Determinants of Poverty Status of Rural Farm Households in Nigeria

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Abstract

Over the years, poverty has continued to prevail in most countries predominantly in developing nations like Nigeria. The majority of those who live below the poverty line in Nigeria are rural farmers despite their contributions to agriculture. This study, therefore, examined the poverty status of rural farm households in Nigeria. The data used were obtained from the National Survey on Incentivizing the Adoption of Climate-Smart Cereal Production Practices in Nigeria: Socio-Cultural and Economic Diagnosis. The data collection was facilitated by the Economic Committee of the Regional Agricultural and Food Agency of the West African States (ECOWAS RAAF-PASANAO) and the French Development Agency (AFD). The data were analyzed using descriptive statistics, Foster Greer Thorbecke (FGT) poverty indicators, and binomial and multinomial logit regression models. The findings show a high incidence of poverty among farm households in rural areas. The results also showed that growing rice, farm size, household size, dependency ratio, age, and market travel costs are the major determinants with positive impacts on rural households' poverty. Credit, gender, year of schooling, Tropical Livestock Unit, access to power holding company of Nigeria (PHCN), and general hospital had a negative influence on poverty status. Poverty was observed to be more severe in the northern geo-political zones. Based on the above findings, it is proposed that adequate attention be paid to education due to the higher incidence of poverty among low-educated households. Agricultural financing policies aimed at rural farmers should be implemented to raise their living standards and thus, reduce poverty among rural farmers. Policies should take the peculiar features of each geo-political zone into consideration while implementing measures to reduce poverty.
Keywords: Binomial and Multinomial Regression Model; Consumption Expenditure; Nigeria; Poverty; Rural Farm Households

1. Introduction

Poverty is the state of living of a person without an adequate amount of income or material wealth. Poverty occurs when people lack the means to satisfy their basic needs, such as food, clothing, shelter, social and economic obligations, and lack full employment and other opportunities (Englama and Bamidele, 1997). Poverty is a risk cause for health issues with numerous connections and impacts, such as lack of adequate resources which negatively impact one's health condition, safety, life expectancy, education, and relationships (Pearson, 2015).

Poverty is multifaceted with economic, physical, structural, and environmental, and has its manifestations in every realm of life. The concept of deprivation occurs in various ways over the years. According to the National Bureau of Statistics (NBS) report about poverty and inequality from September 2018 to October 2019, about 82.9 million people are now living in extreme poverty which represents about 42% of its estimated 195.9 million people. After 58 years of independence, Nigeria has risen from a low poverty level status to become a country with the highest poverty level in the world. According to Dixon et al., (2001), the majority of those classed

below the poverty line are local farmers despite their contribution to food production and availability in the country.

In Nigeria, farming accounts for 21% of Gross Domestic Product (GDP), the sector employs 70% of the labor force (Ripoll et al., 2017). More than 80% of farmers in Nigeria are considered smallholders because they own less than 5 hectares of land. Farmers in the rural areas earn their income from agricultural activities and consider farming to be their primary job. Although the majority of these farmers live below the poverty line, farmers manage to provide for their households' needs (Dixon et al., 2001).

The agricultural sector is the third-largest sector that contributes to the country's GDP (NBS, 2019). Despite the immense contribution, several studies have shown that people with more farmland, those with loans (e.g. micro-credit) or production assets, and people nearest to local markets live below the poverty level than the rest due to lack of agricultural development. In 2017, the Food and Agricultural Organization (FAO) reported that 70% of the rural poor are subsistence farmers who produce 70% of the food in Nigeria (FAO, 2017a). Furthermore, farmers in rural communities experience social issues such as family size, lack of infrastructure investment, educational status, roads or market economy, income issues, well-being, and diseases (FAO, 2017b). The effect of corruption is also a major reason why people are poor, and it also affects the Nigerian cultural groups in various ways, often creating the privileged and excluded groups.

