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Causes and Consequences of Rural-Urban Migration in Woldiya Town, North Eastern Highlands of Ethiopia

Birhan Asmame[1], Muluneh Woldetsadik[2] and Melanie Nicolau[3]

Abstract

This paper analyzes the causes and consequences of migration from rural areas to three kebeles in Woldiya Town using 500 randomly selected migrant household heads. Data were analyzed using qualitative and quantitative methodology. The study revealed that migrants moved in search of employment and services. While production loss was the negative impact of the loss of economically active migrants in the area of origin, the host town experienced problems such as housing shortage, unemployment, and increased cost of living. The research concludes that an integrated rural development policy is very critical to mitigate the problem of rural-urban migration in Ethiopia.

Keywords: rural, urban, migration, development policy

[1]Lecturer, Department of Geography and Environmental Studies, Wollo University, Ethiopia ; E-mail: birhan1050@yahoo.com , Mobile number: +251911568311

[2] Department of Geography and Environmental Studies, Addis Ababa University, Ethiopia; E-mail: mabshare@gmail.com

[3] Department of Geography, University of South Africa (UNISA), South Africa; E-mail: nicolmd@unisa.ac.za

Introduction

Historically, rural to urban migration has played a significant role in the urbanization process of several countries and continues to be significant in scale, even though migration rates have slowed down in some countries (Lall *et al.,* 2006). Today almost half the world population lives in cities and the number of people living in urban areas has risen steadily by around 1 million every year (Bahns, 2005). Urbanization has largely taken place as a result of the "push" of rural inhabitants to urban areas (ILO, 1998). Thus in view of the high rates of urban population growth and the low level of urbanization, rural to urban migration appears to have been the major component of urban population growth in many developing countries. In this regard, Todaro (1976) clearly stated that the major sources of the growth of urban population in developing countries will not be natural population increase but rather the continuing in-migration of rural people; over 50 percent of the urban growths in many developing countries are due to the accelerated pace of rural-urban migration.

Rural-urban migration has been seen as a response of individuals to better economic and non-economic opportunities and an expectation of increased economic welfare in urban areas (Mazumdar, 1987). The classic "push factors" from the rural areas, for example, lack of jobs, famine, war, drought, various kinds of poverty, land degradation, and landlessness have been known to "push" people out of their rural homes in search of better opportunities in the urban areas (Oberai, 1987; Okereke, 1976; Ezra, 2001; Dereje, 2002; Kinuthia, 2003 and Tesfaye, 2007). The "pull" factors in the urban areas have been the hope to find a job, increase one's income, educational opportunities, in search of better services and generally to improve one's economic welfare (Charles,1975 ; Kinfe, 2003 and Worku, 2006).

However, Katy & Brett (2004) indicated that despite the positive economic and social externalities of large cities, a highly concentrated population brings social costs such as congestion, pollution and crime. The increased

demand for housing and overloading of urban facilities sees the poor reside in slums, often lacking access to clean water and sewerage systems. Similarly Mabogunje (1980) stated that often rural-urban migrants have to settle down in shanty towns outside the actual city. This results in the fact that there are many people living without acceptable security, fresh water, waste systems or health services.

Ethiopia is one of the countries in Africa with a comparatively high level of internal migration and population redistribution. This was associated with the country's economic transition from a socialist to a market oriented economy, critical political changes since the 1970s through 1990s, civil war, and famine (Kidane, 1989; Berhanu & White, 2000; Kiros & White, 2004).

As far as the push factors are concerned, different studies in Ethiopia specified that unfavourable land tenure system, lack of rural employment opportunities, seasonality of agricultural work, inadequacy or lack of social and economic services, and natural disasters such as drought caused frequent crop damages and failure, ecological degradation and poverty in rural areas were the main forces for rural out migration (Andargachew, 1992; Ezra, 2001; Feleke, 2005; Kloos, 1982).

The town of Woldiya has been the capital of North Wollo Zone. The town is situated on the main Addis Ababa to Mekele road. It is also a point where the roads to Bahir Dar, Gondar and Afar Region branch off. Because of its strategic location, it receives a considerable number of in-migrants. Taking into account such observations, the objective of this study was to assess the situation and identify the causes and possible consequences of in-migration to Woldiya Town. At the same time, there is apparently little research work on rural-urban migration in the country in general and Woldiya in particular. Therefore, the study contributes by making available information on causes and consequences of rural-urban migration and thereby providing data that can be used as an input to analyze the situation and formulate and launch suitable planning and response strategies to the emerging challenges and problems both in urban and rural settings of the region.

Theoretical Framework

There are multitudes of theoretical as well as empirical studies which are concerned with characteristics, determinants and impact of migration both at international and national levels. In the next section of the article we present a review and critical evaluation of the main existing theories of migration, with special reference to rural–urban movement in those developing countries with some similarities to the Ethiopian context.

Ravenstein's Laws of Migration

These laws deal with the characteristics of migrants, their motives and patterns of migration (Ravenstein, 1985). According to Ravenstein, most migrants travel short distances and with increasing distance the number of migrants decreases; migrants travelling long distances generally go by preference to one of the great centres of commerce and industry; migration occurs in stages i.e. migration will first be to nearby places and then to most rapidly growing cities; each main current of migration produces a compensating counter current; the natives of towns are less migratory than those in rural parts of the country; females appear to pre-dominate among short journey migrants; the volume of migration increases with the development of transport, industry and commerce; and the economic motives are predominant among push and pull factors of migration.

Harris-Todaro's Model of Migration

In the Harris-Todaro Model, migration was regarded as an adjustment mechanism by which workers allocate themselves between different labour markets, some of which are located in urban areas and some in rural areas, while attempting to maximize their expected incomes (Harris-Todaro, 1970). In general, the model underlined that migrants would reach the decision to migrate by taking the probability of unemployment in the destination areas. The migrants could migrate, though their current income in place of origin is higher than in place of migration. This is because the migrants' expectation for a better wage would compensate past loses in the

long run (Todaro and Smith, 2003). According to Todaro (1976), high levels of rural-urban migration can continue even when urban unemployment rates are high and are known to potential migrants. Migrants will move even if they end up being unemployed or receive a lower urban wage than the rural wages. Similarly, the probability of obtaining an urban job is inversely related to the urban unemployment rate (Todaro, 1976).

Migration and the Dual Sector Model of Economic Development

The Lewis Dual Sector model has two main sectors: An agricultural/rural sector characterized by zero marginal productivity of labour, and an urban/industrial sector which has a higher demand for labour and offers higher wages (Lewis, 1982).The model basically states that there is the existence of excess labour in the rural agricultural sector; people migrate to the industrial sector to obtain employment (McCatty, 2004). Besides, the urban manufacturing sector demands labour transfer so as to increase its productivity. In the modern sectors the migrants are thought to be attracted due to better wage.

