loss of a vast agricultural land in the peri-urban areas.

Concerning the question of the expansion of the crimes after loss of farmland; 67 (51.1%), 39 (29.8%), 15(11.5%) and 10 (7.6%) of the respondents responded strongly agree; agree;

disagree and strongly disagree respectively and no one replied indifference. Therefore; the researcher concluded that there is high crime when there is high rate of urbanization.

On the issue of housing problems after eviction, 45 (34.5%); 59 (45%); 10 (7.5%) and 17 (13%) of the respondents responded strongly agree agree, disagree and strongly disagree respectively and nobody said indifference. Therefore, majority of respondents responded strongly agree on worsening housing problems after dislocation. As a result, the researcher reached at a conclusion that urbanization creates shortage of housing for the displaced households.

Table 4.8: Major socio-economic effects (problems) of urban expansion on the peri-urban farming communities

No	Variable	Response	Frequency	Percent
1	Effect of displacement and relocation on the livelihood of displaced farmers	Distress	9	6.9
		loss of confidence	4	3.1
		loss of asset	110	83.9
		economic crisis	8	6.1
2	Main problems of the displaced households	low compensation	120	91.6
		unfair compensation	8	6.1
		lack of infrastructure	3	2.3
3	Purpose of the compensation money	Consumption	131	100
		Investment	0	0
		saving purpose	0	0
		other specify	0	0

Source: Own survey data, 2025

On the issues relating to the effects of displacement and relocation on the livelihood of displaced farmers, 9 (6.9%), 4 (3.1%), 110 (83.9%) and 8 (6.1%) of the respondents responded that there are distress; loss of confidence; loss of assets and economic crisis respectively. Therefore; majority of them replied loss of assets is the major effect of displacement.

Based on the evidences from interviewed key informants from local leaders; the displaced farmers were denied compensation equivalent to their loss. This caused mental distress; loss of confidence and economic crisis.

During the key informant interviews, municipality officials described that the displaced farmers and communities were unwisely consumed the money they got as compensation. This is because the displaced households are lacking financial management skills. Due to this; they faced many problems like family disturbance and marriage termination. Based on the above evidences; the researcher concluded that majority of displaced farmers lost their assets. Concerning the question relating to the main problems of the displaced households; 120 (91.6%); 8(6.1%); and 3 (2.3%) of the respondents responded as low compensation; unfair compensation and lack of infrastructure respectively. According to the above answers; majority of displaced households have complained on the low compensation.

According to the interviewed key informants from municipal leaders; the displaced households complained up on the amount of compensation. They claimed that it is not enough to re-establish their economic base equal to the previous economic status. As a result; the researcher learned that the compensation paid to the displaced households to establish new livelihood.

Relating to the question about the purpose of the compensation money, 131 (100%) of the respondents responded for consumption and no money investment and saving purposes. From this information the researcher concludes that there is no money left for saving and investment.

4.5. Participation of displaced households on decision and estimation of compensation.

The researcher attempted discuss about the participation of displaced households on the issues of displacement compensation decision. The displaced households are worried about their participation on their displacement and compensation decision. The following table presents the data collected from sample of displaced households.

Table 4.9: Assessing the participation of the households on their displacement compensation decision

No	Variable	Response	Frequency	Percent
1	Compensation for loss of farmland	Yes	121	92.4
		No	10	7.6
2	Level of satisfaction after being urban resident	much better	0	0

