

**RURAL-URBAN MIGRATION – CAUSES AND ECONOMIC IMPACT<sup>1</sup>**

**BY**

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**RESEARCH PAPER PRESENTED TO THE SCHOOL OF ECONOMICS,  
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## DECLARATION

This paper is my original work and has not been presented for a degree in any other university.

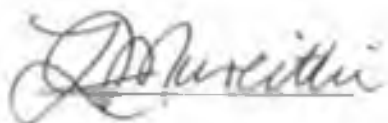


Simon W. Ngari

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Date

This research paper has been submitted for examination with our approval as university supervisors.



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10<sup>th</sup> September 2009

Date



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Date

## DEDICATION

I dedicate this research paper to my dear wife Abigail, my sons Ronald and Kelly and finally to my parents, the late Albert Ngari who was himself a devoted educationist and my mum Zipporah

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My sincere gratitude goes to my supervisors Professor L. P. Mureithi and Dr S. M. Nyandemo for the direction they gave me when writing this paper

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## ABSTRACT

This research paper aims at studying migration from rural to the urban areas with the main concern that by the year 2050, it's expected that 60% of total world population will reside in the urban areas. This is by all means a major transition from the 1950's where only 30% of the population resided in urban areas. The major concern here is whether developing economies will be prepared enough to cope with the socio-economic and political implication of this transition.

This study aims at adding value to already existing literature on migration patterns by looking at other possible factors that may cause rural-urban migration like social ties and relationships among other traditional factors like age, sex, marital status, income expectations and family size.

This research critically examines the effects of education on migration decision by analyzing data on level of education attained and found out that most of the migrants to the urban areas have attained no education at all while majority are only educated to primary level. The study also examines the socio-economic concepts which are attributed to rural-urban migration such as mushrooming of slum dwellings, urban unemployment, crime, environmental degradation and other social vices like drug peddling.

This study aims at making policy recommendations based on the findings which can be of use to policy analysts as they try to cope with this phenomenon and found that the solution lies in creating employment in rural areas and controlling the expansion of urban informal sector. Finally, this study proposes areas that require further research such as the effect of technology in influencing future migration patterns from rural to urban areas.

**Key words** Rural, urban and migration

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## CHAPTER ONE

### 1.1 INTRODUCTION

Rural-Urban Migration represents the relocation of rural population to urban areas where probability of landing better paying jobs is higher and access to social amenities like schooling, healthcare and entertainment is more likely. An urban centre in this study is defined as per the 1979 census and labor force survey of 1988 to 89 where population density of an urban area is 2000 people and above. Urban areas are associated with better infrastructure in terms of communication, electrification, transportation, information technology and social amenities.

Rural-urban migration represents one of the topical issues most studied by scholars yet the phenomenon is on the increase not just for the developing countries but also for developed nations. By the 1950s less than 30% of the world population resided in cities, this increased by 47% by 2000 and by year 2050, its expected that 60% of world population will reside in cities (Urbanization and Global Change: Contemporary perspective, Philadelphia University).

This poses a great challenge to the planning authorities particularly in the less developed nations and has led to emergence of slums, rising crime rates, environmental degradation and global warming, urban unemployment, vices like drug peddling, prostitution, street families among others. In Nairobi one of the major challenges has been hawking which has caused disruption of normal business, destruction of property and social unrest in the city.

Most of the studies agree on the major variables leading to migration, the major ones being age, education, marital status, number of children (family size). Zelinsky (1971) in his mobility transition theory asserts that future population cohorts are more likely to migrate than the previous ones, while Chattopadhyay (2006) research in Ghana found out that migrants had fewer children than non migrants.

Rural-urban migration can be looked at in 3 dimensions. Push factors comprise those that make migrants decide to move from their areas of origin and include such factors like poverty and land scarcity. Pull factors are those incentives that attract migrants like education opportunities, better wages and income and expectation of better lifestyles. There are also trigger factors in which case migrants are faced with circumstances like drought, war, tribal clashes and hostile climate conditions leading to migration.

This research paper intends to contribute further to this topical issue by analyzing other possible variables that may cause rural-urban migration like social network and linkages, parental background e.g level of education for both father and mother as well as scrutinize future determinants of migration like effect of change in communication and technology.

A sizeable number of migrants are relocated by their family members to more accessible areas either in cities or other rural areas. With the continued change in technology like mobile phones, internet and Mpesa services (a cash transfer technology by use of phones) its worthwhile exploring whether they will have impact on future migration patterns.

The rate of rural-urban migration is higher for developing countries compared to the developed countries at the same stage of economic growth implying the rate of urbanization is also higher. Rural-urban migration and urbanization are closely related and both are associated with economic growth.

Migration patterns are complex with the most notable being rural-urban but there can also be rural-rural, urban rural or even urban to urban migration. These patterns of migration are affected by policy decisions, political and social factors e.g civil strife, political instability, patterns and rates of growth between rural and urban areas. This study will however concentrate on rural-urban migration.

## **1.2 Research Problem**

Despite the fact that many studies have been undertaken in an attempt to find the causes of rural-urban migration, the problem still poses a socio-economic challenge of great concern indicating that a gap in knowledge still exists and this calls for an all inclusive study and further research of the problem.

Rural and urban areas are highly interlinked and a mutually beneficial relationship should exist between the two. The problem is that activities being carried out in the rural areas like food and raw materials supply to the urban centres have had very low returns in terms of income generation. This is as a result of poor policies and at times political pressure leading to a situation where governments want to maintain low food prices to ensure popularity, political security and even win votes.

These poor policies and poor infrastructure have led to a gap in income generation from activities being carried out in rural and urban centres causing rural urban migration as economic agents struggle to maximize their utilities.

## **1.3 Research Objective**

This study aims at making further contributions in this area of study which will help policy makers arrive at workable decisions as well as suggest areas that require further research aimed at coping with future patterns of migration through:

- a) Identifying other possible factors that induce rural-urban migration.
- b) Making policy proposals aimed at making rural areas attractive in terms of investments as well as other proposals that would make rural population engage in economic activities worthy their efforts.
- c) Re-assess the significance of variables historically assumed to cause rural-urban migration like age, education, social linkages, family size as well as psychological factors.

## **1.4 Justification and Significance of the Study**

This study aims at addressing the socio-economic challenges associated with rural-urban migration which are quite evident in Kenya and particularly in Nairobi where slum

dwellings are on the increase with Kibera slums being the largest in Africa, urban unemployment, swelling crime rates and social vices like prostitution and drug pedaling. On the other hand under development of the rural areas due to brain drain from rural areas is of major concern.

The study also aims at empirically measuring the significance of causal variables like "social linkage" and its impact on rural urban migration since most migrants only make it to the cities from support in terms of housing, finance and food by relatives already residing in cities. Psychological reasons for migration will also be addressed as it's evident that some migrants end up in poorer living standards than they were initially. Previous literature does not give enough explanation as to why un skilled and semi-skilled labor migrates other than assertions like "city bright lights" attracting them.

