Full Length Research Paper

Rural-urban migration, remittance economy and agricultural investment among small scale farmers in Umuahia south local government of Abia State, Nigeria

Osondu C. K., Ibezim G. M. C., Obike K. and Ijiomah J. C.

Department of Agricultural Economics and Extension Abia State University, Umuahia Campus, P. M. B., 7010, Umuahia, Abia state, Nigeria.

Accepted 19 March, 2014

This study on rural–urban migration, remittance economy and agricultural investment among small scale farmers in Umuahia South Local Government Area was carried out in Abia State, Nigeria. Structured questionnaire was used to obtain data from eighty (80) farm household heads that were selected using multi stage sampling technique. Data gathered through a panel survey were analyzed descriptively and by inferential statistics using paired t-test. The result showed that the mean rate of rural-urban migration in the area was high (60.25). Correlation result of the relationship between rural – urban migration and amount of fund invested in agriculture was 0.498. Mean of annual total remittances received by farmers from friends and relatives in urban centers was ₦ 45,000. The mean amount of remittances invested in agriculture was ₦ 24,051. This study posits that migration is a socio-economic activity which possesses implication for development, stopping migration may be futile as it has its positive implications and farmers should invest most of the remittances received in productive sectors especially agriculture as the sector suffers more due to migration.

Key words: Rural–urban migration, remittance economy, agricultural investment.

INTRODUCTION

Migration is a difficult concept to define because it involves movement of people for different reasons across different places. Migration is generally, a process in which an individual or a group shifts their residence from one location to another. Migration according to Eboh (2002) involves the crossing of national boundaries (in the case of international migration) and the crossing of administrative boundaries within a country (in the case of internal migration). The causes of migration are usually related to the specific contexts in which they take place. According to United Nation (1993) migration was a result of man's reaction to economic differentials although other factors such as war and insecurity has long been identified as inducing migration. Migration may take the forms of rural-rural, rural-urban, urban-urban and urban-rural migration.

Rural-urban migration which is predominant in most parts of Africa more often than not involves a movement from low order to high order central place. Migration of labour geographically, out of farm job is one of the most pervasive features of agricultural transformations and of economic growth. According to Sanders and maimbo (2003) one of every 35 people which amounts to an estimated 175 million people, lives outside their country of origin.

After many decades of political independence, rural Nigeria has not significantly changed. Agriculture still remains the primary occupation and source of earnings the ruralites. Rural dwellers migrate to urban centers in search of higher income earning jobs. Even when these jobs are not available they prefer to remain in the cities because “urban misery they reason is better than rural woes” (Onyeneke, 2005). Remittances are inherently linked with migration (Sander
and Maimbo, 2003) whether for economic or other reasons, migrants from developing countries leave their homes to improve their own livelihood and opportunities as well as to support the family back home. As farming season draws near, small scale farmers in most parts of Eastern Nigeria, look up to their children, wards and relatives in the cities or abroad for money to augment their food budget and more importantly to finance their farm operations. According to Sander and Maimbo (2003) migration pattern and the flow of remittances are congruent, migration being the under current that drives remittances.

The effect of a loss of labour as a result of migration and the effect of migration remittances are likely to lead to changes in agricultural production. In terms of income from agriculture, though, these two effects can offset each other. According to Machebele and Winter-Nelson (2000) suggests that remittances facilitate, rather than substitute for agricultural production. However, according to Aguinas (2006) the effect of remittances on agricultural development is quite unclear.

Motives for migration, choice of destination and means for sending home money are thus important contextual aspects of remittances that should inform policy makers and providers of money transfer services. Remittance economy is gaining importance in Eastern States of Nigeria but how much of the remittances received by small scale farmers in Umuahia South Local Government area of Abia State that is invested in agriculture are not certain.

In order to examine rural-urban migration, remittance economy associated with it and how much of the remittances are invested in agriculture, this study specifically set out to (i) determine the rate of rural-urban migration in the study area; (ii) assess the volume of remittance by migrants to farmers in the area; (iii) determine the proportion of remittances to farmers in the study area that is invested in agriculture and (iv) determine the relationship between rural-urban migration and agricultural investment.

