

An Assessment of the Determinants of Rural Poverty in Southern Nigeria

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Abstract

Government of Nigeria has put in place so many laudable policy measures and strategies to improve the socio-economic empowerment indices so as to enhance the standard living of people in the rural sector. Despite these government efforts, Nigeria is still facing the challenges of poverty most especially in the rural settings. The study set out to examine the determinants of rural poverty in the southern Nigeria particularly the southwest and south-south. The study made use of multi-stage technique in the collection of data using 2019 Nigeria living standard survey. The study also employed probit regression model to measure the determinants of rural poverty in the southwest and south-south of Nigeria. The regression results revealed that gender, age, household size, the sex of the household head, religion, marital status, occupation, and employment sectors are the determinants of poverty in Nigeria. Among these parameters, household size have positive effect on poverty in both southwest and south-south which implies that it has significant effect on rural poverty in Nigeria, whereas others parameters have negative effects. Therefore, the study concludes that household size is one of the causes of poverty, since it is positively associated with poverty, implying that a larger family increases the likelihood of being poor. In line with the findings, the study therefore, recommends that the Nigerian government should design and implement policies that encourage family planning strategies and birth control measures as population control is crucial to achieving poverty reduction.

Keywords: Rural Poverty, Household size, Probit Regression and Sothern Nigeria.

1.0 INTRODUCTION

The issue of poverty has long attracted a serious controversy among the researchers, development workers, politicians, and international development agencies. The consensus however is that poverty is seen as a universal wonder that affects the socio-economic and political well-being of its victims whether in a developed or underdeveloped countries (Oshewolo, 2010). Poverty is a disease that affects people all over the world, and it can be seen as a symptom of underdevelopment in various forms. Nearly half of the world's population

lives below the international poverty line (\$2 per day), and unemployment hit a record high of 23.1% in 2018 (World Poverty Clock, 2018). Generally speaking, a variety of socio-economic indicators are used to assess the general well-being of the population or the standard of living. Food, health care, education, employment prospects, and access to basic infrastructure are just a few of the socio-economic indices that have been measured over time.

Poverty is an unacceptable deprivation in well-being and is becoming more prominent in Nigeria, and this is a worrisome development. Nigeria, a Sub-Saharan African country, has at least half of its inhabitants living in abject poverty (Taiwo and Agwu, 2016). Hunger, ignorance, malnutrition, disease, unemployment, limited access to credit, short life expectancy, and a pervasive feeling of human pessimism are all symptoms of poverty in Nigeria (Owenbiugie and Ilavbojie, (2019). Poverty in all its forms has ravaged Nigerian society for years. Nigeria's poverty gap is widening by the day, with the richest 10% of the population controlling almost 43% of the country's wealth. Despite the fact that several programmes and projects aimed at alleviating poverty have been introduced over time, the country's profile remains at 69.0 percent as at today. The number of Nigerians living in absolute poverty, or those unable to afford the most basic essentials of life like food, shelter, and clothing is estimated to be over 40% of the population, or nearly 83 million people. Nigeria Living Standard Survey (NLSS, 2019). Nigeria is ranked 161st in the world on the United Nations Human Development Index and this might have been due to growing incidence of poverty which is pervasive in the country. (UNDP, HDI report, 2019). Moreover, poverty appears to be higher in rural than in urban areas of Nigeria. The percentage of individuals living in core poverty in urban areas was 18% and 52.1% in rural regions over period between 2018 and 2019 (NBS, 2020). The significance of rural poverty is underscored by the fact that as much as 45% to 80% of national population reside in the rural areas and are dependent in agriculture in most developing countries (Omotoso et.al 2021). In South-western Nigeria, about 70% of the populations live in the rural setting and are dependent on agriculture as in most developing countries of the world for their livelihood (Akoroba 2007).