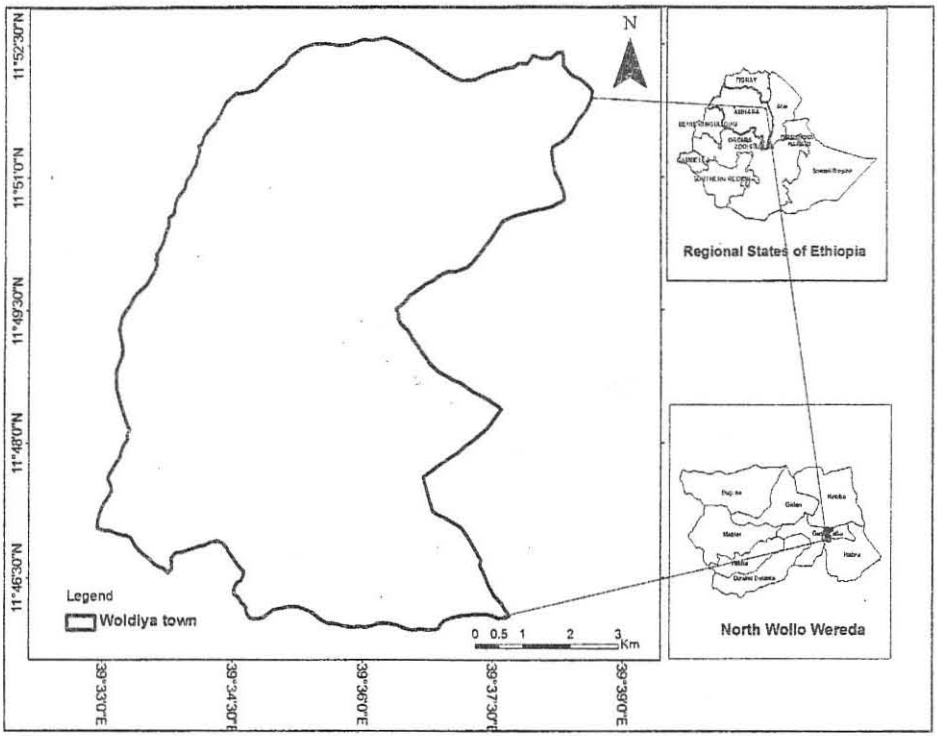
Material and Methods

Description of the Study Area

Woldiya town is the largest urban centre in North Wollo Administrative Zone. It lies astronomically between 11^0 45'56" N - $11^0$52'37''N, and $39^0$32'56" E - $39^0$38'40"E (See Figure 1). It is situated on the major north-south highway that links the capital city of Addis Ababa with Mekele and it is found at a distance of about 521 kms north of Addis Ababa; 360 kms northeast from the regional capital of Bahir Dar; and about 180 kms east from the tourist attraction site of Lalibela where the rock-hewn monolithic churches are found. The area has an average altitude of 2000 meters above sea level. The town is bounded by Mount Gubarja in the east and Mount Gebriel in the north - the major physical barriers that limit further expansion of the town to the east and north, respectively. To the west of Woldiya town lies the flat plain of Mechare which is an alternative area for further expansion extending all the way to Tikur Wuha and Melka Demo rivers. To

the south of Woldiya lies partly on the flat terrain of Mechare and small escarpment of Gubalafto for further expansion until it is also limited by the small mountain which is locally called Guba *Terara* -literally means Mount Guba.

Figure 1: Location of the Study Area



Source: GIS Laboratory, Department of Geography and Environmental Studies, Wollo University, Ethiopia.

Although there is a lack of consistent, adequate and reliable metrological data for Woldiya some information does exist. Scattered data show that the

town has a subtropical */woina dega/* climate with mean annual rain fall of about 850mm and mean temperature of 22^0c . This is also confirmed by the fact that the altitude from 1500 - 1700 and 2300 - 2400 meters above mean sea level in Ethiopia is considered to be *woina dega*. As Woldiya has an average altitude of 2000 meters above sea level, the town falls into this zone.

Woldiya town has demonstrated sustained growth in population size since its foundation between 1778 and 1785 with a total population of 150. From its origin, in the last quarter of the 18^{th} century, after 230 years, the town has grown to be a home of 46,126 inhabitants in 2007 (CSA, 2007). Both natural increase of the population of the town and massive rural to urban and urban to urban migrations have contributed to the rapid growth of the population of the town. Due to its new administrative status, economic and location advantages over other urban centres in the area, the town has attracted large number of people from other areas. It comprises, according to the 2007 census result, over 29% of the total urban population of the Amhara Region (CSA, 2007).

Data Source and Analysis

Questionnaires, focus group discussions, interviews, personal observations and a number of secondary sources were used to collect the necessary data. To complement the data through other instruments and to collect primary data from individual household heads, the questionnaire included open-ended and closed-ended types that referred to the demographic characteristics of past and present migrants, patterns and process of migration, causes and consequences of migration. During the development of the questionnaire, the researchers used related theoretical background that was reviewed for the study. The construction of the questionnaire items was further strengthened using the professional comments provided by fellow academics as well as the feedback obtained during the pilot survey for this research. The pilot survey was made to verify and make sure the items included were up to the required standard. The questionnaire was

prepared in English and translated into Amharic which is the language understood by the local people.

In addition, focus group discussion was conducted with migrants in the town. These groups included migrants from different age groups (young, adult and old people), gender, and experience - individuals who were deemed by the researchers as having accumulated knowledge about the causes and consequences of migrations in the study area. There was one focus group discussion in each kebele: Yejugenet, Debregelila and Defergekbikalo. Each group consisted of ten people. The total number of the respondents for the three kebeles was 30.

In addition to the data collected through questionnaires, group discussions, interviews and observation, secondary data pertaining to in-migration, population and the physical background of the town were obtained from Woldiya Woreda Administration Office and the Statistical Bulletin of the Economic Development and Planning Bureau of Amhara Region. Various publications of the CSA for the years 1984, 1994 and 2007 were also used to get population and housing census statistical and analytical reports at country and regional levels. Abstracts have also been used to obtain more data.

Based on the information obtained from the administration office of Woldiya town, the town is divided into seven *kebeles* for administrative purpose. Among the seven *kebeles* three of them were urban and the rest are rural *kebeles*. Thus, three *kebeles* were selected purposively because the researchers assumed that the majority of migrants settle in the urban *kebeles*. There was no readymade list of migrant households from secondary sources. So, we decided to identify migrant households with the help of *kebele* administrators. Simple random sampling was employed to select household heads.

Table 1: Distribution of Sample Migrant Households

Kebele	Number of household heads	Sample household heads	
		Number	Percent
Yejugenet	5,551	194	39
Debregelila	4,313	150	30
Defergekbikalo	4,462	156	31
Total	14,326	500	100

The researchers expected a high degree of homogeneity in the characteristics of the migrant population of the three sample *kebeles* included in the survey, and thus due to time and financial constraints, the study covered 500 sample households (3.5 percent of the total migrant households) from sample the *kebeles*.