		Better	0	0
		Indifference	5	3.8
		somewhat worse	25	19.1
		much worse	101	77.1
3	Participation of households on compensation decision	much better	0	0
		Better	0	0
		Indifference	10	7.6
		somewhat worse	35	26.7
		much worse	86	65.6
4	The amount and fairness of the compensation	much better	0	0
		Better	0	0
		Indifference	15	11.4
		somewhat worse	41	31.3
		much worse	75	57.3
5	Purchase; improve or build a house after displacement	much better	0	0
		Better	15	11.4
		Indifference	55	42
		somewhat worse	49	37.4
		much worse	12	9.2
6	Compared to other households in your locality that become urban residents how do you rate your living condition	much better	0	0
		Better	0	0
		Indifference	110	84
		somewhat worse	21	16
		much worse	0	0
7	Status of households living condition compared to before your displacement	much better	0	0
		Better	0	0
		Indifference	29	22.1
		somewhat worse	89	68
		much worse	13	9.9
8	Households' future expectation	much better	0	0
		Better	0	0
		Indifference	10	7.6
		somewhat worse	80	61.1
		much worse	41	31.3
9	Displaced households' feeling about the land compensation	much better	0	0
		Better	0	0
		Indifference	0	0
		somewhat worse	19	14.5
		much worse	112	85.5

Source: Own survey date; 2025

Concerning to the response of respondents whether they were paid compensation for the loss of farmland by urban expansion, 121(92.4%) of the respondents disclose yes while 10 (7.6%) of them replied no.

The interviewed key informants from the municipal officials and local leaders were also said that the displaced farmers received compensation for the loss their farmland by urban expansion but they said that it is not enough to support their life.

Regarding to the level of satisfaction of the displaced households after being converted to be urban residents, 5 (3.8%), 25(19.1%) and 101(77.1%) of the respondents were responded indifference; somewhat worse and much worse respectively and no one of the respondents replied much better and better. This indicates that; the majority 77.1% of the respondents replied that they became much worse up on their way of life after being urban residents. This implies that being urban resident is not comfortable for the displaced peri-urban farming communities in Nebelet town.

Concerning to the participation of displaced households on compensation decisions, 10 (7.6%), 35 (26.7%), and 86 (65.6%) of the respondents were replied indifference; somewhat worse and much worse respectively and no body replied much better and better. Therefore; this implies that; the participation of households on compensation decision is undermined by the municipality. Therefore; the researcher concluded that the displaced households generally have no chance to participate on compensation decisions.

Concerning to the amount and fairness of the compensation, 15 (11.4%), 41 (31.3%) and 75 (57.3%) respondents were responded indifference, somewhat worse and much worse respectively and no one said much better and better. This indicates that; compensation amount and fairness were not enough and fair to cover their costs when it is compared to the evicted farmland due to urban expansion.

Therefore; the researcher reached at conclusion on the amount and fairness of compensation for the farmland evicted by the government is not fair and satisfactory.

Regarding to the question about purchase; improvement or building of their houses after displacement, 15 (11.4%), 55 (42%), 49 (37.4%) and 12 (9.2%) of the respondents responded better, indifference, somewhat worse and much worse respectively and no one replied much better. Therefore, the majority of respondents replied indifference about the condition of

shelter and living standard after displacement. Hence; based on the responses of the respondents; the researcher concluded that the displaced peri-urban farming communities receive very low compensation benefits that are not enough to support their life just at least as they were living before displacement.

Concerning to their life as compared to other households in their locality after they were converted in to urban residents, 110 (84%) of the respondents responded indifference and 21 (16%) of the respondents replied somewhat worse and no one respondent replied much better; better and much worse. This shows that; the living condition of the displaced communities as compared to the living conditions the others become indifference (living conditions are not improved). Therefore, the researcher reached at a conclusion that the whole displaced farming communities are found at a very low standard of living.

Regarding to the question of; what is the households living condition compared to before you displaced 29 (22.1%), 89 (68%) and 13 (99%) respondents were replied indifference; somewhat worse and much worse respectively and no said much better and better. This implies that, the living condition of the displaced households become somewhat worse when compared with before eviction. Therefore, based on the respondents' evidences; the researcher concluded that the majority of the peri-urban displaced farming communities are now become victims of economic crisis.

Concerning to the expectation of the displaced households in the future, 10 (7.6%), 80 (61.1%) and 41 (31.3%) of the respondents responded indifference; somewhat worse and much worse respectively and no household replied much better and better. Therefore; this implies that; the majority of households expected somewhat worse in the future of their way of life. This is because the compensation they receive is not enough to bring about changes. Hence; the researcher concluded that based on the reasons stated about the future life of the displaced households, there will be no improvement of the life of the displaced farm households unless the compensation is improved.

