



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**URBAN - RURAL LINKAGES IN SERU TOWN AND ITS HINTERLANDS:
ARSI ZONE, OROMIA REGION**

BY

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JULY, 2011

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**THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA
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ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF SOCIAL SCIENCES

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Abstract

The objective of this study is to evaluate and examine the nature and patterns of urban- rural linkages in Seru town and its hinterlands. Thus, Purposive sampling and stratified sampling technique were used. The site of the study was selected because the woreda is under natural and human pressure. Purposively, five rural Kebeles and the town were selected. Totally six Kebeles were selected based on the purposive sample because five rural Kebeles are located 15km radius from the town. From 5 Kebeles sample size was selected based on proportional allocation stratified technique. The total sample household for both areas was 262. The study also used secondary data like books and Journals. The collected data was also analyzed in descriptive statistics in terms of frequency, percent, mean and median and correlation. The study give due attention to the spatial linkages like production-consumption, marketing linkages(flow of agricultural out put, flow of livestock) service delivery linkages (education, health and the like), flow of people(migration and visiting pattern) and factors affecting urban and rural linkages. The study found, however, that rural households are unable to produce surplus production and supply to the market, there is still interaction and interdependence between Seru town and its hinterlands. Urban households' survey also depicts that urban residents of Seru town purchase both crop products and livestock from rural farmers. The survey from trader also reveals that Seru town is collecting and distributing center of grain crops (especially wheat and teff) and livestock (especially goat) and export to bigger cities like Addis Ababa and Adama. There are also migration linkages between two spatial units. But Production, Service delivery linkage and physical linkages exist between two area are very weak centers.

ACRONYMS

EEA= Ethiopian Economic Association

CSA= Central Statistical Agency

ERA= Ethiopian Road Authority

HH= Households

MDGs= Millennium Development Goals

NGO= Non-Governmental Organization

TVET=Technical and Vocational Educational Training

UN= United Nations

UNDP=United Nations Development Planning

UNHSP=United Nations Human Settlement Program

EMWUD=Ethiopian Ministry of Work and Urban Development

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Most development policies have implicitly based on rural-urban dichotomy which manifested on numbers of policies prepared for urban and rural areas separately. Such kinds of approaches have created gap between two spatial units and thus adversely affect the local economies of the area concerned (Magersa, 2007). Rural areas were considered as remote farming places where as urban areas were considered as over-crowded cities (Braun, 2007). Urban and rural areas were considered to be two distinction spatial units in the context of development planning. As a result, most of the development theories and practices were absolutely based on the dichotomy between the two areas, which reflected itself in the division of policies along spatial and sectoral lines. Urban planners usually focus on urban nodes and giving too little attention to rural-led development, while rural development planners tend to ignore urban centers and define rural areas as consisting only of villages and their agricultural land which adversely affected the development of the two spatial units (Tacoli, 2002). Rural urban linkages affect both rural and urban change, and influence resource use and management. These linkages include flows of people, of goods, of money and of information, as well as other social transactions that are central to social, cultural and economic transformation (Funnell, 1988).

Given this dichotomy, wide disparities between urban and rural areas remained almost all over the world (though the effect is more in developing countries) in terms of economic conditions, access to infrastructure and services, opportunities for socio-economic mobility and control over natural resource and local development. The disparities are caused by natural differences social factors and policy decisions (UNDP, 1995).

This old belief of a separate and dichotomous approach to urban and rural development are no longer accords with reality, considering the complementary functions and flows of people, capital, goods and services, employment, information and technology between the two areas. Rural and urban areas are economically, socially and environmentally interdependent. Rural-urban linkages are essential for both sides' economic growth and sustainable development. Their strength of connection is strong physically, socially, culturally, economically and

environmentally.

Development theories based on the dichotomy between urban and rural areas, as urban and rural areas received different attention in practice and planning. Such approaches undermined the potential of urban rural linkages for poverty reduction and mutual developments. It also creates disparities between two spatial units in the levels of living. In reality however, the urban and rural linkages contribute to local economic developments (Gelan, 2008). Urban centers are a centre of modernization and development. Recent awareness of this process has been given emphasis to mutual development for urban and rural areas. This mutual development is manifested through urban rural linkages (UNHSP, 2005).

Within the economic sphere, many urban enterprises rely on demand from rural consumers, and access to urban markets is often crucial for agricultural producers. Large numbers of urban-based and rural-based households rely on the combination of agricultural and non-agricultural income sources for their livelihoods. Recent figures have shown that a substantial proportion of rural household income is derived from non-farm occupations (an average of 40 percent in Latin America and Caribbean, 45 percent in Africa and 35 percent in Asia) and the relationship also works in opposite direction. In case of chili, for example 20 percent of the agriculture labor force is supplied by urban households (Tacoli, 2002).

Other study revealed that integrating rural and urban development plan accelerates development. The fast growing economies of the Southeast Asian “miracle” or the changes in the organization and management of certain selected areas of China with special market oriented policies are providing indications that fast urbanization processes featuring a synergetic mix of agricultural and industrial activities is creating economic growth (UNHSP, 2005).

The growth of agricultural sector depends on access to urban market and industrial inputs, while the industrial sector of the urban areas require raw materials from the rural sector (Tegegne, 2001). The exchange of labor is driven by the human resource need of the urban centers that rural areas have in abundance, especially unskilled and semi-skilled (Tostensen, 2004). In most developing countries (including Ethiopia), rural urban interactions are very much limited because the rural areas are unable to produce enough food and raw materials; and unable to serve as market centers. The later is also unable to produce goods and services that satisfy the needs of

the rural hinterlands. Rural-urban linkages are also influenced by factors related to production and distribution of agricultural and industrial goods, and movement of labor forces (Tegegne, 2001). The magnitude and strength of rural urban linkages is also not clearly identified.

The challenges facing most African countries is to address the current problems while at the same time create conducive environment that will allow cities and towns to become effective centers of growth and progress. UNHSP (2005) illustrates that, by 2030, 50% of population in Africa will work and live in towns and cities. The same study shows that, lack of employment opportunities, inadequate development and provisions of services, poverty, civil war and natural disasters in rural areas have contributed to high level of population flood in cities of developing countries. The nature, the degree and the intensity of rural urban linkage varies from place to place. The study on the influence of hinterland on the small town has emphasized that the development of rural hinterland is the key to growth of urbanization.

Evans (1992) cited in Tegegne (2001) conducted the household level study of urban rural linkage .The main findings of the study show that the small towns play vital role in supporting the growth of agricultural production, rural income and absorb rural people. The study also reveals that rural hinterland stimulates growth in nearby towns' centers by initiating wide range of small scale non-farm activities. Unlike other study, the study finding closely approximates the theoretical town hinterland relation.

Tegegne (2001) indicates that small towns' centers are immediate importance for agricultural development in Ethiopia. Ethiopia has numerous towns. These towns' centers are expected to assist agricultural and rural development by serving as market, service and employment centers for rural hinterland. The extent to which urban rural linkages exist between small town and its hinterlands in Ethiopia needs an investigation as it is an important issue that is capable of addressing both urban and rural development. According to Rondineli and Ruddell cited in UNHSP (2005) shows that urban and rural areas must closely be linked in order to distribute social and economic service delivery more widely and to increase access of rural population urban service.

Seru town like other towns in Ethiopia has linkage with its surrounding hinterlands and with other towns. Nobody has undertaken a study on the nature and degree and dimensions of urban

rural linkages in this town. The nature of its infrastructure and service delivery affects the growth of the town. Market area is not well arranged in a way that attracts those engaged in market activities. This study attempts to fill the gap by conducting research on the dimensions of rural and urban linkages in Seru town its hinterlands.

1.2. Statement of the Problem

It is widely accepted that urban-rural linkages are natural courses of interdependence between urban and rural areas. They are not abstract but manifestation of the visible flow of people, commodity, capital, technology and information across two spatial units. Urban and rural areas are not self- sufficient. There is symbiotic relationship between the two spatial units to bring developments. Trade, migration and payment, the exchange of goods, peoples and money are the most obvious signs of the relationship between rural and urban areas. There is an exchange of raw materials and finished and semi-finished goods whose sources are found in rural and urban areas. The publication of Scotland government (2005) shows that, the linkages between small town and its surrounding rural areas that provide socio-economic development in both rural and urban areas. However, most cities in Ethiopia are established as the result of political and administrative factors and not on the basis of economic and market driven objectives. Due to this fact, the historical development of cities shows little interdependence between urban and rural areas.

Tegegne (2005) also argues that the development history of Ethiopia has been urban biased until last decades and rural biased until recent time. These unbalanced urban-rural linkage, policies and strategies limit the socio-economic interaction and interdependence of both spatial units. Moreover the implication of urban rural linkages in economic development and poverty reduction in developing countries, especially, in Ethiopia has been affected by the poor economic development, road transport, the integration of poverty reduction activities, food insecurity and less access of employment opportunities among urban and rural areas.

In most developing countries (including Ethiopia), rural urban interactions are very limited because rural areas are unable to produce enough food and raw materials and urban areas also fail to produce goods and services to satisfy the needs of rural hinterlands. Rural urban

interactions are also affected by the factors such as productions and distributions of agricultural and industrial goods (Tegegne, 2001).

Seru town like other towns has come to existence due to administrative reason. Recent government practices of the town and surrounding rural Kebeles contributes less to economic development due to shortages of sufficient and effective infrastructures as well as less integrated system of urban and rural areas.

Even though the town is serving as a center of market, employment and service delivery, there are some factors that affect the linkages between the town and surrounding rural Kebeles. Farmers in the rural areas follow traditional ways of farming which result in low agricultural output. This in turn creates the problems of purchasing livelihood goods and services. The nature of infrastructure and service provided in the town does not enhance urban rural linkages. There is inadequacy of road network to link the town with surrounding rural areas. The mere presence of town by itself could not bring about the desired development unless the town is capable of providing proper functions and stimulate urban rural linkages. An understanding of the nature and strength of linkage between helps to strengthen both urban and rural economies in Seru town. In Seru town urban – rural linkages are very weak. The various linkages between two spatial units depend up on capacity of producing of rural areas and physical infrastructure of the area. Hence, the physical infrastructure between two areas is very poor. Therefore, given all above problems and gap, this study tries to assess the nature of linkages between two spatial areas in terms of production, marketing, migration and services utilization in Seru town and its hinterlands by assessing the capacity of two spatial areas to satisfy the needs of each other.

1.3. Objective of the Study

The general objective of the study is to examine the nature and patterns of urban-rural linkages in Seru town and its hinterlands. While specific objectives are

- To analyze the production linkage between Seru town and its hinterlands.
- To identify the nature of migration linkages between Seru town and its hinterlands.
- To identify the extent to which rural households utilize agricultural inputs and public services.

- ▶ To identify local problems that affect urban-rural linkages in Seru town and its hinterlands.

1.4. Research Questions

The study will attempt to answer the following questions.

- ▶ What are the patterns of agricultural production linkages in Seru town and its hinterlands?
- ▶ What is the nature of migration linkages in Seru town and its hinterlands?
- ▶ To what extent hinterland households utilize agricultural inputs and services in the town?
- ▶ What are the factors that affect urban and rural linkage in Seru town and its hinterlands?

1.5. Research Methodologies

The study was attempted to conduct a survey study of urban and rural linkages in Seru town and its surrounding rural areas. Descriptive across-sectional method was used to identify the linkage between the town and its surrounding rural areas. The target populations were rural households with the radius of 15km from the center of the town, urban households and traders. The researcher also employed both qualitative and quantitative types of data. It was quantitative data that shows the amount of crops and livestock bought by urban households, amount of crop produced and sold by the rural households and amount of livestock owned by rural households. It was a qualitative data that the researcher gathered information about the quality of the road infrastructure that connects rural Kebeles with the Seru town, the status of linkage with distance from the town and the constraints that put back the effectiveness of urban rural linkage were also explained in qualitative form.

1.5.1. Data Sources

To conduct the study on urban -rural linkages in Seru town and its hinterlands, both primary and secondary data sources were used. Primary data was collected by using questionnaire (both structured and unstructured). Secondary data was collected from written documents like book, articles, journals and internet websites. Three types of questionnaires have been prepared for each target group under study, urban households, rural households and urban traders. Questionnaire for rural households contains the questions which examine their expenditure for agricultural inputs, about marketing linkage of their products, services they obtain from urban area and etc. Questionnaire for urban households contains the questions related to their expenditure of agricultural products, migration and the like. Questionnaire for trader also includes questions ascertain whether small town serves as collecting center of agricultural

outputs and or not. Questionnaires were translated in to ‘*Afan Oromo*’ for both urban and rural households’ respondents to avoid communication barriers and respondents give their responses easily.