The researchers made a prior contact with the *kebele* administrators, who arranged a schedule to identify and meet the respondents. The researchers personally met some of the migrants and explained the purpose of the study and tried to get their consent to participate in the study. Upon receiving their consent, the researchers used a random sampling technique to identify the respondents who would complete the questionnaire. Taking into account the sample size and the time schedule as well as the nature and content of questionnaires, the researchers recruited a total of ten enumerators from the respective *kebeles* of the town. These enumerators were given orientation on how to approach and interview the respondents. Enumerators were also informed about the purpose of the research and the different aspects of the questionnaire before they started the actual field survey. The researchers accompanied the enumerators to coordinate and cross validate the data collected. In order to ensure the academic integrity of the data collected, meetings were regularly held with the enumerators to discuss any problems they faced during data collection. A further check on the data collected was

done by the researchers by cross checking completed questionnaires with some of the actual respondents. The survey was undertaken over twelve days from September 27, 2009. A total of 500 questionnaires were completed.

In order to test the hypotheses (The rate of migration to Woldiya is inversely related to distance but directly related to population pressure of the main areas of origin; Education is a significant accelerator of the rate of migration to Woldiya; The rate of in migration to Woldiya is the function of percentage of urban population; There is a strong relationship between unemployment rate and migration to Woldiya), we used coefficient of correlation and multiple regression model. The sources of data of the variables were obtained from the CSA, 1994 and 2007.

The dependent variable in the regression was:

Y= Number of reported in-migrants from *woredas* of North Wollo (Dawintna Dilanta, Gidan, Gubalafto, Habru, Kobo, Meket, Wadla and Bugna *Woreda*) and the independent variables were:

- X_1 = Average distance between Woldiya and the *woreda* centres of place of origin (Km).
- X_2= Percentage of urban population of the *Woredas* of the Zone to the total Population.
- X_3 = Crude population density per Km^2
- X_4= Agricultural population density per Km^2
- X_5 = Unemployment rate
- X_6 =Percentage of literacy

The researchers have transcribed the data from the questionnaire to a coding sheet and the responses were tallied on the tally sheet. After coding the data, the researchers entered them into the computer using Statistical Package for Social Scientists (SPSS) software version 13.0 to summarize the data in the

form of tables, graphs, population pyramid and percentages which were used to illustrate the various aspects of the study.

In general, the method of qualitative data analysis and presentation of findings followed an approach of describing the qualitative data which were collected using personal interview, open-ended questionnaire and group discussions.

Results and Discussion

Flow Pattern and Characteristics of Migrants

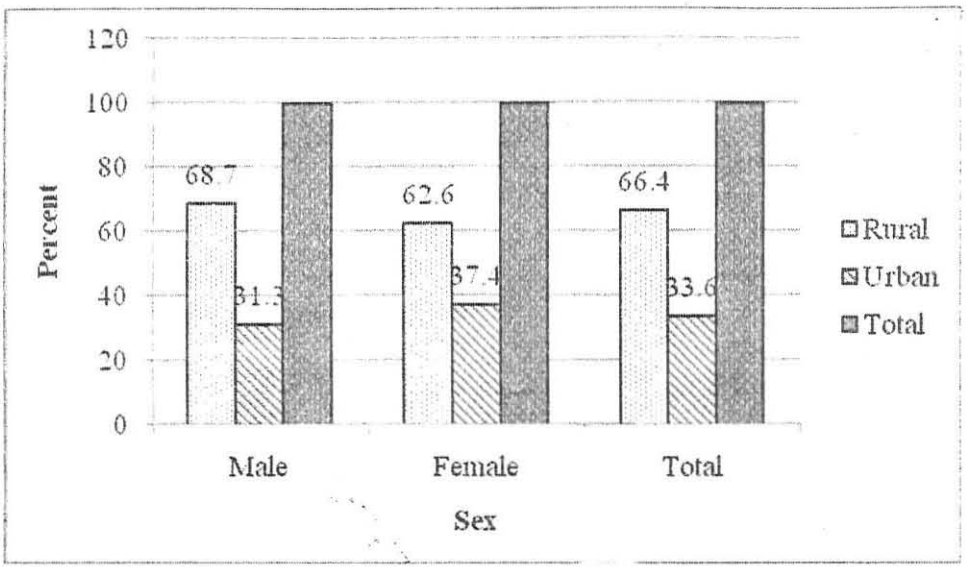
We were able to observe that there were many migrants particularly from rural parts of North Wollo Zone. The in-migrants to the town appeared heterogeneous in age, sex composition, and duration each migrant lived in the town. They also differ in their aspiration, motivation and occupation background. The next sections outline some of the basic features and patterns that characterized the situation.

The Patterns and Volume of Migration

Fast growth rate of urban population is attributed mainly to rural-urban migration which is still the predominant feature of developing countries.

Figure 2 shows that out of the total sample of migrants for this research, around 66.4 percent were from rural areas while only 34 percent were from other urban areas.

Figure 2: Volume of Migration to Woldiya Town by Sex and Place of Origin



Source: Field Survey, 2009

The survey result further indicated that male migrants accounted for about 63 percent of the total migrants. However, the proportion of male migrants of rural origin was much greater than that of male migrants of urban origin. Accordingly, of the total surveyed male in-migrants, about 69 percent came from rural areas while 31.3 percent were from other urban areas. In contrast a total of 63 percent of the female in-migrants surveyed were from rural areas. In general, the proportion of migrants of rural origin was higher than those of urban origin. The most likely cause was drought or lowered agricultural productivity in the rural areas of North Wollo. Due to increased food insecurity in the region, rural people choose to move to towns such as Woldiya in search of employment opportunities and a better life.

The spatial distribution of migrants of their place of origin manifested not only a rural-urban variation but also a regional variation. A total of 6 percent of the migrants to Woldiya in the sample came from different administrative regions of the country. The respondents from the regions of Tigray and Afar accounted for about 4.7 and 1.3 percent of the sample respectively. The majority (94 percent) of the respondents came from the same region i.e. Amhara Region. The reason for this was most likely the proximity and close links. Only 6 percent of the migrants were from other regions i.e. from Tigray and Afar region accounting for about 4.7% and 1.3% respectively.

Although the survey took into account only the heads of households, intra-regional in-migrants from different *woredas* of North Wollo to Woldiya were the dominant over the inter-regional in-migrants from administrative regions (See Figure 3). The adjacent *woredas* mainly Gubalafto, Hibru and Kobo were the main suppliers of migrants to Woldiya. But other *woredas* located at greater distances such as Bugna and Dawintna Delanta contributed the least. Thus, the distance decay effect seemed to hold true in the case of the study area, as most of the migrants to Woldiya were short distance migrants and the volume of urban-ward migration decreased with an increase in distance. The result of the simple correlation coefficient (-.87) showed that distance and volume of migration were negatively correlated. In other words, as distance increased, the number of migrants decreased.