1.2 Statement of the Problem

Poverty is defined as a lack of access to basic needs/goods, a lack of or diminished access to productive resources, inefficient use of common resources, and exclusion mechanisms (Anekwe, Ndubuisi-Okolo, and Attah, 2018). Poor people in Nigeria face considerable inequality of income distribution, poor access to basic facilities and work prospects. Government of Nigeria for a decade now has focused on how to improve the socio-economic empowerment indices such as easy accessibility to sound education, robust health services, and reliable sources of credit facilities among others. This government attempt was made to boost the standard of living, reduce poverty and to enhance growth in Nigeria, most especially to better the lives of the citizenry in the rural setting. Moreover, these government efforts and policy measures that were put in place is also to meet up with the millennium development goals of 2020. However, there are challenges such as decay in infrastructures, weak institutions, policy inconsistencies, poor education system and political instability which have been the impediments towards the achievement of these goals. Despite all the efforts of the government, Nigeria still has the challenge of Poverty even more to its root in the rural sector. Based on this

backdrop, this study intends to explore the determinants of poverty in the rural setting of the southern areas of Nigeria particularly southwest and south-south.

2 BRIEF EMPIRICAL LITERATURE

Osabohien, Matthew, Gershon, Ogunbiyi, and Nwosu (2019), using generalized method of moments for 15 West African countries examined agricultural development, in relationship with job creation and poverty alleviation. The result of the panel data for the period 2000–2016 showed that agriculture value-added have a negative impact on poverty in the selected countries.

Efendi and Indartono (2019) carried out an analysis of the links between poverty, economic growth, health and education in Indonesia between 2004 and 2017. Secondary data and Ordinary Least Squares estimation technique was used and the findings indicated that poverty and economic growth are positively but not significant relationship and it was also found that education had a negative and insignificant relationship with poverty in the country. The finding further showed that education, health and economic growth explained poverty at about 88 percent from the R square statistic. Education and poverty further confirmed the theoretical postulations on the relationship between them in Indonesia.

Nwosa and Ehinomen (2020) examined the nexus among income inequality, poverty and economic growth in Nigeria from 1981 to 2018 using autoregressive distributed lag method of estimation. The result showed that while inequality has a positive and significant effect on economic growth in Nigeria, poverty has an insignificant impact on economic growth.

Dada and Fanowopo (2020) using autoregressive distributed lag examined the impact of institutions on the relationship between economic growth and poverty reduction in Nigeria using data from 1984 to 2018. The result of the study showed that economic growth and institutions (proxied by corruption control and political stability) positively affect poverty reduction both in the short run and the long run. Thus, the study found that both economic growth and strong institutions are significant factors that can be used in reducing poverty in Nigeria.

Danaan (2019) explores the theoretical nature of poverty in Nigeria. The study argues that poverty is complex and multidimensional phenomena because the factors that affect it cut across the social, psychological, economic and cultural spheres of existence. The study suggests the knowledge of these factors that causes poverty in creating pro-poor strategies and a hydra-headed method of addressing its effect increasingly and excellently. The paper argues that empowering people to develop resilience to manage and overcome it within the range of their resources and capabilities is a means of reducing poverty.

Adejumo, Asongu, and Adejumo, (2021), employing the Autoregressive estimates and an unrestricted VAR approach to analyse the dynamic interrelationships among the school enrolment rates and the rate of employment (via unemployment rates) in Nigeria, lend credence to the new-growth theory (i.e. endogenous models) that more investments in human capital, through education especially at higher levels, will allow human capital to evolve dynamically and increase long-run growth in Nigeria.

Edeh, Obi and Obi (2018) examined the effect of government education spending on poverty reduction in Nigeria for the period 1999 to 2017. Time series data on primary school enrolment and government expenditure on education were used to capture education variable and the work employed the Ordinary Least Square analysis. The findings showed that government spending on education did not affect poverty significantly. It was therefore recommended that policies that can translate to poverty reduction such as vocational training should be encouraged to make more impact on poverty reduction.

Maloma (2016) examined the socioeconomic determinants of household poverty status in a low-income settlement in South Africa. The study employed a survey questionnaire was used to collect data from a sample of 300 households in Bophelong township in Gauteng province during the second half of 2013. A binary logistic regression was used to analyse the data. The results show that the education level of the head of the household, his/her employment status and age were inversely related to poverty status. Improvements in the education level and increases in the age of the head of the household were found to decrease the probability of a household being categorised as poor.