1.5.2. Sampling Technique

The Woreda has 14 Kebeles from which 5 Kebeles are found about 15km radius from the town. Therefore 5 Kebeles were purposively selected. From 5 Kebeles sample size was selected stratified sampling technique. And finally simple random sampling system used to select households from each sample strata. The numbers of urban household are 1165 and rural households from 5 Kebeles are 3510 and the total numbers of household in two spatial units is 4675. Of which 262 households in both spatial areas were selected based on the proportional allocation of stratified sampling technique. From urban households 37.9% were traders.

Table1.1. distribution of Sample size in study areas

Kebeles	No households	Sample size
A. Rural Kebeles		
1.Daro Negaya	824	45
2.Daro Dibayu	719	40
3. Sa’ada	538	32
4.Waltahi	929	49
5.Waji Medicho	500	30
Sub total	3510	196
B. Seru town	1165	66
Grand Total	4675	262

Sources: Own survey, 2011

1.5.3. Data Collection Instruments

1.5.3.1. Questionnaire

Questionnaire were used as data collection techniques because it save the time and able to cover a large number of respondents and also it is very easy .The researcher administered both open and close-ended questions. The researcher used this instrument because it gives freedom for the respondents to explain their ideas and feelings without any restrictions. This technique enables the researcher to evaluate urban rural linkages in Seru town and its hinterlands.

1.5.3.2. Observation

Observation was used to fill the gap and to check the relevance of data collected through questionnaire. This was used as the alternative in the case when the households were unwilling to give full information.

1.5.3.3. Data Analysis

Both quantitative and qualitative data were used in the study. The data Collected analyzed, summarized, and presented through qualitative and quantitative methods. Tables, percentage and other figures used to illustrate the nature of urban and rural linkages.

1.6. Significance of the Study

The study will have both policy and academic significance. The result of this study will use as strategy for enhancements of the role of urban and rural linkages by concerned authorities at different levels and will provide some information on constraints that currently exist. The study will also give insight to prepare strategic plan to enhance urban rural linkages. Academically the study will also used as the reference on the study of related problems.

1.7. Limitation of the Study

The researcher faced some challenges when conduct this study. The first problem is the lack of written materials (sources) related to the problem under study. The second one was the respondents suspect the researcher as someone who is sent by government and sometimes unwillingness of some respondent to give information of their professional and the research used personal observation to overcome the problem and finally the most serious problem was shortage of finance to dig out information needed to the study and to increase number of sample size.

1.8. Organization of the Paper

This study is organized in to five chapters. The first chapter deals with the introduction parts which contain statement of the problem, objectives of the study, research question significance of the study and methodology are presented. The second chapter elaborates review of related literature. Chapter three describes the general back ground of the study area. In chapter four, the nature of urban and rural linkages in Seru town and its hinterlands has been discussed based on the data collected and finally, conclusion and recommendation are analyzed under chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1. Definitions of Urban and Rural Areas

There are various definitions given to an area to be called as urban or rural. Different countries have different criteria for these definitions, out of the criteria such as population density economic activity administrative function and infrastructural development that countries of the world use for the classification. The first two are the dominants criteria (UNDP, 2000). According to Tacoli (2004), there are three major problems to make destination between two spatial units. The first one is demographic and economic activities. Using this criterion as the base for classification has problems because different countries do have different criteria of their own. The second problem is a problem of defining the boundary between two areas. The final problem is associated to the areal coverage of the urban areas which are less than the area that urban residents and enterprises cover. This is to mean that urban areas are dependent up on the resource and ecological function of an area considerably larger than themselves. According UN, urban area is an area where non-agricultural production sectors such as manufacturing and services and their workers are concentrated. Adding to this city or urban area usually has a legal status granted by nationally government and is associated with specific administrative structure; rural areas on the other hand are regarded as place of low population density with predominantly agricultural economies.

In Ethiopia population size is used as criterion to distinguish urban areas from it s rural counter parts. Accordingly, all areas having population 2000 and above are classified as urban centers (Tegegne, 2005). Compared to other African countries, urbanization is at lowest share 15%of the total population of the country (EEA, 2005).How ever, there is high rate of urbanization due to ever increasing of urban-rural linkages .Urban centers historically emerged as center dynamic economic activity and play great role in socio-economic development process of the country. On other side, urban centers are sources of all types of modern problems including destitution, homelessness, crime and other problems. It is also true in the case of Ethiopia. In the country urban poverty is manifested in many ways ranging from several destitutions observed along major roads and every corner of urban center to same what hidden deprivation that is not

discernable to front line observers. Nevertheless the process of urbanization brings about process of developments as the farmer is usually the engine for the later (EEA, 2005).

2.2 Perspectives on Urban and Rural Settings and Urban-Rural Linkages

The understanding of rural-urban linkages is very much related to two spatial units; the urban centres and rural areas. Early studies of urban-rural linkages perceived urban and rural areas as separate entities on the ground that they are different in their aspects of occupation, environment, population size, population density, heterogeneity of the inhabitants, mobility of the people and systems of interaction (Worku, 1995). Luis (1938) assumed mutually exclusive criteria including heterogeneous versus homogenous population, densely versus sparsely settled population and industrial versus agricultural economy to make distinction between urban and rural areas. Mitchell (1956) shares the idea analyzing the early stages of the urbanization process in Africa and his labeling of African urban migrants as a standing apart person from his childhood experience, his areas of origin, neighborhoods and tribe since he viewed that the nature of urban and rural milieus were highly discrepant. He also argued that urban migrants experience different lifestyles as the set of relationships among groups of tribesmen in their rural home is very different from the set of relationships even among the same group.

Since the 1960s, the above classic view of the urban-rural divisions has been challenged on the grounds that the early urban-rural study models were focusing on the static and one-sided feature of the two spatial settings. They failed to incorporate the dynamic changes in the rural communities of origin, in the urban communities of destination and in the migrants themselves. Subsequent regional development studies revealed that urban and rural areas are two ends of one and the same continuum of social life joined through migration, and that there is a process of linkage and change brought about by the urbanization of the rural setting and the ruralization of urban life.

The study by Abu-Lughod (1961) was a turning point in challenging previous assumptions and justifying that there are no complete dichotomies between urban and rural areas, as large number of people in both spatial settings combine different income sources and environments in their livelihood. This leads to an increased level of integration and interaction, which can distort the traditional urban–rural divisions.

The concept of urban-rural linkages has gained more energy when it began to be incorporated in regional development planning and implementation strategy. Hinderink and Titus (1988) introduced the application of the urban-rural linkage through the growth centre and the rural services centre strategies. While the growth centre strategy advocates an urban industrial expansion in few selected growth canterers with increasing effects of 'modernizing' rural areas, the rural service centre strategy focuses on development of small urban centers for their own development and that of their hinterlands. Both the market and service centers approaches are considered to be engines of growth since they serve as local market points for the produce of local farms, as collection centers for exported produces and as strategic junctions for connecting to global consumers. Furthermore, service canterers can serve as a means of expression for the introduction of new agricultural supplies and technologies to rural areas and as medium points for accessing social services such as health, education, extension, administration and legal support between canterers and hinterlands. However, the experiences of several developing countries indicated that the spread effects of growth canterers appeared to have little impact on smaller canterers and rural areas growth. This situation becomes quite visible when the growth canterers maximize opportunities by maintaining strong economic linkages with extra-regional and global clients and suppliers (Funnel, 1976; Hinderink & Titus, 1988).

Another aspect of linkage in the rural-urban interaction is envisaged through the impact that rural areas create on the dynamics of urban canterers and non-agricultural activities. This is justified on the grounds that, under stable macro conditions, an increase in food grain production would stimulate growth in agricultural related sectors such as trade, transport, services and industry (Dunham, 1991). This is particularly achieved through forward consumption linkages (resulting from the expenditure of farm incomes on locally produced consumer goods and services), backward production linkages (manifested in the absorption of agriculture inputs such as machinery and fertilizer), forward production linkages (generated from local processing of agricultural outputs) and commercial forward linkages (created through marketing of agricultural outputs, diversifying crop production and maximizing technological choices) (Raneis, 1990).

Ellis and Harris (2004) pointed out that making an absolute dichotomy between development planning in rural and urban areas undermines the interdependent points of production,

consumption and market, which contribute to the creation of greater gross national output. The departure point for this study, emanates that one cannot make complete distinction between urban and rural areas on the basis of the size and the functions of settlements.

Countries have been using different criteria to distinguish between urban and rural areas. Much of the most recent data that we have on urbanization in Ethiopia, nonetheless, is based on the working definition that the CSA adopted and what was considered acceptable by the Ministry of Urban Development and Housing during the MDGs Needs Assessment study. According to this definition any settlement could be taken as an urban centre provided that it fulfilled any one of the following conditions

- If it had 2000 or more inhabit
- If it was an administrative center regardless of population size.
- If it had an urban dwellers association regardless of population size.
- If it had 1000 inhabitants engaged in non-agricultural activity.

According to 2005 census, two criteria were used to define urban areas. These criteria are Population must be more than 2000 and 75% of the population engaged non-agricultural activities. Any area which is not fulfill the above criteria is considered as rural area.

2.3. Theoretical Perspectives of Rural Urban Linkages

According to modernization theory change from traditional to modernization was to occur through the diffusion of capital, technology, values, institutional arrangements and political beliefs. From this point of view, the industrialization in the West was believed to be model that should emulate. The notion of rural urban areas duality was derived from conformity literature of urban developments that consider urban areas as the centers of urbanization and development and consider rural areas as zone of economic backwardness and cultural tradition (Slater, 1986) cited in Tegegne (2005).

On the other side the theory put emphasis on access to basic needs and provision of universal coverage of primary school. This indicates that the need of rural poor people should be met. These are by implication agricultural growth is the engine for growth. This growth is not only providing food but also stimulate demand for industrial growth and urban development. So that the argument based on modernization theory that could implies urban centers brought about the

growth of rural development. This is the process that brought about the growth of urban and rural linkages concept as one strategy to realize economic and social development. In the late 1950s and early 1960s export oriented industries in large cities as the engine of growth and trickle down effects expected to stimulate agricultural production (Tegegne, 2001). But the result is not as expected. Therefore during the late of 1960s and early 1970s agriculture was the deriving force for development for poor rural economies.

Walter Christaller (1933) achieved the central place theory to explain how urban settlements are formed and spaced out relatively to each other. The main premises of Christaller's theory was that if centralization of the mass around the nucleus is an elementary form of order of each other then the same centralized principle can be equated in urban settlements. The size of the center is determined by the types of goods and services it produced, where by the large settlements (few in numbers) produces goods and services of "higher order" (which require large market both in income and population therefore the manner of specialization) and smaller settlement produces goods and services of "lower order".

Davis (2004) identified the debt of the nature of the urban and rural relation was hold on the prominent theory and plan since 1950s. According to this study, two reasons for the renewed interests shown by policy makers. The increasing priorities in the market based strategy which place their emphasis on export oriented agricultural production and rely on efficient economic linkage connecting producers with external markets relation between urban and rural areas.

2.4. Dimensions of Urban - Rural Linkages

Different studies on the urban rural linkages shows that the dimensions and classification of linkages based on the scope and objective of the study. Tacoli (1998) divided urban rural linkages in to the following categories.

I. Spatial linkages: - It is the flows of goods, service, people, money and information across urban rural continuum. These flows are some indicators of the linkages that exist between the rural and urban parts of the country. The volume of marketed grain for example could be an indication of the grain flow. A study in 1996 indicated that the marketed grain was about 28.2 million quintals while estimates from the CSA excluding pulses and oil crops found out that the marketable surplus for 2001/02 was 14 million quintals (Wolday and Elleni, 2003). The latter

represented 17% of the total production. This is an indication of a much lower flows of grains to markets (urban areas) potential. The bulk of the production remains in rural areas for different purposes: consumption, seed and feed. Grain marketing is of course constrained by a number of factors such as subsistence production, poor infrastructure, lack of information and limited storage capacity of traders (Tegegne, 2005).