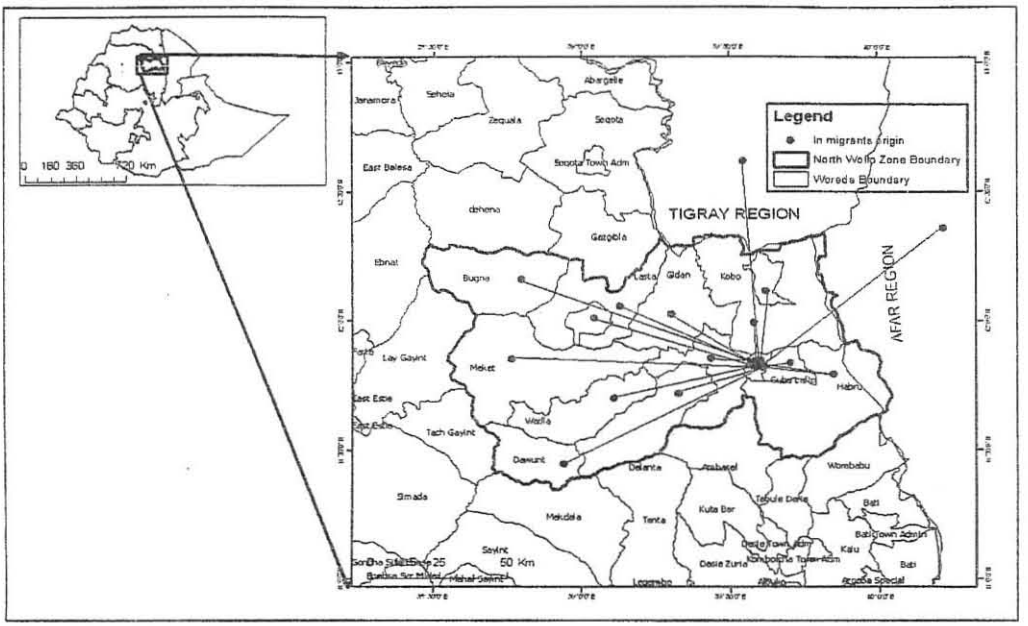
An important aspect of migration is the nature of the composition of migration streams or flows, depending on the involvement of individuals, families and accompanying children. Similarly, migration to Woldiya during the research period had different forms of flow that included single migrant and migrants with families who accompanied before and/or after migration as well as in chained and stepped type movements.

During the group discussions and personal interviews, there was a clear indication of chain and step migration reflected by the in-migrants to

Woldiya who glided through various links: the first in-migrants were soon followed by the birth of their children, close family, friends and distant relatives.

Thus, chain migration is very common particularly among the rural people where one gravitates to the other on the bondage of intimacy and/or kinship relationship. Another indicator of chain migration to Woldiya was the flow of information to the recipients. During the discussion, respondents pointed out that information about the situation of Woldiya has been conveyed to them through their relatives and friends. The logical conclusion from this information was that the role of already settled in-migrants provided a vital "pull" factor to potential migrants to Woldiya Town. Similarly, the respondents pointed out that they had stayed in at least one or more small towns before they migrated to Woldiya. The movement of migrants from small town to medium town; from medium to large towns and from large towns to capital cities helped migrants to adjust themselves to urban life and to strengthen their ability to perform in an urban economy. Therefore, the overall characteristics of the movements of in-migrants of the respondents were direct, stepped, and chain type.

Figure 3: Map Showing the Flow Pattern of Migrants to Woldiya Town



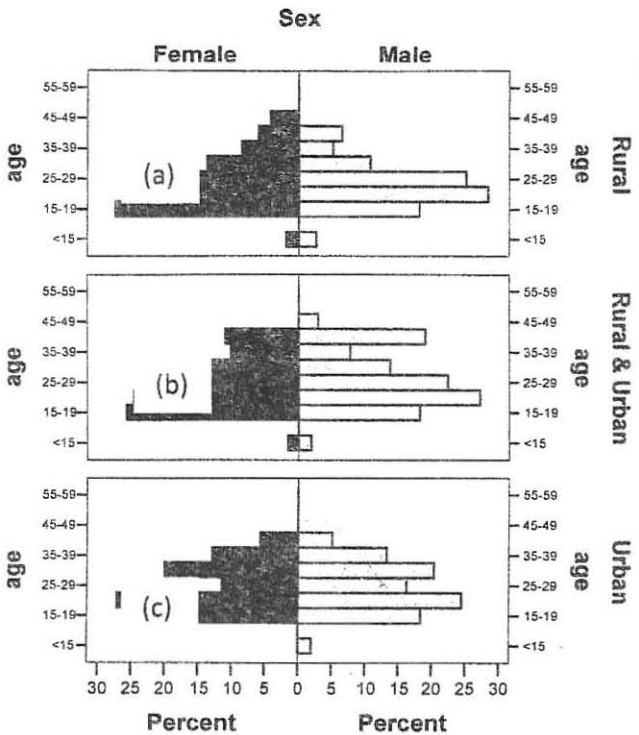
Source: Field Survey, 2009

Characteristics of Migrants

Age and Sex Structure of Migrants

Age and sex composition are the most important demographic characteristics that influence the migration process in most parts of the world. As far as age is concerned, a study by Adepoju (1995) conducted in Africa showed that most migrants within and across national borders are young adults aged between 15-39 years. On the other hand, *Kebede* (1994) argued that migration is not only age selective, it is also gender selective. Similarly, the result of this survey showed the age and gender selective nature of migration to Woldiya Town.

Figure 4: Population Pyramid of Migrants to Woldiya Town



Source: Field Survey, 2009

As shown in Figure 4, the majority of the surveyed migrants were between 15 and 29 years of age. Of the total surveyed migrant population, approximately 67.2 percent in-migrated to Woldiya when they were between 15 and 29 years of age. Only 31 percent of the surveyed migrant populations in-migrated were 30 years or older. On the other hand, around 2 percent in-migrated when they were under the age of 15. The researchers thus concluded that in-migration to Woldiya was age selective. In the survey it was established that there were young migrants to the town. The

researchers could conclude that often young people decide when they are exposed to the pull factors of employment and socio-economic advancement as compared to the often deteriorating socio economic situation in their areas of origin, or simply are in search of a new environment and chance of a life. Due to their age and the resultant prospects, with the capacity to learn new trends, acquire new skills, change jobs, get education and work hard to achieve their goals in newer environments this age group is often more mobile than other age groups. Moreover, the researchers established that the younger age groups migrated as a result of information they had accessed from other population groups who had already in-migrated to the town.

The migrants that originated from the rural areas seemed to be relatively young when compared to those who had migrated from urban areas. The researchers concluded that this was probably due to this age group being less satisfied with the rural agricultural system and were more ambitious and willing to experience urban life. It was clear in the survey that the converse was not true for migrants from urban areas.

Furthermore, Figure 4 shows that the proportion of male in-migrants to Woldiya was greater than that of female in-migrants. The survey showed that the dominant male migratory groups were between the ages of 20-24 and 25-29 respectively. The corresponding dominant age groups for female migrants were between 15 and 19 years. The researchers could deduce that this could be due to the nature and condition of migration in Ethiopia where females become more mobile at an earlier age than their male counterparts. From the data presented in Figure 4, one can deduce that migration to Woldiya Town is age and sex specific. An overall conclusion from the survey was that young people and males were the dominant migrant groups to Woldiya Town.

Marital Status

Marital status is another important characteristic influencing the propensity to migrate, the characteristic of being married, unmarried (single), divorced

and widowed has an effect on the individual's decision to migrate. Single persons have less responsibility than married ones, and thus are more mobile than married individuals. In the research by Kebede (1994), many of the migrants were unmarried at the time they migrated. Similarly, the response given by the respondents in this survey strengthens this principle. The majority (81 percent) of migrants surveyed for this research were either single, divorced, or widowed when they first migrated to Woldiya.