Adeoti (2014) noted that agriculture had the highest modified incidence of poverty and that working in non-farm sector and services decreased the chances of poverty. Studies have shown that the first step in providing a solution to the problem is the proper identification of the factors that cause poverty among rural farm households. This study identifies the determinants of poverty in rural farm households in Nigeria. This study aims to measure poverty broadly by using descriptive statics, the Foster Greer and Thorbecke poverty indicators, and also regress the explanatory variables using the binary and multinomial logit regression model to compare the determinant of poverty status of rural farm households.

Specifically, this study seeks to:
1. generate a poverty profile of rural farm households in Nigeria
2. analyze the determinants of poverty status of rural farm households in Nigeria

These will assist in preparing adequate strategies for more efficient intervention schemes aimed at poverty reduction.

Also, this study would be useful to identify the main determinants of the poverty status of rural farm households in Nigeria. It would also assess how economic change through farming is likely to affect aggregate poverty which could lead to policy change recommendations. Valuable insights from this study would be used to inform relevant institutions for economic development and literature on demographics.

1.1 Data

This study used data from ECOWAS RAAF PASANAO 2017 Survey of the Federal University of Agriculture, Abeokuta (FUNAAB), on cereal production systems and willingness to embrace incentives among smallholders in Nigeria to adopt climate-smart practices. A three-stage sample design was adopted by the study. Stage one was a purposive selection of sixteen states that lead in maize and rice production in Nigeria excluding areas that are prone to conflict. The production statistics were from the National Bureau of Statistics (NBS), 2016.

Stage two was also by the purposive selection of three Agricultural Blocks per State from the main maize and rice production areas of the State per crop and two (2) Extension Cells per block-that is six blocks per State. In the third level, the Proportionate stratified random selection of eight rice and maize farmers from the Association of Rice/Maize Farmers in each of the selected cells. A total sample of 1,536 households was obtained, but only 938 households were used as a result of missing values.

2. Method

2.1 Poverty Line estimation

Following recent works on poverty, the examination in this study used per capita household expenditure as a measure of poverty incidence and for determining the poverty line for rural farm households in Nigeria. The per capita expenditure was preferred in this study because literature has shown that measuring poverty by income is prone to many flaws, especially in Sub-Saharan Africa (SSA) (Datt and Jolliffe, 1999). Firstly, according to farm production and prices, income can change from year to year and also from season to season. Secondly, most people are always unwilling to reveal their true income, and, lastly, the money spent on expenses is not the amount of income per se that counts. The poverty analysis limited to household income may therefore be underestimated (if the household head borrows for consumption) or overestimated (where the household head saves much of the income without spending on consumer goods to enhance welfare) (Adeyonu, 2012). Other poverty studies using the per capita poverty expenditure approach include Omonona, (2001), Okunmadewa et al., (2005), Obayelu and Awoyemi, (2010), World Bank, (2018). The per capita expenditure used is as shown below:

Per Capita Household Expenditure (Y_i) $=$ $\dfrac{\text{Total Household Expenditure}}{\text{Household size}}$ .... (1)

Based on the literature, about 56% of total household expenditure was spent on food items (NBS, 2019). Also, with the international poverty line index of \$1.90 per day, the poor households are those whose expenditure falls below \$1.90 per day, while those above it are said to be non-poor. Because the data is based on food expenditure, the poverty line is downsized by 0.56. Therefore, the new poverty line used is:

$$0.56 * \$1.9 = \$1.06 \text{ per day}$$
$$\$1 = N305.8$$
$$N305.8 * 1.06 = N324$$

2.2 Descriptive Statistics

The various descriptive statistics that were used are: mean, standard deviation, percentages, and frequency distribution. Descriptive statistics was used to analyze the following variants;
(a) Role of Socioeconomic characteristics of household head
(b) Role of Household Composition
(c) Role of Farm and Off-farm Activities
(d) Influence of Common Infrastructure
(e) Differences across Geopolitical Zones