### **1.5 Hypotheses**

Like most of the studies previously done, this study expects that age will be a significant variable in making a migration decision and we expect very few migrants at advanced ages. Previous studies cite a positive relationship between level of education and probability to migrate. In this study however it's expected that people with less education are equally likely to migrate just like those with high level of education. The decision to migrate is dictated upon by available job opportunities in which case there are job opportunities for non skilled and semi-skilled persons in industrial estates, domestic servants and self employment

Other variables expected to have a negative correlation with the decision to migrate include distance from area of origin and that surrounding areas to a city are more likely to produce more migrants than areas which are distant and inaccessible from the city. Finally the study expects that social ties or linkages which are important to a new migrant will be a significant variable in making a migration decision.

## CHAPTER TWO

### 2.1 LITERATURE REVIEW

Rural-urban Migration is evident not only in developing economies but also in the developed ones. The rate of migration is however higher today for developing nations than it was for developed economies when they were at the same stage of growth. The question is; how will the developing economies cope economically, environmentally and even politically with such high urban population densities?

Among the major studies on migration include a theoretical study by Robert Lucas in his paper, "life earnings and rural-urban migration" (June 2002), where he described migration in terms of a decrease in rural population and rural labor and reduced GDP from agriculture. According to his study many new migrants are worse off than before migration and end up in shanties or squatters where they suffer urban unemployment. He sees rural urban migration as a passage from 90% agricultural economy to one that is 90% urban

Richard U. Agesa (2001) in his paper, "Migration and the urban to rural earnings difference: A Sample Selection Approach," used data from Kenya RLES (Rural Labor Force Survey 1988-1989) and ULES (Urban Labor Force Survey, 1986) in his study. He modeled migration as a discrete choice made by workers to migrate from rural to an urban area which he specified as below.

$$\text{Prob}(M_{ig}) = \phi \left[ \alpha + \beta \text{Male} + \gamma Z + \omega (\ln W_u - \ln W_r) + \varepsilon_i \right]$$

Where  $\phi$  is the normal probability density function,  $M_{ig}$  is a binary variable taking the value of one if a migrant is in urban area and zero if in rural area.  $i$  indexes an individual while  $Z$  is a vector of variables determining rural urban migration like age, number of children, size of rural land, distance from rural to urban area, human capital characteristics and urban unemployment rate. Variable  $(\ln W_u - \ln W_r)$  represents the wage difference between a migrant worker in an urban area and a non-migrant worker in a rural area ( $u$  indexes urban area and  $r$  indexes rural area). The coefficient  $\omega$  on wage

differential explains whether a migrant will make a migration decision based on this difference

The findings of the study got coefficient ( $\omega$ ) to be very significant meaning that wage difference between rural and urban areas is a major determinant of migration decision and it's the expected rather than actual salary which increases probability of migration. Richard Agesa found the coefficient for urban unemployment to be insignificant explaining why migration continues despite high unemployment rate in urban areas. This study found a positive and highly significant coefficient on human capital variables, that is, the higher the level of education the higher the probability of migration. This study however does not explain why unskilled workers migrate, a major handicap but other studies emphasize non economic factors which influence migration decision like "city bright lights" may attract unskilled labor.

According to Agnes R. Quisumbing and Scott McNiven in their paper "Migration and the rural-urban continuum, evidence from rural Philippines", social networks are important for migrants particularly for the first-time migrants and that initial financing is by guardians or parents. They however wondered whether migration comprised a brain drain from rural areas or whether it leads to welfare improvement through remittances

In the Contemporary Perspective (Philadelphia University), "Rural to urban migration and the impact upon construction industry - A case study from Mexico", migration is as a result of "push" factors like poverty, land scarcity or "pull" factors which include the incentives that attract migrants and finally "trigger" factors which force people out of their original homes such as floods, hostile climate or ethnic wars

White and Lindstrom (2005) in their study found out that unmarried people are more likely to migrate than married people. However, there might be more hindrances for women than men when it comes to migrating. They also found out that the number of children can restrict mobility.

Todaro (1997) found a positive relationship between level of education and migration to cities and that more educated people are more likely to migrate.

Zelinsky (1971) introduced mobility transition theory and asserted that future generations (cohorts) are likely to be more mobile than previous ones. The study however found Cohort variable to be insignificant.

**Some of the major concepts associated with increasing rural-urban migration include:**

## **2.2 Urbanization**

Development of cities and urban gigantism result from agglomeration economies according to Wallen Island. Investors prefer to locate their investments in areas where they enjoy urbanization economies which are associated with growth of a concentrated geographical region as well as localization economies which are associated with mutually dependant sectors of the economy such as financial, manufacturing, automobiles and transportation. Due to these biased growth patterns, rural-urban migration is catalyzed as rural population seeks for greener pastures.

## **2.3 Emergence of Slums**

Rural-urban migration results into urban unemployment since not every migrant can secure a job in urban areas. Those who don't secure jobs can't afford decent housing leading to emergence of urban shanties which today represent over one-third of the urban population in all developing countries. In most cases, they account for 60% of the urban total population. See the table below.



**Table 1: Slum dwellers and squatters as a percentage of the urban population.**

City	Slum dwellers as a percentage of the population.
<b>Latin America</b>	
Bogota, Colombia.	60
Mexico City, Mexico	46
Caracas, Venezuela	54
Rio de Janeiro, Brazil	20
<b>Middle east and Africa</b>	
Addis Ababa, Ethiopia	79
Casablanca, Morocco	70
Ankara, Turkey,	60
Cairo, Egypt	60
Dar es Salaam, Tanzania.	53
<b>Asia</b>	
Calcutta, India	67
Karachi, Pakistani	44
Manilla, Philippines	35
Jakarta, Indonesia	26

**Source: Population Crisis Committee. World population growth and global security report No: 13 (Washington D.C population crisis committee. 1983)**

Emergence of slums has also been explained by existence of colonial municipal by-laws which have outlived their applicability for example in Nairobi Kenya, there was a colonial requirement that an official house shouldn't cost less than \$3500 and should be accessible by car. This has led to a situation where Nairobi's land is occupied by 10% of the population and 100,000 slum dwellings can't be improved because they're illegal

#### **2.4 First city bias Problem**

In an attempt to woo private investors, there is a tendency by the government to disproportionately allocate a large share of the country's budget to the main city. This leads to urban gigantism where cities like Nairobi experience growth at the expense of other smaller towns like Thika, Wajir and Kitale etc. This further accelerates the problem of rural-urban migration and associated problems like congestion, pollution and crime. According to Paul Krugman this leads to population and economic activities being concentrated in a single city largely to avoid transportation costs to take advantage of existing market as most people have been attracted in search for jobs and better prices

and products have less transport costs. If unchecked, this problem becomes cyclic unless policies are put in place to promote other investment destinations and check rural-urban migration.

Another explanation to first city Bias problem is the existence of dictators with unstable power base (See Table 1.2). Alberto Ales and Edward Glaeser argue that unstable dictatorship fearing overthrow of government must provide "bread and circuses" for the first city to avoid unrest. This bias further aggravates the problem of rural-urban migration.