Concerning the feelings of the displaced households about the land compensation, 19 (14.5%) of the respondents responded somewhat worse and 112 (85.5%) of the respondents responded much worse and no one of the households replied much better; better and indifference. This indicates that majority of the displaced households became very unsatisfied by the

compensation they receive for their expropriated farmlands. The researcher, therefore, concluded that the amount of the compensation given to the displaced households was not enough to re-establish their life.

Table 4.10: Participation of displaced households on their mode of compensation

No	Variable	Response	Frequency	Percent
1	Appropriate mode of compensation for loss farmland	alternative land	46	35.1
		Money	5	3.8
		both land and money	80	61.1
2	Households' perception on the amount and kind of compensation package they received for their loss	satisfied	0	0
		highly satisfied	0	0
		Dissatisfied	96	73.3
		highly dissatisfied	35	26.7
3	Level of satisfaction of displaced farmers on compensation benefits gained	High	0	0
		very high	0	0
		Low	97	74
		very low	34	26

Source: Own survey data; 2025

Regarding to the above information obtained from the respondents, 46 (35.1%) of the respondents responded for the mode of compensation to be alternative land; 5(3.8%) of the respondents replied for mode of compensation in the form of money and 80 (61.1%) of the respondents responded the mode of compensation to be both land and money. This implies that compensation in cash was the formal mode of payments of compensation practiced in the study area. However; the displaced households prefer both money and alternative lands for housing and agriculture.

Accordingly; the cash compensation was mostly for the land loss. The key informants of local leaders said that alternative land and money is good for the loss of farmlands; but, most of the compensation given for displaced households was insufficient money.

Therefore; according to the findings, the researcher concluded that the mode of compensation to be given for the displaced farming communities in the study area is good if the

compensation is in the form of both alternative land and money. Regarding to the perception on the amount and kind of compensation, 96 (73.3%) of the respondents responded dissatisfied, 35 (26.7%) of the respondents replied highly dissatisfied and no one responded satisfied and highly satisfied. Therefore; based on the cumulative view of the respondents, the researcher concluded that most of the displaced households who lost their farmlands are not satisfied with the promise, the amount and kinds of compensation benefits given by the municipality. The reason is that because the compensation benefits are not enough to re-establish their economic base at least as their previous economic status.

Concerning the level of satisfaction of displaced farmers with compensation benefits gained, 97 (74%) and 34 (26%) of the respondents responded low and very low respectively while no one respondent replied high and very high. This implies that majority of the displaced farmers did not receive high and very high compensation.

4.6. Support from municipal authorities and other concerned bodies on adaption and coping strategies

In this section; the role of municipal authorities and other concerned bodies on adaptations and coping strategies for rehabilitation of the displaced peri-urban farming communities due to urban expansion and the role of the government institutions in handling appeals and grievances of compensation and other benefits were analyzed.

Regarding coping strategies practiced by the displaced communities to support their livelihood; they participate in daily labor; government employment; creating own business; serving in someone's house; informal employment like guards and agricultural activities. Majority of the affected displaced farmers are struggling to solve the challenges of the loss of assets in daily labor and other minor economic sources and activities. Hence; majority of the displaced farm households are not satisfied with their current economic status.

Concerning the expectations of displacement farmers from government institutions to improve their life; the government should provide them with enough compensation for the loss of assets. They also demand the non-governmental institutions to help them in the rehabilitation process.

From the results of this survey; the researcher concluded that trainings are vital for displaced households especially after they lost their assets; but, so far, there were not training for households after they lost their farmlands.

Regarding to the government dedication to provide alternative means of livelihood to the displaced households; majority of the respondents responded that the government dedication is not enough to tackle problems of the displaced farmers.