2.3 The Foster-Greer-Thorbecke (FGT) index

The Foster-Greer-Thorbecke (FGT) index, therefore, measures the impact, magnitude, and depth of poverty. FGT can capture the most essential features of the poverty index. Its ethical stability is captured by the alpha parameter and the sub-group decomposability, consistency, and comprehensibility. The Foster-Greer-Thorbecke (FGT) poverty measure is appropriate for measuring poverty. The poverty indices are measured by taking the proportional deficit of expenditure for each poor household and normalizing the sum by population size. Each index places different weights on the degree to which the household falls below the poverty line. The method assesses the degree and level of poverty among rural farm households (calculated as; the headcount ratio $\alpha = 0$, the depth of poverty measured by the poverty gap index $\alpha = 1$, and poverty severity index $\alpha = 2$).

The poverty indices generally called the Foster Greer and Thorbecke (FGT) class of poverty measures were discovered by Foster et al., in 1984.

To measure the severity/ depth of poverty, the Foster, Greer, and Thorbecke (FGT) poverty index is generally given as:

$$P_\alpha = \frac{1}{NZ^\alpha}\Sigma_{i=1}^{q}(z - Y_i)^\alpha \dots\dots\dots\dots\dots\dots\dots \text{(2)}$$

Where,
P = Foster, Greer and Thorbecke index ($0 \leq P \leq 1$)
N = total number of respondents i.e. farm households sampled
q = number of respondents below the poverty line i.e. poor people
α = non-negative poverty aversion parameter (0, 1 or 2).
Z = the poverty line
Y_i = per capita household expenditure of the ith respondent.

   To calculate the poverty status of the rural farm households, the poverty indicators were split into three i.e. poverty incidence (P_0), poverty gap/depth (P_1), and severity of poverty (P_2). If $\alpha = 0$, the index become $P_0 = \frac{q}{N}$. This indicates the headcount ratio or the prevalence of poverty i.e. those whose per capita expenditure is below the poverty line. If $\alpha = 1$, It denotes both the incidence and depth of poverty or the proportion of the poverty line that the average poor would need to meet the poverty line. If $\alpha = 2$, the index tests the severity of poverty which is the mean of square proportion of the poverty gap. When multiplied by 100, it gives the percentage by which the per capita expenditure of the poor household should be raised in design to steer them out of poverty.

2.4 Determinants of Poverty Status of Rural Farm Households in Nigeria (regression model)

   This article adopted the binomial and multinomial logit regression to conclude the determinants of poverty in Nigeria. The logit model has been widely used to measure the determinants of poverty in developing countries (Malik, 1996; Serumaga-Zake and Naude, 2002; Geda et al, 2005; Mok et al., 2007; Sekhampu, 2013). To determine who is poor and non-poor was by binomial logit, while Poverty status (moderate and severe poverty) was by multinomial logit regression method. Presenting all these variants adds depth to my analysis.

   The Logit design aims to enumerate qualitative data reflecting two alternatives, i.e. the poor and the non-poor, in this case, the choice of the logit model is categorized as; 1 for poor and 0 for non-poor. The logit model provides asymptotically efficient and accurate estimations of parameters. This strategy also yields sound statistical outcomes (Gujarati and Porter, 2009). The probability of being poor is defined as an independent variable function. The equation is expressed as follows:

Probability of being Non-poor = 0 = 1 – F (Z) = $e^z/(1 + e^{-z})$ ....… (3)
Probability of being poor = 1 = F (Z) = $e^z/(1 + e^z) = F(\beta_o + \beta_1 X)$ ....…..... (4)

Therefore, equation 3 and 4 are given as;

$$\frac{F(Z)}{1 - F(Z)} = (1 + e^{Z_i})/(1 + e^{-Z_i}) \qquad \dots\dots\dots\dots\dots\dots.. \text{(5)}$$
Here,

F (Z) = $e^z/(1 + e^z)$, this signifies the probability of being poor.