**Table 2: Politics and urban Concentration.**

STABLE DEMOCRACIES	STABLE DICTATORSHIPS
Urban Concentration = 0.23 (0.032)	Urban Concentration = 0.3 (0.03)
Number of observations = 24	Number of observations = 16
UNSTABLE DEMOCRACIES	UNSTABLE DICTATORSHIPS
Urban Concentration = 0.35 (0.07)	Urban Concentration = 0.37 (0.02)
Number of observation = 6	Number of observation = 39

**Source:** Alberto F. Ales and Edward L. Glaeser, "Trade and circuses: Explaining urban giants" *Quarterly Journal of Economics* 110 (1995): 196.

Another consideration that leads to city gigantism and further worsens rural-urban migration is the desire by investors to locate firms near policy makers. Due to bureaucracy and other factors, investors want to be near government officials in case special favours are needed. This trap can only be addressed by tackling bureaucracy and strengthening institutions (legal) and advancement towards democracy.

## 2.5 Emergence of Urban Informal Sector

This results from the fact that not all the migrants are able to secure formal jobs and as urban unemployment rises, new entrants to the urban labour force engage in unorganized, un-regulated business activities in the informal sector to earn a livelihood. These take the form of family business activities run by relatives, hawking, street vending, knife sharpening, snake charming, shoe shining, carpentry, painters. Other Migrants engage in some illegal activities like drug peddling and prostitution.

This sector became increasingly important from the seventies and is today a major source of employment, popularly known as “Juakali sector” in Kenya.

Some of the business ventures in the informal sector succeed very well and graduate to registered, licensed and profitable business enterprises joining other formal organizations. Most of the entrants in this sector are recent migrants from rural areas with little formal education are unskilled and have limited financial access. This sector engages in labour intensive business activities and is a major contributor to the rural-urban migration

The sector is characterized by financial uncertainties, little or no job security and harsh working conditions. Due to these handicaps, most migrants live in semi permanent shanties with minimal essential facilities like drainage, electricity, and clean water. Social amenities like schools and health services are also lacking

Comparatively however, the informal sector income still remains higher than average rural income compounding the problem of rural urban migration, the role of the informal sector cannot therefore be underrated in providing income opportunities for the rural migrants and urban poor. The way forward is therefore to devote a lot of research in making this sector vibrant and provide access to credit which is one of the biggest bottlenecks.

By planning this sector, it would ensure continued growth, provide source of employment and reverse the situation as it is today where the informal sector is a “holding ground”, as

people search for white collar jobs where they believe there's more job security and future progress through pension programmes

There emerges a debate on the way forward for the informal sector. This sector is a provider of up to 50% employment to the Urban Population providing one third of urban income. Focusing on the problems facing the sector like credit access, infrastructure problems like lack of electricity can improve earnings but on the other hand encourage rural-urban migration. Should the focus therefore be on the urban informal sector or should the government planner focus on developing rural areas? The informal sector is also known to be difficult to regulate in that most of the businesses aren't registered and don't follow labor regulations. It's also more difficult for the taxman to collect his dues. Whereas attention must be given to this sector, the main focus should be developing rural areas to provide competitive incomes which would in turn tame the rural-urban migration problem.

## **2.6 Gender Factor in Rural-Urban Migration**

Coming from the background of low income in urban informal sector, women provide the bulk of labour to the informal sector. Women migration has led to increase in female led household which is one of the factors cited for increased black poverty in the paper by Steven Schulman, "The causes of black poverty" Journal of Economic Issues, Dec 1990. Women also seem to suit this sector in that they're able to run small or micro enterprises that require very little start-up capital e.g. homemade food stuffs and handicraft like Kenyan 'Kiondo', Baskets, Bungles etc.

Studies done in Latin America and Asia have shown that women have better repayment discipline on advanced credit than their male counterparts (Todaro, Michael p. Economic development chapter 7). In Kenya, women have formed successful business groups called "Chama" or merry-go-rounds which have elicited the interests of international donors like the World Bank and they are able to access finances through banks and other upcoming gender sensitive institutions.

The likely success of women in the informal sector means that there's also a bigger likelihood for more and more to migrate to urban areas in search for better livelihood.

The success of women in business is however greatly curtailed by unfavorable cultural and social practices which for example prohibit women inheritance to property, right to education, inaccessibility to family planning services increasing fertility rates and overburdening the women with the role of child rearing and reducing their time to engage in business ventures.

## 2.7 Urban Unemployment

Rural-urban migration is today's single most important cause of urban unemployment. This migration contradicts Lewis "Theory of surplus labour" in that the migrants are the rural energetic lot at their most productive stages who migrate in search for better paying jobs leaving behind unproductive rural sector since its not excess labour migrating

This causes unbalanced growth as the populations remaining behind are children and the old who are not able to exploit the potential of rural areas. The practice swells the urban labour while depleting the rural areas off valuable human capital. The problem of urban unemployment is worsened by the fact that large industries are adopting capital intensive modes of production meaning that only a few migrants can access jobs. Furthermore, these companies require skilled labour a factor we saw is missing from most of the urban migrants

## 2.8 Migration Decision

While appreciating that migration patterns are complex the final decision to migrate will depend on more than one factor. Most of these migration factors fall under social, cultural, religious, economic or political factors whereas there can also be circumstantial reasons for migration. The major factors of rural-urban migration include wage differential, age, level of education, distance, cost of migration, social calamities like famine, disease, and violence

A major factor in the 21<sup>st</sup> century that needs to be researched further is the effect of information and technology. This being a century of Information Technology most of the newly evolving industries are Technology based and are a major source of employment.

In Kenya such industries have emerged offering internet services, mobile phone communication and they have recorded phenomenal growth. Closely related to these are institutions offering courses and training related to Information technology.

Most of these new companies and institutions seem to favour large capital cities where there's ready market for their products. The extent to which the factor of Information Technology continues to shape rural-urban migration requires further studies as it might become a single most important factor shaping future rural-urban migration.

## CHAPTER THREE

### CONCEPTUAL FRAMEWORK AND METHODOLOGY

#### 3.1 Conceptual Model

In this model, we shall assume existence of only 2 sectors namely rural agriculture and urban manufacturing. We also assume that the manufacturing sector wage rate is set at

$$\bar{W}_m$$

The potential migrant has the task of maximizing utility and can achieve this by migrating to the urban area where there is a probability of landing a manufacturing job. This is however subject to other considerations such as cost of relocation, housing and cost of other bills. If these costs become prohibitive, then an individual won't migrate since utility in the rural agriculture sector is higher.

This can be explained by the indirect utility function.

$V = \gamma(P_1, P_2, P_3, \bar{W}_m)$  Where  $V$  is the maximum utility the potential migrant can achieve at the set wage rate ( $\bar{W}_m$ ) subject to costs to be incurred where  $P_1$  is cost of relocation (Transport),  $P_2$  is cost of housing and  $P_3$  is cost of other bills like electricity and water.

