Developing Country Studies
ISSN 2224-607X (Paper) ISSN 2225-0565 (Online)
Vol.4, No.6, 2014

Rural-Urban Migration and Livelihoods in South Eastern Nigeria

Chukwuedozie Kelechukwu Ajaero*, Ignatius Ani Madu
Department of Geography, University of Nigeria, Nsukka
E-mail of corresponding author: ajaerock@yahoo.com; chukwuedozie.ajaero@unn.edu.ng

Acknowledgement
This research was supported by the International Foundation for Science (IFS), Stockholm, Sweden, through a grant to Chukwuedozie Kelechukwu Ajaero.

Abstract
Rural-urban migration remains a livelihood strategy employed by the rural populace in the densely populated southeastern region of Nigeria. This study appraises the impact of rural-urban migration on rural livelihoods in southeastern region of Nigeria. Questionnaire surveys on 225 heads of rural households and focus group discussions in each of the five states in the study area were used to elicit information on rural-urban migration and livelihoods characteristics of the rural populace in the past three years. Descriptive statistics, Livelihood Asset Indices technique and Principal Component Analysis were used in data analysis. The results show spatial variations in the impact of migration on livelihoods across the region. Financial and food indices are the most influential livelihood indices while two underlying components namely; financial security and investments by families of migrants' in the rural areas to improve their quality of life together explain 78.07% of the cumulative variance of the PCA in determining the impact of migration on livelihoods. Based on the findings, it is recommended among other things that educational institutions and small and medium scale industries should be established in the study area. The implementation of these measures will translate to improved quality of life in the region.
Keywords: Impact; Migration; Rural livelihoods; Rural-urban; Southeastern Nigeria

1.1. Introduction

In Nigeria like most parts of the developing world, the livelihoods of the rural population are highly dependent on natural resources. These resources are persistently under intense pressure in the quest of the populations to earn their living. In south eastern Nigeria for instance, Madu (2012) has shown that the teaming concentration of population within a limited land space has created enormous demand for agricultural land use. In fact, Federal Republic of Nigeria (2003) has earlier shown that the southeast is the most densely populated part of the sub-Saharan Africa. In terms of population size, and population density of the states in Nigeria, four states in southeastern Nigeria (Anambra, Imo, Abia and Enugu) are among the seven most densely populated states of Nigeria, implying that the southeastern Nigeria is the most densely populated area in Nigeria (Nwajiuba, 2005), while according to Madu (2006) in some parts of the region, the population density in rural localities exceeds 1,000person/km^2.

This pressure which may bring about degradation and depletion of these resources on which majority of the rural populations depend on for their agricultural activities (Bolorunduro *et al*., 2005; Kesavan and Swaminathan, 2006) is also beneficial to a region experiencing it. Thus, Madu(2009), argues that there is a strong correlation between population density and development both of which affect environmental quality and sustainability. This according to World Bank, (2009) is because of the concentration of production and convergence of consumption associated with high population density which not only brings about development but also conditions of greater prosperity in a virtuous circle. As a result of the high population density and consequent human pressure on environmental resources, there is intense competition for the available resources in the area. Migration from the rural areas to urban areas is therefore a common livelihood strategy especially in southeastern Nigeria because of competition for environmental resources in the area. These rural-urban drifts have left the southeastern Nigeria rural areas with demographically unbalanced proportions of dependent populations such as women, children and older or aged persons (Ajaero, 2008)

Furthermore, most of the rural areas in the developing countries are undergoing a process of 'de-agrarianization', which entails the quest of younger workers leaving agriculture and rural areas to urban centers particularly in the last 50 years as a result of population pressure, poor agricultural resource base and imbalance in rural and urban development (Madu, 2005;International Fund for Agricultural Development,2009). Rural-urban migration, which is the focus of this research, therefore results from the search for perceived or real opportunities, as a consequence of rural-urban inequality in wealth in different parts of the world, including Nigeria (Sorenson 2004; Madu, 2006). This inequality, and or urban bias in development according to research findings over the years results from the overwhelming concentration of wealth, assets, purchasing capacity, economic activities, and variety of services in the urban centers as well as the continued neglect of rural areas. Consequently, rural-urban migration has remained a livelihood strategy utilized by the poor, especially the rural

dwellers in Nigeria (World Bank, 2008, Ajaero, 2011).

Researchers have identified consequences of migration, which they have broadly grouped into demographic, social, economic, political and health impacts. These effects of migration occur at both the migrants' place of origin and place of destination depending on the nature and duration of movement. Moreover as migratory processes are multi-dimensional and may generate a wide array of consequences on livelihoods, they have inadvertently led to the initiation of policies for improvement in livelihoods and the achievement of the Millennium Development Goals (MDGs) (Timalsina 2007; Ajaero and Okafor, 2011). The MDGs related to migration include eradication of extreme poverty and hunger, the improvement of health and education, the reduction of infant and child mortality, ensuring of access to safe drinking water, and adequate sanitation. These will ultimately translate into the improvement of the lives of poor rural dwellers as well as ensure gender equality and the empowerment of women. (Gambourd, 2000; Sørensen, Van Hear and Engberg-Pedersen, 2003; Levitt and Sørensen, 2004).