Makhalima (2020) analysed the determinants of child poverty In South Africa using the 2018 General Household Survey data with a sample of 10 902 households. The study used a binary logistic regression model to measure the determinants of child poverty. The regression results revealed that children living in large households, households headed by males, and where the head of household is married or widowed have a higher probability of being poor.

Omotoso et.al (2020) examined the determinants of poverty in rural farming household in the six (6) geopolitical zones of Nigeria. Simple random sampling technique was used to select 400 farming household to source information to achieve the objective of the study through a structured questionnaire and interview schedule. The study employed percentages, means, tables, poverty ratios and regression analysis. The result of socioeconomic characteristics of the respondents revealed that 54.0 percent of the respondents were male with 48.0 percent of them married. Furthermore, the poverty line of ₦427.14 per person per day obtained was a reflection of limited resources among the farming households in the study area.

Dunga (2022) investigated the determinants of Perceptions of Poverty in Gauteng Province of South Africa. The study used data that was collected in the Gauteng Province South Africa in 2019–2020. The study employ both descriptive and regression analysis to capture the stated objective. The results show that the poor to a greater extend agree with the structural perceptions of causes of poverty whilst those that are above the poverty line assign their position to hard work and hence blame the poor for their own circumstances mostly agreeing with the individualistic perception of causes of poverty.

Ahmed and Mohammad (2022) examined determinants of poverty among urban households in Afghanistan. The study used multi stage sampling approach to gather data for 326 households. The logit model was employed to estimate the influencing factors on poverty status among targeted households. The results showed that age of household head, remittances, number of male employed and number of female employed are negatively correlated with poverty status. More so, household size and number of illiterate household's member have positive effect on poverty in the study area.

3.0 RESEARCH METHODS AND MATERIALS

3.1 Study Area

The study was carried out in selected States of both South-western and south-south Nigeria. Southwestern Nigeria comprises six states which are Lagos, Ogun, Oyo, Osun, Ondo and Ekiti. The Southwest lies between latitude 50N and 90N of the equator and longitudes 2.50 and 60N east of the Greenwich Meridan. It is bounded in the East by Delta State, the Republic of Benin in the West, Kwara and Kogi State in the North and by the Atlantic Ocean in the south. The major occupation in the States is farming in which Maize, Cassava, Rice, Yam, Oil palm, Cocoa, Timber are produced enormously while The South-South region of Nigeria comprises of six states which consist of and is strategically located at the point where the Y tail of the river Niger joins the Atlantic Ocean through the Gulf of Guinea. Though a relatively small stretch of land, the south of the country provides the economic mainstay of the economy: oil.

3.2 Sampling Techniques and Data Analysis

Each of Nigeria's six geopolitical zones has its own distinct character. The study uses a multi-stage sample technique, using two geopolitical zones in the southern Nigeria which are South-South and South-West. The second round of sampling chose six states that were selected from the South-West, while seven states were selected from the South-South. The states selected from South-South are Edo, Delta, Rivers, Akwa Ibom, Bayelsa, Cross River. While the states selected from the Southwest are Ekiti, Ogun, Ondo, Osun, Oyo and Lagos. In the third stage, local governments were chosen at random from three senatorial districts in each state, 27 from the 51 rural local government areas in the South-West, and 30 from the 56 rural LGAs in the South-South.

At the final stage, one thousand, four hundred and eighty (1,480) respondents are randomly selected from the 57 LGAs in both South-South and South-West. These local government areas are represented in the parenthesis as follows: In South-West the researcher selected in Ekiti Central (Efon and Ijero), Ekiti North (Ilejemeje and Ikole), Ekiti South (Gbonyin and Emure), Ondo North (Akoko Northwest, Akoko Southeast and Owo), Ondo South (Ile-Oluji, Irele and Okitipupa), Ondo Central (Idanre, Ifedore and Ondo West), Osun Central (Boripe, Bolowaduro, Ifedayo and Irepodun), Osun East (Ife North, Oriade, Atakunmosa east and Obokun), Osun West (Ayedire, Egbedore, Ejiogbo and Ede South). The following local government were selected in the South-South: Edo Central (Esan Central, Igueben, Esan South East), Edo South (Ovia Northeast, Ovia Southwest, Orhionwon), Edo North (Akoko Edo, Etsako West, Owan East), Delta Central (Sapele, Ethiope East, Ethiope West and Okpe), Delta North (Aniocha North, Aniocha South, Ndokwa East and Ndokwa West), Delta South (Bomadi, Burutu, Isoko North and Isoko South), Cross River Central (Abi, Boki and Ikom), Cross River North (Obudu, Ogoja and Biase) and Cross River South (Akamkpa, Bakassi and Odukpani).