The task of an individual (i) is to maximize,  $V = \gamma(P_1, P_2, P_3, \bar{W}_m)$  subject to minimizing

$$\text{Expenditure } I - Y = W_m = P_1X_1 + P_2X_2 + P_3X_3$$

Since the migrant can only be in one place that is, he's either in rural agriculture or urban manufacturing we shall use the binary logit model in our demonstration since the potential migrant will make a discrete choice to be in the rural area or in the urban area.

The ratio of probability of migrating to that of not migrating would be given by the odds ratio and is equal to  $e^Z$ .  $Z$  is the benefit of migrating and would be captured by such variables as improved urban income and social amenities.

$$\frac{M}{1-M} = e^Z \dots\dots\dots(i)$$

(M) is the probability to migrate and (1-M) the probability of not migrating.

Rearranging the terms would give

$$\Delta M = \ell^2 (1 - M)$$

$$M = \ell^2 - \ell^2 M$$

$$M = \frac{\ell^2}{1 + \ell^2} \dots \dots \dots (iii)$$

$\ell^2$  is the benefit of migrating and  $1 + \ell^2$  is the total benefit of migrating and not migrating

Dividing both numerator and denominator of equation (ii) by  $\ell^2$  gives.

$$M = \frac{1}{1 + \ell^{-2}} \dots \dots \dots (iii)$$

Equation (iii) shows the probability of an individual (i) migrating from rural agriculture to urban manufacturing.

From the above model, as the value of  $Z$  increases to infinity ( $Z \rightarrow \infty$ ), the probability, (m) of an individual to migrate tends to (1) as the value of  $Z$  reduces to negative infinity ( $Z \rightarrow -\infty$ ), the probability (m) of and individual (i) to migrate tends to zero (0)

The significance of different variables in the migration decision would be given by the following logistic regression equation where  $Z = f(x)$

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U$$

Where  $X_1$ , cost of transport,  $X_2$  cost of housing and  $X_3$  is the cost of other bills.  $U$  would capture other factors not estimated such as psychological and circumstantial. The empirical model to analyze variables that cause rural to urban migration would take the form



$\text{Prob}(m) = f(\text{Age, sex, edu, dist, family size, expected wage, social-ties, marital status})$

where  $\text{prob}(m)$  is a binary variable which takes the value of one if a person migrates and zero if otherwise. Assuming a linear relationship of the explanatory variables to migration where  $m = f(x)$ , the linear function would be expressed as

$$M_{iu} = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n + U$$

Where  $M_{iu}$  represents migration from rural to urban area,  $X_1$  to  $X_n$  represents the explanatory variables in our case factors leading to migration and  $U$  is the error term

### Area of study and data

The study analyses rural-urban migration in all major urban centres in Kenya by using Integrated Labour Force Survey (ILFS) 1998-99 data which was conducted in all administrative districts of Kenya excluding Turkana, Samburu and Marsabit Districts

This survey utilized National Sample Survey and Evaluation Programme (NASSEP III) framework with 12,814 randomly selected households from 1139 clusters in the urban areas, and there was 80.7 percent response rate, that is 1938 households out of a total 2401 of the selected urban participants. The survey was done by the Central Bureau of Statistics (CBS) Kenya with a technical inter-ministerial steering committee thereby giving credibility in the manner the survey was conducted.

The ILFS 1998-99 data has several attributes that make it suitable in the rural to urban migration study in that it has detailed information on the informal sector (Jua Kali). It is estimated that there are 1.9 million enterprises (70.4%) in rural areas whereas 788,000 (29.6%) are located in urban areas. From these statistics, though there will be migration related to this sector it is expected not to be very significant. The data also has information on employment creation from the sector by status, sex and residence see (Table 3).

**Table 3: Employment in the Informal Sector by Status in Employment, Sex and Residence**

Employee	Rural			Urban			Total
	Male	Female	Total	Male	Female	Total	
Self employed	1,007,687	891,865	1,899,552	362,007	425,985	787,992	2,687,544
Unpaid family worker	42,540	61,846	104,386	11,681	37,489	49,170	153,556
Paid employee	252,336	75,318	327,654	257,048	100,952	358,000	685,654
Other	11,885	759	12,644	16,904	5,808	22,712	35,356
<b>Total</b>	<b>1,314,448</b>	<b>1,029,788</b>	<b>2,344,236</b>	<b>647,640</b>	<b>570,231.64</b>	<b>1,217,874</b>	<b>3,562,110</b>

Source: Central Bureau of Statistics (March, 2003)

From the above table there is more job creation from the sector in rural areas than in the urban sector. More males are self employed in rural areas whereas it's the reverse in urban centres where more women are self employed.

The ILFS data has demographic characteristics of the surveyed population in terms of the age, sex and marital status. The surveyed population depicts a youthful population with 42.3 percent being under 15 years while 75.3 percent is under 35 years of age. It is therefore expected that majority of the migrants would come from age 15 and below.

On school enrolment and education attainment, the data has detailed information on highest level of education attained both in rural and urban areas as well as information on sex status (See the tables below).

**Table 4: School enrolment by level and sex**

Education level	Male	Female	Total
Nursery	406,757	381,194	787,951
Primary	3,276,566	3,029,410	6,305,976
Population (6-13)	3,671,528	3,403,607	7,075,135
Enrolment ratio (%)	89.2	89.0	89.1
Secondary	517,474	429,937	947,411
Population (14-17)	1,561,397	1,523,344	3,084,741
Enrolment ratio (%)	33.1	28.2	30.7
University	27,552	19,413	46,965
Level not stated	26,219	48,181	74,400
<b>Total</b>	<b>4,254,568</b>	<b>3,908,135</b>	<b>8,162,703</b>

Source: Central Bureau of Statistics (March, 2003)

**Table 5: Education Attainment of the Survey Population**

Region	Highest level attained						Total
	None	Nursery	Primary	Secondary	University	Not stated	
<b>Rural</b>							
Male	14.7	3.6	65.0	15.9	0.5	0.1	100.0
Female	23.7	3.6	60.8	11.2	0.3	0.4	100.0
Total	19.3	3.5	62.9	13.5	0.4	0.4	100.0
<b>Urban</b>							
Male	6.3	3.7	43.9	41.3	4.4	0.4	100.0
Female	9.8	2.6	51.5	33.0	1.7	1.2	100.0
Total	8.1	3.2	47.7	37.2	3.0	0.8	100.0
<b>Total</b>							
Male	12.5	3.6	59.5	22.6	1.5	0.4	100.0
Female	20.2	3.3	58.5	16.9	0.6	0.6	100.0

Source: Central Bureau of Statistics (March, 2003)

Table 4 indicates that there is a higher enrolment for males than it is for women indicating that migration related to education is higher for men than women. Table 5 indicates that the level of illiteracy is higher for women than with men both in rural and in urban areas with a higher percentage of women having attained no education at all

#### **Variable description**

The study will use the following factors as explanatory variables on rural urban migration as supported by literature and available data.