One significant source of livelihood for the rural populace as a result of this increasing drift towards the cities is remittances. Recently, migrants' remittances and the income multipliers they create are becoming critical resources for the sustenance strategies of receiving households as well as agents of regional and national development. Households that receive these remittances tend to use the proceeds primarily for current consumption (food, clothing) as well as investments in children's education, health care, improvement in household food security, water and sanitation, especially in the developing countries (World Bank, 2005; World Bank, 2008; Ajaero, 2011).

In different parts of the world Nigeria inclusive, researches have been carried out on the impacts of migration. Some of these researches include those of Sibanda(2004) in South Africa, Azam and Gubert(2005) in Mali, Lucas (2005) in Albania and Morroco, Nwajiuba(2005) in Nigeria, Adams (2006b)in Latin America, Mc Kenzie(2006), Taylor and Mora(2006) in Mexico, Sorenson(2006) in Somali, Pozo(2007) and World Bank(2007) in developing countries. However, these researches focus only on international migration neglecting the linkages between rural-urban migration and livelihoods.

Consequently, the assessment of the impacts of migration on the livelihoods of rural households based asset indicators has remained relevant since migration acts as a catalyst in the transformation process of not only the destiny of individual migrants but also of the conditions of family members left behind, of local communities and of the wider sending regions. Such a study has remained of great importance particularly in terms of asset utilization in socio-economic planning; allocation of resources and much more importantly, in the political management of populous and developing countries such as Nigeria.

Although a number of migration studies have been done in Nigeria, most of the studies were carried out in other regions of the country and dealt mainly on the characteristics of migrants and factors of migration (Udo, 1972, Adepoju,1977,1982,1986, Fadayomi 1998, Adesiji et al. 2009, Ajaero and Okafor, 2011, Aworemi and Abdul-Azeez, 2011, Olowa and Awoyemi, 2012). Consequently, there is need for empirical studies on the impacts of rural-urban migration on livelihoods of the rural populations in Nigeria, and most especially in southeastern Nigeria, where rural-urban migration studies are almost non-existent. The purpose of this research therefore, is to empirically analyze the impact of rural-urban migration in southeastern region of Nigeria on the livelihoods of the rural populations using the livelihood asset indices technique.

2.1.Research Methodology

2.1.1. Selection of study population

The study area comprises the five southeastern Nigeria states of Abia, Anambra, Ebonyi, Enugu and Imo. The states exhibit homogenous socio-economic and linguistic characteristics, fall within the same agro climatic and other geographic conditions and are all within the South east geo-political zone of Nigeria. Each of the States has at least a Local Government Area (LGA) with predominantly urban settlements/areas (UA). An urban area have been defined in Nigeria as an area having population of more than 20,000 persons(NPC, 1998).These urban areas are also characterized by dominance of non-primary economic activities, heterogeneous concentration of population, possess landscapes having more of artificial structures than natural features, and with heterogeneity of functions which include being destination of rural out-migrants. On the other hand, these five States also have LGAs with predominantly rural settlements/areas (RAs)(i.e areas with populations of less than 20,000 persons).

Since each of the states has three senatorial zones which have common characteristics, a rural LGA (RA) was randomly selected from each of the senatorial zones so as to ensure representations of all zones of the state. This means that three (3) rural LGAs were used in each state totaling fifteen (15) rural LGAs for the five states of the study area. The sampled LGAs used in this research are as follows;

- Anambra State: Anambra West, Dunukofia, and Ekwusigo.
- Abia State : Ukwa East,Isikwuato, and Ikwuano
- Ebonyi State : Ivo, Ezza North, and Ebonyi
- Enugu State : Isi Uzo,Oji River,and Uzo Uwani.

- Imo State : Owerri West, Nkwerre, and Onuimo.

From each of the States, 40 households were randomly selected from each the rural LGAs (i.e 120 rural households in each of the five States totaling 600 rural households in the five States).

2.1.2. Conceptual Framework.

The analysis of the impact of migration on livelihoods in this study is based the sustainable livelihoods framework developed by DFID (1999), and modified by the Livelihoods Monitoring Unit (LMU) (2004). Livelihood is defined in the framework as the capabilities, assets and activities required for a means of living (DFID,1999). The capability of individuals includes various factors such as self-esteem, security, happiness, stress, vulnerability, power, and exclusion. Also, livelihoods assets are categorized into natural capital, human capital, physical capital, financial capital and social capital while livelihood activities on the other denote a wide range of human occupations in the primary, secondary, tertiary and quaternary economic sectors. The sustainable livelihoods framework according to DFID (1999) and Timalsina (2007) represents a tool which helps to define the scope of, and provides the analytical basis for livelihoods analysis through the identification of the major factors affecting livelihoods and the relationships between them. This framework identifies five interacting elements which are vulnerability contexts; assets/resources; structures and processes; strategies; and outcomes.