Equation 5 is the odd ratio in favor of the farm household below the poverty line. This is the ratio between the likelihood that a farm household will be poor and the likelihood that the household will not be poor. In Equation 5, the natural log is:

$$L_i = L_n \left(\frac{F(Z)}{1-F(Z)}\right) = Z_i = (0 + (1 \times 1 \ldots (k \times k^-))) \ldots\ldots\ldots\ldots\ldots \text{ (6)}$$

In the analysis, Equation 5 will be used for estimating the logit model. Therefore, the rural farm households' model of poverty status determinants is centered on the following empirical logit specification.

$$L_i = L_n \left((F(Z))/(1-F(Z))\right)$$
$$= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \beta_{15} X_{15} + \beta_{16} X_{16} + \beta_{17} X_{17} + \beta_{18} X_{18} + \beta_{19} X_{19} + \beta_{20} X_{20} + \beta_{21} X_{21} + \beta_{22} X_{22} + \beta_{23} X_{23} + \beta_{24} X_{24} + e_i$$
$$\ldots\ldots\ldots \text{ (7)}$$

Where,
L_i is the logit (i.e, natural logarithm of the odd ratio),
$F(Z) = 1$ for the poor household and $1 - F(Z) = 0$ for the non-poor household as the dependent variable (poverty status of household).
$\left(\frac{F(Z)}{1-(F)}\right)$ = the odd ratio for the likelihood of being poor or not poor.

β is the parameter; Z is the poverty line; and x is the explanatory variables, including household personal characteristics, household characteristics, physical resources, and neighborhood influences. Household character istics include the age of head of household, age squared, gender of head of household, years of household head education, and head of household marital status. Household socio-economic characteristics include household size, Tropical Livestock Unit, the share of Farm income, Credit available to the farmer, growth of rice, Availability of Power Holding Company of Nigeria, Availability of Public Tap, Availability of General Hospital, Farm size cultivated, Dependency ratio, Distance to the nearest market and Environmental characteristics include: North East, North West, South East, South-South, South West, Number of Migrants and Years of migrant.

For the probabilities in multinomial logit model are therefore given by;

$$prob\,(Y = j) = \frac{e^{\beta_j x_i}}{1 + \sum_{k=1}^{j} e^{\beta_k^l x_i}}$$
$$prob\,(Y = 0) = \frac{1}{1 + \sum_{k=1}^{j} e^{\beta_k^l x_i}} \quad \text{for, } j = 1, 2, 3 \ldots\ldots\ldots \text{ (8)}$$

The partial derivative was calculated as shown below to interpret the effects of independent variables (x) on the probability of each poverty category.

$$\frac{dp}{dx} = p_j (1 - p_j)\beta_{xj} - \sum_k p_j p_k \beta_{xk} \quad where\ j, k = 1, 2, 3 \ldots\ldots\ldots \text{ (9)}$$

The log likelihood function is given by;

$$\ln L = \sum_i \sum_j d_{ij} \ln prob\,(Y_i = j)$$

3. Results and Discussion

3.1 Descriptive statistics

The findings discuss the role of socio-economic characteristics of rural farm households' head of in Nigeria. Relevant variables in this study are age, gender, marital status, and years of schooling. A descriptive analysis of the variables is presented in Table 1 below. From the analysis, it was shown that the mean age of rural farm households was 45 years. This study shows that the rural farm household heads are on average, in the energetic age group with relatively high productivity. Also, the result showed that young people are not interested in farming operations, as only about 12.37% of respondents between the ages of 0 and 30 were involved. Out of a total of 938 households, the dominant households were male-headed with 846 (about 90%) while 92 (about 10%) were female-headed. This shows that a great number of the household heads who are males are more devoted to active work and are more productive, unlike females who are less active. This is in line with the study of Etim et al., (2010) which indicated that a male-headed household reduces the likelihood of household poverty.