Table 4.11: Support from municipal authorities and other concerned bodies on adaption and coping strategies

No	Types of support	Response	Frequency	Percent
1	Informing before eviction	very high	0	0
		High	0	0
		somewhat	6	4.6
		Low	109	83.2
		very low	16	12.2
2	Training on saving and credit arrangements	very high	0	0
		High	0	0
		Somewhat	25	19.1
		Low	97	74
		very low	9	6.9
3	Training on entrepreneurship skill for income diversification	very high	0	0
		High	0	0
		Somewhat	35	26.7
		low	85	64.9
		very low	11	8.4
4	Networking with saving and credit institutions for loan	very high	0	0
		High	0	0
		Somewhat	47	35.9
		Low	76	58
		very low	8	6.1
5	Support on expansion of urban agriculture	very high	0	0
		High	3	2.3
		Somewhat	55	42
		Low	69	52.6
		very low	4	3.1
6	Safety net for food support	very high	0	0
		High	59	45

		Somewhat	28	21.4
		Low	31	23.7
		very low	13	9.9
7	Participation in various groups for rehabilitation	very high	0	0
		High	0	0
		some what	2	1.5
		Low	6	4.6
		very low	123	93.9

Source: Own survey data, 2025

Concerning to informing before eviction by the concerned body to the households, 6 (4.6%), 109 (83.2%) and 16 (12.2%) of the respondents responded somewhat; low and very low respectively and no one said very high and low. This implies that; the displaced peri-urban farming communities were not given such sound training orientation to be ready for eviction. Although, in some cases, awareness were given on the way how to use the compensation benefits; it was not in an integrated manner. They argue that since they are in low socio-economic status; it would have been better if they were given adequate advice on how to lead life in new neighborhood. Therefore; the researcher concluded that informing households before eviction are vital for displaced households especially before they lost their most valuable assets.

Concerning on the issues of training on saving and credit establishment, 25 (19.1%), 97 (74%) and 9 (6.9%) of the respondents replied somewhat; low and very low respectively and no one household responded very high and high. This indicates that training on saving and credit establishments were not given to the displaced peri-urban farming communities by the concerned body. However, there was informal information given by the municipality for the evicted households to save their compensation in Dedebit micro finance.

On the issues of training on entrepreneurship skills for income diversification in non-farm activities; 35 (26.7%), 85 (64.9%) and 11 (8.4%) of the respondents responded somewhat, low and very low respectively and no body responded very high and high. Therefore; majority of the respondents said trainings related to entrepreneurship skills for income diversification in non-farms activities given by the concerned body were low. From this information; the researcher concluded that training on the entrepreneurship skills was not

enough for displaced peri-urban farming communities. This is because no institution is giving any formal training or awareness in capacity building on how to make urban businesses.

Regarding to the issues of net working with saving and credit institutions for providing loan, 47 (35.9%), 76 (58%) and 8 (6.1%) of the respondents responded somewhat; low and very low respectively and no one said high and very high. Therefore, majority of the respondents (58%) replied that networking with saving and credit institution is low. But to some extents there is networking with Dedebit micro finance. There were interactions to save their compensation money in that institution. Based on these results; it is possible to conclude that the networking with saving and credit institutions is still not good. Therefore; the government should support the displaced farm households as much as possible.

Concerning supports on the expansion of urban agriculture, 3(2.3%), 55 (42%), 69 (52.6%) and 4 (3.1%) of the respondents responded high, somewhat, low and very low respectively and no one of the respondents replied very high. These findings imply that; majority of the displaced households (52.6%) replied low. This implies that the government does not assist the displaced households to start urban agriculture. Therefore; based on the respondents' cumulative responses; the findings of this study indicate that the concerned body is not supporting the displaced households to participate on urban agriculture.

Concerning the issues of safety net for food support, 59 (45%), 28 (21.4%), 31 (23.7%) and 13(9%) of the respondents responded high, somewhat, low and very low respectively and no one responded very high. This implies that the municipal administration with collaboration of non-government organizations (NGOs) should support the displaced households to participate in safety net programs. Most of the displaced households were participating on the safety net programs, but not all peri-urban farming communities in Nebelet Town.

