

## Determinants of Rural Women's Livelihood in Ibarapa North Local Government Area of Oyo State, Nigeria

Afees Babatunde Adeniyi<sup>1</sup>, Adebola Saidat Daud<sup>2</sup>, Olufunmilola Amao<sup>3</sup> and Abiodun Olusola Omotayo<sup>4</sup>

<sup>1, 2, 3</sup>*Department of Agricultural Technology, School of Plant Sciences, Oyo State College of Agriculture and Technology, P.M.B. 10, Igboora, Oyo State, Nigeria*  
<sup>1, 2, 3, 4</sup>*Department of Agricultural Economics and Extension, North-West University, Mafikeng Campus, Mmabatho 2735 South Africa*

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**ABSTRACT** This study assessed the determinants of the sources of livelihood for rural women in Ibarapa North Local Government Area. 102 respondents were randomly selected using the multistage sampling technique while data was collected using structured questionnaires. Descriptive and inferential statistics were used for data analysis. The result of the descriptive analysis shows that most (80.4%) of the respondents had formal education, majority of the respondents were farmers with access to some agricultural inputs and farm implements. It was also revealed that most of the respondents that were farmers encountered problems such as inadequate credit facilities, lack of extension service, lack of storage facilities and poor marketing information. The result of cross tabulation shows that years of education, marital status and husband's occupation had an influence on the choice of occupation of the respondents. The multinomial logistic regression analysis results also showed that some of the fitted explanatory variables explained the dependent variable. Out of the five explanatory variables hypothesized to influence choice of livelihood strategies, three (education, marital status and husband occupation) were found to be statistically significant ( $p < 0.01$ ). It is therefore recommended that policies that will improve the livelihood portfolios of women in the study area should be put in place.

### INTRODUCTION

Rural areas are the economic backbone in most developing countries and they enhance economic growth through job creation, labor supply, provide food and raw materials to other growing sectors of the economy, and help generate foreign exchange. Despite these significant contributions, rural areas are the most marginalized. They are characterized by poverty, food insecurity, unemployment, inequality and lack of important socioeconomic services. Ahmed et al. (2007) estimated that about 410 million people in sub-Saharan Africa still live in absolute poverty, surviving on less than one dollar per day. Also, the World Bank (1996) recorded the total population of the poor in Nigeria at 34.7 million, with the incidence depth and severity of poverty more in the rural areas than in urban areas.

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*Address for correspondence:*  
 Abiodun Olusola Omotayo  
 Department of Agricultural Economics and Extension,  
 North West University,  
 Private Bag x 2046,  
 Mmabatho 2790 South Africa  
 E-mail: omotayoabiodun777@gmail.com

According to Olayemi (1995), the poor have no access to the basic necessities of life such as food, clothing and decent shelter, are unable to meet social and economic obligations, lack skills for gainful employment, and have few, if any, economic assets and a general lack of self-esteem. In most cases, the poor lack the capacity to liberate themselves from the shackles of poverty, and this perpetual situation makes the condition of extreme poverty persist and they are transmitted from generation to generation (Obadan 1997). Research on the nature of rural poverty utilizing the livelihoods approach tends to uncover aspects of rural poverty that have not been well understood, or have been neglected in mainstream policy discourses (Ellis and Allison 2010; Eneyew and Bekele 2012).

Recent academic and policy debates concerned with attacking (particularly rural) poverty reflect a growing awareness of the importance of a lack of assets as both a symptom and cause of poverty, (Baulch and Hoddinott 2000; Birdsall and Londoño 1997; De Janvry and Sadoulet 2000) and the value of the livelihoods concept in understanding how the poor call upon a range of different assets and activities as they seek to sustain and improve their wellbeing (Ellis 2000).

Livelihood, according to Carney (1998) is the capabilities, assets (including both social and material resources) and activities required for a means of living.

Sustainability is achieved when a livelihood 'can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'. Millar and Mansell (1999) stated that livelihood strategies are composed of activities that generate the means of household survival and are the planned activities that men and women undertake to build their livelihoods. Livelihood outcomes are the achievements of livelihood strategies, such as more income, increased wellbeing, and reduce vulnerability, improved food security and a more sustainable use of natural resources. It is sustainable when it has the capacity to meet the immediate needs of the people while its ability to meet future needs is not jeopardized.