**Age (A)** – will represent the age at which a potential migrant is likely to migrate. Age is hypothesized to have influence on migration decision

**Sex (S)** – This is a binary variable with a value of one if male and 2 if female. Sex is hypothesized to influence migration decision.

**Marital status (MS)** - This is a dummy variable with the values

- 1 = Never married
- 2 = Married monogamy
- 3 = Married polygamy
- 4 = Separated
- 5 = Divorced
- 6 = Widowed
- 7 = others (specify)

Marital status is hypothesized to influence migration decision with more unmarried persons likely to migrate.

**Distance (D)** – Refers to distance from origin and it is expected to be very significant in making a migration decision. Areas nearer to urban centers are expected to have more potential migrants and the reverse is true for areas distant from urban areas.

**Level of Education (LE)** – This is a dummy variable with values of

- 1 = No schooling at all
- 2 = Nursery
- 3 = Primary
- 4 = Secondary
- 5 = Undergraduate
- 6 = Post graduate

**Expected Wage (EW)** - In this study, this variable was proxied by main reason for looking for a different job and accordingly from the data, it was found to be low pay or income. This variable is hypothesized to significantly influence migration decision as people expect to land better paying jobs or businesses once they migrate to the urban areas.

**Self Employment (SE)** - The variable is hypothesized to influence migration decision as people migrate to start self employment. This is common in many urban areas evidenced through business activities like hawking, transport (e.g. matatus), second hand cloth sale and retail ventures.

**Social ties (ST)** This variable in the study is proxied through the main method used for seeking work and the majorities were found to seek jobs through friends and relatives. The study hypothesizes that the variable is important in making a migration decision as people are likely to join friends and relatives in search for jobs.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

This chapter presents analysis and findings of our research. This study carried out a descriptive analysis of some of the explanatory variables of the surveyed population and came up with information in the tables and figures below.

#### 4.1 Demographic factors

Table 6: Age of Persons

	Frequencies	Percent
0 to 9 years	8106088	27.4
10 to 19 years	7871969	26.6
21 to 29 years	4495742	15.3
30 to 39 years	3588920	12.1
40 to 49 years	2459371	8.3
50 to 59 years	1415787	4.8
60 to 69 years	927975	3.1
70 to 79 years	451991	1.5
80 to 89 years	153916	0.4
90 to 99 years	48167	0.1
Missing systems	83572	.3
Total	29603500	100.0

Source: Author (2009), compilation from ILES 1998-99 data

From the findings of the above table, of the 29,603,500 people 69.3% was population aged below 30 years a fairly youthful population and 81.4% were aged below 40 years. This information clearly shows that this is the age bracket likely to produce majority of migrants.

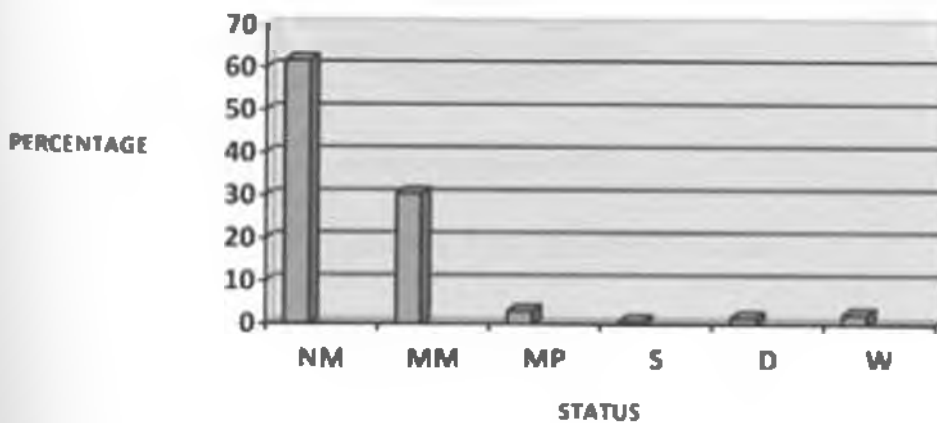
**Table 7: Sex**

	Frequency	Percent
Male	14777230	49.9
Female	14826270	50.1
Total	29603500	100.0

Source: Author (2009), compilation from ILFS 1998-99 data

From the above table the study found that there is almost sex parity between males and females with only a 0.1% difference. This means that though there might be differences in migration patterns between males and females, these could be insignificant.

**Figure 1: Marital Status**



Source: Author (2009), compilation from ILFS 1998-99 data

NM –never married

MM- married monogamy

MP-married polygamy

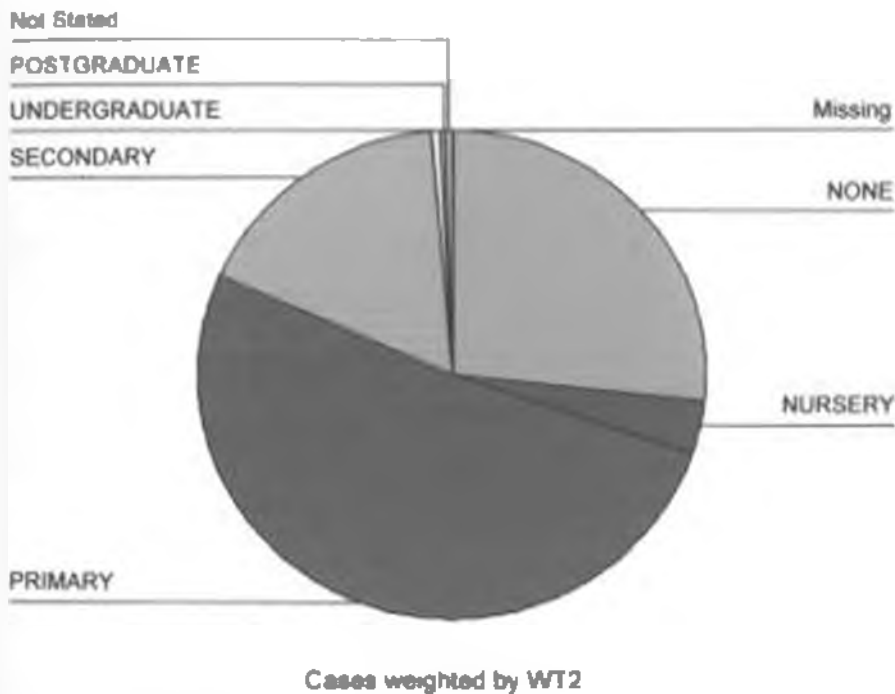
S- Separated

D-Divorced

W-Widowed

From the findings in the above figure, majority of the population (61.6%) is never married. This category is most likely to produce majority of the migrants.

Figure 2: Highest academic level attained as a percent of total population



Source: Author (2009), compilation from I.L.F.S 1998-99 data

From figure 2, the study found amazing statistics in academic levels attained with 26.6% with no education level at all, majority of the population (51.3%) only had primary level education, 17.1% had attained secondary school level of education, only 0.5% had attained undergraduate level of education while 0.4% attained post graduate level with



0.4% unstated. From these findings it's most likely that majority of migrants will come from the category of those with only none or primary level of education.