Concerning participation of various groups for rehabilitation, 2 (1.5%), 6 (4.6%) and 123 (93.9%) of the respondents responded same what; low and very low respectively and no one said very high and high. Therefore, majority of the respondents (93%) replied very low. about the participation of various groups in rehabilitation programs of the displaced peri-urban farm households. Based on these results; it is possible to conclude; displaced peri-urban farming communities were dissatisfied by low participation of different groups on capacity building and rehabilitation processes.

CHAPETER FIVE: CONCLUSSIONS AND RECOMMONDATIONS

5.1. Conclusions

Urbanization is one of the dominant global processes shaping the social and economic structures of both developed and developing countries. In Ethiopia, and particularly in small and medium towns such as Nebelet, urban expansion has been accelerating in recent years. While urbanization brings opportunities for modernization, infrastructure development, and economic growth, it often comes at the expense of peri-urban farming communities who depend heavily on land for their livelihoods. These groups are the most vulnerable to land expropriation, inadequate compensation, and the loss of sustainable income sources.

The problem addressed in this study emerged from the growing tension between urban expansion and the livelihoods of peri-urban households. In Nebelet Town, the process of expansion has led to the displacement of farming families who were neither adequately prepared for such change nor supported in their transition. The absence of compensation systems, limited livelihood alternatives, and weak institutional support have created serious socio-economic challenges for these communities.

The objective of this study was to examine the socio-economic effects of urban expansion on peri-urban farming communities of Nebelet Town. Specifically, it aimed to assess the impacts of displacement on household income, food security, and livelihood strategies, as well as to evaluate the role of government and non-government institutions in addressing these challenges.

To achieve these objectives, the research methodology combined both qualitative and quantitative approaches. Data were collected through household surveys, key informant interviews, and focus group discussions. Statistical and descriptive analyses were employed to compare household income and livelihood conditions before and after displacement. This methodological approach enabled the researcher to capture both the numerical changes in income and the lived experiences of displaced farmers.

The findings of the study reveal that the process of urban expansion in Nebelet Town has significantly disrupted the livelihoods of peri-urban farming communities. Displacement due to land expropriation resulted in severe socio-economic consequences, as most households were

neither prepared for the transition nor provided with adequate compensation or institutional support.

The majority of displaced farmers wished to continue farming; however, the loss of farmland and the absence of viable alternatives forced many into insecure and low-paying jobs such as daily labor, housework, or security services. These activities proved unsustainable and insufficient to replace their former agricultural income, thereby exposing households to food insecurity, declining incomes, and deteriorating living standards.

A critical issue highlighted by this research is the lack of clear, professional, and transparent valuation systems to guide compensation. Promises made by local authorities during the urban expansion process were not fully implemented, leaving many households dissatisfied and distrustful of government institutions. Moreover, no substantial training or rehabilitation programs were offered by either governmental or non-governmental actors, further limiting the ability of displaced households to adapt and rebuild their livelihoods.

In conclusion, this study shows that urbanization in Nebelet Town has resulted in more harm than benefit to peri-urban farming communities. Unless comprehensive planning, transparent compensation mechanisms, and sustainable livelihood restoration strategies are introduced, urban expansion will continue to deepen economic vulnerability and social grievances among displaced populations.

5.2. Recommendations

It is customary that every researcher comes with certain findings and problems seeking solutions. Likewise, this research identified many problems and challenges faced on displaced peri-urban farm communities. Despite many problems and challenges; the researcher is intended to state only some recommendations on some selected issues. Therefore; the following recommendations are forwarded based on the findings of the study:

1. **Transparent and Fair Compensation** – The government should establish a clear, professional, and independent valuation system to ensure displaced farmers receive fair and timely compensation for their expropriated land.

2. **Livelihood Diversification and Training** – Displaced households should be provided with vocational training, skill development programs, and access to credit schemes to help them diversify their livelihoods beyond agriculture.
3. **Sustainable Urban Planning** – Urban expansion programs must incorporate participatory planning processes, ensuring that peri-urban communities are consulted, informed, and adequately prepared before displacement occurs.
4. **Institutional Support and Rehabilitation** – Both governmental and non-governmental institutions should actively participate in post-displacement rehabilitation by offering technical, financial, and social support to affected households.
5. **Strengthening Food Security** – Specific programs should be designed to address food insecurity among displaced households, such as urban farming initiatives, cooperatives, or subsidies for essential goods.
6. **Monitoring and Accountability** – Continuous monitoring mechanisms should be established to ensure that promises made during urban expansion are fulfilled, and that grievances of displaced households are addressed transparently and effectively.

