Examination of Urban-Rural Migration in Delta State, Nigeria: Implications for the Agricultural Extension Service

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Abstract: This study was conducted to examine urban-rural migration in Delta State, Nigeria and its implication for extension service. Data were collected from 180 respondents who were purposively selected. It was discovered that most of the migrants were males, mostly in the age range of 50 years and above; mostly married and had one form of formal education or the other; had average household size of 6 persons. Most of them have spent 6-10 years in the rural area and their migration was mostly prompted by retirement. The selected socio economic variables of the migrants had significant relationship with the decisions of the migrants to engage in agricultural activities. Implications of the findings for extension service include identifying and training the migrants on the current skills and technologies of agriculture, taking advantages of their level of exposure and experiences in the urban areas to make them opinion leaders and identifying them a year before their retirement in order to provide them with training in the agricultural enterprise of their choice.

Key Words: Urban-rural migration, opinion leader, agricultural extension service, retirees, agricultural development.

1. Introduction

Generally, migration is a regular occurrence in the life of a nation. While rural-urban migration is mostly temporary, urban – rural migration tends to be on permanent on basis. Observations indicate that most people that are involved in urban-rural migration are return migrants. Return migrants are people who return after emigration to their community of origin (Bovenkerk, 2004; Ekong, 2003). People migrate in response to prevailing conditions or situations. The decision to migrate or move is always informed by the prevailing situations. Movements of people tend to be a selective process affecting individuals or families with certain economic, social, educational and demographic characteristics (Adewale, 2005).

Adewale (2005) suggests that urban-rural migration is one of the important modes of migration. Previous studies concentrated on rural-rural and urban-rural modes of migration. For instance, Okpara (1983), Fadayomi (1998), and Ekong (2003) discovered that rural-urban and rural-rural types of migration were predominant in developing societies. However, studies by Okpara (1983) reveal that rural-urban migrants outnumber urban-rural migrants.

According to Ekong (2003), Fadoyomi (1998) and Afolabi (2007), rural-urban migration has negative impacts on agricultural productivity through the loss of productive members of the rural communities. It is expected that a reversed trend in migration will help to mitigate this problem of negative impact on agricultural productivity. Williams (1970) observed that some factors such as economic/financial crisis, old age, transfer from urban areas as workers, retirement and invasion of pests and disease in urban areas are related to urban-rural migration. Jibowo (1992) maintains that urban-rural migration is influenced by factors like congestion, traffic jams, sanitation problems, increasing urban unemployment, increased crime rate and accommodation (housing) problems. These factors are actually prevailing in Nigeria currently and every Nigerian, especially those from the
The Niger Delta Region in which Delta State is located, wishes that these problems are addressed.

The discovery of petroleum in the Niger Delta Region has fuelled rural-urban migration to the detriment of the agricultural economy of the region. A lot of people in the rural areas were prompted by the petroleum industry to migrate from rural to urban areas to seek employment. This, in turn, created a deficit in the agricultural productivity of the Delta State.

Urban-rural migration has generally increased agricultural output while the population of economically active persons in agriculture also increased between 1970 and 2000 (Majid 2004). While the trend of growth in agricultural productivity shows improvements in China and the rest of Asia, as a result of urban-rural migration, this is not the case in Sub-Saharan Africa (Afolabi, 2007). Urban-rural migrants are also involved in educative and health related occupations and trading. People who have lived in an urban area are cosmopolitan due to their interaction with people coming from various places. In the rural areas, people are engaged in agriculture related activities such as farming and processing. Other rural occupations include artisanal activities like blacksmithing, bicycle repairing, etc.

This study was undertaken to examine urban-rural migration in the Delta State and its implications for agricultural extension services. The specific objectives of this study were to: i. ascertain the demographic characteristics of the migrants; ii. determine their length of stay in the rural areas iii. identify the causes of their migration to rural areas iv. ascertain the jobs they are presently engaged in, in the rural area.

Hypothesis Ho: The demographic characteristics of urban-rural migrants do not influence their involvement in agriculture.