The study revealed that about 68 percent of the surveyed male in-migrants were single when they first migrated to Woldiya. The corresponding figure for female in-migrants was about 70 percent. It was also found that 19 percent of the surveyed migrants were married when they migrated to Woldiya, of which 23 and 12.3 percent were males and females respectively. The fact that the higher proportion of married females were of rural origin than urban origin can be explained by the practice in the rural areas of Ethiopia for females to marry at earlier ages than their males in the rural part of the country.

Thus, from the sample survey, one can understand that most of the in-migrants to Woldiya were females who were single, divorced or widowed and of a rural origin. This is in direct contrast to the corresponding figure of urban origin. The survey established that this was due to the perception that unmarried females in the rural areas of Ethiopia have huge responsibilities in the homestead as well as on the farm. Due to their responsibilities females have little time for education and many are often coerced to drop out of school due to responsibilities related to their gender. It is thus sometimes common practice for females to move to areas that provide better and/or different opportunities. In rural Ethiopia, females who are divorced or widowed often command less respect from the society, and this acts as a push factor for female migrants from rural areas to move to urban areas, where they can engage in activities not related to farming or the household.

When the in-migrants to Woldiya were analyzed on their marital status, it was found that they were dominated by unmarried males and females and fewer married, divorced and widowed migrants.

Educational Characteristics

The prospect of education is one of the significant pull factors in inducing rural to urban migration. The decision to migrate is also more likely influenced by educational attainment of the migrant. This means that those who are better educated are relatively more involved in different migration streams than those who are not. Those who have completed secondary school education are potentially more migratory than those who have only completed elementary school. This is because educational attainment increases ones chance to find employment and get other opportunities. Strong association between the propensity to migrate and level of education has been observed in many developing countries (Oberai, 1978). However, it should be noted that Adepoju (1995) found that there was an increase in the migration of illiterate persons to the urban informal sectors of some African and other developing regions, and thus the generality of education as a factor of migration might decrease.

This research established that the propensity to migrate is directly related to the educational attainment of the individual. The majority of the respondents (about 69 percent) in this research had primary school and above educational level when they migrated to Woldiya. However, 50 percent of the sample in-migrants had secondary education and above.

In this study the in-migrants from urban areas to Woldiya appeared to be in a better position when compared to the in-migrants from the rural areas. About 93 percent of urban origin in-migrants had a primary education or more, whereas the corresponding figure for in-migrants from a rural origin was about 58 percent. The difference in educational attainment between the two groups could be explained by the presence of more schools in urban areas than is the case in the rural areas. In addition, many parents of rural children are not always willing to send their children to attain any form of

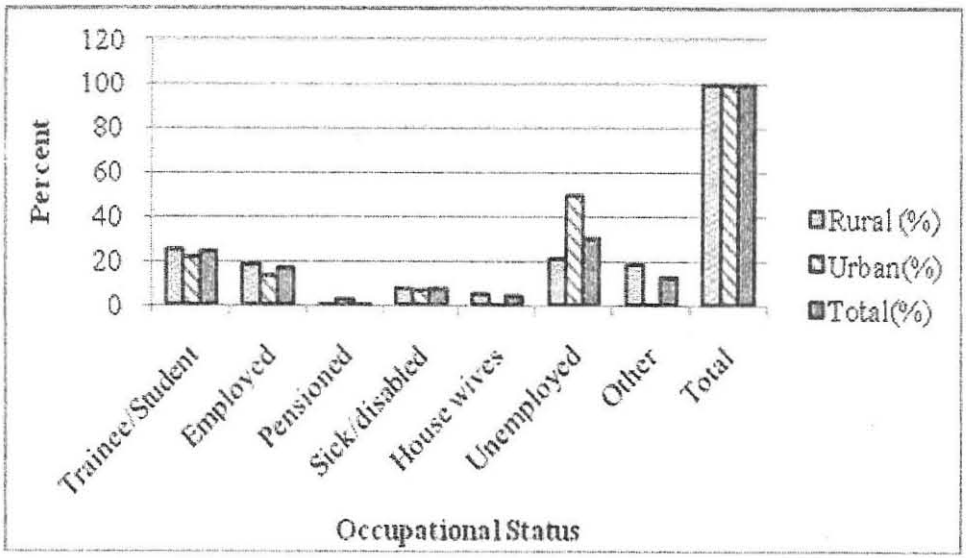
education but rather choose to keep their children at home to assist with farming and other related activities. The research also established that the school dropout only one factor for low educational attainment of in-migrants of rural origin.

Occupational Status

The occupational status of migrants is one of the determinant factors for the decision to migrate. In the case of farmers where there is crop failure the decision to migrate will be based on the need for better opportunities. Due to lack of employment opportunities outside of the agricultural sector, many qualified students will evaluate the employment opportunities in urban areas. In the same vein migrants of urban origin often decide to move to another urban area if they perceive that area to have better employment opportunities.

Figure 5 shows that about 17 percent of the surveyed migrants were employed before they migrated to Woldiya Town, whereas the computed figure for unemployed migrants was found to be about 31 percent. Among urban origin sample in-migrants, the proportion of unemployed in-migrants (49.4 percent) was much greater than those who came from rural areas (21.4 percent). This may be due to the presence of high unemployment level in the different urban areas of Ethiopia. As such, it would appear that unemployed people of urban areas prefer to go to another urban area where better employment opportunities are available. This research showed that a significant proportion of the respondents in Woldiya were either unemployed, or were students before they came to Woldiya for employment and other better opportunities.

Figure 5: Occupational Status of Respondents before Migration at Place of Origin



Source: Field Survey, 2009

The survey also assessed employment status of in-migrants before they in-migrated to Woldiya. Out of the total surveyed in-migrants, 50, 23.3 and 22.1 percent were farmers, and were government and private organization employees before they came to Woldiya, respectively. In general, most of the surveyed in-migrants of Woldiya were found to be young adults that were productive both demographically and economically. Most of them had primary level education or above. The majority of them were single while only a few of these were divorced or widowed.

The Causes of Migration

There are several reasons for population mobility from place to place. Reasons for migration to urban centres in particular are more complex.

However, the causes of migration are usually identified in two broad categories, namely "push" and "pull" factors, the former being 'compelling' and the latter 'persuasive' in nature. For example, people of a certain area may be pushed off by poverty and other natural factors to move towards towns for employment. On the other hand, better employment opportunities or the need for better facilities in urban areas may also pull people to different urban areas. In addition, the decision to migrate from one place to another may also be influenced by non-economic factors such as the need to join relatives, the need to be free from cultural and family restriction and obligation and so on. Until recently scholars have concluded that migration is a response by humans to a series of economic and non-economic factors (Lewis, 1982; Todaro, 1997). However, more contemporary scholars agreed that rural-urban migration is largely explained by economic factors than non-economic factors (Todaro, 1997). In Ethiopia rural-urban migration also takes place largely as a response to economic factors rather than non-economic factors (EEA, 1999/2000).