The majority of the rural farm household heads (96.7%) were married while only about 3.30% indicated never married. This has implications such that married households enjoy the benefits of pooled income relative to unmarried households. The study revealed that the mean years of schooling were 7.87 years. 242 households (25.80%) had zero educational background while households 238 (25.37%) had between 1 and 7 years of schooling. This shows that more than half of the household heads either have no prior education or only managed to have a primary educational background. This can be a major cause of low productivity among farmers because lack of education makes it difficult to implement improved production techniques, which can then ascertain the level of poverty in households.Following:

Table 1: Role of Socio-Economic Characteristics of House Hold Head

Variable	Frequency	Percentage (%)
Age		
Less than/equal to 30	116	12.37
31-40	272	29.00
41-50	286	30.49
>50	264	28.14
Total	938	100
Mean Age		44.96
SD		11.87
Gender		
Male	846	90.19
Female	92	9.81
Total	938	100
Years of Schooling		
0	242	25.80
1-7	238	25.37
8-13	244	26.01
>13	214	22.81
Total	938	100

Mean		7.87	
SD		5.88	
Never Married			
Yes	31	3.30	
No	907	96.70	
Total	938	100	

Source: Author's Computation with MS Excel

3.2 The Foster, Greer and Thorbecke (FGT) Poverty Measures

Table 2 presents the poverty profile Table 2 presents the poverty profile of the rural farm households in Nigeria based on the FGT poverty measures. The Observed characteristics show poverty variations in rural farm households. The overall poverty incidence among all farm households was 59.3. This means that 59.3% of farm households live lower than the set poverty line. Overall poverty gap/depth was measured at 21.6%, which means that a rise in expenditure of at least 21.6% is needed to get poor households to the poverty line. The severity of poverty among households was measured to be 9.8%. This means that poverty measured among the average poor is 9.8%. Gender-based poverty figures indicated that 60.4% of male-headed households are poor, while just 48.9% of female-headed households live below the poverty line.

This finding is consistent with Omonona's (2009) observation that the higher poverty incidence among male-headed households could be due to the small number of female-headed households in the overall sample. It is also because the female-headed households mostly are always involved in other businesses like sewing, trading, etc. in most parts of rural Nigeria, in addition to agriculture, especially trade. Poverty depth was recorded at 22.2% for males and 16.8% for females. The males recorded 10% severity of poverty while 7.3% was recorded for females.

The Northern areas had a higher poverty incidence than the southern geopolitical zone. Northwest showed the highest poverty incidence of 72%, while Southwest recorded the lowest incidence of poverty of approximately 43.7%. The Northeast and Northwest had the largest poverty gaps of 28.7% and 28.0% respectively and the poverty severity of 14.7% and 13.0% respectively. Observations from this study revealed that poverty measures increased with an increase in age, household size, and dependency ratio. The rural farm households recorded higher poverty incidence, depth, and severity as the age grade, household size, and dependency ratio increased.

Table 2: Poverty Profile of Rural Farm households (2017)

	INCIDENCE (P0)	DEPTH (P1)	SEVERITY (P2)
All Household	0.593	0.216	0.098
GENDER			
Male	0.604	0.222	0.100
Female	0.489	0.168	0.073
GEOPOLITICAL ZONE			

North West	0.722	0.280	0.130
North East	0.657	0.287	0.147
South South	0.478	0.164	0.069
South East	0.633	0.229	0.102
South West	0.437	0.136	0.056
AGE			
Less than/equal to 30	0.466	0.167	0.076
31-40	0.563	0.197	0.087
41-50	0.629	0.233	0.105
>50	0.640	0.240	0.110
HOUSEHOLD SIZE			
1-3	0.195	0.051	0.018
4-7	0.475	0.152	0.064
8-15	0.815	0.309	0.141
>15	0.947	0.446	0.226
DEPENDENCY RATIO			
0	0.365	0.119	0.051
1-2	0.647	0.239	0.109
3-5	0.672	0.250	0.112
>5	0.895	0.351	0.165

Source: Author's Computation using MS Excel

3.3 Determinants of Poverty among Rural Farm Households

Table 3(a) displays the output of the Binary Logit Regression Model of the Determinants of Poverty. This study indicates who is poor among rural farm households. The findings revealed that GrowRice has a positive correlation with poverty among rural farm households with a coefficient of 21.6%. Farm size and tropical livestock unit however showed a negative relationship with poverty. This means that an increase in both variables decreased the level of poverty. The household size showed a 31.7% positive relationship, which indicates that the household's poverty level often rises as the size of the household increases. This finding is in line with the observations of Olaniyan (2000), Etim and Edet (2007), and Etim et al., (2010) that poverty increased with an increase in household size.