II. Sectoral linkages: - It assumed that the availability of non farm activities in rural areas and the existence of farm activities in urban areas. A sharp dichotomy of urban rural settlements often assumed that the livelihoods of their inhabitants can equally being divided in to two main mutually exclusive sectors. Accordingly, agriculture activities are for rural areas and manufacturing and services activities are for urban areas. How ever many researchers have shown that number of urban households engaging in agriculture and rural house holds those income derived from non-agriculture activities are increasing (Tacoli, 1998).According to Satterthwait and Tacoli (2003) ,this sectoral divisions between urban and rural specialists and policy does not reflect the reality in many cases, and create difficulties.

Kammeier (2002) divided urban rural linkages into seven parts. He also admitted that some linkages are cross-cutting and hard to put it in fixed categories. He also point out that elements to be analyzed and facilities required strengthening the specific linkages. Demand Linkage economic agents (such as firms, households, and individuals) operating in an economic sector buy/sell goods and services from/to those associated with other sectors. The product flows such transactions lead to are referred to as demand linkages. Demand linkages fall into two broad categories - production linkages and consumption linkages. As implied by their title, production linkages are centered on inputs and take two forms – backward and forward linkages. Backward production linkages represent the input demands of producers in a sector, while forward linkages capture the demand for the goods and/or services produced by the sector in question as inputs by producers in other sectors. To take agriculture as an example: farmers demand fertilizers, fuel, pumps, and repair services (backward linkages) and, in parallel, non-agricultural producers demand agricultural products as inputs (forward linkages). Empirically, the direction and strength of these linkages are measured by input-output interrelationships (commonly as

coefficients). Consumption linkage is in contrast summaries the pattern of household and individual demand for (or expenditure on) consumer goods and services.

To continue with the agriculture example: agriculture-related consumption linkages consist of the demand for agricultural products by farm and non-farm households together with farm households' demand for non-agricultural goods and services. Two applications continue to motivate the interest in demand linkages. Both relate to the fact that production and consumption linkages represent important characteristics of any economy. As a consequence, demand linkages are an effective device for describing the structure of any economy. That represents the first application. A related, but more analytical, application involves the use of demand linkages to specify and measure growth linkages. The central tasks, in this latter case, are identification and measurement of the impact of growth in a sector on the rest of the economy. It has been established that production and consumption patterns play a crucial role in determining the direction and importance of such growth linkages.

2.4.1 Physical Linkage

Physical or spatial linkage is expressed throughout infrastructural development. The road infrastructure is the main infrastructure serving for more than 95% of volume of ton km and passenger km in the country. Thus the extent to which different parts of the country (Ethiopia) served by road network is an indication of their connectivity and urban rural linkages

(Tegegne, 2005). Nearly 80% of populations in Ethiopia depend up on the uses of traditional models of transportation that is head and back loading, walking, and animal back transport which are low burden and some are time consuming (ERA, 2002).

2.4.2. Economic Linkage

The economic aspects of the linkage are associated with livelihoods diversification and production systems. These encompass various kinds of resources flow including labor, natural resources, agricultural commodities, and financial flows (Baker and Pedersen, 1992) and industrial goods and services flow. In this case, agricultural raw materials flow from rural to urban areas while industrial goods and services flow from urban areas to rural. Moreover, urban areas facilitate extractive processes in rural areas and rural areas facilitate manufacturing in urban areas, the processes necessary for enhancing livelihood diversification. Hence, selling of

goods and services produced in one settlement to another marks the trading and commercial relationships between towns and the surrounding rural areas as towns provide access to markets and serve as means of livelihood for the rural communities (Tostensen, 2004).

Moreover, rural urban linkage enhances diversification of means of livelihood both in rural and urban settings. In this connection, Hazell and Haggblade (1990) found out that growth in rural non-farm income and employment are strongly linked with agricultural growth. Agricultural growth will lead to expansion of high value agricultural outputs such as livestock and horticultural production, which are labor intensive and can benefit the poor. Agriculture can influence non-farm activities at least in three ways: production, consumption and labor market linkages. Agricultural production requires increased use of inputs such as fertilizers, chemicals, sprayers, irrigation and farming equipments, etc., which are either produced or distributed through non-farm enterprises. Moreover, increased agricultural output stimulates forward production linkages by providing raw materials that require milling, processing, and distribution by non-farm firms.

2.4.3 Social Linkage

The social aspects of urban and rural linkages are explained by the relationship between urban and rural dwellers. This can be established based on the existing ties in terms of livelihood; kinship, friendship, marriage and religious. Urban house holds typically send money and other commodities to rural relative while rural households supply their urban relative with food stuff, firewood, and building materials. In some instance urban household stay in rural areas and established friendship (Tostensen, 2004).

2.4.4 Environmental Linkage

The livelihood system of the society is affected by the impact of urban rural linkage on environment which provides means of production, water supply and clean air that are needed for healthy life. Environmentally the urban rural linkage is characterized by urban areas polluting the rural landscape, water and air. Industrial , commercial ,institutional and residential wastes in urban areas is often dumped directly in rural areas or emitted in to air with the ultimate destination in rural areas(Abdel-Ati,1992) cited in Zeleke(2006). The rural areas also pollute the

urban environment by affecting sources of drinking water or atmosphere through the use of agricultural chemical such as fertilizer and pesticides (Kemete, 2000).

2.4.5. Service Delivery Linkage

Urban areas deliver different kinds of services. The availability of the services attracts the surrounding rural areas. Regarding to the services delivery linkages Rondineli and Ruddell that urban centers and rural areas must be closely linked in order to distribute social and economic services, widely and to increase the access to rural population to urban amenities. Where transportation and communication network have been developed between urban and rural areas, the rural areas close to the urban areas are able to take the advantage of improved and specialized service in urban areas while improved accessibility to urban areas makes it possible to rural areas to enjoy high quality service in urban areas.

2.5. Migration and Urban-Rural Linkages

Migration is flexible and dynamic phenomenon that encompasses territorial mobility of people and involves movement like absence from home for periods (from a couple of days to several years), seasonal migration and permanent relocation. Although diversified in forms, it involves a certain degree of commitment on the part of migration to the place of origin and destination. This shows whether the migration is permanent or non-permanent in nature. Non-permanent forms of migration now are becoming increasingly important given network and in the information technology (Magersa, 2007).

Migration is one of the vital sources that contribute to rapid urbanization, generally associated with higher level of productivity and development. Migration also plays an important role by linking people with spaces and transferring of people from places of lower opportunities to those of higher opportunities and subsequent transfer of resource. The flows of people between urban and rural areas is caused by push (economic hardship in the place of origin) and pull (economic opportunities) is one of the pushing factors from rural areas and the possibility job opportunities and better education in the cities are some of the pulling factors from the urban part as the case of Bangladesh (J. Garret & Sh. Chowdhury, 200) cited in Magersa (2007). Rural urban migration is mostly for economic reasons however, most studies show that the prevailing urban poverty in developing countries lead to assumption that migrants do not know what to expect, that illusions

about the prospects lying ahead bring them to an urban environment in which they find themselves trapped (H.C dandekar,1997). Contrary to this, other studies reports that most migration considered that they have improved their living conditions and they have satisfied with their move. Basing on this study many rural communities have developed migration strategies which have informed by experiences of migrants who have kept in touch who return to the village an visit or to stay and by villages fail to account culturally and socially specific factors which play an important t role in determining direction composition and type of movement (Tacoli, 2002).

Rural urban migration and or urban-rural migration is one of the major indicator of urban-rural interactions and interdependences rural areas and cities are linked by long term rural urban circular and reverse urban-rural migration. Urban to rural migration are often associated with economic decline and increase poverty unlike the former one which is associated to economic development (Tacoli, 1998 & 2004).

Migration is gender and age dependent. The complexity in migration direction and duration is matched by the composition of flow which reflects wider social- economic dynamics. The age and gender of who moves and who stays can have a significant impact on source of area in terms of labor availability remittance, household organization and agricultural production system (Tacoli, 1998). Labor market at destination areas are also segmented along of gender, age and ethnicity with the later usually reflecting migrant networks control over specific sections of labor market at destination (Tacoli, 2002).

2.6. Factors Influencing Urban-Rural Linkages

There are different factors which affect urban- rural linkage such as government policies, built environment rural production, structure of rural economy, social-economic relation natural environment, resource endowment and spatial linkage (Tegegne and et al, 2005).Government policies can affect urban- rural linkage in various ways. In developing countries the government intervened in fixing the price of grains, determining grain market, restricting regional grain movement and the participation of the private sectors through limiting license (Chowdhury, 2005).Currently governments in many developing countries have embarked up on decentralization. Although decentralization includes many advantages it can also have a

significant impact on urban- rural linkage (Bajracharya, 2005). The types of land tenure which banned mobility and diversification on job opportunities have reduced urban -rural linkage (Tegegne, 2005). Another factor of urban rural linkage is the level of built environment. Adequate infrastructure development such as road communication network make centers source of energy, water supply etc are pillars of urban- rural linkage development approach. The absence or presence of these facilities affect the urban rural linkages (Douglass, 1998). The third important factor is rural production regime of organization of production. The organization of production within a given sector will have subsequent bearing on urban- rural linkage. According to Douglass (1998) commercial cash Crop production which use low wage labor can show little demand for the local town services while small holder production regimes depend to a great extent, on town to market, supplies cooperative and consumer shopping and hence relatively stronger urban rural linkages . Socio- economic relations is another factor for urban rural linkage. For example social exclusion from employment market credit and access to education is crucial issue in multiracial and multilingual countries and these will have tendency to distinguish urban rural linkages (Chowdhury, 2005). Finally natural environment and resource endowment are another factors for rural-urban linkages. (Deforestation can lead to continuous flooding and drought and this situation may enhance the pattern of access and types of function supported the hinterlands).

2.7. Urban- Rural Linkages in Ethiopia

Tegegne (2001) identified that Ethiopia is predominantly agrarian country those prospects for development rely on rural progress. In the past the attempt to increase the productivity of agriculture and bring about rural development has focused on the structural problems. These problems are related to land tenure, lack of input, inadequate and fragmented land size and pricing and overall policies of the country. The policies are narrowly focused because of price change, institutional and technical innovations alone will not bring the desired change. Farmers may face obstacle in having access to supporting service and off-farm opportunities. The later for example, provide income diversification and enable farmers to move the risk taking in using inputs and technical innovations. These opportunities would be realized if we exploit linkage between agricultural and non-agricultural linkages. Generally this linkage could be manifested in different forms of demand that could be exhibited by households, consumer and producers.

Households in rural areas demands urban goods and service while urban households' demands farm products.

The study conducted by Gemen technical cooperation (2006) under the ministry of work and urban development describes the management of economic development across spatial areas. The study also shows that towns and cities in Ethiopia do not have strong coordination with their rural hinterlands and administration in all aspects of the town. There is no institutional framework for the coordination and therefore regional institutions work on their respective sector independently.

CHAPTER THREE

DESCRIPTION OF THE STUDY AREA

3.1. Historical Background of the Study Area

Seru is the capital city of Seru woreda. The establishment of Seru town has long history. Seru is found in the Southeastern part of the country, 300km from Addis Ababa, 175km from the zone capital Asella, and 75km from Adele and about 27km from Bele town. The town has some basic social service such as improved gravel road and general semi-digital telephone. The town's topography is studied and the town is getting master plan and in near future the town HAS got a 24 hour electricity service in study year.

Seru town is the oldest town in Arsi Zone next to the Ticho town. According to the elders, Seru town was established before 1935 in the place called "Mire" with few houses. At that time "mire" was the place where a church was established at about 1903/4. Marketing activities (buying and selling) was made in Ticho town. The then landlord called Kebir Saliya Sadiqo gathered all the landlords and discussed on the importance of establishing the market. A market was then established in the place called Oda Qancare. In order to keep the security of the people, k/Saliya Sadiqo took the responsibility to administer the market area.

In the 1935 when the Italian troops came to Seru, they settled on the top of Tulu Daltu Mountain to the East of the present town. Latter they changed their place to the South of the town in the present day woreda administration office. This is an upland and suitable for telegram communication. At the time when the town was controlled by Italian troops, the total area of the town was estimated to be only 12 hectares.

After the withdrawal of Italian troops 1940, the town was administered by the man called Basha Waldayas Gebayehu and the town became 'woreda' capital town. The then boundary of the Seru 'woreda' was in the West Habe town, in the North Sude woreda, in the East Shenan River Amigna and West Hararghe zone, and river Wabe Shebelle which separate Arsi and Bale zone, in the South again Wabe Shebelle River. At this time the then administration of Seru woreda is divided in to Amigna, Bele, and Arsi Robe woredas.