This study is anchored on the null hypothesis that there is no significant difference between total remittances received by farmers and the remittance channelled to agricultural investment.

METHODOLOGY

The study was conducted in Umuahia South Local Government area of Abia State. Umuahia South LGA was created in August 1991 with the headquarters at Apumiri Ubakala. This LGA is bounded in the North by Umuahia North LGA, South by Isiala-Ngwa North LGA, and East by Imo River and west by Ikwuano LGA. Umuahia South LGA covers an area of about 140 km² with a population of 138,570 comprising 68,950 males and 70,177 females (NPC, 2006). The coordinates are 5°30' N and 7°26' E. The LGA is made up of 45 autonomous communities. The major food crops grown in the area include yam, maize, cassava and cocoyam. Farm animals like pigs, sheep, goat and poultry are also reared in the study area.

Participants in this study were selected using multi stage random sampling technique. Four autonomous communities (Nsukwe, Amuzu, Mgbakuma and Ipupe) were randomly selected in the first stage from the 45 autonomous communities. From each of the four communities, four villages were randomly selected. Lastly, five farm household heads were randomly selected from each of the sixteen villages, giving a grand sample size of 80.

Data were collected using semi-structured questionnaire. The questionnaire sought information on the household members resident and not resident at home, remittances received by each household and the amount of these remittances invested in agriculture.

The data collected were analyzed using descriptive statistics (frequency distribution tables, percentages, mean) and inferential statistic (correlation analysis and paired t-test). Objective I was computed by dividing the total number of migrants per household by the household size and expressed in percentage (Nwajiuba and Ejiofor, 2008; Onyeneke, 2005). Objectives ii and iii were analyzed using descriptive statistics. Objective iv was realized using simple correlation analysis. The implicit form of simple correlation analysis is as stated below

\[ Y = b_0 + b_x \tag{1} \]

Where:
Y = Agricultural investment
b₀ = Intercept
b = Slope
X = Rate of migration

The hypothesis of no difference between total remittances received and those invested in agriculture was tested using paired t-test. The paired t-test is stated below according to Emerole et al. (2009).

\[ t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}} \tag{2} \]

\( n_1 + n_2 - 2 \) degrees of freedom.

Where:
t = Student “t” statistic
\( X_1 \) = Mean of the total remittance received by farmers
\( X_2 \) = Mean of the remittances invested in agriculture by farmers.
Table 1. Distribution of respondents by the rate of migration.

<table>
<thead>
<tr>
<th>Rate of Migration</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>2</td>
<td>2.50</td>
</tr>
<tr>
<td>21-40</td>
<td>17</td>
<td>21.25</td>
</tr>
<tr>
<td>41-60</td>
<td>21</td>
<td>26.25</td>
</tr>
<tr>
<td>61-80</td>
<td>36</td>
<td>45.00</td>
</tr>
<tr>
<td>81-100</td>
<td>4</td>
<td>5.00</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.00</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>60.25</td>
</tr>
</tbody>
</table>

Source: Field Survey Data, 2013.

Table 2. Distribution of Respondent by Annual Remittance Received.

<table>
<thead>
<tr>
<th>Remittance (₦)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 - 40,000</td>
<td>49</td>
<td>61.25</td>
</tr>
<tr>
<td>41,000 - 80,000</td>
<td>17</td>
<td>21.25</td>
</tr>
<tr>
<td>81,000- 120,000</td>
<td>14</td>
<td>17.50</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.00</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>₦45,000</td>
</tr>
</tbody>
</table>

Source: Field Survey Data, 2013.

\[ S_1^2 = \text{variance of the total remittance received by farmers} \]
\[ S_2^2 = \text{variance of the remittances invested in agriculture} \]
\[ n_1, n_2 = \text{Sample size} \]

RESULTS AND DISCUSSION

Rate of migration

Table 1 shows that 45.00% were within the range of 61 - 80%, 26.25% of the respondents had migration rate of 41 - 60% and 21.25% in the range of 21 - 40% migration rate. The table result posted a mean migration rate of 60.25% which reveals that the rate of migration in the study area was high. This result mirrors the decline of available labour for agricultural production in the study area and is in agreement with Dehaan (2002) who posits that the rate of migration in Nigeria was high with two thirds of households estimated to have had migrants.