2. Materials and Methods

The study was conducted in Delta State, Nigeria. The state consists of 25 local government areas which are grouped into Delta North, Delta Central and Delta South Agricultural Zones by the Delta State Agricultural development programme (the public agricultural extension agency). The urban areas in the state include Asaba, Agbor, Sapele, Effurun, Ughelli, and Warri. Two local government areas were randomly selected from each of the 3 agricultural zones under consideration. At the second stage, 3 rural communities were randomly selected from each selected local government area which thus resulted to a total of 18 rural settlements. From each rural settlement, 10 individuals were selected so as to have a sample size of 180 respondents. This sample size was adopted considering the fact that, according to Ofuoku and Chukwuji (2012), urban-rural migrants are always few compared to the population of rural-urban migrants.

Data were collected from the respondents with the use of questionnaire and interview schedule administered to formally educated respondents and to respondents who had little or no formal education respectively. The instrument was subjected to reliability test. The test was run using the test retest method. The retest was done 3 weeks after the retrieval of the instrument from the respondents at the first administration. The result of the correlation between the first and second responses showed a high level of correlation for the questionnaire \( r = 0.831 \) and the structured interview schedule \( r = 0.791 \).

The data collected were subjected to descriptive statistics such as frequency counts and percentages. The hypothesis was tested with the use of logistic regression technique.

Although the logistic regression model is similar to the linear regression model, it was best suited for this study because the dependent variable was dichotomous. The binary response in this study was whether the respondents were engaged in agriculture related activity or not, i.e. yes or no. The logistic model was implicitly stated as:

\[
\ln \left( \frac{p_i}{1-p_i} \right) = \beta_0 + \sum_{j=1}^{n} \beta_j x_{ji} + \varepsilon_i
\]

The empirical model specifying engagement in agriculture related activity by the ith farmer is explicitly specified as:
Where:
\[ y = \text{engagement in agriculture (dummy)} \]
\[ \exists o = \text{constant term} \]
\[ X_1 = \text{gender (dummy)} \]
\[ X_2 = \text{age (years)} \]
\[ X_3 = \text{marital status status dummy} \]
\[ X_4 = \text{education (years of schooling)} \]
\[ X_5 = \text{Household size (no of persons)} \]
\[ \epsilon = \text{error term} \]

Engagement in agriculture was regressed against the defined demographic characteristics of the urban-rural migrants.

3. Results and Discussion

3.1. Demographic Characteristics of Urban-Rural Migrants

Most of the urban-rural migrants were males (70.0%) and the majority of them were in the age range of 60-69 years (27.2%), most of them were married (78.9%) and 82.1% of them had at least some primary education. Most of them (31.1%) had household sizes between 5-7 persons (Table 1). The results indicate that most of the respondents were retirees (see Table 3) who still have responsibilities as married men, considering the fact that most of them had fairly large household size. The retirement pension paid to retirees is lower than the salary they used to earn. Those (42.1%) who worked in private enterprises in the urban areas do not receive pensions, as only gratuity is paid to them. The fact that most of them had some formal education means that education may have guided their decision to migrate to rural areas which most likely are their places of origin. Education is also expected to inform their decision to be engaged in one activity or the other. Education exposes people to information and interaction with other people from other places with whom ideas are cross-fertilized. The enlightenment gained through education cannot be quantified as education is one good variable that influences the attitude of man positively to situations in life. From observations on adoption studies, innovators are mostly found among the educated farmers. This class of adopters is among those that are cosmopolitan, those who have had experiences in the urban areas and are educated. Mendola (2008) found that migrant households tend to use new farming innovations to improve agricultural production than non-migrant households.

Through their engagement in various activities (see below) they earn and save money, in order to be afloat financially. These results are congruent with those of Adewale (2005) who discovered that most of the urban - rural migrants in Oyo State, Nigeria were males who were mostly married and had some formal education.

3.2. Length of Stay of Migrants in Rural Areas

Table 2 indicates that most (34.4%) of the urban-rural migrants have been living in the villages for 6-10 years, while 20% have spent 1-5 years since their return. This implies that most of the migrants migrated to the rural areas rather recently. The migrants studied in Oyo State were also found to have mostly moved into the rural areas in recent years (Adewale, 2005).