The survey result of this study also confirmed the above idea. The majority of the sample in-migrants obtained job or some sort of employment. About 24.6 percent of sample in-migrants moved to Woldiya as a result of famine, poverty or crop failure. This was due to the fact that North Wollo *woredas* were highly food insecure and had highly degraded environments. Thus the only opportunity was to move to another area for economic betterment. On the other hand, 13.4 percent of the surveyed migrants were looking for more modern urban services and facilities while 6.4 percent of sample in-migrants came to Woldiya to get better education and training. About 5.4 percent of sample in-migrants moved to Woldiya as a result of a job transfer. In addition, the in-migrants surveyed for this research came to Woldiya to join their relatives (6 percent) and to be free from cultural or family restrictions and obligations (1 percent).

The research further revealed that there was a significant variation between rural and urban origin migrants as to the influence of cultural or family restriction as one of the causes for migration to Woldiya. Out of the total

sample in-migrants who reported that cultural or family restriction and obligation were their main causes for migration to Woldiya, 2.1 percent of them came from rural areas whereas none came from urban areas. This may be related to the fact that in Ethiopia there are a number of cultural restrictions and obligation and these are more rampant in rural areas than is the case in urban areas. Furthermore, out of the total sample in-migrants of rural origin that came to Woldiya to be free from cultural or family restriction and obligation, the proportion of females was greater than those of male respondents. This may be because early marriage, abduction and other related practices are more prevalent among females in rural Ethiopia.

In general, the rural-urban migrants migrated to Woldiya basically in search of economic betterment at place of their destination. Using the established reasons for migration amongst the respondents, the research attempted to test the proposed hypotheses by means of the multiple regression analysis.

In order to test the hypotheses formulated in particular and to identify the most influential migration factor(s) in general, one dependent variable (Y) is used. In the models the researchers included some of the most important variables. As it can be observed in the correlation matrix, there is no multicollinearity among the independent variables since the correlation coefficients are not almost equal to unity; higher adjusted R^2 and t-tests are significant at 0.05 level of significance. This shows that there is no multicollinearity.

Thus, when eight woredas of the zone (Dawintna Dilanta, Gidan, Gubalafto, Habru, Kobo, Meket, Wadla, and Bugna) were taken into account, the most significant independent variables observed were only physical distance from centre of local woreda of origin to Woldiya (X_1) and percentage of literacy (X_6), in descending order of importance in explaining the total variation in the dependent variable. The value of adjusted R square was 0.721, which implies that a significant relationship exists between the independent variables and the dependent variable. They could explain about 72 percent of the total variation in the dependent variable, i.e., difference in the magnitude of out-migrants destined to Woldiya from each local woreda.

The analysis of variance showed that the variables were statistically significant at 0.05 level of significance in contributing to the total variations (See Table 2 for summary of the results).

Table 2: Summary of the Regression on Dependent Variable for Woreda Migrants

R	R square	Adjusted R square	Std. Error of the Estimate
0.895	0.801	0.721	27.91849

Variables in the Equation

Variable	B	Std.error	Beta	T	Sig.
X_1	-0.619	0.172	-0.781	-3.588	0.016
X_6	2.552	2.452	0.226	1.041	0.346
Constant	85.092	40.368		2.108	0.089

$Y' = 85.092-0.619X_1 + 2.552X_6$

Distance appeared the strongest explanatory factor and considerably determined the rate of migration to Woldiya. As it was expected and hypothesized, the coefficients had a negative sign which implied that the proportion of migrants varied inversely with distance between the rural area origin and the urban destination. The lower standard error also indicated that there was strong evidence that the estimates were statistically

significant. The hypothesis that the amount of migration to Woldiya is inversely related to distance was found to be statistically acceptable, whereas the level of literacy (x_6) with B coefficient of 2.552 and significance level of 0.346 was not significant evidence to explain the dependent variable(Y). Its importance was lower in its influence on the decision to migrate to Woldiya. Thus, the hypothesis that education was a significant accelerator of the rate of migration to Woldiya could not be accepted.

Migration is a constant demographic factor and its reasons for leaving ones place of origin are very complex. Hence, the variables are not sufficient by themselves to explain the incidence of migration since the amount of variation explained by both variables was 72.1 percent. Therefore, it can be assumed that there must be other reasons that push people from their origins to Woldiya. The variables of the regression equation at 0.05 level of significance could not be completely ignored and may have had direct or indirect influence on the dependent variable. Thus, there was no sufficient ground to accept the hypotheses (the rate of migration to Woldiya is the function of percentage of urban population and there is strong relationship between unemployment rate and migration to Woldiya).

Consequences of Migration

In migration research scholars' understanding of the consequences of migration so far is less well developed. This is due to the effect of migration on both the places of destination and origin that is very complex and requires thorough understanding of a variety of behavioural contexts. However, in general, the consequences depend on the volume of migration, the degree of flow of remittance, and the type (characteristics) of migrants that dominates the migration flow.

The high rate of overcrowding and unemployment is increasingly causing several social, psycho-social, cultural, political and economic problems in the towns, making them quite unstable social organizations in perpetual tension and stress. In spite of this frustrating state of affairs, the movement

of people continues unabatedly to urban areas due to the perceived, though false expectation of better living and working conditions in urban areas.

Problems Encountered by Migrants while Adjusting Themselves to the New Environment

Individuals may take rational decisions to leave their places with the hope of better life chances of their destinations. This is always a decision under risk and uncertainty taken under certain perception based on the information and knowledge.

According to the survey, about 79 percent of in-migrants of Woldiya made their own decisions to re-locate. This indicated that family bondage for decision making of the respondents was less important. The survey also emphasized that family-parent decision were more important than relatives' or friends' decisions in the case of respondents from rural origin.

The research established that the effect of migration upon the individual involved could take many forms, most of which were related to the extent to which the migrants' needs and aspirations were met in the host community as well as the respondents' own adaptation to the their new surroundings. On arriving at area of destination, the migrants in the survey typically underwent three inter-related processes. First, acculturation took place. Secondly, the migrant adjusted to the new economic and social environment. Thirdly, the migrant participated in the institutional and social settings of the new environment. This process is also typical of findings by Lewis (1982) and Barrett (1996). In order to establish this process, the researcher attempted to establish information on the experience and satisfaction of the migrants with urban life in Woldiya.

Table 3: Information about Woldiya and Problems Faced by Migrants during the Initial Period of In-migration to Woldiya

	Response	No	%
Information about Woldiya	Positive (life is easier in Woldiya)	463	92.6
	Negative (life is not easy in Woldiya)	37	7.4
	Total	500	100
Problems faced by migrants	Housing /shelter problem	293	58.6
	Food and related consumer items	7	1.4
	Social services and other amenities	18	3.6
	Job problem	169	33.8
	Cultural difference	9	1.8
	No difficulty	4	0.8
	Total	500	100

Source: Field Survey, 2009.