**Table 8: Ownership of self-employed business**

	Frequency	Percent
Sole proprietor	2544770	87.8
Partnership	124501	4.0
Cooperative	4171	.0
Family	35010	1.0
Not Stated	206372	7.2
Total	2914823	100

**Source: Author (2009), compilation from IHS 1998-99 data**

From the above table, the study found that out of the total businesses started in the informal sector, 87.8 are sole proprietorships. These findings have a great implication on migration decision since many people are likely to migrate with the hope of starting self employment as evidenced in most urban centres where there is presence of hawkers, jua kali artisans and small scale traders dealing in clothing, retail in food, shops etc.

**Table 9: Results of Regression Analysis**

Model	Constant	Coefficient	Standard error	t	Adjusted R squared
Age	75.259	-1.65	0.013	-43.38	0.549
Sex	29.354	0.371	0.034	16.867	0.04
Marital status	62.424	-18.06	0.019	-1962.8	0.199
Level of education	78.688	-19.688	0.020	-2737.07	0.326
Wage expectation	1.58	0.762	0.05	152.795	0.115
Self employment	3.45	-0.15	0.02	-70.755	0.02
Social ties	23.097	6.818	0.048	141.32	0.021
Number of urban areas	19.340	0.002	0.43	450.98	0.013

The table above indicates the results obtained after the explanatory variables were regressed against migration as the dependant variable. From the above findings, the study found that sex is significant in migration decision as indicated by R squared of 54.9% and the co-efficient of -1.65 implies that migration would decline as age limits approach upper limits and just as would be expected, few people would migrate to urban areas at advanced ages of over 60 years and according to the study's analysis this category comprise only 5.4% of the total population.

The study found sex to be statistically significant ( $t > 2$ ) in migration decisions. However, the statistical significance as indicated by R squared of 0.04 indicate that change in sex, that is, whether male or female has a small impact on migration decision and as earlier indicated, there is almost sex parity between males and females with a difference of only 0.1%. It was however found that more males migrate than females (see table 10 below). This table indicates that, of the total in-migrants, males constituted 37.6% whereas women constituted 32.3% in the urban areas.

**Table 10: Spatial distribution of life time in migrants**

Region province	Enumerated in the region	Born and enumerated in the region	In- migrants		
				Males	Females
<b>Region</b>					
Rural	21,932,800	20,692,165	1,240,635	5.6	5.7
Urban	7,670,700	4,989,991	2,680,709	37.6	32.3

Source: Central Bureau of Statistics (March, 2003)

Marital status was found to be significant in migration decision, meaning that change of marital status from being single to say marrying reduces chances of migrating as indicated by a negative coefficient of - 18.06. This is further supported by the R squared statistics of 19.9 % indicating the level of migration explained by a change in marital status .

Findings from the level of education indicate that the number of persons migrating is of no statistical significance with their level of education. The negative coefficient (- 19.688) indicates that as the level of education increase the smaller is the number of migrants whereas the reverse is true as the level of education decreases the higher is the number of migrants.

This is further supported by the findings of our study which indicate that 26.6% of the population had attained zero level of education, while 51.3% only had primary level of education. This total combined indicate that 77.9% only had primary education and below and only 22.1% had secondary and above level of education. Graduate and post graduate level comprised only 0.4% and therefore the negative coefficient makes sense in that as the level of education increases, there are fewer migrants

These findings also explain the fact that non-skilled persons migrate in large numbers worsening the problem of urban unemployment since majority don't have skills to enable

them acquire jobs. This leads to problems being evidenced in the urban areas such as hawkking, slum dwellings, crime, prostitution, drug peddling and environmental degradation.

Social ties were found to be very significant in making a rural to urban migration decision. This variable in this study was proxied by the main method used by job seekers while looking for employment as shown in the table below.

**Table 11: Main method for seeking work**

	Frequency	Percent
Wrote to employer	78821	.3
Applied to private employment bureau	15391	.1
Answered employment advert	24474	.1
Asked relatives/friends	1196571	4.0
Direct approach to employer	287477	1.0
Arranged for resources to start self employment activities	76003	.3
Other	17239	.1
Total	1710545	5.8
Missing System	27892955	94.2
Total	29603500	100.0

**Source:** Author (2009), compilation from 11 FS 1998-99 data

According to the table above, those people who asked for jobs from relatives and friends would comprise 68.97% of all the job seekers if we excluded the missing system (94.2%) i.e. those who are self employed, employed or otherwise. This variable had a strong positive correlation coefficient of 6.8 and statistically significant as indicated by t-statistic greater than two. This means that a sizeable level of migration is explained by the fact that job seekers join their friends or relatives who are based in urban centers in looking for employment opportunities.

The findings of this study indicate that it is the expected wage that leads to migration. The study found the variable to be of statistical significance with a positive correlation coefficient of 0.712. These findings can be used to explain the fact that people migrate irrespective of the high unemployment rate existing in all urban areas

Self employment was found to have a negative correlation coefficient (-0.15). This is conceivable because most people who end up in Jua kali/informal sector is due to lack of employment opportunities, are sacked or use it as a transition ground as they look for employment. It's also a fact that 70.4% of all enterprises are located in the rural areas while only 29.6% are located in urban areas (see table below). This means that people who start small scale enterprises are likely to locate in rural areas rather than migrate as shown in the table below and that there are more enterprises in the rural areas. It also shows that there are more women than men in this sector. (See table 12 below).

**Table 12: Distribution of informal sector enterprises by Area, Gender and Type of work site**

Work site	Male	Female	Total
<b>Rural</b>			
Open market	59,476	117,702	177,177
Market stall	82,428	107,496	189,924
Residential	203,308	167,281	370,590
Commercial	486,716	397,200	883,916
Roadside/open ground	96,468	53,773	150,261
Road side kiosk	33,885	25,011	58,896
Other	24,839	5,804	20,643
Not stated	630	481	1,111
<b>Total</b>	<b>987,751</b>	<b>874,769</b>	<b>1,862,519</b>
<b>Urban</b>			
Open market	48,112	113,589	161,701
Market stall	16,135	42,163	58,298
Residential	52,330	49,952	102,282
Commercial	86,637	68,127	154,764
Roadside/open ground	84,735	83,356	168,091
Road side kiosk	43,214	64,881	108,095
Other	10,401	1,196	11,597
Not stated	0	0	0
<b>Total</b>	<b>341,561</b>	<b>423,265</b>	<b>764,828</b>

Source: Central Bureau of Statistics (March, 2003)

Finally, the study found a small positive correlation coefficient (0.002) between the number of towns and probability of migrating as indicated by the variable (number of urban areas). This could be true in that as the existing urban areas expand and new ones are created for example through creation of new districts, more people are likely to migrate to the urban areas.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

From the findings of the study, sex, social ties, expected wage were found to have positive relationships with the decision to migrate whereas level of education attained, self employment and marital status were found to have negative correlation coefficients.