3.3 Analytical Method

Descriptive statistics were used to describe the socioeconomic characteristics of respondents, their housing and living arrangements, the health services they utilised, and so on, using frequency tables and percentages.

To assess the determinants of rural poverty, the Probit model was specified. This model allows rural poverty to be modeled as probability conditioned on independent variables, which are age, gender religion, marital status, employment among others. Let be a continuous variable that we do not observe, that is, a latent variable and assume that it is determined by the model;

$$y^* = \beta_1 + \beta_2 x_i + \dots + \beta_k x_k \varepsilon_i \quad (3.10)$$

$$y^* = x_i \beta_i + \varepsilon \quad (3.11)$$

Where;

ε = residual (error term) which is assumed uncorrelated with x (i.e. x is not endogenous).

x_i = vector of explanatory variables which are socio-economic variable such age, gender etc.

β_i = parameters of x_i

While we do not observe y^* , we do observe the discrete individual poverty status whether it is 0 or 1 e, according to the following rule:

$$y_i = \begin{cases} 1 - if - y^* > 0 \\ 0 - if - y^* \leq 0 \end{cases} \quad (3.12)$$

The poor individual is assigned the value of 1 while a non-poor individual is assigned the value 0. To model the probability that an individual is poor, a standard normal distribution is assumed and presented as;

$$p(y_i = 1 / x_i) = \phi(x\beta) \quad (3.13)$$

Therefore, using the probability response probit model, the association between poverty and independent variables is presented as;

$$POVL = \alpha_0 + \alpha_k X_k \quad (3.14)$$

Where;

$POVL$ = poverty line

X_k = indexes factors that influence poverty such as age, household size, gender, marital status etc.

3.4 Definition of Variables

Dependents Variable

Poverty level will be taken as a dependent variable. This variable will be considered from the income perspective. P1= 1 means that the household is poor and when P1= 0, it means the household is non-poor.

Independent Variables

The explanatory variables that will be expected to influence poverty among the respondent are:

Age: This will be the household head's age in years. The a priori presumption is that as one's age increases, the risk of poverty increases as well.

Sex: This is a dummy variable representing the household head's gender. Males have a value of 1 while females have a value of 0. The expectation is that if either coefficient is positive, the risk of poverty increases.

Marital Status: This represents the marital status of the household head. The variable takes the value of 1 for married and 0 for single. The a priori expectation is that if the coefficients of any area of this status are positive, the probability of being poor would increase.

Household size: This shows the size of the household living within the household and sharing a common source of food. The a priori expectation is that if the coefficient of the household is positive, then the probability of being poor increases.

Level of Education: This shows the household head's educational level, measured in years of formal schooling. The expectation is that a negative education level coefficient reduces the likelihood of poverty.

Income of the household head (x8): This is the annual income of the household head. The a priori expectation is that if the coefficient of income is negative the probability of being poor reduces.

3.5 Data Collection Technique and Data Source

The study analysed data from the Nigerian National Bureau of Statistics' 2018/2019 Nigeria Living Standard Survey, which was conducted in conjunction with the World Bank. Quantifiable and non-quantifiable parameters affecting the income and expenditure patterns of rural households in the research region were gathered. The researcher collected data on the socio-economic characteristics of rural households, including their age, gender, household size, marital status, and educational level. Additionally, data on the incomes, sources of income, and food consumption of households were gathered.