3.2. Physical Setting of the Study Area

3.2.1. Location and Area

Seru town is one of the 180 Woreda's in the East Arsi zone of Oromia Regional National State. It is bordered by South and East Wabe Shebelle River which separate Arsi and Bale zone, on the West again Wabe River, on the North Amigna 'woreda' and in the Northeast West Hararghe zone. The town is approximately located at the 07°40' - 40°12' North latitude and East longitude.

3.2.2. Population

In 1994, the population of Seru woreda was 80,358 of which 40,007 were male and 40,351 were women. About 5.39% of Population was urban dwellers and the rests were rural dwellers (CSA, 1994). In 2005 the total population of the woreda reached 112, 183. 56,642 were men and 55,541 were female and 6.89% were urban dwellers which is less than Zone average of 12.3%. In 2005, the area of the zone is said to be 2,361.57 kilometer square with estimated population density of 47.7 people per square kilometers which is less than the woreda average of 132.2 people per square kilometers. According to data obtained from Seru town administration office, after Bele woreda was separated from Seru in 2006/7, the total areas of the Seru woreda reduced in to 1687.67 square kilometers and the population was reduced to 73,591 with the population density of 43.6 people per square kilometers and the population of Seru town found to be 8,016 of which 4,276 were male and 3,740 were female.

3.2.3. Land use Type in Seru Woreda

According to document of Seru 'woreda' Finance and Economic Development, land use conditions of the 'woreda' is classified as Cultivated land, Cultivable land(arable), Forest land, Grazing land, Water land, Mountainous and rock, Built up areas, land reserved for different social services and Bush land. Land use of the 'woreda' (table3.1) Shows that the land use in the 'woreda' is dominated by bush land which account for about 43.73% the total land. Arable land is very important in the 'woreda' it accounts for about 36.7% of the land indicating that there is a room for future expansion in the 'woreda'. About 10.74% of the land is devoted for annual and perennial crops. Land under grazing account for 2.6% where as land covered by forest is only 0.75%. It is therefore evident that deforestation has taken place in the 'woreda'. Land devoted for built up areas is 1.52%, for different social services 2.1% and about 1.73% is mountainous and rocky land.

Table 3.1 Land use type, area and percentages in Seru woreda.

NO	Land use pattern	Areas coverage(km2)	percent
1	Cultivated land	181.28	10.74
2	Cultivable land	620	36.7
3	Forest land	12.59	0.75
4	Grazing land	44.36	2.60
5	Water land	1.21	0.07
6	Mountainous and rock	29.22	1.73
7	Built up areas	25.6	1.52
8	Different social services	35.49	2.10
9	Bush land	737.95	43.73
	Total	1687.7 km ²	100.00%

Source: - Seru Woreda Finance and Economic Development Office, 2010

3.2.4. Climate

Data for the climate of the study area obtained from national meteorological service agency. The climate of study area inferred from meteorological record of Seru station. According to the traditional Agro-climatic zone which considers rain fall, climate and altitude, the study area lies within dry ('kola') and 'Woina Dega' Agro-climatic zone. About 98% of the woreda lies within Kolla type of climate and only 2% found in the Woina Dega type of climate. 'Kola' areas range between 950-1500m above Sea level where as 'Woina Dega' ranges between 1500-2500m above sea level. The mean annual rain fall is 700mm-1200mm in summer and winter respectively and the mean maximum and minimum annual temperature of the year is 27°C and 18°C December to February and July to October respectively.

3.3. Economic Activities

3.3.1. Agriculture

Agriculture is the most common economic activity of rural population of Seru 'woreda'. Farming system in the 'woreda' is mixed farming both crop production and animal rearing. The major cereal crops produced in this area are in 'Woina Dega' part wheat, barley, and in the 'Kolla' part maize, haricot bean and teff are dominant.

3.3.2. Trade, Industry and Tourism

Seru town is the center of activities of the 'woreda' as distribution center. All rural Kebeles gain their goods and services from Seru town. In Seru town, includes 16 grain mills employing 45 people, as well as 269 registered public and private businessmen trading firms in the woreda, of

which 26% were wholesalers, 57.6% retailers and 57.6% were service providers. Other is believed to be operating on informal sectors. There are about 18 tourist attracting historical sites in the woreda. From these sites kokobe cave, Sheik Kamandhe, Sheik Abbas Building and Cafa Sheik Abbas are the most known tourist site in the district.

3.4. Infrastructure

Urban-rural linkages are highly influenced by the availability of different types of infrastructures in a given area. Physical, social and economic infrastructure plays an important role in improving rural productivity and access to market. The availability and affordability of physical infrastructure is an important in connecting producers to local urban centers (Satterthwaite, 2003). Therefore rural producers' physical access to market and the extent of these urban centers' connection to wider networks of Regional, National and International urban centers are dependent up on the availability of infrastructure (Magersa, 2007).

3.4.1. Physical Infrastructure

The only modern mode of transport available in Seru 'woreda' is road transport. The quality of road network in the study area is very poor compared to other parts of the country. The movement from one place to another within 'woreda' and with other 'woreda' is very difficult especially during rainy season. There is no route through Seru 'woreda' to other town. There is only one route that connect Seru town to other town.

3.4.2. Social Infrastructure

3.4.3. Health

Health institution play an important role in order to have healthy citizen capable of producing that in turn contribute to economic development of the country. The town has one health center, three clinics (privately owned), one rural drug vender and five health posts.

3.4.4. Education

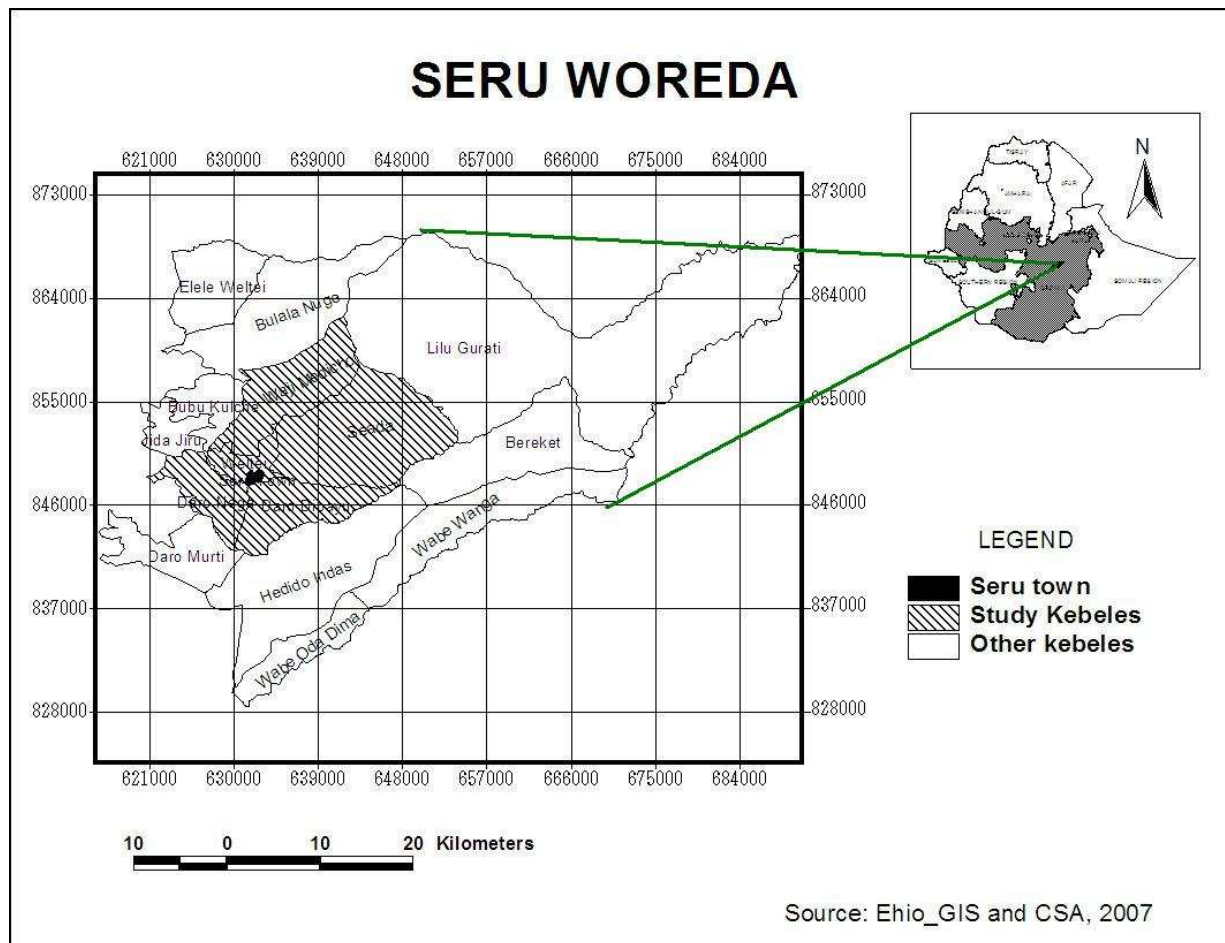
Education is very important for development. The agricultural researches that provide extension services and other inputs; and technologies that increase production are gain through education. The availability of schools and training centers are essential for linking urban and rural areas through the movement of capital human and financial elements. The 'woreda' has one KG, 15 primary schools (1-4), 15 junior schools (5-8), one secondary school (9-10) and no preparatory

and other colleges and training centers like technical and vocational school (TVET) and teacher colleges.

3.4.5. Other Infrastructure

There is only one route that connects the town to other towns. Communication infrastructures like telephone and postal services are important for social and economic activities of the communities. For example, telephone is one of the most important means of communication used by the traders to obtain recent information they need. Hence it has impact on the urban and rural linkage. In terms of telephone Seru town has digital telephone service and in the study year, the mobile phone service becomes functional in woreda. Unfortunately, the woreda has no postal service.

Other infrastructure like bank and microfinance service play important role in facilitating urban and rural linkages. However, in Seru town there is no bank and credit and saving services like microfinance.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1. Characteristics of Hinterlands' Households

4.1.1. Age of Rural Households

Age is an important demographic characteristic of the sample households. The age of households ranges from 18-69 with the mean of 39.20 and median age of 49. Table 4.1 illustrates that about 25.0% of the respondents were in the age group of 18-30. About 39.3% included in the second age group, that is 31-43. This age group is the one which contains large number of sample households. The third age group contains 27.6% of the total sample size. Only 6.1% and 2.0% were included in the age group of 57-69 and above 69 years respectively.

The age structure has also significant implication on the economic activities of the households. As indicated below majority of the sample in the study area shows that, there belong to 31-43 age group. This age group is adult and productive age and is independent. These productive people are the factors of production and they have positive implication on development and also urban rural linkages.

Table 4.1 Age structures of rural households

Age structure of rural households		Frequency	Percent
Valid	18-30	49	25.00
	31-43	77	39.00
	44-56	54	28.00
	57-69	12	6.00
	>69	4	2.00
	Total	196	100.00

Source:-Own computation, 2011

4.1.2. Gender of Rural Households

Table 4.2 shows the gender structures of rural population. The sample households are male dominated. Male accounts for 84% of the total sample population. Female respondents form 16% of total rural sample households.

Table 4.2 Gender structures of rural households

Gender		Frequency	Percent
Valid	Female	31	16.00
	Male	165	84.00
	Total	196	100.00

Source: own survey, 2011

4.1.3. Occupation of Rural Households

In the rural areas of Seru town, the most common occupations is both animal rearing and crop cultivation which account for 77 % of all activities. Only 10.20 % of the sample households are crop producers without animal rearing and 6.10% are engaged only in animal rearing. 7.10% of the total rural sample households is engaged in trade and crop production (See table 4.3).

Table 4.3.Occupation of rural households

Occupation conditions of rural households		Frequency	Percent
Valid	crop producer	20	10.20
	animal rearing	12	6.10
	mixed	150	76.50
	trade and crop producers	14	7.10
	Total	196	100.00

Source: own survey, 2011

4.1.4. Educational level of Rural Households

In Educational attainment, about 37.60 % can read and write, 31.10% have attained 1-4 grades, 17.90% of the respondents have educational level of 5-8 grades, and 7.70.% have attained grade 9 and 10 and only 3% had more than 10 grades. Educational attainments have positive implication on the urban rural linkages particularly and on economic and social development in general. Educated people are mostly engaged in non agricultural activities like trade, industries and service. These conditions facilitate urban rural linkages and transfer to industrialization.