These are important findings in that they can help in decision making and policy purpose. Social ties as a variable can attest to the level of nepotism and bureaucracy in us far as job seeking is concerned. Measures can therefore be put in place by implementing systems aimed at ensuring appointments are done on merit particularly in the civil service recruitments.

It's also clear that people migrate due to expectations as portrayed by the positive correlation between migration and wage expectations. It's important to make unemployment statistics in urban areas clear and publicize them to rural potential migrants' in order to motivate them look for alternative employment and opportunities available without necessarily migrating. This can further be supported by improving infrastructure in rural areas to make it viable for starting income generating activities.

Another important finding of the study is on self employment as a variable responsible for rural and urban migration. According to this study it was found that these self employment enterprises in the urban areas constitute only 29.6% while 71.4% are located in rural areas. As evidenced, a good percentage of people in this sector in the urban areas are under-employed and most of them eventually go under due to fierce competition, duplication of ventures, lack of capital, experience and skills needed to run these enterprises. The implication is that urban unemployment worsens. The policy recommendation here is for the government to encourage rural self employment enterprises since these ones are more suitable because the operators are not exposed to high cost of living. The government should take a precautionary approach to the existing

informal sector enterprises by ensuring a controlled expansion plan and providing finance and infrastructure to the existing ones.

Findings from level of education attained were most significant in this study. Previous studies didn't explain migration of non skilled labour and only portrayed a scenario of high level of migration with advanced levels of education. This study however found that 26.6 % of the total population by 1999 had no education at all while 51.3% only had primary education making a total of 77.9%. Only 22.1% had secondary level of education while 0.9% was educated to undergraduate and post graduate level. This implies that the largest percentage of migrants is likely to be less educated as shown by the negative coefficient on level of education and migration. This is an important finding in that policies like decentralization of institutions of higher learning won't have impact on rural urban migration since they comprise only 0.9%. The problem of migration would best be tackled by addressing the issue of unemployed persons with little or no skills at all by ensuring they can start self employment enterprises back in the rural areas.

Finally, the study was conducted using secondary data collected in 1998-99 (integrated rural urban labour force survey). This happens to be the most current data available but there is no reason to suspect that these findings could be out dated. This is because rural-urban migration trends have not changed much as well as patterns of unemployment and demographic characteristics. However, primary data would supplement unavailable data on variables like distance covered by migrants which could not be analyzed due to lack of information on the same.

#### **Areas Recommended For Further Research**

Due to the fast rate of change in information and technology, this study recommends that further research to be conducted in this area to find the implication of such technologies like the internet, mobile phones and cash transfer technology by use of mobile phones e.g. m-pesa in migration. The trend of urban people moving their dependants to urban areas could easily be influenced by the fact that its now much easy to communicate and even transfer finances from urban to rural areas with the introduction of the new



technologies though this will depend on the rate at which they are adopted in the rural areas

Government policy is also an important determinant of rural to urban migration as was seen in the last budget proposal (2009) where rural finance allocation was boosted through increased constituency development fund (CDF). This increase in allocation is expected to catalyze economic activities in the rural areas through creation of increased employment opportunities. Detailed research can unveil the impact of these policies on rural to urban migration as well as the changing patterns of this phenomenon

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# APPENDIX I: THE QUESTIONNAIRE I.I.F.S 1998-1999

CENTRAL BUREAU OF STATISTICS  
 MINISTRY OF PLANNING AND NATIONAL DEVELOPMENT  
 LABOUR FORCE CHILD LABOUR SURVEY  
 LABOUR FORCE PARTICULARS

Enumerator \_\_\_\_\_  
 Supervisor \_\_\_\_\_

GEOG CODE				CLUSTER NO				H/HOLD NO.		DUO	
1	2	3	4	5	6	7	8	9	10	11	12

Province \_\_\_\_\_ District \_\_\_\_\_  
 City-Town \_\_\_\_\_ Date \_\_\_\_\_

TO BE ANSWERED BY ALL HOUSE-OLD MEMBERS AGED 5 YEARS AND OLDER

Serial No	Name	Relation to head 1 = Head 2 = Spouse 3 = Son 4 = Daughter 5 = Sister 6 = Brother 7 = Parent 8 = Other relation 9 = Unrelated	Age in completed years (if age is >=99 code 99)	Sex 1 = Male 2 = Female	Marital status		Highest academic level reached 1 = None 2 = Nursery 3 = Primary 4 = Secondary 5 = Undergraduate 6 = Post graduate	If not at school full time, year respondent left the highest academic level if 'none' code 00	Highest vocational/professional certificates attained 1 = None 2 = Trade tests 3 = Ordinary diploma 4 = HND 5 = CPA/CPS 6 = Others (specify)	Year of Highest Certificate Attained if 'none' code 00	District of birth in Kenya or country if Born outside Kenya (See listing of codes in the Enumerators manual)
					1 = Never married Full Time 2 = Married (monogamy) 3 = Married (polygamy) 4 = Separated 5 = Yes 6 = Divorced 7 = No 8 = Widowed 9 = Other - specify	A05					
A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	

CENTRAL BUREAU OF STATISTICS  
 MINISTRY OF PLANNING AND NATIONAL DEVELOPMENT  
 LABOUR FORCE/CHILD LABOUR SURVEY  
 PAID EMPLOYEE PARTICULARS

Enumerator \_\_\_\_\_  
 Supervisor \_\_\_\_\_

GEOG CODE			CLUSTER NO.					H/HOLD NO		DUO	
1	2	3	4	5	6	7	8	9	10	11	12

Province \_\_\_\_\_ District \_\_\_\_\_  
 City/Town \_\_\_\_\_ Date \_\_\_\_\_

**TO BE ANSWERED BY ALL HOUSEHOLD MEMBERS WHO ARE IN PAID EMPLOYMENT**

Serial No	Name	Did member hold a job or work for pay/profit or service last week? 1 = yes 2 = no  If No, refer to B10	Status in employment (Main)  1 = Paid employee 2 = Working employer 3 = Own-account worker 4 = Unpaid family worker 5 = Apprentice 6 = Other (specify)	Sector 1 = Modern sector - Public inst. 2 = Modern sector - Private inst. 3 = Informal sector (Jua Kali) 4 = Small scale farming and pastoralist activities 5 = Other (specify)	Industry  See listing of codes in the Enumerator's Reference Manual	Hours worked last week	Looking for different work/job?		Main reason for not working or holding a job last week 1 = Sick/ incapacitated 2 = Full-time Student 3 = Retired 4 = Looking for work 5 = Out of season 6 = Retirement/redundancy 7 = Temporary lay off 8 = Don't need work 9 = Other (specify)	If did not work last week	
							Yes	No		Did member work during the last 12 months	Last occupation if ever worked
B01		B02	B03	B05	B06	B07	B08	B09	B10	B11	B12