Their movement and stay in the villages may have been informed by the presence of motor able roads and electricity. Most of the villages now have health centers and people have started to be aware of the people-friendly physical and biological environment of the villages.

3.3. Causes of Urban-Rural Migration

Most of the migrants (66.1%) were pushed to rural areas due to retirement; a further 26.1% moved due to urban unemployment (Table3). The implication is that most urban-rural migrants embarked on return migration. Most retirees return to their villages of origin after retirement, to avoid financial insolvency of the household as life in the village is cheaper than in the urban areas. This is especially so with those who already
built houses in their villages. Prolonged unemployment among the youth in the urban areas forces them to migrate back to the rural areas where life is simple, especially when their hosts tend to become hostile or exhibit some element of hostility towards them. Guatam (1999) observed that people migrating in India are careful enough and take all precautions so that they will be sure of their host and job before they leave rural areas to urban for job.

| Table 1: Demographic characteristic of respondents |
|-----------------------------------------------|
| **Variables** | **Frequency** | **Percentage (%)** |
| Gender         |               |                   |
| Male           | 126           | 70.0              |
| Female         | 54            | 30.0              |
| Total          | 180           | **100.0**         |
| Age            |               |                   |
| 20-29          | 38            | 21.1              |
| 30-39          | 26            | 14.4              |
| 40-49          | 19            | 10.6              |
| 50-59          | 19            | 10.6              |
| 60-69          | 49            | 27.2              |
| 70 and above   | 0             | 0                 |
| Total          | 151*          | **83.9***         |
| Marital Status |               |                   |
| Married        | 142           | 78.9              |
| Single         | 38            | 21.1              |
| Total          | 180           | **100.0**         |
| Formal Education |             |                   |
| No formal education | 32       | 17.8              |
| Primary education | 44         | 24.4              |
| Secondary education | 51      | 28.3              |
| Tertiary education | 53        | 29.4              |
| Total          | 180           | **100.0**         |
| Household size (no. of persons) |     |                   |
| 1              | 36            | 20.0              |
| 2-4            | 32            | 28.9              |
| 5-7            | 56            | 31.1              |
| 7-9            | 20            | 11.1              |
| Above 9        | 16            | 8.9               |
| Total          | 180           | **100.0**         |

*151 respondents responded to this section

| Table 2: Length of stay of migrants in rural areas |
|-----------------------------------------------|
| **No. of years** | **Frequency** | **Percentage (%)** |
| 1-5              | 36            | 20.0              |
| 6-10             | 62            | 34.4              |
| 11-15            | 25            | 13.9              |
| 16-20            | 28            | 15.6              |
| Above 20         | 29            | 16.1              |
| Total            | 180           | **100.0**         |
Table 3: Causes of migration from urban to rural areas

| Causes          | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Unemployment    | 47        | 26.1           |
| Cost of living  | 83        | 46.1           |
| Retirement      | 119       | 66.1           |
| Ethnic crisis   | 15        | 8.3            |
| Transfer        | 7         | 3.9            |
| Congestion      | 6         | 3.3            |
| Illness         | 13        | 7.2            |

3.4. Occupational Status in the Rural Areas

Table 4 indicates that most (31.1%) of the urban-rural migrants were involved in agriculture and agriculture related processing (23.3%) while 20% of them were into trading. Ekong (2003) has defined the rural as an area of settlement in which half or more than half the adult working population is engaged in farming. This finding confirms the rurality of the areas the respondents migrated to. The major occupations in rural areas are farming and other agriculture related activity like processing. Most respondents’ families have enough land to sustain farming activities – crop, livestock and fish farming. Most retirees take up an agriculture related activity after retirement in order to keep their body busy and transcend the fear of early death; they hold the belief that on retirement if one stays at home everyday doing nothing, the body organs deteriorate faster as they are not put to full use. According to Gautam (1999), urban-rural migrants acquire land and engage in farming on getting back to the village after saving money for such a purpose while working in the urban area.