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MEKELLE UNIVERSITY

College of Social Sciences and Languages Department of Geography and Environmental Studies Questionnaires Prepared for Households Survey

Dear respondents

My name is Brhanemeskel Amare. Currently, I am postgraduate student at Mekelle University in the Department of Geography and Environmental Studies. I am conducting research on Socio- economic Effects of Urban Expansion on the Peri-urban Community: Case Study of Nebelet Town and its Peri-urban Areas, Central Zone, Tigray as a partial fulfillment for my graduation. The purpose of this questionnaire is to collect primary data for this research. To achieve this purpose and to deeply investigate the case, your response to the questions given has crucial value. Therefore, you are kindly requested to read the questions carefully and give accurate and real response that exists on the ground. Your identity and the response that you reply will not be used for any other purpose other than this research work. So, please feel free and give your honest and genuine response according to your experience and your personal understanding on the issues (facts) on ground.

Thank you in advance for the willingness to complete the questionnaire. Have a nice time!

General Direction:

Please, write **X** mark in the box corresponding your answers or write appropriate answers in the provided spaces.

Part I: Background information of the household respondents

1. Sex: 1. Male 2. Female
2. Age (in years): _____.
3. Religion: 1. Christianity 2. Muslim 3. Others
4. Educational level: 1. Can't read and write 2. Read and write 3. Grade1-4
4. Grade 5- 8 5. Grade 9- 12 6. Above grade 12
5. Marital status: 1. Single 2. married 3. divorced 4. Widowed
6. Household size (including the head): _____.

Part II: Questions relating to urban expansion & eviction of farmlands

1. What is (was) your major occupation?

No.	Types of occupation	Before eviction	After eviction
A	Only farming		
b	Partially farming		

C	Gov't employee		
D	Daily labor		
E	Private employee		
F	Others, specify		

2. What are the major causes of urban expansion to the peri-urban areas of Nebelet town?
 - a. rural-urban migration
 - b. rapid natural population growth
3. What are the major reasons of urban expansion to the peri-urban areas of Nebelet town?
 - a. shortage of land for housing
 - b. shortage of land for infrastructure development
 - c. shortage of land for other investment
4. What is the status of the farmland you lost for urban expansion?
 - a. partially evicted
 - b. totally evicted
5. Write the size of the farmland you lost for urban expansion in hectare _____.
6. What was the purpose of the farmland you lost for urban expansion?
 - a. all irrigated
 - b. partially irrigated
 - c. all non-irrigated
 - d. others _____.

Part III: Major socio-economic effects (problems) of urban expansion on the peri-urban farming communities of Nebelet town.

1. Is there any change on your livelihood asset possession due to urban expansion?
 - a. Yes
 - b. No
2. If your answer is yes what was the total possession of the household you owned before eviction and what is left for the household after eviction? Please list down on the table below

No	Types of assets you have	Unit measurement	before eviction	after eviction
1	Farm land	Tsimad		
2	Grazing land	Tsimad		
3	Livestock cow and oxen	Number		
	Goat and sheep	Number		
	Bee heave	Number		
	If any other specify			
4	Permanent plants	Number		
	Fruit trees	Number		
	Eucalyptus tree	Number		
	Gesho, chat, coffee,	Tsimad		
5	If any other specify			

3. What are the socio-economic impacts of evicted households resulted from displacement?

No.	Impact of displacement on households in the fringe land due to urban expansion	Strongly agree	agree	Dis agree	Strongly dis agree
1	Urban expansion affects in loss of income				
2	Evict farmers from suitable location				
3	Food insecurity due to land expropriation				
4	Live in poverty due to expropriation				
5	Difficulty to cover rehabilitation cost				
6	Low participation on small and micro enterprise after eviction				

