Impact of Rural Livelihood Diversification among Rural Household in Nigeria

Oruche Chinyere Amaka¹,²,³*, Faisal Muhammad³,⁴

¹Department of Development Studies, School of Business and Economics, North-South University (NSU), Dhaka Bangladesh
²Department of Development Studies, Faculty of Social Sciences, University of Dhaka (DU), Bangladesh
³Otu Institute of Research and Training (OIRT), London, United Kingdom
⁴Department of Public Health, Faculty of Allied Health Sciences, Daffodil International University (DIU), Dhaka Bangladesh

Corresponding Author: Oruche Chinyere Amaka, Department of Development Studies, Faculty of Social Sciences, University of Dhaka, Bangladesh. Email: amakaogunleye@gmail.com

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ABSTRACT
Livelihood diversification can be referred to as attempts by individuals and households to raise diverse means of income to survive and improve their standard of living. The key driver of diversification is to increase income because the main source of income is not enough to provide a satisfactory livelihood. This study aimed to determine the factors influencing livelihood diversification in rural household poverty reduction in Nigeria. A cross-sectional study was conducted among 30 rural households in South-Eastern Nigeria. A simple random sampling technique was used to select the households, and data was collected using a semi-structured questionnaire. Data collected were analyzed using statistical software (SPSS version-20). The majority (63.3%) of the respondents were male, and about 50.0% had 5-10 family members. Most of the respondents (36.7%) were between 46-60 years of age. Food security (36.7%) was the major reason for livelihood diversification from all the respondents, followed by income with 33.3%. A statistically significant association was found between non-farm activity and land ownership. The study revealed that income was the main reason to engage in livelihood diversification in the rural household because more income is needed to adequately take care of the large family size. The influencing factor for non-farm activities was the market (demand and supply). A further study of a larger population of households in rural areas is needed to ascertain the extent of rural livelihood diversification.

Keywords: Livelihood, Diversification, Households, Income, Food-Security

INTRODUCTION
Livelihood diversification is defined as the process by which rural families construct a diverse means of activities and social support abilities to survive and to improve their standards of living. Livelihood diversification is also an attempts by individuals and
households to raise income and reduce environmental risk which differs sharply by the degree of freedom of choice (to diversify or not), and reversibility of the outcome (Hussein and Nelson, 1999). Livelihood diversification includes both on-and off-farm activities which are undertaken to generate income additionally to that from the main household agricultural activities, via the production of other agricultural and non-agricultural goods and services, the sale of waged labor, or self-employment in small firms, and other strategies undertaken to spread risk (Stark and Levhari, 1982). The main driving forces of diversification are: to increase income when the resources needed for the main activities are too limited to provide a sufficient means of livelihood (Minot et al., 2006); to reduce income risks in the face of missing insurance market to exploit strategic complementarities and positive interactions between different activities and to earn cash income and financial investment in the face of credit failures (Barrett et al., 2001).

In developing countries, a move away from the agricultural sector to industry is expected to improve the distribution of income by increasing the income of low earning groups while an increase in the relative productivity of agriculture is expected to reduce income disparities by increasing the income of those employed in this sector (Topalova, 2005). However, in Africa the diversification via non-agricultural means provides 20-45 percent of full-time employment and 30-50 percent of rural household income (Babatunde and Qaim, 2009). Little is known about the impact of such activities on the distribution of income and consequently, inequality. In the last three decades, development researchers have focused on understanding the determinants of livelihood sources and intensification of poverty among rural people. This has produced many empirical studies of income and activity diversification, documenting various reasons why households simultaneously participate in more than one income-earning activity (Reardon, 1997; Ellis, 2000). Ellis (1998) distinguished between pull and push factors that necessitate diversification. Pull factors are incentives that afford households the choice to participate in multiple income-earning activities while push factors, however, are constraints that leave a household no other choice than to diversify in response to desperate circumstances where income from only one or two activities is insufficient to meet daily needs. Livelihood diversification is the norm in developing countries. Very few people or households derive all their income from a single source.

METHODS

Study Setting and Period:
This study was carried out in Ideato-North. This is a Local Government Area in Imo State, Nigeria. It was created in 1976 as Ideato Local Government, but was later divided into Ideato North, and Ideato South. The study was conducted for a period of three months (October to December 2014).

Study Design, Population and Selection Criteria:
This study was a descriptive cross-sectional survey conducted in the South-Eastern part of Nigeria. The study populations were all the people residing in selected villages in Ideato North Local Government Area. In this study both male and female of 20 years and above living in selected households were recruited. The respondents were selected based on availability and willingness of participation.

Sample and Sampling Technique:
A total of thirty (30) households in rural villages in Ideato-North Local Government Area in Imo State, South-Eastern part of Nigeria were selected using a simple random sampling technique.