This framework was further modified by LMU (2004).The crux of the modified framework is that there exist assets, upon which households or individuals depend on for their livelihoods whether they are in the rural or urban areas. Therefore, for assessment of the livelihoods situation of any set of people, the framework identifies livelihood outcomes which are measurable through certain indices such food security, water and sanitation (Watsan) security, gender equity etc. **I**n this study, the analysis of the impact of rural-urban migration on the livelihoods of the rural populace was carried out using the various measurable asset indices in the sustainable livelihoods framework such as the financial index, economic index, nutritional index, and gender equity.

2.1.3. Data Collection

A set of questionnaire was distributed to rural households and was used to gather information on the nature and uses of remittances received from the rural-urban migrants. In addition the questionnaire sought for information on the livelihoods assets of the households in the past three years that resulted from migrants' remittances. Since virtually almost all the households in the study area have urban migrant based on reconnaissance survey, households used for this study are those that have migrants that have stayed in the urban area in the past three years. The use of this time frame is to standardize the findings of this study. Furthermore, Focus Group Discussion sessions involving cross sections of populations in the rural areas were used to appraise the authenticity of the responses got from the respondents. Finally, secondary sources of data on population characteristics were also used. These sources include the National Population Commission offices, Libraries, Government offices and data from other published sources.

2.1.4. Data analysis.

The nature and uses of remittances from rural-urban migration in the study area are analyzed with the aid of descriptive statistics. In appraising the impact of rural-urban migration on rural livelihoods, the assets of households in the rural areas (source regions) derived from questionnaire were analyzed with the aid of "Asset Indices" which were calculated from variables of household ownership of assets. These assets were derived from the Sustainable Livelihoods Framework developed by the Livelihoods Monitoring Unit (explained under the section on conceptual framework above) Asset Indices according to Filmer and Scott (2008) is of the basic form:

$$A_i = b_{1i}.a_{1i} + b_2.a_{2i} + \ldots\ldots\ldots\ldots + b_k.a_{ki} \quad (1)$$

where A_i is the asset index of household "i", a_{1i}, a_{2i},……,a_{ki}, are k indicators of asset ownership variables (such as radio, television, corrugated iron roofs), and b_1, b_2,……, b_k, are weights to be used in aggregating the asset indicators into an index (Filmer and Scott, 2008). In calculating the asset index, PCA was used to determine the weights as a factor score for each asset variable, and to also achieve a linear combination of the variables in which the maximum variance was extracted from the asset variables. The first component to be extracted from each asset variable is known as the linear index or efficient component of the asset variable because it has the largest amount of information about the variable. Consequently, the scoring factors of the first principal components (efficient components) were used for constructing the asset indices using the asset indices formula by Filmer and Scott (2008) above. For this analysis, the determination of weight as a factor score for each asset variable was carried out using STATA 12 analytical program. Table 1 shows the variables that were used to generate the various asset indices used in estimating the impact of migration on the livelihoods of the rural households in the study area.

Table 1: Variables Used in Computation of the Asset Indices

Asset Indices	Variables used in computing the asset indices
Education	Highest level of formal education of HH* head. Proportion of HH in primary, secondary and tertiary schools. Proportion of HH that have completed primary, secondary and tertiary schools.
Water	Primary source of domestic water supply for the household.
Sanitation	Where the HH dispose of sewage. Where the HH dispose of domestic refuse/garbage.
Economic	ICT equipment owned by HH. Transportation equipment owned by HH. Household equipment e.g. blender, fan etc owned by HH.
Food	Number of square meals consumed by HH per day. Percentage of income spent on food by HH.
Health	Last time a member of HH fell sick. How the HH manage health conditions of sick members. Last time a sick member of HH visited hospital for treatment.
Gender Equity	Participation of female members of HH in decision taking. Issues female HH members participate in their decision taking.
Institution Access	Membership of community associations by HH members. Institutions HH have access to, or benefit from.
Nutrition	Consumption rate of proteins by HH in a week. Consumption rate of vitamins by HH in a week.
Financial	Monthly income of HH. Proportion of income saved by HH.

HH*: Household

In addition, Hierarchical Cluster analysis was used to categorize the livelihood impacts of rural-urban across the states of the study area. Finally, PCA was also done using the asset indices so as to identify the underlying determinants of the values attached to the asset indices by the rural households in the study area.

3.1. Results and Discussion.

Various studies have shown that remittances sent home by migrants have remained one of the important benefits of migration derived by household left behind by migrants especially in rural areas. This study found that in all the states of the study area, the migrants send remittances to families left behind. Table 2 below shows that the migrants send different amounts of money as remittances at various intervals. In addition, the proportions of households that receive remittances vary from state to state. Ebonyi state has the highest proportion of households with migrants that receive remittances with about 98% of migrant sending households agreeing that they receive remittances. In all the states studied, more than 70% of all their households receive remittances but

Anambra state has the overall least proportion of households that receive remittances where about 72% of the households receive remittances.