Table 4.4 Education levels of rural sample households

Education level of rural households		Frequency	Percent
Valid	Read and write	74	37.80
	1-4	61	31.10
	5-8	35	17.90
	9 and 10	15	7.70
	>10	5	2.60
	missing value	6	3.10
	Total	196	100.00

Source: Own computation, 2011

4.2. Condition of Farming

4.2.1 land Holding

The average land holding size of the sample household is about 0.50 hectare per household. This is relatively more than the 'woreda's average land holding size which is 0.44 hectare per household. As to classification of land by fertility, majorities of sample households classified their land as fertile and other as semi- fertile and some said unfertile.

4.2.2. Livestock Production

Significant variation observed in livestock ownership within sample households though they reported that they have different types of livestock (*see table 4.5*).

Table 4.5 average number of livestock owned by rural households

Types of cattle	Average owned	No of respondents	Percent
Ox	1.46	61	31.00
Cow	1.37	27	13.80
Goat	2.35	34	17.30
Sheep	2.32	31	15.80
Horse	0.02	15	7.70
Donkey	1.35	18	9.20
Mule	0.01	10	5.20
Total		196	100.00

Source: own survey, 2011

Table 4.5 shows that the average livestock owned by rural households. The average number of oxen owned per household is less than two, which has its own impact on farming system.

Relatively there is high number of goats and sheep ownership in the study area. Relatively except donkey, other pack animal like horses and mules are not common in study area.

4.2.3. Crop Production

Farm size and oxen ownership are among the most the important factors that affect the volume of crop production of the rural households.

Table 4.6 Rural households' crop production and its purpose (last year)

No	Types of crops	Average product in quintal	Primary purpose
2	Wheat	6.39	Consumption
3	Teff	3.99	Consumption and sale
4	Sorghum	6.21	Consumption
5	Barley	3.18	Consumption
6	Maize	3.01	Consumption
7	Pea	2.01	Consumption
8	Bean	0.93	Consumption
9	Haricot been	3.88	commercial

Source: own survey, 2011

As indicated in the table 4.6, rural households produce small amount of crop. Due to this, the all most all crop produced used for home consumption purpose. Only haricot been used for commercial purpose. Most of the respondents could produce more than three types of crops. Majority of respondents produced wheat, maize and sorghum.

4.3. Characteristics of urban Households

4.3.1. Age of Urban Households

The sample is selected across different age groups. The lower age boundary is found out to be 18 year and the sample households mean age is 22 year. Table illustrates that most of the respondents lies within 31-43 age groups account for about 42.40%. This age group includes adult households. 12(18.20%) households were in the age group of 18-30. 7.60% of households found in the 57-69 age group and only 3% are found in the last age group.

Table 4.7 Age structure of urban households

Age group		Frequency	Percent
Valid	18-30	12	18.20
	31-43	28	42.40
	44-56	19	28.80
	57-69	5	7.60
	>69	2	3.00
	Total	66	100.00

Source: - Own survey data, 2011

Age is an important demographic characteristic because as the age of the households become older and older; their capacity in the production becomes decreases. On the other hand, age has direct link to productivity. Youth are the one who contribute to economic development.

4.3.2. Gender of Urban Households

Table 4.8 shows the gender structures of urban sample population. Like that of rural households, urban sample households are also male dominated. Males account for 85.80% of the total sample population. Female respondents form 15.20% of total sample households. Imbalance in gender structure may implies that most of the activities in the town are male driven.

Table 4.8 Gender structure household respondents

Gender		Frequency	Percent
Valid	female	10	15.20
	male	56	84.80
	Total	66	100.00

Source: - Own survey data, 2011

4.3.3. Education Level of Urban Households

Table 4.9 illustrates that, most of the urban households' educational level lies within junior school (5-8). This accounts for about 31.80%. About 7.60% of urban sample households can read and write, 15.20% of the respondents have attained first cycle of primary school (1-4) and 18.20% has completed grade 9 and 10. Only 27.30% of the respondents attain above grade 10.

Table 4.9 Educational level of urban household respondents

Education level		Frequency	Percent
Valid	Read and write	5	7.60
	1-4	10	15.20
	5-8	21	31.80
	9 and 10	12	18.20
	>10	18	27.30
	Total	66	100.00

Source: own survey, 2011

4.3.4. Occupation of Urban Households

Urban households have different occupations like Trading, government work laborers and other activities. The following table shows the different occupations of the respondents.

Table 4.10. Occupation of urban household respondents

Occupation		Frequency	Percent
Valid	Trader	25	37.90
	government employees	15	22.70
	Laborers	9	13.60
	other	17	25.80
	Total	66	100.00

Source:-own computation, 2011

As indicated in the above table. Large numbers of households are traders accounting for about 37.90%. 22.70% is government employees and 13.60% is daily worker or laborers. Other urban activities account for about 25.80%. Trade is an important activity that connects urban and rural households. Trade allows exchange of commodities between two spatial areas. Exchanges of goods and service between urban and rural area is one types of urban and rural linkages. There fore trade can have significance role in urban and rural linkages in the study town.

4.4. Roles and Functions of Seru Town

At present the town providing various goods and services for people in the center and hinterlands as well. The status of administration coupled with other factors could have a differential impact on type and patterns of urban-rural linkage. The town has one health center and one health post, network coverage and semi-digital telecommunication. There is no bank water supply and postal service in the town. Table 4.11 shows the function of the town and the availability of goods and services for urban and hinterlands' residents.

Table 4.11 Business types and Functions of Seru town

No	Business type	availability
1	Private trade and services	
	Hotel	✓
	Bar	✓
	Restaurant	✓
	Bakery	✓
	Grain trade	✓
	Berber	✓
	Metal work	✓
	Wood work	✓
	Mill house	✓
	Retail trade	✓
2	Public and social services	
	Education	
	KG	✓
	Primary (1-4)	✓
	Junior (1-5)	✓
	Secondary (9-10)	✓
	Preparatory (11-12)	X
	Health	
	Pharmacy	✓
	Clinic	✓
	Health center	✓
3	Infrastructures	
	Telephone	✓
	Electricity	✓
	Bank	x
	Water supply	x
	Transport root	✓
4	Administration	✓
	Police station	✓
	Judicial court	✓
	Municipality	✓
	Administration office	✓
	Finance office	✓
	Education office	✓
	Agriculture office	✓
5	Agriculture	✓
	Veterinary service	✓
	Livestock breeding	✓
	Input supply store	✓
	Social recreation	✓

Source own survey, 2011

X: represent absence of service and ✓: represent the present of services

4.4.1. Sources of Revenue of the Town

In Seru town different economic activities are carried out by urban households to meet their livelihood strategies. These activities are the sources of revenue for the municipality. The town gets revenue mainly from the following activities. These are different taxes (production), Livestock tax, Land rent, house tax/rent, commercial tax, bus rent, license for construction of house and fences, different fees, Fees from loading and unloading and Property transfer fees. Livestock tax and land rent are by far the main sources of revenue of the town.

Table 4.12. Revenue plan and actual performance of Seru town from 2006/7 to 2010/11

year	Plan to be collected	Actual performance	Percent (%)
2006/7	405,250.00	146,522.50	29.00
2007/8	500,350.00	150,105.48	30.00
2008/9	600,036.00	194,773.68	32.46
2009/10	400,000.00	221,801.35	55.45
2010/11	450,000.00	Processing	70 expected

Source: - Seru Municipal office, 2010

In comparing the plan and actual performance in 2006/7 it can be seen that more than 70% of the revenue remains uncollected. It is only 29% which was collected. The uncollected is estimated to amount 255,144.52 birr. In the 2007/8 year the performance was also very low, only 30 % (150,105.48 birr) was collected and 70 % (350,244.52 birr) remain uncollected. In the 2008/9 the collected revenue has increased and reached about 32.46 % (194,773.68 birr). This is about one-third of the plan. In the 2009/10 year more than half (55.45%) was collected, which compared to the previous three years shows better achievement. In the study year, 2010/11 it is expected more than 70% will be collected. In fact that Seru town is increasing its collection capacity is a positive sign and needs to be further strengthened.

There are two market days per week in Seru town (Tuesday and Saturday). In these days, agricultural outputs, livestock and industrial goods come to the market from the surrounding merchants. There are four general market areas scattered in different parts of the town. These are grain market, fruit market, industrial product market and livestock market. The livestock Market of the town is found at the North of the town. It is not fenced and does not have facilities that can

serve market attendants. The area is located at the periphery of the town. Since road does not reach the area it is unable to transport cattle from the market. The total area of livestock market is only 0.42 hectare serving 2800 livestock per market day.

4.4.2. Characteristics of Urban Traders

In the town there are different small scale trading activities are carried out. The most important trade engaged is Grain trade and retail. The main features of these types of trade are discussed hereafter

4.4.2.1. Grain Traders

From sample traders nine were grain traders. Their capital ranges from 9,000 to 21,000 Birr with an average capital of 15,000 Birr. The sources of their income are themselves and their relative as there is no Bank and microfinance service in the town. They said that they purchase the grain from rural farmers in the market of the town and export to other towns like Adama and Addis Ababa. Hinterlands areas are known by different types of crops. For example, Woina Dega areas are known by wheat and Barley (Waltahi), Daro Negaya and Daro Dibayu are known by sorghum, Haricot bean and teff production.

4.4.2.2. Retailers

Retailer traders in the town are small business owners. They operate privately and sell consumer goods. Compared with grain traders, their capital is lower which ranges from 500 to 2500 Birr. They purchase items for whole sales and retail to consumers in the markets.

4.5. FORMS OF URBAN-RURAL LINKAGES

Urban –rural linkages have different forms and dimensions. However, this study focused on urban-rural linkages and give due attention on spatial linkages such as production and consumption linkages (crop production, livestock production use of agricultural inputs), marketing linkages (flow of production, livestock and industrial goods and services), flows of people (migration and visiting pattern) , services delivery linkages(education, health) and factors affecting urban-rural linkages.

4.5.1. Production Linkages

Production linkages are manifested in the forms of backward and forward production linkages. Backward linkages results when the rural farmers use agricultural inputs such as improved seeds, pesticide, herbicides and fertilizer. While forward production linkages involve processing and distribution of agricultural outputs of rural hinterlands household by firm at nearby town. Agricultural inputs help in increasing productivity in nourishing crop with minerals that are necessary for production. Therefore, small towns are expected to improve farmers' access to agricultural inputs. An extent to which local farmers utilize agricultural inputs and extension services and whether small towns are the source of these services to local farmer will reveal the impacts of small town on the hinterlands. Survey of rural households reveals that about 89% of rural households get inputs from Seru woreda agriculture office.

Table 4.13 Rural households used agricultural inputs last year (2009/10)

Agricultural inputs	Average expenditure (Birr)	Number	Percent
Fertilizer	531.50	192	98.00
Improved seeds	481.25	46	23.53
Herbicides	52.35	109	55.62
Pesticides	21.50	98	50.00

Source: own survey, 2011

Table 4.13 depicts that the predominant types of input used by rural farmers in Seru woreda was fertilizer. Almost the entire sample population used fertilizer last year. However, this does not

mean that they used sufficient amount of fertilizer. This small amount of utilization of fertilizer will reduce the amount of crop production which in turn limits urban-rural linkages in terms of crop production and supply to the market. It is only about 56% and 50% of the respondents reported that they used herbicides and pesticides respectively. About 23.53% of respondents have used improved seed on the 2009/10 production years.

As far as the average expenditure of inputs concerned, Fertilizer takes the first rank and followed by improved seeds and herbicides. Other inputs such as tractor and harvesters have not been by any of the sample households. Respondents also suggested that there are different reasons for not using herbicides and pesticides. The major problems reported by famers are high cost of fertilizer and irrelevance of inputs. Farmers believed that the use of chemicals could have negative impact on the quality of honey production.

4.5.2. Marketing Linkages

Marketing linkage is manifested when urban dwellers and traders purchase agricultural outputs from rural households. The inputs to the process to marketing linkage is therefore, agricultural products and the output is the consumption of products by urban consumers (White, J.T, 2005) cited in Magersa, 2007). The simplest link between consumer (urban households) and producers (farmers) is where agricultural producers sell their own products directly in a market to the consumers. But the marketing linkages between agricultural producers and urban consumers are sometimes provided through a network of traders. Here the following sections discussed about agricultural out puts supplied to the market by rural farmers, the town potential of absorbing hinterlands' products and the marketing channel of the town with other bigger town.