Ensuring the income of women is an essential precondition for the elimination of poverty and the upholding of human rights (Catley 2000) in particular at the individual level, as it helps build a base for social change. When different dimensions of the livelihood issue are considered, the incidence of income is the most important. Living standards of the rural poor would only be uplifted when they receive income from the economic activities (Ahmed 2009; Ahmed et al. 2007; Al-amin 2008). Income generating activities (IGAs) change the livelihood of the poor in terms of living conditions, housing, nutrition, savings, dress, medical treatment, health, sanitation, liberalization and education (Ullah and Routray 2007). Overcoming widespread poverty and improving livelihood requires confronting the widening disparity of rural women's income (Fakir 2008; Kandiyoti 1990).

It is expected that the participation of women in IGAs can contribute to enabling households to cope with income shocks, ensure food security, avoid an increase in poverty or prevent vulnerable households from falling below the poverty line. Meanwhile, many researchers have found women to be working in various roles in the farming system, as the sources of their livelihood.

The position and role of women in Africa's agricultural production, and the circumstances under which they are forced to operate are not

well understood and appreciated. This is also applicable to other sectors. They lack the means of production, have little or no access to those inputs that enhance productivity, have no security in terms of right to land ownership due to social norms and values, are severely constrained in time and labor, and have almost no outlet to improve their human capital (Due 1991). This undermines their position and contributions to their household economy and agricultural productivity.

The study will help in identifying the determinants of sources of livelihood of rural women. It will also provide baseline data and resources toward improving the welfare of rural women. Eneyew and Bekele (2012) affirmed that understanding the local context of household livelihoods is not only necessary to ensure appropriate development strategies, but also as a basis for monitoring and evaluation, and a means of assessing potential for replication in other contexts. Therefore, a better understanding of the determinants of the choice of various livelihood strategies adopted by rural women is important in order to solve the problem of hunger and poverty.

The main objective of this study is to examine the determinants of sources of livelihood for women in Ibarapa North Local Government Area of Oyo State. The specific objectives are to describe the socio-economic characteristics of women in the study area, to identify the main sources of livelihood of women in the study area, and to analyze the determinants of the chosen livelihood strategies in the study area. The null hypothesis states that there is no significant relationship between the determinants of sources of livelihood and woman in the study area.

## METHODOLOGY

### Study Area

The study was carried out in the Ibarapa North Local Government Area of Oyo, the headquarters of the Local Government is situated at Ayete. It was created in 1996 from old Ifelaju Local Government Area. There are ten political wards in the Local Government. Two wards in Ayete, four wards in Igangan, two wards in Ofiki while the remaining two wards are in Tapa. Ibarapa North Local Government shares its boundary with Ibarapa Central Government in the north

and in the west with Iseyin Local Government and bounded with Imeko Afon Local Government of Ogun State in the south. According to NPC (2006), the study area has a human population of about 101,092 (NPC 2006) and it is about 1,218 km in size. The climate of the area can be described as a tropical type with two distinct seasons clearly identified as wet and dry season while the temperature of the area varies with season. The common cash crops grown in the area include cocoa, citrus and oil palm while the arable crops include cassava, maize, melon, yam and other vegetables.

### Sampling Technique

A multistage sampling technique was used to select the respondents for the study. In the first stage, five wards out of the ten wards in the Local Government Area were selected. Secondly, two communities were randomly chosen from each selected wards giving a total number of ten communities. The final stage was the selection of eleven women from the selected communities. Thus, one hundred and ten women were randomly selected and interviewed using structured questionnaires, but only one hundred and two questionnaires were returned and used for the study.

### Method of Data Collection

Primary and secondary data were used for this study. Primary data was collected with the aid of a questionnaire and interview schedule while secondary data was sourced from the library, journals, Internet, and Local Government Secretariat. Questionnaires were used to obtain data on socioeconomic characteristics of the respondents and their sources of livelihood.