For the importance of remittances received to be comprehended, there is need to know the actual amount being remitted in addition to knowing the proportion of households that receive remittances. All things being equal, the impact of remittances manifest more based on the amount sent and not only on the number of households that receive these remittance. From Table 2, it can be seen that most of the migrants remit more than ten thousand naira at any time they send home remittances. Imo state has the greatest proportion of migrants that send home between one thousand and two thousand naira while Ebonyi state has the greatest proportion of migrants that send home more than ten thousand naira.

The fact that Imo state migrants are the most educated and Ebonyi state migrants the least educated may be responsible for the amounts being remitted. In this regards, it is assumed that the more educated a migrant is, the more his chances of securing a better paying employment, and the greater his tendency to remit more to his rural household.

With regards to the nature of remittances, the study showed that money is the most common form of remittance in all the states of the study area. Also, majority of the migrants in Abia and Anambra states remit once a month when they may have received their salaries or wages. On the other hand, majority of migrants in Ebonyi, Enugu, and Imo states remit either twice a month or during festivals. The various uses recipient households put remittances into are indicators of the development needs of the community. It also indicate their ranking of areas of developmental and policy interventions that they desire. In the study area also, remittances are used variously such as in funerals, education, investments etc. However, the uses of these remittances vary across the states. The highest use of remittances in in education of household members, this is followed by buying of food and building/maintenance of houses. While the highest use of remittances for education is by Abia state households, the highest use of remittances for house building is by households in Ebonyi State. Of all the states, Ebonyi state seems to be the less developed, thus their emphasis on trying to secure residential houses for their increasing population. Furthermore, Ebonyi state households invest more than the households in other states, still an indicator of the quest of the population of the state to wriggle out of deprivation and low standards of living.

Table 2: Nature and Uses of Remittances by Rural Households (% of respondents)

	Abia	Anambra	Ebonyi	Enugu	Imo
Recipient Households	88.3	72.9	98.4	95.6	80.3
Regularity of remittance					
Every week	7.7	5.7	6.7	3.1	1.9
Once a month	32.1	50.9	8.3	18.8	22.6
Twice a month	14.1	9.4	28.3	20.3	11.3
Once a year	28.2	5.7	8.3	18.8	15.1
More than once a year	11.5	11.3	10	7.8	22.6
During festivals	6.4	17	38.3	31.2	26.4
Nature of remittance					
Food	29.3	21.2	31.3	23.9	16.1
Cloth	23.2	28.2	54.4	42.3	10.3
Money	74.4	40	82.4	78.9	29.9
Amount Received (N)					
Less than 2000	18.1	11.8	8.2	6.6	2.6
2001-4000	15.3	7.8	6.6	8.2	10.5
4001-6000	13.9	15.7	4.9	11.5	7.9
6001-8000	6.9	7.8	11.5	1.6	2.6
8001-10,000	23.6	25.5	4.9	9.8	34.2
More than 10,000	22.2	31.4	63.9	62.1	42.1
Uses of Remittances					
Debt Repayment	9.8	17.6	13.4	9.9	10.3
Buying of Food	34.1	34.1	29.4	28.2	27.6
House Building	14.6	20	50	38	16.1
Savings	19.5	10.6	22.1	8.5	8
Education	61	27.1	30.9	28.2	25.3
Investment	19.5	3.5	50	42.3	8
Funerals	1.2	17.6	27.9	32.4	2.3
Purchase of HH Goods	15.9	24.7	26.5	35.2	11.5

Based on the LMU framework and the use the asset indices formula as noted in the conceptual framework, the livelihoods indices were calculated for the study area. The summary result of the analysis is shown in Table 3. While the mean values of some indices are greater than the standard deviation, others have means less than the standard deviation. Statistically, where the mean of a data set is less than the standard deviation, it indicates the presence of figures far scattered beyond the size of the mean value (Anyadike, 2009). This is so in education index, water index, sanitation index, economic index, health index and access to institutions index in the study area. The mean of these indices therefore does not represent the quantum of distribution of these indices in the study area.

Table 3: Summary Statistics of All Indices

Index	Mean	Sd	Min	Max
Education index	1.81*	2.67	0	43
Water index	0.29*	0.30	0	1
Sanitation index	0.52*	0.56	0	3
Economic index	0.43*	0.45	0	2
Food index	1.28	0.34	1	2
Health index	0.26*	0.28	0	1
Gender equity	0.45	0.43	0	3
Access to institution	0.31*	0.40	0	2
Nutritional index	0.46	0.34	0	2
Financial index	4.23	2.41	1	12

* values with means less than the standard deviations.