4.5.2.1. Agricultural Outputs and Marketing

Small town connected to larger centers are expected to remove the problem farmers face in marketing agricultural products and bringing products to market and respond to the available demand in the town. Traders also avoid high cost of collecting products from discrete settlements. On the other hands if market towns are not connected to their hinterland subsistence production will prevail and there will be little brought to market (Tegegne, 2001:56). Study conducted in 15 Ethiopia villages by Dercon and Hoddinott (2005) cited in Eshetu (2007)

revealed that rural households have sold 25%-60% of their grain crops and 75% of their livestock in nearest small town in a year.

Table 4.14 provides the types of grain crop their average annual output and an average amount sold both in quality and value terms by rural farmers in Seru town by rural hinterlands. Teff, wheat, haricot been, onion and peas are among the most important crops brought to Seru market about 68.2% of the producers of teff reported that they have sold about 75% of their products last year. About 97.10 % of the farm households who produced wheat reported that they have sold 42.50% of their product in Seru market last year. Similarly 72.50% of rural households who produced haricot bean reported that they have sold 96% of their products last year. In remote areas of Seru woreda haricot bean is the most common cash crop. About 76% of respondents who produced sorghum have brought only 39% of their product to the market and 52% of producers of barley also reported that they have sold 25% of their product. Sorghum and barley are crops which have low proportion of sale, because rural households used them mainly for home consumption.

Table 4.14 Crop output, types, amount sold and place of sale by rural households in 2009/10

Types of crops	Average product in quintal	Average sold in quintal		Average sold (birr)	No of farmers	percent
		No	%			
Wheat	6.39	2.71	42.5	1395.65	190	97.10
Teff	3.99	2.299	75	2066.09	169	68.20
Sorghum	6.21	2.23	39	1010.19	149	76.40
Barley	3.18	0.79	25	310.78	102	52.00
Maize	3.01	1.23	41	480.93	115	59.80
Pea	2.01	1.02	51	1531.02	51	26.00
Bean	0.93	0.44	48	625.24	134	68.20
Haricot been	3.88	3.72	96	2205.96	142	72.50
Onion	2.00	1.06	53	210.94	125	63.80

Source: own survey data, 2011

4.5.2.2. Purchase of Crops by Urban Households

One of the assumptions of many rural-urban linkage studies is that farmer households create demand for urban goods and small towns can meet much demand of rural households (Gaile, 1992) cited in (Tegegne, 2001:63). Towns are playing a worthy of serving as a collecting and distributing center for the surrounding hinter lands' agricultural products and thereby linking the

hinterland with regional and national economies (Tacoli, 2002). One of marketing linkage of urban households to rural households is through purchasing grain (consumer goods) crop.

Table 4.15 shows that, the grain crops (food consumption) of urban households. Urban households of Seru town are the highest consumers of teff, as indicated in the table. About 81.5 % of urban households responded that they have bought and consumed the average of 52.30 kg of teff in one month and its average expenditure found to be 203.97 Birr. This crop is also one of the dominant crops produced by hinterland households. 73.10 % of urban sample households also bought and consumed 41.30 kg of sorghum and their expenditure was estimated to be 67.92 Birr. The second dominant consumption crop is wheat. 61.20% of urban households reported that they have bought 15.20 of kg and expended 42.56 Birr in month. Households in Seru town responded that they have bought crop in the market directly from producers and in rare cases they also bought from traders.

Table 4.15 Grain crops bought and average expenditure by urban households January, 2011

Types of crops	Consumption in past February, 2011		No of household respondents	percent
	Amount in kg	Av. Amount in Birr		
Teff	52.30	203.97	54	81.50
Wheat	15.20	42.56	40	61.20
Sorghum	41.30	67.92	48	73.10
Bean	2.10	19.95	50	76.40
Pea	2.50	24.66	30	45.10
Barley	6.10	17.69	32	48.90
Maize	9.50	14.25	47	71.00
Onion	5.31	12.90	39	58.90

Source: own survey data 2011

4.5.2.3. Livestock Production and Marketing

The argument made for marketing of crops could be made to the marketing of livestock as well. Hence, small town are expected to stimulate higher livestock sell to earn income on the parts of farmer (Tegegne, 2001; 60). Rural households of Seru woreda have reported that they sold livestock and livestock product within 1 year (see table 4.16). In Seru woreda farms have sold poultry product, goat, sheep, ox and etc. poultry has the highest sale among the others. About 49% of the owners of poultry have sold nearly 38% of poultry in the market. Regarding to sheep and goat, rural households indicated that, they have sold sheep and goats in the market. About 24% of the owners of sheep have sold nearly 51% percent of their sheep. Similarly, 11% of the

rural households who have goats have also sold 63% of their goats. Rural farmers' have sold other animals like oxen, cows and donkeys. About 9% and 5% of respondents have sold 9% oxen and 41% of cows respectively.

Table 4.16 livestock owned and sold by rural households in 12 months

Types of livestock	number owned in 12 month	Amount sold in 12 moth		No of households	
		No	%	No	%
Ox	1.66	0.15	9	18	9.00
Cow	1.43	0.59	41	10	5.00
Sheep	6.01	3.06	51	47	24.00
Goat	6.58	4.15	63	22	11.00
Donkey	0.9	0.19	21	4	2.00
Poultry	8.39	3.00	36	96	49.00

Source: own survey data, 2011

As indicated in Table 4.16, livestock which have small proportion of sale are ox (9%) and donkey (21%). The study area used traditional farming system, entire households used oxen ploughing. And donkeys are used as the means of transportation system to transport goods and to/from rural areas.

4.5.2.4. Purchase of Livestock by Urban Households

Another way of looking at marketing linkage is observing urban households' purchase of livestock. As it is indicated in the table 4.17, urban dwellers have bought goat, sheep, cow and poultry. Poultry and goats have higher numbers of consumers. Most frequently goat, sheep and poultry are used for consumption of urban household. 40% of sample urban households have bought an average of more than five hens within a year. 27% of sample has bought more than two sheep in a year and 33% of sample urban people have bought more than two goats in a year.

Table 4.17 urban households purchase livestock in a year

Types of livestock	Average consumption		Purchase from		No of respondents	
	No	Birr	Famer	Trader	No	%
Sheep	2.21	321.00	75	25	16	27.00
Goat	2.87	295.75	69	31	22	33.00
Poultry	5.24	132.31	85	15	26	40.00

Source: own survey data, 2011

The above shows not closed market which means the products are sold not only in Seru town and the rests are locally consumed, but also there is a trade outlet with other town such as Bele town, Adele and Arsi Robe town. As tried to mention earlier there are two market day in Seru town, Saturday and Tuesday. In these day traders come from those towns mentioned and purchase agricultural products and livestock from the town and take to other big town like Addis Ababa and Adama. They also supply industrial products like cloth, shoes and food items and agricultural inputs to the households which they cannot get from Seru town.

4.5.2.5. Off-farm Activities

Off-farm activities are considered as part of survival strategies offering cyclical and seasonal employment and supplementing meager farm income in drought-affected areas (Mulat, 1995). Observed off-farm activities in the study area are more or less the type that could consider as part of survival strategies or practices to supplement meager income. Various definitions are given to off-farm activities. However, this paper refers to all primary, secondary and tertiary activities practiced in the study area. Given due emphasis to the vital role of urbanization on development, the development of off- farm activities play crucial role. Off- farm sector offer two-way linkage between farm and non-farm activities and also serve as bridge between urban and rural areas.

Table 4.18 Shows numbers of rural farmers engaged in off-farm activities

Did you engaged in off-farm activities?	No of respondents	Percent (%)
Yes	100	51.00
No	84	43.00
Not responded	12	6.00
Total	196	100.00

Source: own survey, 2011

Of total rural sample households, 51% reported that they are engaged in off-farm activities and 43% of rural sample households reported that they did not. Of 51% rural households who engaged in off-farm activities reported that they engaged in fuel and charcoal trading, and followed by trade (31%), 14% of the respondents said that they engaged in daily labor .Trade include marketing with such items like vegetable, livestock and etc. Other types of off-farm activities are weaving, blacksmith and the like. Data obtained from the respondent who engaged in off-farm activities indicated that the activities are very important to help the households who have the problem of shortage of farm to help their family. But the problem is that those farm

activities are not enough to feed their family because they earn little money as these activities are not well developed (example caring goods, cutting tree, loading and unloading and etc)

Table 4.19 Types of off-farm activities in hinterland of Seru town

Types of activities	No of respondents	Percent
Charcoal and fuel selling	48	48.00
Daily labor	14	14.00
Trade	31	31.00
Other	7	7.00
Total	100	100.00

Source: Own survey, 2011

From this one can deduce that rural off-farm activities support in generating income and creating job opportunities. However, these activities have minor contribution to urban and rural linkages. Because, such types of activities help households for only daily expenditure 'hand to mouth'. Charcoal and fuel selling also have negative impact on environment as it accelerated deforestation rate which in turn affect human being.

4.5.2.6. Agricultural Problems

Agricultural problems have linkage with urban and rural interaction. Land shortage has the first, because land redistribution has not been undertaken since 1983 E.C. Now population is increasing and hence; land shortage is becoming a great problem of the rural society of the study area.

Table 4.20 Agricultural problems in study area

Types of problems	No of respondents	Percent
Shortage of Land	196	100.00
Lack of capital	181	92.30
Unexpected drought	187	96.40
Transport	75	38.30
Fertility of soil	91	46.40
lack of pasture land	121	61.70
High cost of fertilizer	152	77.60

Source: own survey data, 2011

Table 4.20 reveals that the agricultural problems in the rural areas of Seru 'woreda' that contributed to the low production of agricultural production. As indicated in the table, the first and most serious problem is shortage of farm land. Of rural sample households 100% of the respondents reported that they have the problem of shortage of farm land. The average land

holding of the woreda is only about 0.5 hectare per household. The second problem is unexpected drought that affects the areas frequently. Of sample rural households 96.40% reported that the shortage of rain (drought) is the factors that affect crop production in rural areas. Lack of capital is also mentioned as the problems of agriculture in rural areas as they do not have sufficient money to purchase agricultural inputs such as fertilizer and improved seeds. Transportation is also the problem seen in the rural areas of Seru town. About 98% of rural areas of Seru town found in the 'Kolla' types of climate and their geographical location is also hilly and rugged terrain. Shortage of grazing land is also the problem that reduces the livestock production. Fertility of soil play significant role in reducing prop production. This is because as the population is increase the fertility of soil decrease as soil conservation mechanism is not well practiced in the area. The rural farmers also reported that erosion is serious problem that forced them not to use fertilizer and improved seeds as it have been taken by erosion.

4.5.3. Migration and Urban-Rural Linkages

Small towns are believed to serve as attraction points for surrounding people. Thus, the flows of migrants from surrounding areas to the big centers will be increase (Tegegne, 2001). Migration status of urban Households revealed that the majority of urban households are migrants (see table 4.21). Of sample urban households, 49% of the respondents indicated that their previous place of residence is rural area which means their place of birth is rural areas. Additionally about 15% of sample urban households reveal that they come from other town. Of total urban households, only 36% were born in Seru town and thus there are urban residents.

Table 4.21 Migration status of urban households

Place of birth	No respondents	percent
Seru town	24	36.00
Rural areas	32	49.00
Other town	10	15.00
Total	66	10.00

Source: own survey data, 2011

Information collected through questionnaire depicts that there are many causes why the have changed their residents to Seru town. Shortage of farm land in rural area is one of the major push factors for the high level of migration in study area. About 50% of the migrants reported that shortage of land is the cause of their migration. Another reported by 28% of respondents is

education. They have come to urban area for better education. About 12.50% and 6% have reported that they migrated because of finding better life and search for better job respectively.

Table 4.22 Causes of migration in Seru town

Reason of migration	Number of households	Percent
Shortage of farmland	16	50.00
Better life	4	12.50
Search job	2	6.00
Marriage	1	4.00
Education	9	28.50

Source: own survey, 2011

4.5.4. Rural Households' Visit to Seru Town

Towns provide various services to the hinterland people to provide several services such as market for agricultural products, source of urban goods and services and the centers for off-farm employment. Thus, residents of hinterlands go to the town to receive these functions. Table 4.22 shows the frequency of hinterland people visiting Seru town. The patterns of visiting the town range from once a week to five times in a week. However, the majority of rural households reported that they go to the twice in a week. Table 4.23 indicates that 40% rural households visit Seru town twice a week. This is because there are two market days in a week (Saturday (peak market day) and Tuesday). About 25% and 19.50% of rural house holds responded that they visit Seru town once and three times respectively. These are also 10.50% and 5% of respondents' visit the town four and five times in a week.