As indicated in Table 3, although the majority (92.6 percent) of the surveyed migrants had positive outlook (that is "migrant enjoy an easy life") before they out-migrated to Woldiya, most of the surveyed migrants indicated that they faced different problems during the initial period of their settlement in Woldiya. About 59 percent of the migrants reported that they faced housing/ shelter problems whereas about 34 percent had problem

obtaining employment. About 3.6 and 1.8 percent of the surveyed migrants faced problems related to obtaining social services and other amenities, and of cultural differences at the initial period of in-migration, respectively. This cultural difference could be related to the fact that people who came from different regions or *woredas* had different cultures and traditions which in turn create inconvenience for some time. Moreover, about 1.4 percent of the surveyed migrants had problem of getting food and related

consumer items. However, about 0.8 percent of the surveyed migrants reported that they faced no difficulties at the initial stage of their resettlement in Woldiya.

Examining the time that in-migrants spent without job was also one of the common methods that helped to assess the problems that migrants faced after a certain period of arrival in the town. According to respondents' report, the majority of them (80.8 percent) had no job that was waiting for them and a significant proportion of them were employed within one year. During the group discussion they stated that the main difficulties faced by migrants were the inadequate supply of consumer items, housing shortage, problems related to job such as difficulty of obtaining urban formal job and inadequate social services and amenities.

Current occupational status, educational and income level of migrants

Current occupational status: One of the main interests of in-migrants to an urban centre is to participate in the urban labour force. However, participation in the urban labour force often depends on different factors such as the in-migrants' level of education, presence of relatives and skills. Thus, examining the current occupational status of migrants was important to assess the impact of migration on individual migrants as well as on the destination area.

The study revealed that about 61 percent were employed whereas 18.6 percent of the migrants were unemployed at the time of the survey. This may have implied that employment rate was higher among migrants who had to compete for employment opportunities with the non-migrants. Such

migration of working force means loss of agricultural labour force in the rural areas which may lead to reduction of agricultural production. The other effect of migration in the areas of origin is its impact on labour distribution creating labour imbalances particularly in the rural areas. As a result, agricultural production could be hampered and adversely affected because the rural labour force is dominated by old people, children and females.

As to the type of employment, about 50.8 percent were found to be self-employed during the survey. This is true in many African countries where the bulk of new entrants into the urban labour force seemed to create their own employment (Todaro, 1997). Relatively more migrants (19.3 percent) were employed in government organization. The study further indicated that about 58 percent of the migrants were engaged in permanent jobs because most of the migrants were employed in self-employment, government or private organizations.

Thus, the cumulative effect of flow of labour force with such magnitude was that it created pressure on the existing employment opportunities by jeopardizing the non-migrants' opportunities to get employment.

Current educational level of migrants: Different studies on migration point out that the search for education and training is one of the reasons for rural out-migration. Thus assessing the educational level of migrants at their destination area was important. During the survey period, migrants were asked questions on their current educational level. The majority of the respondents (69 percent) had primary and above level of education when they in-migrated to Woldiya. However, after their migration to Woldiya the literacy rate of migrants had increased to 86 percent. This indicated that the migration involves not only selection of educated persons from their origin but also provide an opportunity for in-migrants to improve their educational level within their urban destination. This may be because in Woldiya there are different training and educational institutions that in turn created opportunities for the migrants to upgrade their education and training levels.

Current income level of migrants: One of the economic characteristics of a migrant is income. An attempt was made to examine the current income level of migrants although there was a problem of obtaining reliable data on the income of individuals. The survey indicated that most migrants (41 percent) earned an average income level of less than 100 birr per-month. Similarly, about 23.6 and 18.2 percent of migrants earned a monthly income of 100-500 birr and 500-1000 birr respectively. This could be because the respondents may have been engaged in different self-employment

opportunities, albeit on a small scale and this allowed them to earn average monthly income.

The significant impact of rural-urban migration upon the places of origin is related to remittance. During the group discussion and personal interview, participants stated that though the amount of money remitted happened to be very low, they were in a position to remit certain amount of money to their places of origin. They reported that their remitted money was used to improve agriculture, purchase consumable items and support livelihood activities. In fact, most of the migrants surveyed indicated that they led a hand-to-mouth existence. Due to the high costs of living in Woldiya, they did not have sufficient money to sustain themselves.

Access to housing and urban facilities: As is commonly known, migration has depopulating effects on home areas and overcrowding at destination areas thereby adversely affecting, at least temporarily, the existing socio-economic systems in both areas. In particular the problem of pressure on limited urban housing and urban services and resources is intense and more severe in many poorly endowed and fledgling towns like Woldiya.

One of the many problems that are often associated with urbanization is the inadequacy of urban housing. That means, the rate of supply of housing does not keep pace with the growing potential demand for housing in different urban areas. In this regard, an attempt was made by arranging group discussions and interviews with the migrants and officials of the municipality of Woldiya. Respondents stated that Woldiya had been facing

chronic problems of housing and shortage of other urban facilities. The migrants reported that they are living in rented houses which had no private or separate kitchen, and this meant that food had to be cooked outdoors or within the main house. The houses also did not have toilet or bathing facilities. They were living in crowded conditions in one or two rooms that were inadequate for their families. Even though the government constructs condominium houses, they could not afford to buy such houses. In relative terms, the supply and distribution of electricity and water was good.

A comparison of the socio-economic condition of migrants before and after migration

An attempt was made to gather information about the socio-economic condition of migrants before and after migration. As such, socio-economic conditions such as working conditions, income, education attainment, access to education for dependents, access to urban transportation and health care, and general living conditions of migrants were used as instruments for assessing the impacts of migration on individual in-migrants.

Three-quarters of the surveyed migrants reported that various aspects of their lives had improved. For instance, about 60.2 percent of the respondents reported that they improved their employment prospects. About 57 percent of them reported an improvement in their income while 77.4 percent of them had significantly improved their educational level.

Similarly, about 91 and 89 percent of the surveyed migrants reported that access to education for their dependents and access to urban transportation had improved, respectively. About 94 percent of them said that access to health care services had improved, while 76.2 percent reported that their general living conditions had improved. In Ethiopia, access to education, health care, and transportation in rural areas has not improved much in quality. Therefore, most of the migrants are of rural origin, they expected to benefit from the available social services like education, health service and transportation in better quality and quantity than in urban areas. Around 19

percent of the surveyed migrants reported that their educational status remained the same. This was due to their being involved in a number of self-employment activities which provided only bare essentials, and as such they did not have enough time to attain further formal education.

Discussion on the applicability of the findings to migration theories

One can assess whether the findings substantiate the migration theories in explaining rural-urban migration observed by way of comparing the features of migration models under review with the findings of the research.

The applicability of each of the migration models to the findings of this research was discussed.

Ravenstein's law of migration

According to Ravenstein, most migrants travel short distances and with increasing distance the number of migrants decreases. This statement was found to be applicable to the study because the adjacent *woredas* mainly Gubalafto, Habru and Kobo were the main suppliers of migrants to Woldiya. Distant *woredas* of Bugna and Dawintna Delanta contributed to a lesser degree. Thus, the distance decay effect seemed to hold true in the case of the study area because most of the in-migrants to Woldiya surveyed were short distance migrants and the volume of urban-ward migration decreased with an increase in distance. The result of the simple correlation coefficient (-0.870) showed that distance and volume of migration were negatively correlated. In other words, as distance increased, the number of migrants decreased.