### Statistical Techniques

Descriptive statistics was used to analyze the data. Descriptive statistics such as mean, frequency distribution tables, and percentages were used to describe the socio-economic characteristics of the respondents, and the main sources of livelihood of women in the study area was analyzed by using SPSS 22 software. Inferential statistics used in this study was the Multinomial Logistic Regression Model to identify the determinants of livelihood strategies of women in the study area. To identify the determinants of rural women's decisions to engage in

various livelihood strategies available to them with the assumption that in a given period at disposal of its asset endowment, a rational household head chooses among the livelihood strategy alternatives that offer the maximum utility. Data was analyzed using the STATA 12 software. Following Greene (2003), suppose for the  $i$ th respondent faced with  $j$  choices, one specifies the utility choice  $j$  as,

$$U_{ij} = \beta_j + \epsilon_{ij} \dots \dots \dots (1)$$

If the respondent makes choice  $j$  in particular, then it is assumed that  $U_{ij}$  is the maximum among the  $j$  utilities. So the statistical model is derived by the probability that choice  $j$  is made, which is,

$$\text{Prob}(U_{ij} > U_{ik}) \text{ for all other } K=j \dots \dots \dots (2)$$

Where,

- $U_{ij}$  is the utility to the  $i$ th respondent from livelihood strategy  $j$
- $U_{ik}$  the utility to the  $i$ th respondent from livelihood strategy  $k$

If the household maximizes its utility defined over income realizations, then the household's choice is simply an optimal allocation of its asset endowment to choose livelihood that maximizes its utility (Pickford and Brown 2006). Thus, the  $i$ th household's decisions can, therefore, be modeled as maximizing the expected utility by choosing the  $j$ th livelihood strategy among available discrete livelihood strategies.

## RESULTS AND DISCUSSION

### Socio-economic/Demographic Characteristics of Respondents

Table 1 shows the dependent and independent variables considered for the present study. The socio-economic characteristics constitute Table 2, considering the age, sex, household size, educational status and marital status, some of which were also used in the logistic regression analysis.

**Table 1: Description of dependent and independent variables**

| <i>Dependent</i> | <i>Independent</i> | <i>Primary occupation</i> |
|------------------|--------------------|---------------------------|
| Y=1              | Age (in years)     | Farming                   |
| Y=2              | Years of education | Trading                   |
| Y=3              | Marital status     | Artisan                   |
| Y=4              | Husband occupation | House wife                |
| Y=5              | Land acquisition   | Civil servant             |

Source: Field Survey

**Table 2: Frequency distribution of the socio-economic characteristics of the respondents**

| <i>Socio-economic characteristics</i> | <i>Frequency</i> | <i>Percentage</i> |
|---------------------------------------|------------------|-------------------|
| <i>Age Range (yrs)</i>                |                  |                   |
| 20-29                                 | 11               | 10.8              |
| 30-39                                 | 23               | 22.5              |
| 40-49                                 | 39               | 38.2              |
| 50-59                                 | 24               | 23.5              |
| 60 and above                          | 5                | 5.0               |
| <i>Educational Status</i>             |                  |                   |
| No of formal education                | 20               | 19.6              |
| Primary education                     | 19               | 18.6              |
| Secondary education                   | 34               | 33.4              |
| Tertiary education                    | 23               | 22.5              |
| Adult education                       | 6                | 5.9               |
| <i>Marital Status</i>                 |                  |                   |
| Single                                | 8                | 7.8               |
| Married                               | 79               | 77.5              |
| Divorced                              | 5                | 4.9               |
| Widowed                               | 10               | 9.8               |
| <i>Family Structure</i>               |                  |                   |
| Monogamous                            | 36               | 35.3              |
| Polygamous                            | 66               | 64.7              |
| <i>Household Size</i>                 |                  |                   |
| 1-2                                   | 2                | 2                 |
| 3-4                                   | 18               | 17.7              |
| 5-6                                   | 71               | 69.6              |
| 7-8                                   | 11               | 10.7              |
| <i>Years of Experience</i>            |                  |                   |
| 1-5                                   | 6                | 5.9               |
| 6-10                                  | 9                | 8.8               |
| 11-15                                 | 13               | 12.8              |
| 16-20                                 | 28               | 27.5              |
| 21-25                                 | 13               | 12.8              |
| 26-30                                 | 17               | 16.7              |
| 31-35                                 | 16               | 15.7              |

Source: Field Survey

### **Age**

It is observed that 10.8 percent of the respondents' ages are between 20-29 years, 22.5 percent of the respondents fall between the age range of 30-39 years, 38.2 percent fall within the age range of 40-49 years, 50-59 years is 23.5 percent and 5 percent fall within 60 and above years. The mean age of 43 years derived in this study implies that most of the respondents were in their active age, full of energy and engage in farm work and other paid jobs as their main source of livelihood. The study corroborates the findings of previous literature such as (Oluwatayo 2015).