Table 3a: Determinants of Poverty among Farm households

Independent variable	Coefficient	S.E.	p-value	Odds ratio
GrowRice	0.216	0.18	0.23	1.241
Farmsize_Ha	-0.006	0.009	0.489	0.994

TLU	-0.003	0.013	0.811	0.997
Credit	0.000	0.000	0.269	1.000
HHSize	0.317 *	0.03	0.000	1.373
DepRatio	0.101	0.064	0.117	1.106
Age	0.005	0.045	0.905	1.005
AgeSq	0.000	0.000	0.939	1.000
Gender	-0.506	0.311	0.104	0.603
Never_married	-0.656	0.52	0.207	0.519
Ever_married	0.759	0.529	0.151	2.136
SchlgYr	-0.035 *	0.015	0.017	0.965
PHCN	-0.254	0.192	0.186	0.776
Public_tap	0.427	0.274	0.119	1.533
General_hospital	0.412 *	0.199	0.038	1.51
MktTravel_Cost	0.000	0.000	0.902	1.000
Share_OfffarmInc	0.089	0.306	0.772	1.093
NorthEast	1.496 *	0.47	0.001	4.465
Northwest	0.479 *	0.243	0.048	1.614
Southeast	1.249 *	0.371	0.001	3.487
SouthSouth	-0.097	0.328	0.767	0.907
Southwest	0.113	0.283	0.689	1.12
Migrant	-0.293	0.368	0.425	0.746
MigrantYears	0.015	0.013	0.262	1.015
Constant	-2.388	1.048	0.023	0.092
Model X² =	**307.74**	**p.< .05**		
Pseudo R² =	**0.378**			
-2 Log Likelihood =	**1643.92**			
n =	**935**			

Note: The dependent variable in this analysis is Poverty Status coded so that 0 = Non-poor and 1 = poor

Source: Author's Computation using Logit Regression Analysis (SPSS)

3.4 Determinants of Poverty Status among Farm households

The multinomial analysis shown on Table 3(b) reveals the poverty status of each farm household, whether severe or moderate. In this study, the reference category here is severe poverty. From the analysis, an increase in Household size and Dependency ratio will increase the chances of severe poverty by 30.6% and 10.3% respectively. Meanwhile an increase in tropical livestock units and credit access will increase the chance of escaping severe poverty by 3.6 % and 28.1% respectively. An increase in GrowRice and Farm Size will reduce

the chances of being in moderate poverty by 28.5%, 2.9%, 9.5% and 1.5% respectively.