Data Collection and Analysis:
Data was collected using a pre-tested semi-structured questionnaire by face to face interview technique. The questionnaire was designed in English and verbally explained in the local language by the researcher for an easier understanding of respondents. The study relied mainly on primary data. The data was analyzed using a Statistical Package for Social Sciences (SPSS version 20). The descriptive statistics were expressed in percentages and frequencies. The inferential statistics were done to show the significance between variables where it was applied. A p-value less than or 0.05 was considered as statistically significant.

RESULTS
More than three-tenths (36.7%) of the respondents were between 46-60 years of age. Majority (63.3%) of the respondents were male and about 50.0% of them had 5-10 family members. About half (50.0%) of the respondents had a primary level of education,
followed by 23.3% who had no formal education, 16.7% had secondary/vocational/technical level of education and only 10.0% had bachelor and above level of education. About 60.0% of the respondents were married which tallies with the modal age of 46-60 years of the study population (Table 1).

Table 1: Socio-demographic characteristics of the respondents (n=30)

| Characteristics       | Frequency (n) | Percent (%) |
|-----------------------|---------------|-------------|
| Age (years)           |               |             |
| <30                   | 5             | 16.7        |
| 30-45                 | 10            | 33.3        |
| 46-60                 | 11            | 36.7        |
| >60                   | 4             | 13.3        |
| Gender                |               |             |
| Male                  | 19            | 63.3        |
| Female                | 11            | 36.7        |
| Household Size        |               |             |
| >5                    | 9             | 30.0        |
| 5-10                  | 15            | 50.0        |
| 11-15                 | 6             | 20.0        |
| Education             |               |             |
| Primary               | 15            | 50.0        |
| Secondary/VOC/tech    | 5             | 16.7        |
| Bachelor and above    | 3             | 10.0        |
| No formal education   | 7             | 23.3        |
| Marital Status        |               |             |
| Single                | 1             | 3.3         |
| Married               | 18            | 60.0        |
| Divorced/ Separated   | 3             | 10.0        |
| Widowed               | 8             | 26.7        |

The majority (63.3%) of the respondents influencing factor was market, followed by access to infrastructure (26.7), while the least (10.0%) influencing factor was access to credit (figure 1).

Figure 1: Distribution of respondents by influencing factors (n=30)
Table 2: Distribution of Respondent by Reason for Diversification and Gender Household Head (n=30)

| Variables       | Income n (%) | Food Security n (%) | Risk aversion n (%) | Changing value n (%) | Frequency n (%) |
|-----------------|--------------|---------------------|---------------------|----------------------|-----------------|
| Male            | 8(42.1)      | 7(36.8)             | 2(10.5)             | 2(10.5)              | 19(63.3)        |
| Female          | 2(18.2)      | 4(36.4)             | 3(27.3)             | 2(18.2)              | 11(36.7)        |
| Total           | 10(33.3)     | 11(36.7)            | 5(16.7)             | 4(13.3)              | 30(100.0)       |

The income was the major (42.1%) reason for diversifying for male respondents, and for female respondents major reason for diversifying was food security (36.4%). Cumulatively, food security (36.7%) was the major reason for livelihood diversification from all the respondents, followed by income with 33.3%, risk aversion (16.7%), and the least reason was changing value (13.3%) (Figure 2).

Table 3: Relationship between Non-farm Activity and some variables (n=30)

| Variables                       | Non-Farm Activity | Total | df | Chi-square | P-value |
|---------------------------------|-------------------|-------|----|------------|---------|
| Food security                   |                   |       |    |            |         |
| Satisfactory                    | 4(13.3)           | 3(10.0)| 7(23.3)| 2 | 2.272  | 0.321|
| Unsatisfactory                  | 8(26.7)           | 1(3.3)| 9(30.0)|   |         |     |
| Poor                            | 11(36.7)          | 3(10.0)| 14(46.7)|   |         |     |
| Gender of the Household Head    |                   |       |    |            |         |
| Male                            | 13(43.3)          | 6(20.0)| 19(63.3)| 1 | 1.969  | 0.161|
| Female                          | 10(33.3)          | 1(3.3)| 11(36.7)|   |         |     |
| Land Ownership                  |                   |       |    |            |         |
| Yes                             | 7(23.3)           | 5(16.7)| 12(40.0)| 1 | 3.758  | 0.050|
| No                              | 16(53.3)          | 2(6.7)| 18(60.0)|   |         |     |
| Educational level               |                   |       |    |            |         |
| Primary                         | 13(43.3)          | 2(6.7)| 15(50.0)| 3 | 2.529  | 0.470|
| Secondary/Voc/Tech              | 4(13.3)           | 1(3.3)| 5(16.7)|   |         |     |
| Bachelor & above                | 2(6.7)            | 1(3.3)| 3(10.0)|   |         |     |
| No formal education             | 49(16.3)          | 3(10.0)| 7(23.3)|   |         |     |
| Age (years)                     |                   |       |    |            |         |
| <30                             | 4(13.3)           | 1(3.3)| 5(16.7)| 3 | 1.846  | 0.600|
| 30-45                           | 8(26.7)           | 2(6.7)| 10(33.3)|   |         |     |
| 46-60                           | 9(30.0)           | 2(6.7)| 11(36.7)|   |         |     |
| >60                             | 2(6.7)            | 2(6.7)| 4(13.3)|   |         |     |