### **Level of Education**

This shows that 19.6 percent of the respondents have no formal education, 18.6 percent of

them have primary school education, 33.4 percent have secondary school education, 22.5 percent attain tertiary education, and 5.9 percent of the respondents had adult education. This indicates that majority of the respondents are in the category of non-formal education or stopped schooling at secondary school. Their low level of education and the rural setting they are in, conditioned majority of them to choose farming and trading as their main source of their livelihood. According to Babatunde et al. (2007) education is a social capital, which could impact positively on a household's ability to take good and well informed production and livelihood decision.

### **Marital Status**

This shows that 7.8 percent of the respondents were single. 77.5 percent of the respondents were married, 4.9 percent of the respondents were divorced and 9.8 percent of the respondents were widowed. This implies that majority of the respondents were married. The rural farming households' marital status could determine their livelihood as married respondents are expected to have better livelihood in the study area.

### **Family Structure and Household Size**

It is found that 35.3 percent of the respondents were monogamous while 64.7 percent of the respondents were polygamous. Also, 2 percent of the household sizes were in the range of 1-2, 17.7 percent of the respondents fall within the range of 3-4, 69.6 percent of the respondents fall within 5-6 range and 10.7 percent fall between 7-8 household sizes. Large household size could lead to correspondingly poor livelihood of respondents in the study area. This also conforms with the study of Awotide et al. (2010) on rural livelihood diversification among farming households that increase in family size increases the probability of them being poor.

### **Farming Experience**

The observations are that 5.9 percent of the respondents had farming experience of 1-5 years, eight percent of the respondents had farming experience of 6-10 years, 12.8 percent of the respondents falls within 11-15 years, 27.5 percent

falls within 16-20 years, 12.8 percent falls within 21-25 years, 16.7 percent of the respondents had been in farming system between 26-30 years, and 15.7 percent of the respondents had been in farming between 31-35 years. This clearly indicate high number of years of experience in the study which could invariably lead to increase in farming outcomes hence corresponding increase in livelihood as high year of farming experience will lead to better mastery of season and farming system by the respondents. This finding is in line with Muhammad et al. (2008) who opined that rural household's diversification is common among farmers with much years of farming experience.

### The Main Source of Livelihood for Women in the Study Area

Table 3 shows the main sources of livelihood for women in the study area, which reveals that 43.14 percent of the respondents were farmers, 28.43 percent were traders, 18.63 percent were artisans and 9.80 percent were civil servants. This shows that a majority of the respondents were farmers. This implies that most of the respondents derived their source of livelihood from farming followed by trading activities. According to Ajayi et al. (2016), diversification of income sources by rural households and occupations are norms for individuals or households for different socio economic reasons which can be categorized as either farm or non-farm income sources for livelihood. In addition, it is evident that rural households in Nigeria engage in multi-

**Table 3: Frequency distribution of the main source of women's livelihood in the study area**

| Primary occupation | Percentage | Frequency |
|--------------------|------------|-----------|
| Farming            | 43.14      | 44        |
| Trading            | 28.43      | 29        |
| Artisans           | 18.63      | 19        |
| Civil service      | 9.80       | 10        |
| Total              | 100        | 102       |

ple livelihood activity such as trading, small scale business and processing of agricultural goods in order to supplement earning from agricultural enterprise Edna et al. (2007).

### Multinomial Logistic Regression Result of the Determinants of Rural Women's Livelihood Strategies in the Study Area

Multinomial Logistic Regression Model was used in Table 4 to identify determinants of livelihood strategies. The Wald chi-square value was of the analysis was statistically significant ( $p < 0.01$ ) which indicate that the coefficients of the parameters estimated for the included variables were obviously not all statistically equal to zero. Therefore, the set model produced a good fit for the data. Out of the five explanatory variables hypothesized to influence choice of the rural women's livelihood strategies, only three variables were found to be statistically significant, that is years of education, marital status and spouse occupation, were found to influence the choice of livelihood strategies by the rural women at different probability levels. This therefore implies that the null hypothesis (which states that there is no significant relationship between the determinants of sources of livelihood and women in the study area) is hereby rejected and the alternative is accepted.