Table (3b): Determinants of Poverty Status among Farm households

Parameter Estimates

PovStatus[a]		Coefficient	S.E.	p-value	Odds ratio
Non-Poor	Intercept	3.654	1.209	0.003	
	GrowRice	-0.41	0.211	0.052	0.664
	Farmsize_Ha	-0.005	0.009	0.575	0.995
	TLU	0.006	0.013	0.672	1.006
	Credit	0.000	0.000	0.415	1.000
	HHSize	-0.365 *	0.032	0.000	0.694
	DepRatio	-0.109	0.07	0.119	0.897
	Age	0.000	0.051	0.992	1.000
	AgeSq	0.000	0.001	0.796	1.000
	Gender	0.414	0.374	0.269	1.512
	Never_married	0.693	0.642	0.28	2.000
	Ever_married	-0.372	0.68	0.585	0.69
	SchlgYr	0.035 *	0.017	0.038	1.036
	PHCN	0.247	0.223	0.267	1.281
	Public_tap	-0.35	0.313	0.263	0.705
	General_hospital	-0.199	0.231	0.391	0.82
	MktTravel_Cost	0.000	0.000	0.463	1.000
	Share_OfffarmInc	-0.019	0.354	0.958	0.981
	NorthEast	-2.092 *	0.518	0.000	0.123
	Northwest	-0.702 *	0.278	0.011	0.495
	Southeast	-1.603	0.422	0.000	0.201
	SouthSouth	-0.022	0.387	0.954	0.978
	Southwest	0.058	0.344	0.866	1.06
	Migrant	0.579	0.475	0.223	1.785
	MigrantYears	-0.022	0.016	0.168	0.978
Moderate Poverty	Intercept	1.132	1.17	0.334	
	GrowRice	-0.336 *	0.204	0.099	0.715
	Farmsize_Ha	-0.03 *	0.014	0.027	0.971
	TLU	0.006	0.007	0.404	1.006
	Credit	0.000	0.000	0.808	1.000
	HHSize	-0.100 *	0.021	0.000	0.905

DepRatio	-0.015	0.058	0.791	0.985
Age	0.01	0.048	0.835	1.01
AgeSq	0.000	0.000	0.707	1.000
Gender	-0.162	0.398	0.684	0.85
Never_married	0.077	0.731	0.916	1.08
Ever_married	0.644	0.68	0.344	1.903
SchlgYr	0.001	0.016	0.966	1.001
PHCN	-0.019	0.223	0.932	0.981
Public_tap	0.14	0.275	0.611	1.15
General_hospital	0.394	0.219	0.072	1.483
MktTravel_Cost	0.000	0.000	0.254	1.000
Share_OfffarmInc	0.113	0.338	0.739	1.119
NorthEast	-1.304 *	0.543	0.016	0.271
Northwest	-0.433	0.261	0.098	0.649
Southeast	-0.712	0.429	0.097	0.491
SouthSouth	-0.224	0.397	0.572	0.799
Southwest	0.326	0.342	0.34	1.385
Migrant	0.469	0.498	0.347	1.598
MigrantYears	-0.012	0.017	0.482	0.988

Model X^2 =	372.392	p.< .05	
Pseudo R^2 =	0.372		
-2 Log Likelihood =	1643.92		
n =	935		

Note: The reference category is: Severe Poverty

Source: Author's Computation using Logit Regression Analysis (SPSS)

4. Conclusion

This paper examined the determinants of poverty status of rural farm households in Nigeria. The findings showed that the major determinants of poverty among rural households are Grow Rice, Household size, dependency ratio, age of household head, farm size, gender of head of household (male/ female), head of household schooling years, tropical livestock unit, credit access, market travel cost, PHCN access, General Hospital access. Grow Rice, Farm size, Household size, Dependency ratio, age and market travel cost had positive influence on poverty status. Tropical Livestock Unit, Credit, Gender, Schooling year, access to PHCN and General Hospital access had a negative influence on poverty. The study also found that poverty is more severe in the northern geo-political zones.

Education is an area to be given adequate attention. This study has revealed that poverty is severe among households with low level of education and that increasing the proportion of individuals should have more than six years of schooling to reduce the level of poverty. Based on the findings of this study, the following policy

recommendations are suggested towards ensuring poverty reduction in rural farm households. More attention should be focused on educating members of poor households.

Policy makers should seek to improve the quality of education and also create educational opportunities for rural households and means to increase literacy rates. Farmers' access to credit facilities should be improved by cooperative societies and other agricultural financing policies aiming at rural farmers. This facility should be well maintained and agricultural enterprises and production measured in order to prevent diversion and ensure timely repayment. This would increase the income of farm households and thus their quality of life, thereby reducing poverty.

In view of the differential impacts of the marginal effects of the geo-political zones on the poverty levels of rural farm households of the geo-political zones, policies should take into account the distinct features of each zone before implementing initiatives to reduce poverty.

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