LABOUR FORCE/CHILD LABOUR SURVEY

PAID EMPLOYEES PARTICULARS

Enumerator \_\_\_\_\_  
 Supervisor \_\_\_\_\_

GEOG CODE			CLUSTER NO					H/HOLD NO.			D.O	
1	2	3	4	5	6	7	8	9	10	11	12	

Province \_\_\_\_\_ District \_\_\_\_\_  
 City/Town \_\_\_\_\_ Date \_\_\_\_\_

TO BE ANSWERED BY ALL HOUSEHOLD MEMBERS WHO ARE IN PAID EMPLOYMENT

Serial No	Name	Inst. No. (for highest certificate) 1 = None 2 = Vocational 3 = Village polytechnic 4 = Institute of Technology 5 = Apprentice 6 = On the job 7 = NYS 8 = National polytechnic 9 = College (e.g. Utala teacher's Agric) 10 = University 11 = Other	Type of Training Institution/Organization (= N/A 1 = Private institution 2 = Public institution 3 = Informal arrangements 4 = Employer (on the job) 5 = Other (specify)	Length of job search  How long did you look for this job?  Months	Working pattern  1 = Full time 2 = Part time 3 = Seasonal 4 = Other (specify)	Average hours per day worked last week	Number of days worked last week	Number of weeks worked last 12 months	Cash earnings last month (Kshs)			Earnings in kind last month (Kshs)
									Basic salary	Other benefits and allowances	Total gross earnings	
C3		C02	C03	C04		C06	C07	C08	C09	C10	C11	C12

CENTRAL BUREAU OF STATISTICS  
 MINISTRY OF PLANNING AND NATIONAL DEVELOPMENT  
 LABOUR FORCE/CHILD LABOUR SURVEY  
 UNEMPLOYED AND JOB SEEKER

Enumerator \_\_\_\_\_  
 Supervisor \_\_\_\_\_

GEOG COO:			CLUSTER NO				= / F OLD NO.		OLD		
1	2	3	4	5	6	7	8	9	10	11	12

Province \_\_\_\_\_ District \_\_\_\_\_  
 City/Town \_\_\_\_\_ Date \_\_\_\_\_

TO BE ANSWERED BY ALL UNEMPLOYED AND JOB SEEKING MEMBERS AGED 15 YEARS AND OLDER

Serial No	Name	Did member seek work last week?  1 = Yes 2 = No	Type of work sought 1 = Past employment 2 = Business necessary - Employer 3 = Business operator own account worker 4 = Farming/Pastoralist activities 5 = Other (specify)	Type of work sought at the work sought		Job seeking paid establishment. Expected monthly pay  (KSh)	Method used to seek for work last week? 1 = Write to Employer 2 = Applied to Union office 3 = Applied to Labour office / Gov Employment Bureau 4 = Applied to Private Employment Bureau 5 = answered newspaper Advertisements/friends 6 = Asked relatives/friends 7 = direct approach to Employer 8 = Arranged for resources to start self employment activity 9 = Other (specify)	How long have you been looking for work?  (months)	How much longer will you look for this work/job?  (months)	What will you do if you do not find this work/job in the next 2 months?		If did not seek work last week, state main reason 1 = Waiting to hear from prospective employer 2 = Waiting to hear from relative or friend 3 = Be able to work until 4 = Arranged to start self employment activity 5 = Self-employment started 6 = Personal/family commitments 7 = Full-time student 8 = Don't need work 9 = Other (specify)	If ever worked, reason for leaving last work/job 1 = Sick leave 2 = School-leaving 3 = Low pay 4 = Poor working condition 5 = Sacked 6 = Retrenched 7 = Retired 8 = Low motivation 9 = Other (specify)
				Institution (highest certificate)	Type of training institution/organization					1 = Look for different work 2 = Continue looking for preferred work/job 3 = Go for training 4 = Other (specify)	1 = Run own business 2 = Find another town 3 = Move to another country 4 = Not sure		
D01		D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13

## OPERATORS OF INFORMAL SECTOR BUSINESS

## BUSINESS PARTICULARS

Enumerator \_\_\_\_\_  
Supervisor \_\_\_\_\_

GEOG COD:			CLUSTER NO.					H/HOLD NO.			DUO	
1	2	3	4	5	6	7	8	9	10	11	12	

Province \_\_\_\_\_ District \_\_\_\_\_

City/Town \_\_\_\_\_ Date \_\_\_\_\_

TO BE ANSWERED BY MEMBERS WHO OPERATE OWN BUSINESS/INFORMAL SECTOR  
OPERATORS

serial No	Name of business (if any)	Location of the business				Type of structure	Industry (see codes in the manual)	How long has your business been in operation?  Months	In the business regular or intermittent? 1= regular 2= Intermittent	How many days did the business operate last week	Major products made or services offered			Business status		Level of technology used
		Location	Road/street	Box no.	Work site						1 <sup>st</sup> product / service	2 <sup>nd</sup> product / service	3 <sup>rd</sup> product / service	Ownership	Registration	
E01	E02	E03	E04	E05	E06	E07	E08	E09	E10	E11	E12	E13	E14	E15	E16	E17



## APPENDIX II: REGRESSION RESULTS

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	75 259	013		5852 182	.000
	Age of persons	-1 650	000	.741	4338 738	.000

a Dependent Variable: Migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741(a)	.549	.549	28 003

a Predictors: (Constant), Age Of Persons

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	20 354	.034		854 275	.000
	Sex	.371	.022	.004	18 807	.000

a Dependent Variable: Migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.004(a)	.000	.000	43 348

a Predictors: (Constant), Sex

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	62 424	019		3239 177	.000
	Marital Status	18 090	000	.440	1982 830	.000

a Dependent Variable: migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446(a)	.199	.199	38.805

a Predictors: (Constant), Marital Status

**Coefficients (a)**

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	78.688	.020		3932.398	.000
	Highest academic level reached	-.19088	.007	-.571	-2737.072	.000

a Dependent Variable: Migration

**Coefficients (a)**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.571(a)	.326	.326	35.503

a Predictors: (Constant), Highest Academic Level Reached

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.581	.015		102.251	.000
	Expected Wage	.762	.005	.115	152.795	.000

a Dependent Variable: Migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.115(a)	.013	.013	10.153

a Predictors: (Constant), Expected wage

**Coefficients (a)**

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.458	.000		017.032	.000
	Self Employment	.150	.002	.042	-70.755	.000

a. Dependent Variable: migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.042(a)	.002	.002	7.410

a. Predictors: (Constant), Self employment

**Coefficients (a)**

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.097	.138		107.831	.000
	Social Ties	6.818	.048	.147	141.324	.000

a. Dependent Variable: Migration

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.147(a)	.021	.021	46.460

a. Predictors: (Constant), Social ties

**Coefficients (a)**

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.340	.020		748.292	.000
	District And Towns	.002	.000	.114	450.980	.000

a. Dependent Variable: Migration

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.114(a)	.013	.013	43.068

a. Predictors: (Constant), District And Towns

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