While females appeared to be more migratory than men from their place of birth, this research established that the proportion of male in-migrants to Woldiya town was greater than that of female in-migrants. In this case, this statement does not confirm Ravenstein`s Law of Migration which states that females appear to pre-dominate among short distance migration, i.e., females are more migratory than males within the place of their birth, but males more frequently venture beyond. This confirms that some of the

theories developed based on the Western experience do not seem to be applicable to the African and particularly in the Ethiopian context.

Finally, Ravenstein's last assumption that the major causes of migration are economic correlated with the findings of this study that indicated that the majority of the sample in-migrants accounted for 34.4 percent of the total to obtain or seek employment. About 24.6 percent of sample in-migrants moved to Woldiya as a result of famine, poverty and crop failure. This was due to the fact that North Wollo *woredas* were highly food insecure and had highly degraded areas. This seemed to leave many in-migrants with little

option but to move to other areas to improve their economic situation in destination areas.

Harris-Todaro's Model of Migration

The Harris-Todaro Model underlined that migrants would reach the decision to migrate by taking the probability of unemployment in the destination areas. The migrants could migrate, though their current income in place of origin is higher than in place of destination. This model was found to be applicable in this research as the migrants reported that the amount of money earned annually at place of destination was almost five fold compared to their rural annual per capita income. As far as the economic considerations in terms of higher or expected higher incomes for migrants in Woldiya, which made them leave migrants in the first place were concerned, the Todaro-Harris Model was applicable in this research. Therefore, the income differential at places of origin and destination proved to be an important push-pull factor in the area.

Migration and the Dual Sector Model of Economic Development

The results of the research showed that a higher proportion of surveyed migrant populations of Woldiya were either unemployed, or farmers who came from rural agricultural areas to Woldiya looking for employment and other better opportunities. This goes with the 'Lewis Dual Sector Model' discourse; people migrate to the industrial sector to obtain employment' (McCatty, 2004).

Conclusions and Recommendations

There are towns in Ethiopia where population growth has been rapid during recent years, and this increase is not due to the natural increase but rather as a result of migration processes. Amongst these towns is Woldiya, which is one example of a town that has experienced accelerated growth rate of population as a result of in-migration.

Most in-migrants of the town were of rural origin. Though Woldiya attracts migrants from many parts of the country, most of them were intra-regional, particularly intra-zonal. In other words, the stream of migration to the town was dominated by short distance migrants, characterized by their stepped and chained movement following one another. The majority of them are in their most productive ages, both demographically and economically. The town itself hardly seems to be in any feasible way capable of absorbing the excessive inflow of migrants nor has investment capacity to add to its urban resources. Migrants themselves are too poor to contribute capital resources to the town's growth and development.

A large number of migrants were single (unmarried) when they came to Woldiya. The dominant divorcee and widowers were females from rural origin. Most of the migrants had formal education. However, more males than females had formal education in both migrants of urban and rural origin. A greater number of migrants were either students/trainees or unemployed or sick/disabled before they migrate to Woldiya. Among the employed ones most of them were farmers.

Most migrants moved for economic reasons such as seeking employment, job transfer, to open up or extend personal business, to gain education and training services. On the other hand, some of them moved to Woldiya for non-economic reasons such as to be free from cultural or family restrictions and obligation, and to join relatives or friends in the town.

Rural push factors, by and large, are stronger than the urban pull factors causing excessive migration while rural areas because of lack of investment and economic growth, at the same time suffering from excessive population

growth, lack of agricultural or alternative employment, droughts and famines were amongst reasons for migration. The urban pull factors are weak and the urban capacity is low, practically, the rural migrants perceived life chances in the town destination are highly misconstrued and rather exaggerated, based on here-say and wrong information about the opportunities available in the town. Growing unemployment in the rural areas pushes young people, who are also bitten by the rising ambition bug and better life chances in the urban area.

There are several factors that induced the flow of people to Woldiya. The main determinants were low per capita income, distance and education. The availability of better employment opportunity and career advancements were concentrated in the urban areas. Therefore, the relevant measures that can be taken on these determinants are expected to increase the rate of migration and did not arrest the people in their rural areas in particular.

The survey revealed that most of the migrants were in their productive age, thus leaving behind the dependents in the rural areas with low labour efficiency and productive capacity. As such, this condition could lead to adverse effects on agriculture because of less efficient and low agricultural labour input, particularly because small-scale subsistence agriculture can be hardly made mechanized and still requires hard manual labour.

In-migrants of Woldiya Town did not move in a well-planned and a rationally decided manner, and thus they face many problems particularly during their initial arrival. Among the problems, housing is the most pressing. The town has chronic shortage of housing units compared to the growth of population. Thus, because of scarcity of houses, dwellers live in highly congested dwellings and rooms but the distribution of water and electricity to different parts of the town has improved.

Most of the migrants have improved their working condition, income, education, schooling of dependents, access to urban transportation and health care. In general, for most of them their general living conditions were

improved. However, the problem of housing, lack of employment opportunities and sufficient consumption goods, rising cost of living, inadequate social services and others were major problems that migrants face.

Some of the theoretical models of migration were found to be applicable to this research. However, the Ravenstein's Law of Migration, which states that 'females pre-dominate among short journey migrants' could not be confirmed in this research rather the opposite was found to be true as it was found that males were more migratory than females in this case study.

In general, the high flow of migrants to Woldiya had accentuated the problem of unemployment. Thus, the overall effects of rural-urban migration in the town were discouraging. The need to formulate recommendations to solve some of the socio-economic problems of both at the places of origin and destination was thus postulated by the researchers.

Recommendations

After analyzing the causes and consequences of rural-urban migration to Woldiya Town, based on the findings, the writers suggest that policy makers and implementers found at different level both in the area of rural and urban sectors give a closer attention to the following policy-based recommendations.

- Low productivity of the agricultural sector, problem of marketing and rural unemployment and underemployment and poverty which prevails in the rural economy as a whole compelled many rural people to out-migrate. This is because development gap could not be narrowed between rural and urban areas. It is only when such gaps can be made
- Narrow that out-migration can be discouraged. Therefore, there is the need for integrated rural development strategy to increase agricultural production by increasing rural labour productivity. Improving farm technology and increasing farm modern inputs such as fertilizers, high yielding variety of seeds, insecticides, adequate agricultural extension

services, taking care of farm-gate agricultural commodity price incentives, improve access to financial credit and market facilities.

- Resettlement on voluntary basis from highly degraded areas to where there is a vacant and potentially productive irrigable land can reduce the flow of people towards urban areas.
- Equipping rural communities with necessary knowledge and skills, by way of improving access to education and health facilities, and vocational trainings, would prepare rural out-migrants for a better

- Employment opportunity at their place of destinations- urban centres like Woldiya.
- The problem in the housing sector development, which could not show a due pace of growth compared to fast growing urban population resulting from large rural-urban migrants, should be given more attention by facilitating access to houses developed by regional government or local government agencies or the private sector so that urban inhabitants can get access to a fair and conducive habitat.

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