4. RESULTS AND DISCUSSION

Table 4.1a The probit analysis of the determinants of rural poverty in Nigeria

Poverty Status	Coefficient (Z-statistics)	Marginal effect (Z-Statistics)
Gender (Female)	-0.241(-2.93)***	-0.092(-3.01)***
Religion (Christianity)	-0.283(-1.9)**	-0.11(-1.9)**
Religion (Islamic)	-0.772(-3.98)***	-0.249(-4.15)***
Age Group (15-24years)	-1.454(-4.9)***	-0.53(-4.82)***
Age Group (25-34years)	-0.678(-3.4)***	-0.261(-3.35)***
Age Group (35-44years)	-0.527(-4.17)***	-0.202(-4.16)***
Marital Status (Married Monogamous)	-0.205(-2.43)**	-0.078(-2.42)**

Marital Status (Married Polygamous)	-0.039(-0.49)	-0.015(-0.49)
Head of Household (Male)	0.424(5.1)***	0.163(4.93)***
Employment Sector (Public)	-0.072(-0.99)	-0.027(-0.99)
Household Size	0.235(12.8)***	0.089(10.7)***
Employment (Not available for employment)	-0.013(-0.14)	-0.005(-0.14)
Employment (Wage employment)	0.022(0.23)	0.008(0.22)
Employment (Self-employment)	-0.178(-1.94)**	-0.068(-1.83)*
Log of Age	-0.865(-3.13)***	-0.327(-3.08)***
Constant	2.866(2.38)**	
No of Observations	1480	
Log likelihood	-791.66094	
R2	0.21	
LR Chi2	408.79(0.000)	

Source: Authors' computation from STATA 15, (2021)

***, ** and * correspond to 1%, 5% and 10% levels of significance

For Nigeria, Table 4.1(a) displays the coefficients of the variables, marginal effects, the z-statistic, associated p-values, and the coefficients' 95 percent confidence intervals. The likelihood ratio chi-square of 408.79 with a probability value of 0.000 indicates that the model as a whole is statistically significant, indicating that it fits significantly better than a model without predictors. The probability value indicates that the independent variables have strong explanatory power. Furthermore, the model's pseudo-r-squared is 21%, indicating that the explanatory factors explained 21% of the variation in the dependent variable, and the results are validated at p0.05. The model's fitness is confirmed by the LR-statistics of 408.79 with a probability value of 0.000. Gender, religion, age group, marital status, head of family, employment sector, household size, and employment are among the factors used in this study. Gender (female), religion (Christian and Muslim), age groups (15-24 years, 25-34 years, and 35-44 years), marriage status (married monogamous), Head of Household, household size, and work (self-employed) are all statistically significant, whereas others are not. The Probit regression coefficients show how a unit change in the predictor affects the z-score.

From table 4.1a, female decreases the z-score by 0.241, which indicates that female respondents are less likely to experience poverty compared to male. Also, a change in the religion of the respondents from other religions to Christianity and Islamic decreases the z-score by 0.238 and 0.772 indicating that as the respondents become Christians or Muslim, they

are less likely to experience poverty. Being in the age group 15-24 years, 25-34 years and 35-44 years decreases the z-score by 1.454, 0.678 and 0.527 respectively at a 1% level of significance. This analysis indicates that as respondents grow older, they are less likely to experience poverty. Furthermore, a change from never married to married (monogamous) decreases the Z-score by 0.205, indicating that a respondent that is married to one partner is less likely to experience poverty. However, the realization of this condition is attributed to the spouse employment status. From the results, a change from unemployed to self-employed decreases the z-score by 0.178, this means that a self-employed respondent is less likely to experience poverty than an unemployed respondent in the rural area. A male head of household increases the z-score by 0.424, which indicates that respondents from a household headed by the male are more likely to experience poverty than the female head of household. Similarly, a unit change in household size increases the z-score by 0.235 meaning that as household size increases, respondents are more likely to experience poverty.

The marginal effects or partial effect measures the effect of a change in one of the regressors while holding all other regressors constant on the conditional mean of the dependent variable. The partial effects are measured as a unit of probability. From Table 1.1a, the results show that the probability that a female respondent will experience poverty is 0.092, this means that the probability that a female will experience poverty is lower than the probability that a male respondent experiencing poverty. The probability that a Christian and Muslim respondent will experience poverty is 0.11 and 0.24 lower than a respondent from another religion. Similarly, the probability that a respondent within the age group 15-24 will experience poverty is 0.53 which is more than the respondents within the age groups 25-34 and 35-44. However, the probability that a respondent in a monogamous marriage will experience poverty is 0.0078. The probability that respondents from a household headed by the male will experience more poverty is 0.163. The probability that as household size increases, respondents will experience more poverty is 0.089. Finally, the probability that a self-employed respondent will experience poverty is 0.068.