4. Can you please mention what socio-economic problems or opportunities you faced after you lost your farm land?

No	Problems of displaced households' due urban expansion	Strongly agree	agree	In difference	Dis agree	Strongly dis agree
1	Lack of skill & knowledge of evicted farmers for adaptation					
2	Lack of good governance and corruption					
3	Improper utilization of compensation by farmers					
4	Unfair and inadequate monetary compensation					
5	Lack of municipality follow up and support					
6	Lack of providing information to farmers					
7	No participation on compensation decision					
8	Urban expansion induced					
9	Reduction of social bond and social relations					
10	Loss of agricultural land					
11	Expansion of crime					
12	Housing problems					

What has been the effect of displacement and relocation on the livelihood of displaced farmers?

.....

6. What are the main problems of the displaced households complained? -----

7. Is the compensation money used for: A, consumption B, investment
 C, saving purpose D, other specify-----

Part IV: Assessing the participation of households on their displacement compensation decision

1. Did you receive compensation for the loss of your farmland for urban expansion?

a. Yes b. No

2. If your answer for question number one is yes, was the process of compensation decision transparent, participatory, fair and adequate? Please, fill your response in the following table.

No.	mpensation and utilization	Much better	better	In Difference	Somewhat Worse	Much worse
1	How you satisfied after being an urban residence					
2	participation of households on compensation decision					
3	The amount and fairness of the compensation					
4	Did you purchase, Improve, or Build a house after displacement					
5	Compared to other households in your locality that become urban resident how do you rate your household living condition					
6	What is the households living condition compared to before you displaced					
7	What do you expect will be the households in the future					
8	How do you feel about the land compensation					

3. Which mode of compensation was good for your loss of your land?

4. alternative land 2. money 3. both land and money

5. What was your perception on the amount and kind of compensation package received for the loss of your materials?

1. satisfied 2. highly satisfied 3. dissatisfied 4. highly dissatisfied

6. Level of displaced farmer's satisfaction with the compensation benefits gained in relation to urban expansion: 1. high 2. very high 3. low 4. very low

Part V: Support from municipal authorities and other concerned bodies on adaptations and coping strategies

1. What coping strategy is practiced by the displaced community to tackle livelihood problems?
2. What would be expected from government and non-governmental to improve the life of the displaced farmers?
3. What types of support and follow up are you getting from the concerned bodies?
4. How is the government dedication to provide alternatives to the displaced households?
5. Supports made by municipal administration after eviction. Please level of support as follows.

No.	Types of support	Very high	High	Some what	Low	Very low	
1	Informing before eviction						
2	Training on saving and credit establishment						
3	Training on entrepreneurship skill for income diversification in non-farms						
4	Networking with saving and credit institutions for loan						
5	Support on expansion of urban agriculture						
6	Safety net for food support						
7	Various groups participation for rehabilitation						

Part VI: An interview will be performed with the municipal officials of the Town and officials of Embaseneyti Wereda Agriculture and Rural Development Office.

Dear interviewees,

My name is Brhanemeskel Amare. I am a student in the Department of Geography and Environmental Studies, Mekelle University. I am conducting research on Socio- economic Effects of Urban Expansion on Peri-urban Community: Case Study of Nebelet Town and its Peri-urban Areas, Central Zone, Tigray as a partial fulfillment for my graduation of master’s degree in Geography and Environmental Studies.

So, the objectives of this interview are to collect data for academic research; and finally forward some researched recommendations. Dear interviewee, you are expected to provide accurate and rational information on the subject under discussion. Your honest information is highly valuable as it determines the success of this study. Therefore, the researcher is very grateful for your genuine devotion on providing relevant and honest data. Thank you for the willingness to complete the interview. Have a nice time.

An interview guideline prepared to municipal leaders in Nebelet Town

General Directions: Please, give detail and relevant information accordingly:

1. Do you think that, the displaced or expropriated land of peripheral farming communities negatively affects their livelihood? Explain your reason?