Table 4.23 Frequency of rural households visiting to town

Frequency in a week	No of respondents	Percent
Once a week	49	25.00
Twice a week	78	40.00
Three times	38	19.50
Four times	20	10.50
Five times	10	5.00

Source: own survey data, 2011

The most important purpose of rural households visit small towns are for markets (Chowdhury, 2005). Table 4.24 indicates that reasons of rural households visiting Seru town. About 91% of rural households of Seru woreda reported that they visited town for buying and selling goods. About 87% of rural households visit Seru town for access to social services (medical treatment

education, administrative purpose, etc). About 21% of rural households responded that they visited the town to visit their relatives.

Table 4.24 Reasons of rural households visiting Seru town

Selected Reasons	No of respondents	Percent
Buy and sell	179	91.35
Access to social service	171	87.13
Visit relatives	41	21.05
Other	16	8.25

Source: own survey data, 2011

The survey found out that the frequency of visit is mostly affected by the distance of rural areas from town. That is the longer the distance of rural areas from the town, the lower the visit and vice versa.

4.5.5. Service Delivery Linkages

One of the manifestations of urban-rural linkage is through public service delivery linkages. Rural households in the study area reported that they have come to the town to access to different public services such health, education, administration and judicial services. The patterns of public services delivery linkages varies from one types of service to another this means that the way rural households utilize education services is different for that of health. The availability of services in urban areas is an indicator of the level of development in one way and another. It attracts the nearby rural settlers for the search of such services like education, health and communication services in the town.

Survey from rural households reveals that, Seru town has service linkage with different hinterland (rural) areas. Rural areas get different social services from Seru town include service like education, health service, communication and transportation service. Therefore, there is a need to promote the integration between urban and rural service delivery linkages on education, health, telecommunication and other basic social services of Seru town rather than continuing to treat them as independent sector in the structural plan preparation for town.

4.5.5. 1. Education

Education is the main powerful force which attracts the rural people from different areas of the woreda to Seru town. It is the basic input of development and an essential investment in people

and precondition for reasonable and sustainable development. Even though the town does not have higher education institution like university, college and some vocational training, students come to the town for education in secondary school. At woreda level there are about 14 rural Kebeles. Each Kebele has at least one elementary school and others have more than one. From each Kebele, after completing their primary school, students come to Seru town to continue their education in secondary school. In Seru town, most students are from rural areas (Seru woreda Education Office, 2002). School is one of the institutions which give social services for both urban and rural peoples. Currently Seru woreda has 31 educational institutions which are directly administrated by Seru woreda educational office. But the town has only 3 schools. 1 KG (Kindergarten), 1 elementary School (1-8) and 1 secondary school (9-10). Seru secondary school has constructed giving service since 2005/6.

Table 4.25 Numbers of schools in Seru woreda

No	School level	No of schools	Total
1	1-4	15	15
2	5-8	14	14
3	9-10	1	1
4	KG	1	1
Total		31	31

Source: - Seru town education office, 2010

Table 4.25 shows that the educational institutions' distribution in Seru *woreda*. At *woreda* level, there are 31 government owned educational institutions, of which 15 are primary schools of first cycles (1-4), 14 are secondary cycles (5-8), 1 secondary school (9-10) and one KG. The secondary education and KG are only found in the town. Each rural Kebeles have at least one primary school (1-8) and the students complete up to grade 8 in their own Kebeles. After this level, the students need to go Seru town to follow their secondary education (9-10). Here, it shows that the town has educational linkages with all the rural Kebeles. The town does not have preparatory school; thus, students walk a distance of about 38 km to neighbor woreda town. This condition has negative impact on the students who have financial problems, cannot continue their education in neighbor school, thus, forced to drop out.

4.5.5. 2. Health Service

Health service is one of the basic social services that people need to access. Without health service provision development will be unexpected. So, the social services like health and education is the precondition in the poverty alleviation strategies.

As the data collected from the woreda health office, Seru town has only one health center which is expected to service for 25,000 people. But the population of the woreda is about 73591 of which 36,449 are male and 37,142 are female. To provide health service for this much of people, two additional health centers should be required. But there is only one health center in this district and functioning beyond its capacity. So, the hinterland populations get the service by only going to the town.

Under the health center, there are five health posts directly administrated under Seru health center office. Each health posts expected to service 5000 peoples. These health posts are found in five rural kebeles namely Jidda Jiru, Waltahi, Darro Negeya, Daro Dibayu and Sa'ada. The rest rural kebeles have not and health posts, thus, they need to get the service either from the town or the nearby rural kebeles. The health center is working in rural areas by following the health extension packages to attain their objectives. The health extension packages are depending up on prevention of disease than curative activities. The health center is mostly working curing but health extensions are working on the prevention activities in rural areas.

When looking about health expenditure, 93% of rural households who utilize health services form the town reported they get health services from the town. As far as education services concerned, rural households use education services in different ways. Of the total sample rural households, 36% reported that they send their children for primary schooling. This is because each rural Kebele has at least one primary school in their localities. About 56% of rural sample households reported that they sent their children for junior school. The average member of rural households who sent their children to town for junior school is greater that rural households who sent their children for primary school because the number of junior schools in rural area is less that that of primary school. About 99% of rural households sent their children to the town for secondary school as there is no any secondary school in rural areas.

Table 4.26 Distribution of respondents utilize urban services

Types of services	No of respondents	Percent
Health		93.15%.
Clinic	180	91.74
Pharmacy	175	89.51
Health center	192	98.20
Education		63.5%.
Primary	71	36.00
Junior	110	56.00
Secondary	194	99.23
Infrastructures		93.50
Telephone	171	87.00
Transportation	196	100.00
Administration		99.50
Judicial services	194	99.00
Police services	196	100.00

Source: Own survey, 2011

When compare and contrast rural households' utilization of health and education services it looks quite different. As indicated in the table 4.26 the average utilization of education is in the town is about 63%, where as the average utilization of health service by rural households is estimated to be 93.15%. This is because the expansion of schools in the rural areas is greater than that of health services. Thus rural households get them only from urban area.

4.6. Challenges of Urban - Rural Linkages

Some researchers identified various forms of urban and rural linkages exist in Ethiopia. These linkages are however, affected by number of problems. The linkages and their problems could differentiate by looking factors related to the flow of agricultural output, industrial goods, labor and finance. Urban-rural linkage is affected by different factors such as farming system, which affect agricultural output (limited agricultural output), accessibility to transport and lack of telecommunication services in rural areas. As discussed in previous chapter, the production capacity of rural households of Seru town to supply products to the market is slightly weak.

Table 4.27 Factors affecting urban rural linkages in Seru town and its hinterlands

NO	Factors affecting urban rural linkages	Percent (%)
1	Limited agricultural out put	36.00
2	Lack of road transport	34.00
3	Telecommunication services	30.00
	Total	100.00

Source: own survey, 2011

Table 4.27 reveals that limited agricultural output is a problem of urban and rural linkages. Lack of road transport is another problem in the study area. This study shows that there is lack of proper infrastructure for enhancing the linkages. About 36% of the respondents said that limited agricultural output affects urban and rural linkages (economic). About 34% reported that road and transport to be the challenges of urban and rural linkages. About 30% of the respondents reported that lack of telecommunication service is the problems that affect urban and rural linkage.

4.6.1. Patterns of Farm Output

There is a great variation between agricultural productivities in rural areas. The farms out puts are influenced by the fertility of soil, availability of farm inputs and methods of farming among the farmers. In respect to crop cultivation in the study area, there are some factors that influence the productivity of the crops. The first one is the poor farming system followed by farmers. The surrounding rural households used oxen to plough land. Some of the soil coverage is affected by erosion. Nobody has used modern farming system in the study areas. This primitive farming system decreases agricultural out puts. The second reason that reduces the productivity of crop in the rural area is the dependency of farmer on rain water for crop cultivation. Irrigation is not practiced in the study area.

Farmers with small size of land will not be able to produce surplus production. To the extent, surplus production is limited. The possibility of urban and rural exchange will be reduced. Concerning the animal rearing, the rural farmers are used primitive ways of animal rearing. Some farmers proud of numbers of cattle than the output they deliver from them. The output gain from animal rearing is very low. The limited agricultural output and the limited animal rearing practices in the study area affect the degree of urban and rural linkages.

4.6.2. Conditions of Infrastructure and Services

Many rural households are found at the distant from the town. They need road infrastructure for marketing agricultural output and get services. The condition of the infrastructure and service is not efficient or non-existent to link town to rural areas.

Table 4.28 Modes of transportation used by rural households

Categories of mode of transportations	number	Percent (%)
on foot	159	81.00
Animal back	21	11.00
Car	16	8.00
Total	196	100.00

Source:-own survey, 2011

As indicated in the table 4.28, Physical linkage between Seru town and its rural area is very weak. About 81% of the rural households reported that they used traditional modes of transport that is on foot. Only 8% get the chance of transporting by the car. The natures of the road networks surrounding rural areas of Seru town do not encourage the free movement of goods and service. There is only one direction that have road and transport service. The rest rural areas used animal back and walking on foot to come the town. Resources are transported to rural are by the help of donkey back. Using donkey for the transportation purpose is not efficient and effective relative to the modern modes of transportation system. But as indicated in (figure4.1) majority of rural households are still using donkey for transportation. Others carry by themselves. It takes a lot of time and money using this way of transportation system. In addition to this, donkey and human labor cannot carry many resources. It is difficult to transport perishable vegetable from rural areas to the town. Rural households also need processed industrial products from the town. They transport in similar way of the resources. On the other hand, they have no electricity. Some rural areas have only the access of wireless network coverage.



Figure 4.1.Rural a households using animal for transporting their product to Seru town

Finally when compared forms of urban-rural linkages in Seru town and its hinterlands, the degree of linkages are varies from one type of linkage to another. Some linkages are strong where as other are weak. On the other hand linkage its self affect one other. For example the availability of physical infrastructure (physical linkages) can positively or negatively affect other forms of linkages such as service linkages, marketing linkage and even production and consumption linkages.

In the study area physical linkage is very weak. As the town is found at the border of Arsi and Bale zone there is only one route that connects the town to the other town. The town does not have the route connect to Bale zone across Wabi River and there is no route that connects the town to the hinterlands. This is because the town is rounded by the hill and rugged train that is not suitable to construct road between two areas and it takes high investment. Therefore the poor physical linkage between the town and its hinterlands as well as between Seru town and other town negatively affect the other forms of urban and rural linkages in the areas.

Even though there is problem infrastructure and services, limited agricultural output and communication services, marketing linkages is the stronger urban rural linkages in study area. There are strong marketing linkages between Seru town and its hinterlands as well as between Seru town and other town such as Bele, Adele and Robe. Seru town has also marketing linkages with big town like Addis Ababa and Adama. From bigger town Addis Ababa and Adama, industrial product and food item come to Seru town by Seru town traders and other trader those come from other town. There is forward and Backward linkages between Seru town and Addis Ababa and Adama. Traders come from other town and supply good to Seru town and its hinterland those gods that are not supply by the town's traders. On the other hand these traders collect crops especially teff and wheat and livestock mainly goat from Seru town and exported to Addis Ababa and Adama towns. Therefore one can concluded that marketing linkages between Seru town and its hinterlands as well as Seru town and other bigger town like Addis Ababa is strong.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. CONCLUSIONS

This study focused on urban-rural linkages and give due attention on spatial linkages such as production and consumption linkages (crop production, livestock production use of agricultural inputs), marketing linkages (flow of production, livestock and industrial goods and services), flows of people (migration and visiting pattern) , services delivery linkages education, health) and factors affecting urban-rural linkages. Agricultural, particularly crop cultivation and animal rearing is the most economic activities of the area. However, it is decreasing from time to time. This insignificant contribution is attributed to factors such as shortages of farm land, unexpected drought, shortage of pasture land and decreasing fertility on the soil caused by rapidly increasing of population.