From the above analysis, some factors negatively influence poverty, while others have a positive effect on rural poverty. Specifically, factors such as gender, religion, age group, marital status and employment negatively determined poverty status, while male head of household and household size relate with rural poverty positively.

Table 4.1b the probit analysis of the determinants of rural poverty in the South-South and South-West

	South-South		South-West	
	Coefficient (Z-statistics)	Marginal effect (Z-Statistics)	Coefficient (Z-statistics)	Marginal effect (Z-Statistics)
Poverty Status				
Gender (Female)	-0.14(-1.25)	-0.055(-1.25)	-0.595(-4.11)***	-0.173(-4.11)***
Religion (Christianity)	0.227(1.57)	0.09(1.57)	-4.891(-14.44)***	-0.81(-2.41)***

Religion (Islamic)	-0.954(-2.65)***	-0.305(-2.65)***	-4.601(-12.37)***	-0.992(-2.29)***
Age Group (15-24years)	-0.463(-1.25)	-0.183(-1.25)	-3.586(-6.31)***	-0.91(-6.31)***
Age Group (25-34years)	-0.076(-0.32)	-0.03(-0.32)	-1.99(-4.83)***	-0.663(-4.83)***
Age Group (35-44years)	-0.138(-0.88)	-0.054(-0.88)	-1.335(-5.54)***	-0.42(-5.54)***
Marital Status (Married Monogamous)	-0.187(-1.75)*	-0.074(-1.75)*	-0.087(-0.51)	0.025(0.51)
Marital Status (Married Polygamous)	0.409(3.28)***	0.162(3.28)***	-0.035(-0.24)	-0.01(-0.24)
Head of Household (Male)	0.175(1.78)*	0.069(1.78)*	0.346(2.82)**	0.346(2.82)**
Employment Sector (Public)	-0.061(-0.7)	-0.024(-0.7)	-0.197(-1.26)	-0.056(-1.26)
Household Size	0.222(9.5)***	0.087(9.5)***	0.427(5.22)***	0.121(5.22)***
Employment (Not available for employment)	0.047(0.43)	0.018(0.43)	-0.25(-0.97)	-0.071(-0.97)
Employment (Wage employment)	0.078(0.69)	0.031(0.69)	-0.198(-0.73)	-0.059(-0.73)
Employment (Self-employment)	-0.147(-1.39)	-0.058(-1.39)	-0.298(-1.05)	-0.091(-1.05)
Log of Age	-0.163(-0.49)	-0.064(-0.49)	-2.769(-4.85)***	-0.786(-4.85)***
Constant	-0.176(-0.12)		17.048(6.81)***	
No of Observations	780		700	
Log likelihood	-555.81425		-196.87184	
R2	0.28		0.36	
LR Chi2	181.33(0.000)		473.02(0.000)	

Source: Authors' computation from STATA 15, (2021) ***, ** and * correspond to 1%, 5% and 10% levels of significance

Table 4.1b above shows the coefficients of South-South and South-West models, marginal effects, the z-statistic, associated p-values, and the 95% confidence interval of the coefficients for both South-South and South-West, Nigeria. The likelihood ratio chi-square for South-South is 181.33 with a probability value of 0.000 and South-West with a likelihood ratio chi-square of 473.02 and probability value of 0.000 which indicates that the models as a whole are statistically significant. The likelihood value shows that the independent variables have explanatory and significant power. Also, the pseudo-r-squared of these models are high (above 25%). The R-square value of 0.28 for South-South shows that the independent variables explain 28% of the variation that occurs in the dependent variable while the R-square value for South-West 0.36 shows that the 36% of the variations that occur in the dependent variable can be explained by independent variables. The results are validated at $p \leq 0.05$ as shown in the results, the model is significant at 1% (LR-statistics = 181.33; p-value = 0.000) for South-South and (LR-statistics = 473.02; p-value = 0.000) for South-West, thus confirms the fitness of the model. The probit regression coefficients give the change in the z-score for a unit change in the predictor. The variables employed in these analyses include; gender, religion, age group, marital status, head of household, employment sector, household size and employment.