From the results in Table 3, it can also be seen that while the financial index has the highest mean value of 4.23, the health index has the least value of 0.26. These mean that while migration impacted highest in the monetary holdings of the households, migration has least impact of the health conditions of the households. Moreover, the results show wide gaps between the minimum impacts of migration on education and finance across the study area. While education has a minimum value of zero impact in a section of the study area, it has a maximum value of 43 in other parts of the study area. On the other hand, while finance has the least value of 1 in a part of the study area, it has a maximum value of 12 in other parts of the study area. Furthermore, Table 4 below shows the estimated magnitude of impacts of migration on rural livelihoods in the States of the study area using the asset indices analytical technique.

With regards to education index, Enugu and Imo States experience relatively high impact while Abia State experience relatively low impact. The water index has a relatively moderate impact on Anambra, Ebonyi and Enugu States and has a relatively low impact on Abia State. Imo State reports a relatively high impact of the sanitation index while Abia and Ebonyi States experience a relatively low impact of the economic index. Relatively, the food index impacts moderately on Abia, Anambra and Enugu States while the health index impacts highly on Imo State. With regards to the gender index, only Enugu State depicts a relatively low impact while only Imo State also shows a relatively high impact of migration on access to institutions. The nutritional Index has an aggregate relative high impact in Imo State while the financial index records a relatively low impact in Ebonyi State. Subsequently, Figure 1 depicts the spatial distribution of the magnitude of impacts of these livelihoods indices across the states. Generally, in the study area, it can be seen from Table 4 and Figure 1 that Imo and Enugu States have recorded the highest impact of migration on the livelihoods of their house holds relative to other states in the study area. On the other hand, Abia state recorded the least aggregate impact of migration on rural households across the entire study area.

Table 4: Impacts of Migration on Rural Livelihoods Indices in the Study Area

Migration Impact Indices	Abia	Anambra	Ebonyi	Enugu	Imo
Education index	2.41	4.92	4.75	6.11	7.52
Water index	0.47	0.84	0.83	0.90	1.02
Sanitation index	1.17	0.98	1.25	1.27	1.80
Economic index	0.95	1.03	0.84	1.05	1.47
Food index	3.96	3.82	3.77	3.92	4.05
Health Index	0.58	0.87	0.93	0.73	1.30
Gender equity index	0.78	1.38	0.84	1.19	1.40
Access to institutions index	0.71	0.69	0.65	0.58	1.20
Financial index	11.59	12.87	10.30	13.43	12.63
Nutritional index	1.38	1.36	1.52	1.49	1.94
Aggregate index	**23.99**	**28.76**	**25.71**	**30.67**	**34.33**

The asset indices analysis carried out on the livelihoods indices in the study area identified financial index as the

most influential indices prevalent in the area. However, the asset indices analysis have not been able to bring out clear cut underlying determinants for the values attached to the livelihoods indices by the households in the study area. Consequently, principal component analysis (PCA) was carried out on the livelihoods indices so as to identify the underlying determinants of the values attached to these indices by the households in the study area. In carrying out the PCA, the VARIMAX rotation technique was used to rotate and sharpen the results. Table 5 below show the results of the rotated PCA.

Table 5: Principal Component Analysis of the Livelihoods Indices

INDICES	Component I	Component II
X1(education)	.692*	.469
X2 (water)	.758*	.563
X3 (sanitation)	.867*	.334
X4 (economic)	.893*	.097
X5 (food)	-.063	-.862*
X6 (health)	.851*	.462
X7 (gender)	.826*	.346
X8 (institutions)	.850*	.333
X9 (nutritional)	.758*	-.192
X10 (financial)	-.217	-.755*
Eigen Value	**6.508**	**1.299**
% Variance	**53.56**	**24.51**
Cumulative%	**53.56**	**78.07**