Table 4: Occupations engaged in on movement to rural areas

| Occupation | Frequency | Percentage (%) |
|------------|-----------|----------------|
| Farming    | 56        | 31.1           |
| Processing | 42        | 23.3           |
| Trading    | 36        | 20.0           |
| Civil service | 22  | 12.2           |

3.5. Influence of Demographic Characteristics on Decision to Engage in Agriculture

The logistic regression result showing the influence of demographic variables on the decision of urban-rural migrants to engage in agricultural occupation is presented in table 5.

Gender ($X_1$): the results show that gender has a negative coefficient, but is significant. This implies that the male household heads, though engaged in agricultural activities, are less involved than their wives. This is a result of the fact that women are more interested in farming than men. This is congruent with Uzokwe and Ofuoku (2006) who discovered that women have taken over almost every farm operation from their husbands.

Age ($X_2$): this variable is also found to have significant, but with a negative coefficient. This result is in agreement to our a priori expectation. It implies that older people are less likely to take the decision to engage in farming as they have become weaker.

Marital status ($X_3$): marital status has positive and significant relationship with decision to engage in farming. This is also in agreement with our a priori expectation. This means that the respondents had responsibilities and thus they decided to engage in farming. Qin (2010) found that rural household heads are more likely to engage in farming as a result of their marital status.

Education ($X_4$): education had positive and significant relationship with decision to engage in agriculture.
farming. This was also expected. This implies that the more the years of schooling, the more the likelihood they were informed enough to know the importance of agriculture with respect to their livelihood. Adewale (2005) found a similar relationship in his study in Oyo State, Nigeria.

Household size ($X_5$): household size had positive and significant relationship with the decision to engage in farming. This again is consistent with our a priori expectation. It implies that the larger the household size, the more the likelihood to make a decision to engage in farming or agricultural activities. Most of the urban-rural migrants had large household sizes.

This implies that there were many people to feed and cater for as most African household sizes are large. Having this in mind the decision to engage in farming becomes easy.

The result of the logistic regression analysis confirms that some demographic variables influenced urban-rural migrants’ decision to engage in farming. It also shows that the demographic variables explained 89.2% variation in the decision to engage in farming (dependent variable).

Table 5: summary of logistic regression results

| Variables          | Coefficient | Standard error | Wald statistics |
|--------------------|-------------|----------------|-----------------|
| Constant           | 0.047       | 1.322          | 0.035*          |
| Gender ($X_1$)     | -0.026      | 0.477          | 0.002*          |
| Age ($X_2$)        | -0.467      | 0.702          | 0.443*          |
| Marital status ($X_3$) | 0.096      | 0.562          | 0.029*          |
| Education ($X_4$)  | 0.015       | 0.114          | 0.018*          |
| Household size ($X_5$) | 0.096      | 0.562          | 0.029*          |

$R^2 = 0.892$

*significant (p<0.05).

3.6. Implications for Extension Service

Several implications for extension services can be deduced from the findings of this study. One of the objectives of extension programmes is to increase arable crop production through the encouragement of people to become involved in farming. Most of the urban-rural migrants are mostly retirees and to a lesser degree unemployed. It is therefore necessary for extension officers and planners to identify these groups of urban-rural migrants, with the objective of encouraging them to get involved in and, consequently, to design a training programme tailored-made for them. The training programme is expected to make them acquire current skills and technologies in farming.

Such a programme will have the advantages of re-integrating them into the farming community they feel relevant to the social system once more. Most of the retirees had some form of formal education and are expected to have more experiences than non-migrants. The extension service can take advantage of these qualities and promote these migrants to become the opinion leaders of farmers’ groups in the rural communities. Villagers very well respect the views of those who have lived and worked in the urban especially those who had tertiary education (Ekong, 2003).

Making migrants opinion leaders will aid extension agents in their work with the farmers who did not migrate from their rural communities. This is particularly useful when the latter are conservative. The extension service can even put up a system through which they will collaborate with ministries, government agencies and private firms in order to identify those who are to retire a year later. Following, pre-retirement training courses on agricultural practice can be organized.
for them, based on the (expected) migrants’ specific interests regarding their prospective agricultural enterprise. This implies preparing them for post retirement life.

4. Conclusions

Most of the urban-rural migrants are retirees and are interested in farming. It is conceivable that it would be beneficial to further encourage and train these retirees to get involved in agriculture and related activities.

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