There is a statistically significant association between non-farm activity and land ownership (p<0.05). However, there is no significant (P>0.05) association between non-farm activity, food security, household head, educational level, and respondents' ages. Table 4 shows that 91.7% of male household heads (i.e., 11 out of 19 male household heads) had land ownership, and only 8.3% of female household heads (i.e., 1 out of 11 female household heads) had land ownership. There was a significant association (P=0.009) between land ownership and the gender of the household head. It also shows that the main livelihood diversification for the male was non-farm 7(70.0%), while for females, it was non-farm and family farm 7(53.8%). However, there was no significant association (P=0.243) between the livelihood diversification strategy and the gender of the household head (Table 3).
Table 4: Relationship between Gender of Household Head, Land Ownership, and Livelihood Diversification Strategy (n=30)

| Variables                        | Gender                  | Chi-square | df  | P-value |
|----------------------------------|-------------------------|------------|-----|---------|
|                                  | Male n (%)              | Female n (%)|     |         |
| Land Ownership                   |                         |            |     |         |
| Yes                              | 11(91.7)                | 1(8.3)     | 6.914 | 1       | 0.009   |
| No                               | 8(44.4)                 | 10(55.6)   |     |         |
| Livelihood Diversification Strategy |                       |            |     |         |
| Any farm wage                    | 2(66.7)                 | 1(33.3)    | 4.174 | 3       | 0.243   |
| Family farm                      | 4(100.0)                | 0(0.0)     |     |         |
| Family farm & non-farm           | 6(46.2)                 | 7(53.8)    |     |         |
| Non-farm                         | 7(70.0)                 | 3(30.0)    |     |         |

DISCUSSION

This study aimed to determine the factors influencing livelihood diversification in rural household poverty reduction in Nigeria. According to household size distribution, 50.0% of the respondents had 5-10 persons. This may be due to the study being conducted in rural areas in Nigeria where extended family is commonly found. Also, family planning is not usually practiced in rural Nigeria, as it is believed that most households practice more farming and have a large family to help out on the farm. Similarly, a study revealed that in Africa, some countries had experienced very rapid increases in contraceptive prevalence (e.g., Ethiopia, Malawi, Rwanda), while others (e.g., Nigeria) have seen little change (John and Hardee, 2019). Income was the major reason for diversifying for male respondents, and for female respondents' major reason for diversifying was food security. A similar study showed that the majority of the households were fairly diversified, and half of their total income was from off-farm sources (Babatunde and Qaim, 2009).

A major influencing factor was access to the market, while the least influencing factor was access to credit. The market was also one of the influencing factors in which the Himalayan farmers have diversified their livelihood activities (Mduduzi and Bianca, 2017). This reveals that more access to credit through microfinance should be provided to rural communities. This enables more households to diversify their livelihood; it will, in return, improve the standard of living and reduce poverty. Diversification is worthwhile for most households. This means that the impact of livelihood on the household welfare helps the family improve their standard (such as sending their kids to school, access to healthcare, etc.). Likewise, another finding demonstrated that a household could enhance well-being only when it pulls into its livelihood portfolio the high return sector(s) among various off-farm opportunities available (Gautam and Andersen, 2016).

Furthermore, the study demonstrated that 40.0% of the respondents had access to land while 60.0% had no access to land. Land reform is important in improving agricultural production and employment. This shows that rural households are patriarchal in Nigeria. There was a significant association between non-farm activity and land ownership. Also, there was a significant association between land ownership and the gender of the household head. About 91.7% of male household heads had land ownership, and only 8.3% of female household heads had land ownership. Women in the South-Eastern part of Nigeria usually do not own land. They gain access to land through men: husband, sons, fathers, brothers, etc. In South Asia, about three to 10 percent of the rural women own the land they cultivate (Govind, 2005).

CONCLUSION

The study concludes that income was the main reason to engage in livelihood diversification in the rural south-eastern part of Nigeria. The influencing factor for non-farm activities was the market (demand and supply). Non-farm diversification is, therefore, a means to rural poverty alleviation. Access to rural infrastructures like electricity promotes non-farm rural livelihood diversification. Rural households' diversification in non-farm activities is usually of small-scale capacity, which can produce a low return diversification. Therefore access to credit facilities will increase non-farm diversification, rural wealth, and more investment for high returns.
RECOMMENDATION

The policy should be focused on activities that would intensify rural infrastructural development, which is still backward in the study area. This will alleviate poverty and discourage rural-urban drift, which results in overpopulation of the urban center, increase in the unemployment rate and crime, and poor standard of living, which characterize the urban centers in the developing countries. In addition, rural non-farm development programs should also be gender-sensitive by prioritizing women in their activities and decision-making process.

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