* significant loadings exceeding 0. 64

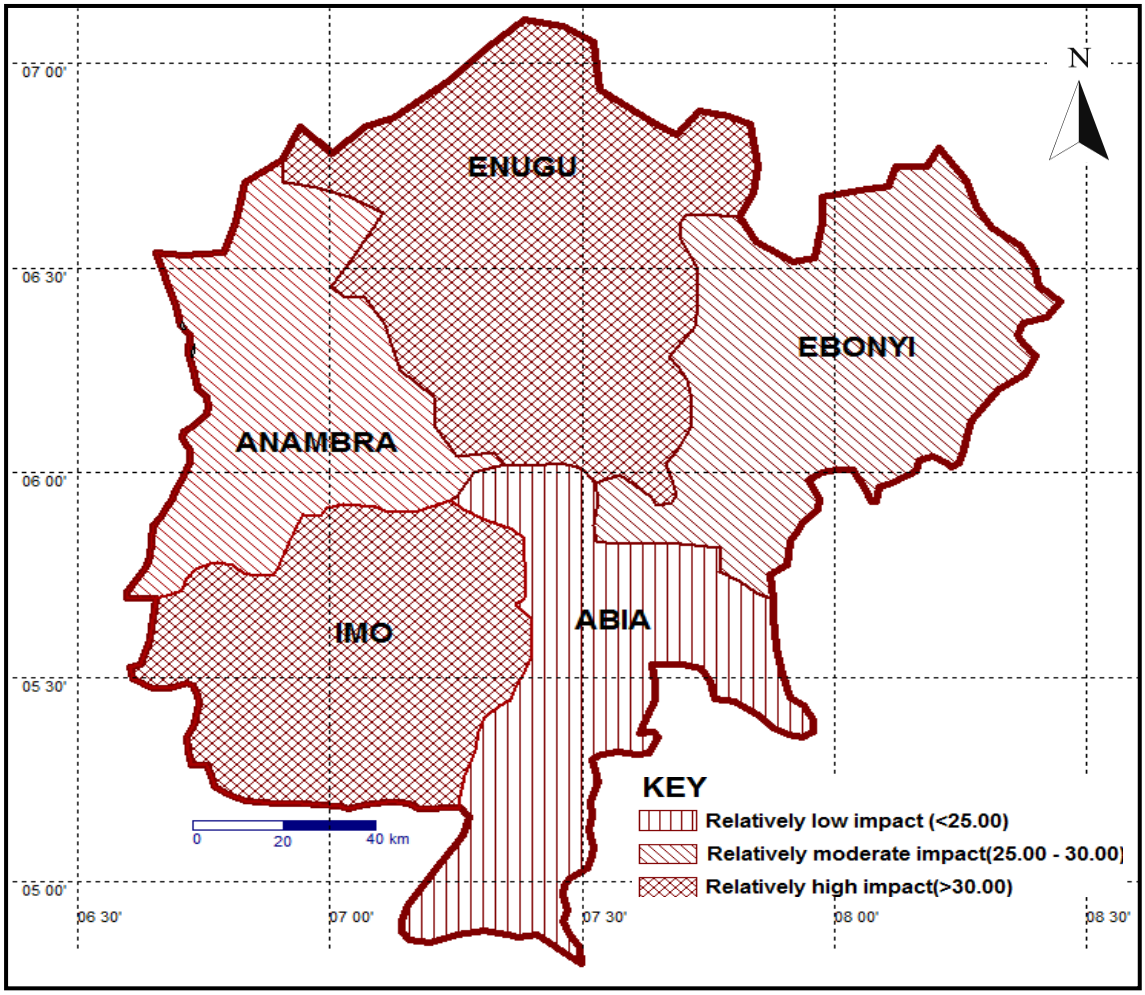

Figure 1: Map of the study area showing the spatial impact of rural-urban migration on rural livelihoods.

The results of the PCA indicate that the indices of livelihoods in the study are have been reduced to just two underlying components. These two components together explain 78.07% of the cumulative variance in the PCA

variables thereby leaving 21.93% of the determinants of the values of our livelihoods indices to be explained by other factors.

Component I has an eigenvalue of 6.508, a variance of 53. 56% and loads high on eight variables. These variables are X1(education index), X2 (water index), X3 (sanitation index), X4 (economic index), X6 (health index), X7 (gender index), X8 (access to institutions index), and X9 (nutritional index). The underlying component then becomes investments by families of migrants' in the rural areas to improve their quality of life.

Component II has an eigen value of 1.299, a variance of 24.51% and loads high but negatively on two variables. These variable are X5 (food index), this is a pointer that quantity of food alone does not improve the well being of the consumer unless the food so consumed has quality or nutritious value, and X10(financial index) meaning that access to money only as a commodity does not translate to improved livelihoods except when put to productive use. Therefore money contributes to rural livelihoods only when it is put to productive use and not when it merely belongs to a household. The underlying component becomes personal security of the holders of the money and consumers of the food.

4.1. Conclusions and policy recommendations

The findings of this research show that more than 70% of all the households in each state of the study area receive remittances. The study also revealed that most migrants remit more than ten thousand naira each time they send remittances back home, Imo state has the greatest proportion of migrants that send home between one thousand and two thousand naira while Ebonyi state has the greatest proportion of migrants that send home more than ten thousand naira. These remittances are mostly sent home for various reasons such for education of relatives, funerals etc. on the other hand, the uses of these remittances vary spatially and in scope of usage. In this regard, the highest use of remittances is in education of household members, followed by buying of food, and building/maintenance of houses. With regards to the LGAs, the uses of remittances for debt repayment, buying of food, and other miscellaneous uses are generally uniform across in the study area.

This study made use of the sustainable livelihoods framework by LMU (2004) to calculate asset index for livelihoods outcome indices in the study area. The indices calculated include education index, economic index, the gender index, food index and nutritional index. On aggregate the livelihood indices had the following impact scores after estimation. Financial (60.82), sanitation (29.76), education (25.70), health (24.87), food (19.53), nutritional (9.46), gender (5.63), economic (5.339), water (4.064) and access to institutions (3.83). Consequently, the aggregate impact of migration on rural livelihoods across the states is Abia (23.99), Anambra (28.76), Ebonyi (25.71), Enugu (30.67) and Imo (34.33). on the basis of the clustering, migration has a relatively high impact on rural livelihoods in Imo state, a relatively low impact on Abia and Ebonyi states, and a relatively medium impact on Anambra and Enugu States.