The parameter of education of the women's was positive and statistically significant at ( $p < 0.05$ ). Which indicates that Increase in educational attainment of the women farming households increased the probabilities of the household's having a better livelihood in the study area. The implication of this is that higher numbers of years of education could have a positive influence on the ability of the farmers to know better about their livelihood. This is in line with the report of Ajala et al. (2003), which pointed that education enables individuals to gain knowl-

**Table 4: Multinomial regression logistic result for the determinants of livelihood pattern of respondents.**

| Coefficient                 | Standard error | Z        | P> /Z/  |
|-----------------------------|----------------|----------|---------|
| Age {0.10043}               | -0.11083       | 0.05689  | -0.19   |
| Education level {0.39433}   | 0.10786        | 0.146166 | 1.74**  |
| Marital status {0.10536}    | -1.82496       | 0.98488  | -1.85** |
| Spouse occupation {0.53644} | 0.31269        | 0.11416  | 2.74*** |
| Land acquisition {1.5223}   | 0.48181        | 0.53088  | 0.91    |

Source: Computer Printout of Multinomial Regression.

P > /Z/ 1.6, value significant @ 10%; P > /Z/ 1.61-2.45, value significant @ 5%; P > /Z/ 2.45, significant @ 1%\*\*\*

edge and skills, thereby increasing their power and understanding for proper livelihood.

Also the coefficient of respondent's marital status was negatively significant at ( $p < 0.05$ ). It implies that married respondents have lesser probability of having better livelihood in the study area. This corroborates with the finding of Awotide et al. (2010) on rural livelihood diversification among farming households that increase in family size increases the probability of farmers being poor. Furthermore, holding other variables constant, the parameter of spouse occupation was positive and statistically significant at ( $p < 0.01$ ). This by implication indicates that spouse of respondents' occupation contributes to their livelihood. In other words, respondents whose spouse have occupation have more likelihood of better livelihood than their counterparts whose spouse(s) does not have. This is in line with the apriori knowledge as respondents whose spouse(s) work are likely to have more income, hence better and improved livelihood.

### CONCLUSION

The study focused on the determinant of sources of livelihood pattern of women in Ibarapa North Local Government Area of Oyo State. The descriptive analysis shows that most of the respondents had formal education (80.4 percent), spent up to 12 years in school (secondary education) and most of the respondents were farmers and traders, with an average household size of 5 and they encountered the problems of inadequate credit facilities, lack of extension service, lack of storage facilities and poor marketing information. The socio-economic variables examined for the multinomial regression are age, marital status, educational level, household size, spouse occupation, and land acquisition. The result revealed that out of the five explanatory variables hypothesized to influence choice of livelihood strategies, only three were found to be statistically significant, that is, years of education, marital status and husband occupation. Majority of the respondents were farmers and traders, and they have access to some of agricultural inputs and farm implements, which enhanced their farming activity. It was also revealed that most of the respondents that were farmers encountered the problems of inadequate credit facilities, lack of extension service, lack of stor-

age facilities and poor marketing information. The result of cross tabulation shows that years of education, marital status, and spouse occupation had an influence on the choice of occupation and livelihood of the respondents. The result of the multinomial logistic regression analysis also showed that some of the fitted explanatory variables explained the dependent variable. Out of the five explanatory variables hypothesized to influence choice of livelihood strategies, only three were found to be statistically significant, which include years of education, marital status and spouse occupation.

### RECOMMENDATIONS

This study therefore recommended that efforts should be made to improve the livelihood portfolios of women farmers in the area to make their livelihood sustainable through different Government Women Empowerment programs and non-governmental organizations. This could be achieved by providing modern storage facilities, credit facilities at lower rates, provision of extension agents, good roads and a responsive marketing structure should be put in place. Finally, government policies should be directed towards creating an enabling environment for diversification to other livelihood activities that can improve sources of farming women's' livelihood.

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