In the South-South, variables such as Religion (Muslim), marital status (monogamous and polygamous), Head of household (male) and household size are statistically significant. Specifically, a respondent being a Muslim decreases the z-score by 0.954 indicating that Islamic religion is negatively related to rural poverty. Also, a change in the respondent's marital status from never married to married monogamous reduces the z-score by 0.187, indicating that married monogamous reduces the likelihood of respondent being poor. However, a change in the marital status of a respondent from never married to married polygamous increases the z-score by 0.409 indicating that the respondent is more likely to experience poverty. Furthermore, a male head of household increases the z-score by 0.175, meaning that respondents from a household headed by the male are more likely to experience poverty than those headed by a female. Finally, a unit change in household size increases the z-score by 0.222 meaning that as household size increases, respondents are more likely to experience poverty.

In the South-West, Gender (female), religion (Christian and Muslim), age group 15-24 years, 25-34 years and 35-44 years, head of household (male) and Household size is statistically significant. However, in the South-West, a female decreases z-score by 0.595, which indicates that a female respondent is less likely to experience poverty. Also, a change in the religion of the respondents to Christianity from other religions decreases the z-score by 4.891 indicating that a Christian respondent is less likely to experience poverty and also a change in religion to Muslim, reduces Z-score by 4.601 meaning that a Muslim respondent is also less likely to experience poverty. Moreover, being in the age group 15-30 years, 31-45 and 46-60 years respectively decreases the z-score by 3.586, 1.99 and 1.335 indicating the less likelihood of the respondents experiencing poverty. Furthermore, a male head of household increases Z-score by 0.197, this implies that male head of household is positively related to rural poverty. Similarly, a unit change in household size increases the z-score by 0.427 indicating that as household size increases, respondents are more likely to experience poverty.

The marginal effects of the South-South results measured in a unit of probability show that the probability that a Muslim respondent will experience poverty is 0.305. Also, the probability that a respondent in a monogamous and polygamous marriage will experience poverty is 0.074

and 0.162 less than the probability of being single or never married. Lastly, the probability that a respondent from a household headed by a male will experience poverty is 0.0069 and the probability that a rise in household size will experience poverty is 0.087. Similarly, the marginal effects of poverty in the South-West show the probability that a female respondent will experience poverty is 0.173, this means that a female in the South-West has a lower probability of experiencing poverty. The probability that a Christian and Muslim respondent will experience poverty is 0.81 and 0.992 respectively. Similarly, the probability that a respondent within the age group 15-24 years, 25-34 years and 35-44 years will experience poverty is 0.91, 0.663 and 0.42 respectively. However, the probability that a respondent from a household headed by a male will experience poverty is 0.346 and the probability that increases in household size will increase poverty is 0.121.

Overall, the results show that the positive factors that influence rural poverty in the South-South include married polygamous status, the male head of household and household size, while married monogamous status and Islamic religion have a negative effect on rural poverty. However, in the South-west, only the male head of household and household size influence rural poverty positively, other variables such as age, gender and religion negatively affect rural poverty. This shows variation in the factors that determine rural poverty in the South-South and South-west.

5.0 CONCLUSION AND POLICY RECOMMENDATIONS

This study concluded that rural poverty is highly influenced by one's degree of education, as poverty is more prevalent among those with a lower level of education in Nigeria. The South-South and South-west axes obtained the same conclusion. Additionally, various causes of rural poverty in Nigeria were found. Gender, age, household size, the sex of the household head, religion, marital status, occupation, and employment sectors are among these characteristics. Among these parameters, household male sex and household size have a beneficial effect on rural poverty in Nigeria, whereas others have negative effects. According to the findings, household size is one of the causes of poverty, since it is positively associated with poverty, implying that a larger family increases the likelihood of being poor. Therefore, in with the findings, this study recommended that the Nigerian government should design and implement policies that encourage family planning strategies and birth control measures as population control is crucial to achieving poverty reduction.

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