The results of our PCA also indicate that the indices of livelihoods in the study are has been reduced to just two underlying components. These two components together explain 78.07% of the cumulative variance in the PCA variables thereby leaving 21.93% of the determinants of the values of our livelihoods indices to be explained by other factors. Component I has an eigenvalue of 6.508, a variance of 53. 56% and loads high on eight variables. These variables are X1(education index), X2 (water index), X3 (sanitation index), X4 (economic index), X6 (health index), X7 (gender index), X8 (access to institutions index), and X9 (nutritional index). The underlying component then becomes investments by families of migrants' in the rural areas to improve their quality of life. Component II has an eigen value of 1.299, a variance of 24.51% and loads high but negatively on two variables. These variable are X5 (food index), and X10 (financial index). The underlying component is food and financial security. Further analysis of the PCA to extract the components scores shows that nutritional index has the greatest relative impact of 0.269 since a balanced diet not only help to reduce hunger, but also helps in emotional, psychological, and reasoning capability of an individual. This index is also intricately related to the food index of 0.202. Other component scores are education (.081), water (.076), sanitation (.116), economic (.234), health (.129), gender (.151) access to institutions (.161), and financial index (.130).

Based on the findings of this study, the following suggestions are made to help in improving the livelihoods of the rural population in the study area, and by extension in other rural areas in Nigeria. First, it is recommended that governments, NGOs, development agencies and policy makers should pay more attention to the infrastructural needs such as roads, water supply and electricity in the rural areas. Second, there is need to establish small and medium scale enterprises (SMEs) in the rural areas that will provide jobs for the youths, yield revenue for the development of the rural areas, attract more economic activities in the rural areas and contribute to the improvement of the quality of life of the rural populace. In addition, educational and vocational institutions should be established in the rural areas. This is to enable the youths acquire requisite skills that will make them employable in the SMEs that will be established. In conclusion, if these recommendations are properly implemented, it will help in stemming the tide of rural-urban migration in the study area, retain demographically active populations, and promote sustainable development of the area.

References.

Adams, R.H. (2006). Remittances, Poverty and Investment in Guatemala. In Ozden C, Schiff M (eds) *International Migration, Remittances and the Brain Drain,* pp 53-80. World Bank and Palgrave Macmillan, Washington D.C.

Adesiji, G.B; Omoniwa, V.; Adebayo, S.A .; Matanmi, B.M. and Akangbe, J.A. (2009). Factors Associated with the Youths' Rural-Urban Drift in Kwara State, Nigeria. *Interdisciplinary Journal of Contemporary Research in Business* (1), 69-77.

Adepoju, A. (1977). Migration and rural development in Nigeria, In Binsbergen, W.M.J and Meilink, H.A (eds) *Migration and the Transformation of Modern African Society,* Africa- Studiecentrum, Leiden:

Adepoju, A. (1982). *Pattern of migration, living conditions and community development in rural areas of South-West Nigeria* Federal Ministry of Social Development, Youth, Sports and Culture (Social Development Directorate), Lagos.

Adepoju, A. (1986). *Rural migration and development in Nigeria*. University of Ife, Nigeria.

Ajaero, C.K (2008). Spatial Impacts of rural-urban migration on rural livelihoods in Southeastern geopolitical zone of Nigeria (Unpublished Ph.D Seminar). Department of Geography, University of Nigeria, Nsukka.

Ajaero, C.K. (2011). Human Migration Studies: State-of-the-art.(Unpublished Ph.D Seminar). Department of Geography, University of Nigeria, Nsukka.

Ajaero, C.K and Okafor, O.I. (2011). Selectivity and Determinants of Rural-Urban Migration into Lagos, State, Nigeria. *Nigerian Journal of Geography and the Environment* (2) 214-229.

Anyadike, R.N.C. (2009).*Statistical Methods for the Social and Environmental Sciences*. Spectrum Books Ltd, Ibadan, Nigeria.

Aworemi, J.R and Abdul-Azeez, I.A. (2011). An Appraisal of the Factors Influencing Rural-Urban Migration in Some Selected Local Government Areas of Lagos State Nigeria. *Journal of Sustainable Development* 4: 3.

Azam, J.P. and Gubert, F. (2005). *Migrant remittances and economic development in Africa: A review of evidence*. Paper prepared for the AERC Plenary Session, Nairobi.

Bolorunduro, P.I; Adesehinwa, A.O.K and Bolorunduro, O.M. (2005). Policy options in managing the crisis of environmental degradation and the prevalence of poverty in urban Nigeria. *Journal of Food Agriculture and Environment* (3)216-219.

Department For International Development (DFID) (1999). *Sustainable livelihoods guidance sheets*, Department for International Development, London.

Fadayomi, T.O. (1998). *Rural Development and Migration in Nigeria: Impact of the Eastern zone of Bauchi State Agricultural Development Project*. Institute of Social and Economic Research, Ibadan Nigeria.