2. Do you think dislocated peripheral farming community given adequate awareness about the purpose of land expropriation? Explain your answer?
3. What type of mode compensation is available for the displaced farmers? Is the mode of compensation alternative or mandatory?
4. Is there clear and uniform guideline of law on how to fix the amount of compensation?
5. What are the factors to be considered in relation to valuation of the amount of compensation?
6. Do you believe the given compensation or other materials are fair enough to the displaced peripheral farming communities while considering, farmer's economic background and land productivity?
7. Do you think the amount of compensation is adequate to successfully enable to the displaced farmers lead their life?
8. Have you been the displaced and disposed peripheral farming community given the training orientation and institutional supports in such a way that they can easily sustain their livelihood in newly changed urban way of life?
9. If your answer for question no-8 is yes, in which of these skills acquired training do you have participated?
10. As government institution, what is your organization's role to internalize the negative effect of urbanization on these peri urban community economic livelihoods?
11. What are the government policy responses to mitigate the problem related to displacement of household from their land?
12. How do displaced farmers cope with new mode of life? Is there any support from your institution?

Part VII: An interview will be performed with the local leaders (community leaders)

Dear interviewees,

My name is Brhanemeskel Amare. I am a student of Geography and Environmental Studies in Mekelle University. I am conducting research on Socio- economic Effects of Urban Expansion on Peri-urban Community: Case Study of Nebelet Town and its Peri-urban Areas, Central Zone, Tigray as a partial fulfillment for my graduation of master's degree in Geography and Environmental Studies.

So, the objectives of this interview are to collect data for academic research; and finally forward some researched recommendations. Dear interviewees, you are expected to provide accurate and rational information on the subject under discussion. Your honest information is highly valuable as it determines the success of this study. Therefore, the researcher is very grateful for your genuine devotion on providing relevant and honest research data. Thank you for the willingness to complete the interview. Have a nice time.

An interview guideline for local leaders (community leaders)

General Directions: Please give detail and relevant information accordingly:

1. What are the effects of urban expansion programs you faced after actual implementation?

2. What do you think about the major economic effects faced you and your family displaced?

Explain in briefly?

3. Have you discussed on the issues of compensation package before determining the kind and amount of the compensation? If so how explain it?

4. What are the kind and nature of the compensation you agreed and why?

5. Do you believe the given compensation are fair to farmers considering economic backgrounds, living cost and productivity?

6. What technical trainings and orientations are given to the displaced farmers?

7. Do you get any training how to use the benefits of packages provided to you and others while you move to new ways of urban life? If yes, what are the trainings?

8. Do you believe the given compensation money or any other materials are fair enough to the displaced peripheral communities while considering, farmers economic background and land productivity?

9. How do the displaced farmers cope with new mode of life?

10. What do you think about measures to be done to improve affected farmers?

Part VIII: Questions for Focus Group Discussion (FGD)

1. Is there rapid change in the town's trend and expansion incorporating farm lands which resulted in displacing farmers in the fringe area?

2. Huge number of farmers are displaced in the fringe land of the town due to the town's expansion. How do you evaluate it?

3. The displaced farmers which were in the fringe lands of the town are more affected their livelihoods due to the urban expansion?

4. The displaced farmer due to the town's expansion has better live condition from the previous.

5. What looks like the socio-economic impact of the displaced households due to the urban expansion and what has been the effect of displacement on the livelihoods of the households?

6. The number of unstable confused and disturbed dwellers are increasing alarmingly following displacement and losing farm lands? Do you agree, how explain?

7. The conversion of farm lands for residential purposes has negative result on food security, provision of social services, employment opportunity etc.

8. All urban dwellers have strong passion to live decent life but for the displaced farmer's life in the town is unaffordable?

9. The displaced farmers gets support and follow up by concerned bodies after they loss their farmland?

10. Were benefits packages that the government promised to fulfill and are they implemented?

11. Many options were presented to the displaced farmers to decide leave their farm lands and they get what they prefer?

12. What are the local coping mechanisms used to reduce the socio-economic impacts of urban expansion on displaced households?