The major crops produced in the area are cereal crops mainly wheat, maize, teff, barley and sorghum. Haricot been is the most known commercial crops in the area, especially in remote areas of the woreda. The production of vegetables in the area is not worth mentioning because of factors such as the absence of irrigation practices in the area and consumption competition of wild animals such as monkeys, pigs and apes. Another factor is that the farmers give less attention toward production of such crops.

The relation between Seru town and its hinterlands (production-consumption, marketing, migration and service) delivery linkage is under the influence of natural and human pressure. It is obvious that for strong relation to be exists between two spatial units; the two areas need to provide necessary goods and services to their counterpart. However, rural households are unable to produce surplus production and supply to the market, there is still interaction and interdependence between Seru town and its hinterlands. Rural households of Seru woreda have been evidence to relatively stronger marketing linkages to Seru town. Urban households' survey also depicts those urban residents of Seru town purchase both crop products and livestock from rural farmers. The survey from trader also reveals that Seru town is collecting and distributing center of grain crops (especially wheat and teff) and livestock (especially goat) and export to bigger cities like Addis Ababa and Adama.

Rural households of Seru town have service delivery linkages with the town. They have utilized education, health, administration and judicial court services mostly available in Seru town. There are also another services likes telephone and transportation services that rural households need from urban area. Regarding to the primary and secondary school 36% and 56% of rural sample households reported that they sent their students for primary and junior school respectively. There is also migration linkage between Seru town and its hinterlands. Survey of migration depicts that of urban residents 49% of respondents reported that they have come from rural areas before ten years. This was mainly because of different factors such as searching job, Shortage of farm land in rural areas and the like. Limited agricultural output lack of transportation and telecommunication are regarded as the factors that shape the urban and rural linkages between Seru tow and its hinterlands.

5.2. RECOMMENDATIONS

For the realization of mutual development and for the formation of the smooth and strong linkage between urban and rural areas and to strengthen urban and rural linkages between Seru town and its hinterland, the following recommendations were forwarded by the researcher.

- To interlink both urban and rural areas, there is a need to established market institution to coordinate urban and rural areas. The coordination of urban and rural administrators assists the local, economic development and increase the degree of urban and rural linkages between two spatial units.
- Road and transportation facilities need to be developed in the rural areas to make the appropriate linkages between two spatial areas. Because physical linkage is the fundamental for strengthened urban-rural linkages of linkages.
- Effective and efficient urban and rural linkage is important for precondition of enhancing and increasing production of rural households and also access agricultural out put in both spatial areas. There should be infrastructural development that involves town and rural communities. The greater access to the information technology, better road and education are among the other things need to be enhanced the linkages between rural and urban areas. As tried to mention in the findings, the physical linkage (infrastructural development) between two areas was to be very weak. Therefore the infrastructure development between two areas facilitates the other dimension of urban and rural linkages like economic and service delivery linkages. Thus priority should be given to road as it helps to take resource from rural areas and commodities to rural areas.
- Communication has to be developed in the rural areas to ease the cost of the transportation. It also helps to access information from the town. There should be maintenance of infrastructure and service in both rural and urban areas.
- Improving socio-economic problems in both town and rural areas demand the improvement of agricultural productivities in rural areas. To end this, there is a need of appropriate strategy that yield to increase agricultural productivities of rural farming system. The farmers should be gain training in the rural areas how to increase their production in the farmers training

centers. The core roles of the farmers training center is to provide service through training and demonstrations agricultural productivity should be enhanced by adopting agricultural infrastructure through small scale irrigation system and utilizing unused land. Improving the production capacity of rural population by introducing different mechanism that increases soil fertility such as compost.

- The administrator of both spatial areas should coordinate and work with each other to strengthen the relationship between areas.

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APPENDIX I

ADDIS ABABA UNIVERSITY

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

QUESTIONNAIRE TO BE FILLED BY RURAL HOUSEHOLDS

This question is designed to collect information on the problems of urban rural linkages in Seru and its surrounding rural areas and suggest possible solution on the problem observed. Here! You are kindly requested to give relevant information based on your general experiences. Make the mark “✓” sign in the box of your choice. You are also expected to write your responses on the space provided.

Thank you for your coordination!

I. Personal Information:-

1. Sex: _____
2. Age _____
4. Occupation: _____
5. Income: _____
6. Do you farm the land? A. Yes B. No

II. Production linkages

1. How is the fertility of your plot?
 A. Fertile B. Semi-fertile C. Infertile
2. How much is your farm land size in hectare? _____
3. Is farm land you own is enough for your family? A. yes B. No
4. If your answer for question' 8' is No, how do you overcome the problem?
 A. By engaging in non-agricultural activities
 B. By renting additional plot of land
 C. Other

5. What kinds of non-farm activities do you engage?
6. Did have you used fertilizer last production year? A. yes B. No
7. If your answer for question '1' above is yes, from where did you gets it?
8. If you have not used fertilizer last production year, what are the reasons for not using?
- A. lack of money C. lack of access
- B. high cost D. other
9. Have you used improved seeds last year? A. Yes B. No
10. If you have not used, what is the reasons for not using?
- A. lack of money C. lack of access to credit
- B. high cost D. seed not available
- 11 Have you used herbicides last year? A. yes B. No
12. Have you used pesticides last year? A. yes B. No
13. If you have not used pesticides and herbicides what is the reason for not using?
- A. lack of money C. Not available
14. Have you faced any problem on crop production?
- A. Yes B. No

III. Agricultural production and marketing linkages

1. What is your maximum production in kg per hectare in a year?
-
2. The major crop you produce? A. Wheat B. Barley C. Maize D. Teff E. Sorghum
3. Have you produced any surplus to sell?
- A. Yes B. No
4. If your answer for question '3' above is 'no' what is tour reason for not producing?

A. Shortage of farm land

C. Unfertile soli

B. Unexpected drought

D. Other

5. If your answer for question '3' above is yes, where did you sell your product?

6. What kinds of activities do you performing out of farming time?

7. What amount of average money do you generate from these activities?

8. What are the types of crop did you produced in last production year? Please fil,out the following table

Types of crop	Average Amount of produced	Average amount you sold	Money you earned(Birr)

9. Do you rear animal?

A. Yes

B. No

10. Please indicate amount of cattle you had, sold and money you earned in a year.

cattle	Av .Amount owned	Av. Amount sold	Av. Money you earned(Birr)
Ox			
Cow			
Goat			
Sheep			
Hen			
Horse			
Donkey			
Camel			
Mule			
total			

IV. Visiting pattern

1. Do you visit town frequently?

A. Yes B. No

2. How often did you visit the town?

A. Once a week C. Four times
B. Twice a week D. Three times in a week

4. Why you go to the town? A. Administration B. education C. recreation D. Religious

E. Medical treatment F. Other

5. Is there any road that connects your Kebeles to the town? Yes No

6. What is the kind of road net work that connects your Kebeles to the town?

A. No road B. Gravel C. Asphalt D. Mud

7. What are the types of transportation you use to go to town?

A. Animal B. On foot C. Bus

V. Service delivery linkages

1. Did you send your children to town for school?

A. Yes B. No

2. If your answer for question '1' above is 'yes' please fill out the table below!

Types of schools	No of respondents	Percent
Primary		
Junior		
Secondary		

3. Did any of your family affected by any disease?

A. Yes B. No

4. If your answer for question '3' above is 'yes' from where did you get treatment? Please fill the following table

Types of health institution	No of respondents	Percent
Clinic		
Pharmacy		
Health center		
Other		

5. Is there any communication service in your area?

A. Yes

B. No

6 If there is any please indicate A. Digital B. Manual C. Other

7 Is there bank in the town? A. Yes B. No

8. From where do you borrow money? A. Microfinance B. Bank C. relative

9. Is there school in the town? A. Yes B. No

10 Are you satisfied the service given in your area? A. No B. Yes

11. What types of service you need from the town?

12. What are the problems hinder you not to get adequate service provision

APPENDIX II
ADDIS ABABA UNIVERSITY
DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES
QUESTIONNAIRE TO BE FILLED BY URBAN HOUSEHOLDS

This question is designed to collect information on the problems of urban rural linkages in Seru and its surrounding rural areas and suggest possible solution on the problem observed. Here! You are kindly requested to give relevant information based on your general experiences. Make the mark “✓” sign in the box of your choice. You are also expected to write your responses on the space provided.

I. Personal Information:-

1. Sex _____
2. Age: _____
3. Educational status _____
4. Occupation: _____
5. Did you or any of your family have been engaged in any agriculture activities last year?
A. yes B. No
6. What is your regular occupation?
7. Where is your pervious residence?
A. Urban B. Rural
8. If you have come from other place where did you come from?
A. Rural areas in the woreda
B. Rural areas out side woreda C. other urban cent
9. Did your previous residence is rural area?
A. Yes B. No

10. Why did you come to this place?

- A. Search job
- B. Due to marriage
- C. education
- D. Better life
- E. Other

11. Do you have relative in rural areas?

- A. Yes
- B. No

12. Did you frequently visit your relative?

- A. Yes
- B. No

13. Did you purchase any crop products form rural households last year?

- A. Yes
- B. No

14. From whom have you purchase?

- A. From producer
- B. From traders
- C. Both trade and producers

15. If your answer for question '13' above is; yes' please indicate the average amount of crop you bought and average amount of money you expend

Crops types	Av. Amount you buy(kg)	Av. amount of money you expend
Teff		
Barley		
Wheat		
Maize		
Sorghum		
Beans		
Peas		
Onion		
Pepper		
Tomato		
Potato		
Millet		
total		

16. Did you purchase any livestock last year?

- A. Yes
- B. No

17. From whom you purchase livestock?

- A. From producer
- B. From traders

C. Both trade and producers

18. If your answer for question '16' above is 'yes' please fill out the following table.

cattle	Av. Amount bought	Av. Money you spent (Birr)
Ox		
Cow		
Goat		
Sheep		
Hen		
Horse		
Donkey		
Camel		
Mule		
total		

19. What are goods and service you need from rural areas?

A. Grain B. livestock C. charcoal D. vegetables

20. Mention if there is any other _____

21. Do you satisfied with the goods that you required from the rural areas?

22. Please indicate the services that are provided in this town.(make the “✓”if it provided in this town)

Types of services	
Banking	
Hotel	
Telecommunication	
Education	
HealthService	
Technical Delivery	
Water supply	
electricity	
Postal service	
transport service	
Recreational service	

23.What are the problems associated with the provision of service delivery in Seru town?

APPENDIX III

ADDIS ABABA UNIVERSITY

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

QUESTIONNAIRE TO BE FILLED BY URBAN TRADERS

This question is designed to collect information on the problems of urban rural linkages in Seru and its surrounding rural areas and suggest possible solution on the problem observed. Here!

You are kindly requested to give relevant information based on your general experiences. Make the mark “✓” sign in the box of your choice. You are also expected to write your responses on the space provided.

I. Personal Information

1. Sex _____

2. Age: _____

3. Educational status _____

4. Occupation: _____

5. Where is your previous residence?

A. Rural area

B. Here in urban

C. Other town

6. If you come from other area, why do you come to this town?

A. To search better job

C. Shortage of farm land in rural area

B. Preferring the town's life

D. Other

7. Have you ever taken out loan?

A. Yes B. No

8. If your answer for question '7' above is 'yes' from whom you took?

A. Bank C. Relatives
B. Microfinance D. Others

9. How much is your capital? _____

10. What types of trade do you undertake?

A. Wholesaler B. Retailer

11. What types of product do you sell?

A. Commercial crop C. grains
B. Commodities D. Other

12. What is your source of income?

A. Bank C. Relatives
B. Microfinance D. Others

13. From where did you purchase product that you sell?

14. How do you explain the marketing linkages between Seru town and its hinterlands?

APPENDIX IV

OBSERVATION CHECK LISTS

Rural Areas

A. Nature of farm land

1. Fertility
2. Amount owned by farmers

B. Surplus Production

C. The major crop you produced

D. Livestock owned by rural households

E. Market observation

1. Crop sold
2. Livestock sold
3. Market demand
4. Market supply

F. Urban functions

- ◆ Distribution and collection
- ◆ Market center
- ◆ Social services

 Education

 Health

 Administration

 Other

G. Physical linkages

-  Road connect to rural areas
-  Transportation system used by rural households

H. Population linkages

-  Migration
-  Visiting pattern
-  Commuting to work

Urban Areas

- A. Major services in the town
- B. Grain market
- C. Livestock market
- D. Major crop sold in the market
- E. Major livestock sold in the market