Amount of remittances received by respondents

Table 2 shows that a good proportion (61.25%) of the respondents received less than ₦40,000 annually as a remittance from their family members who migrated to another place. 21.25% of the respondents received between ₦41,000-₦80,000 annually as remittance while 17.50% of the respondents received between ₦81,000- ₦120,000 as annual remittance. The mean annual remittance of the respondents was ₦45,000. The prime motivator for migrants is economic. The migrants usually send money to their family members. This is a positive aspect of migration as the remitted funds can be used for various purposes including consumption and investment. The result posits remittances are inherently linked with migration and agrees with Sander and Maimbo (2003) who stated that whether for economic or other reasons migrants from rural areas leaves their home to improve their own livelihood and opportunities as well as to financially support the family back home.

Investment of remittance in agriculture

Table 3 shows that 72.50% of the respondents invested less than ₦30,000 of their remitted funds in agriculture; 23.75% invested between ₦31,000 – ₦60,000 of their annual remittance in agriculture, while 3.75% of the respondents invested between ₦61,000 - ₦90,000 of their annual remittance in agriculture. The mean amount of remittances invested in agriculture was ₦24,051. This shows that part of the remitted fund is invested in agriculture. The invested fund tends to neutralize the negative effects of migration on depletion of available labour supply for agricultural production, by providing credit which can be utilized in hiring farm laborers.

Relationship between rural-urban migration and amount of fund invested in agriculture

Table 4 result shows that the rate of migration had a positive relationship with amount of fund invested by respondents in agriculture. This implies that as the rate of
Table 3. Distribution of respondents according to the amount of remittance investment in agriculture.

<table>
<thead>
<tr>
<th>Amount Invested (₦)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 - 30,000</td>
<td>58</td>
<td>72.50</td>
</tr>
<tr>
<td>31,000 – 60,000</td>
<td>19</td>
<td>23.75</td>
</tr>
<tr>
<td>61,000 – 90,000</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>₦24,051</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey Data, 2013.

Table 4. Correlation result of the relationship between rural-urban migration and amount of fund invested in agriculture.

<table>
<thead>
<tr>
<th>Migration rate</th>
<th>Invested fund</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.498</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Field Survey Data, 2013.

Table 5. Paired t-test analysis on the difference between total remittance received and the amount he invests in agriculture.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Mean difference</th>
<th>T cal</th>
<th>T tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Remittances Received</td>
<td>45,000</td>
<td>20,904</td>
<td>6.784***</td>
<td>2.6</td>
</tr>
<tr>
<td>Remittances Invested in Agriculture</td>
<td>24,051</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey Data, 2013.

Migration increases amount of fund invested in agriculture also increases. Migrants have opportunity of earning higher income level than they have been enjoying at home from sales of their farm products. Part of this additional income are remitted home and invested in agriculture. Rural - urban migration increases inflow of wealth from the urban centers and rural development. It narrows the gap between rural and urban centers and is inevitable in the quest of developing nations becoming more developed.

**Difference between total remittance received and amount of remittance invested in agriculture**

The result of the paired t-test as given in Table 5 shows there is a significant difference between the total remittances received by farmers and amount of remittances invested in agriculture. This implies that significant portion of the remittances must have been used in unproductive activities such as consumption.

**Conclusion**

The rate of migration is high and reduces available labour supply for agricultural production. The mean annual remittance of the respondents was ₦ 45,000. Family members of migrants receive remittances annually from them and use part of it to invest in agriculture. The mean amount of remittances invested in agriculture was ₦ 24,051. Rural - urban migration had a positive relationship with availability of credit for agricultural investment funds. However, the remittances received had a significant difference with the amount invested in agriculture. Migration is a socio-economic activity which possesses implication for development, stopping migration may be futile as it has its positive implications.

**Recommendation**

i.) Farmers should invest most of the remittances received in productive sectors especially agriculture as the sector suffers more due to migration.

ii.) Incentives such as farm machinery should be distributed to improve the productivity of the few existing small scale farmers in rural areas.

iii.) Farmers should form cooperatives to have a common
forum for obtaining incentives easily from both public and private sectors.

REFERENCES