Food and Agricultural Organization (FAO) (2006). *Fisheries and Aquaculture Management and Conservation: Sustainable Fisheries Livelihoods Approach*. Rome: Food and Agriculture Organization of the United Nations.

Federal Republic of Nigeria (FGN) (2003). *Nigeria's First National Commission under the United Nations Framework Convention on Climate Change.* Federal Ministry of Environment, Abuja.

Filmer, D and Scott, K (2008). *Assessing Asset Indices*. World Bank Policy Research Paper 4605, Washington, D.C.

Gamburd, M. (2000). *The Kitchen Spoon's Handle: Transnationalism and Sri Lanka's Migrant Housemaids.* Cornell University Press, New York.

The International Fund for Agricultural Development (IFAD) (2009). *Enabling poor rural people to overcome poverty in Nigeria.* Rome, Italy.

Kesavan, P.C and Swaminathan, M.S. (2006). Managing extreme natural disasters in coastal areas. *Philosophical Transactions of the Royal Society* 364 (1845) 2191-2216

Levitt, P and Sørensen, N.N. (2004). The transnational turn in migration studies. *Global Migration Perspectives* (6) 2-13.

Livelihoods Monitoring Unit (LMU) (2004). *Measuring Livelihood Impacts: A Review of Livelihoods Indicators, CARE Bangladesh Research Tool* TANGO International, Inc, Dhaka.

Lucas, R.E.B. (2005). *Migration and Economic Development in Africa: A Review of Evidence*. Paper prepared for the African Economic Research Consortium Biannual Research Workshop, Nairobi.

Madu, I.A. 2005. Rural Land use change in Southeastern Nigeria: Evidence and Environmental Consequences. *Global Journal of Social Sciences* 4 (1) 27 – 32.

Madu, I.A. (2006). Spatial Inequality in Nigeria: The Imperative of Geographic Perspectives in the Development Process. *Journal of Social and Economic Development* 8 (2)105-120.

Madu, I.A. (2009). The impacts of anthropogenic factors on the environment in Nigeria. *Journal of Environmental Management* (90)1422–1426.

Madu, I.A. (2012). Spatial Impacts of Rural Population Pressure on Agricultural Land use in Nigeria. *Applied Spatial Analysis and Policy* (5) 123-135 DOI**:** 10.1007/s12061-011-9064-x Springer

Mckenzie, D.J. (2006). Beyond remittances: the effects of migration on Mexican households. In Ozden C and Schiff M (eds) *International Migration, Remittances and the Brain Drain,* 123-147. World Bank and Palgrave Macmillan, Washington D.C.

National Population Commission (NPC) (1998). *1991 Population Census of the Federal Republic of Nigeria: Analytical Report at the National Level*. Government Printer, Abuja.

Nwajiuba, C. (2005). International Migration and livelihoods in Southeastern Nigeria. *Global Migration Perspectives*, Geneva No. 50.

Olowe, O.W and Awoyemi, T.T. (2012). Determinants of migration and remittances in rural Nigeria. *Journal of Development and Agricultural Economics* 4,7: 191-198.

Pozo, S. (2007). Immigrants' Remittances. In Woods J, O'leary C (eds.) *Principles of Labor Market Information.*

Sibanda, A. (2004). Who gets to drop out of school in South Africa? The role of individual and household attributes. *African Population Studies* 19 (1) 99-117.

Sorenson, N.N. (2004). *The development dimension of migrant remittances: Toward a gendered typology.* Paper presented at International Forum on Remittances, Washington D.C

Sorensen, N.N. (2006). The development dimension of migrant remittances. *Migration Policy Research, IOM Working Papers Series, No. 1*.

Sørensen, N.N; Van Hear, N and Engberg-Pedersen, P. (2003). Migration, Development and Conflict: State of the Art Overview. In Van Hear, N and Sorenson, N.N. (eds), *The Migration Development Nexus.* International Organization for Migration, Geneva.

Taylor, J.E and Mora, J. (2006). Does Migration Reshape Expenditures in Rural Households? Evidence from Mexico. *World Bank Policy Research Working Paper 3842*.

Timalsina, K.P (2007). *Rural Urban Migration and Livelihood in the Informal Sector: A Study of Street Vendors of Kathmandu Metropolitan City, Nepal* **(**Unpublished Master of Philosophy Thesis in Development Studies) Department of Geography Norwegian University of Science and Technology (NTNU).

Udo, R.K. (1972). *Social Relations of Rural-Urban Migrants with Host Communities.* Paper presented at the IAI/IDEP Seminar on Modern Migration in West Africa, Dakar.

United Nations (2007). *Access to Basic Services for the Poor – The Importance of Good Governance, Asia-Pacific MDG Study Series.* United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Development Programme (UNDP) and Asian Development Bank (ADB), Bangkok, Thailand.

World Bank (2005). *Empowering People By Transforming Institutions, Social Development in World Bank Operations.*

World Bank (2009). *World Bank Development Report -Reshaping Economic Geography*. The World Bank, Washington DC.