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## **SOCIOECONOMIC DETERMINANTS OF POVERTY INCIDENCE AND AVERAGE TIME TAKEN TO EXIT POVERTY AMONG HOUSEHOLDS IN OYO STATE, SOUTHWEST NIGERIA**

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### **ABSTRACT**

Achieving the United Nations goals of eliminating poverty in its various forms globally will continue to be a delusion without properly examining the role of household socioeconomic characteristics in poverty alleviation, as well as time it takes poor households to exit poverty. This study was however carried out to examine the role of socioeconomic characteristics on poverty incidence and time it takes to exit poverty among households in Oyo State, Nigeria. Multistage sampling procedure was used to select 140 households comprising of 577 persons. The study was carried out in 2019 using primary data. Descriptive statistics, Foster-Greer-Thorbecke (FGT) index and logistic regression model were the analytical tools used for the study. The result showed that mean per-capita annual expenditure and poverty line were ₦143,288.52 and ₦95,525.68 respectively. About 32% of the households were found to be poor, the poverty incidence and severity were 11% and 5% respectively. Furthermore, it will take the poor households 4.21 years to exit poverty if their annual consumption expenditure grows at 10%. Household size increases probability of the poor households to exit poverty while level of education, other occupation, remittances, road networks and clean cooking fuel increases the chance of the poor households to exit poverty. The study recommends intensification of basic and adult education programmes, birth control measures, promotion of economic growth through employment generation, and provision of infrastructural facilities for poverty alleviation.

**Key words:** poverty, watts index, deprivation, exit time, Nigeria

### **INTRODUCTION**

Poverty connotes physical, economic and social deprivation in terms of good healthcare facilities, education, nutrition, income, property, assets, and denial of socio-political and economic participation (Omoniyi, 2018). Chukwuma (2013) defined poverty as a human and societal problems which constraints the creativity of man and make him think of mere existence. Globally, 1.4 billion people live in extreme poverty, with more than two third of them residing in the rural parts of developing countries (Ravallion et al., 2007; IFAD, 2012). In Nigeria, poverty is a problem that disproportionately affects the rural and urban populations. According to the National Bureau of Statistics (NBS), 86.9 million individuals in rural and urban areas of Nigeria were estimated to be subsisting on less than \$1.90 (or \$684) per day (NBS, 2018). This represents 43.45% of the country's population. According to the World Bank's \$3.20 per day income poverty criterion, Nigeria's poverty rate is 71%, which is higher than that of other developing nations that produce oil, such as Brazil (9.1%), Mexico (6.5%), Ecuador (9.7%), and Iran (3.1%) (Onyeiwu, 2021). The causes of poverty include income disparities, poor governance, corruption, incorrect policies, changes in family structure, a decline in the real value of safety nets, a lack of infrastructure development, and inadequate human resource development (Ajakaiye & Adeyeye 2001; NPC, 2004; Omoniyi, 2018).

Although various policies and programs have been created by succeeding governments to reduce poverty in the nation in all of its manifestations, the intervention programmes have faced setbacks as a result of policy snafus, program non-sustainability, and a lack of efficient

targeting mechanisms for the poor (Adepoju, 2018). However, if the impact of household socioeconomic characteristics on the dynamics and scope of poverty is examined, as well as by identifying who the poor are and how long it will typically take for the poor households to move out of poverty, provided that the per capita consumption of the poor grows at a positive rate per year, poverty reduction mechanisms will become sustainable and effective. There are growing literatures on poverty and its determinants in rural areas of Nigeria (Oparinde et al., 2018; Oke, 2019; Okunola & Ojo, 2019; Agunbiade & Oke, 2019), little attention had been paid to the effects of household and community characteristics on poverty as well as the time it will take the poor households to exit poverty particularly. This setting served as the backdrop for the study. Oyo state has the highest consumption poverty in the south-western region of Nigeria according to World Bank (2013); this makes it imperative to examine the poverty profile of people in the state, particularly among the rural inhabitants as they were the most deprived. Understanding the determinants of poverty and the time it will take the poor to move out of poverty will help the regional government, national government, policy makers and non-governmental agencies to proffer long lasting solutions to this multifaceted menace. Specifically, this study described the socioeconomic characteristics of the rural households, examined the poverty status of the households, estimate the time taken for the poor households to exit poverty and examined the effects of household socioeconomic characteristics on poverty status.

### **THEORETICAL REVIEW**

Several theories, such as the classical theory, neo-classical theory, Keynesian theory, Marxist theory, and social exclusion theory, are dominant when it comes to understanding poverty. The classist view poverty as individualist, to them, an individual decides to become poor and they can move their ways out of poverty through their own labour effort. The Neo-classicists opined that poverty relates to economic and social deprivation rather than individualist. They opined that lack of social as well as private supports were the root cause of poverty. Classical and neoclassical theories quantify poverty based on monetary units and readiness with policy limitation. They also emphasize on the effect of incentives of the individual behaviour and relationship between income and the productivity. However classic and neoclassic were criticized that the theories focused more on individual without considering others factors attached to poverty eradication.

Keynesian theorists were of the opinion that broad underdevelopment in its multiple facets cause poverty. Marxists opined that capitalism and class division causes poverty and poverty can only be stamped out through strict market regulations. However, the social exclusion theorists emphasize characteristics of groups or classes other than their purely economic means in explaining poverty.

Research has been conducted over the years to investigate poverty and its causes. Agunbiade and Oke (2019) assessed the poverty status of 180 rural households in Osun State using FGT index and Tobit regression model, and it was concluded that managing birth rate as well as increasing revenue generation can reduce poverty. Okunola and Ojo (2019) studied determining elements of poverty among 90 rural households in Ondo State with the annual capital expenditure approach, finding that household size increases the probability of being poor while an increase in overall income lessens poverty status. Oyekale et al. (2019) examined the impoverishment level of rural households in Ogun State through Multidimensional Poverty Index (MPI), discovering that 69% live without clean water, electricity, healthcare services, education or proper living conditions – infrastructural facilities followed by living condition, social capital, health and education were most deprived amenities. Aboaba et al. (2019) analysed multidimensional poverty indicator for rural households in Oyo State with a headcount ratio, incidence and index of 31%, 50% and 16% respectively; they proposed awareness programs combined with skills acquisition initiatives targeted at women and youths which are believed to assist with mitigating destitution in the area.

## METHODOLOGY

### Study Area

The study area was Oyo state in the south-western region of Nigeria. The state has high incidence of consumption and multidimensional poverty. World Bank (2013) reported that Oyo state has the highest consumption poverty of 34.3% compared to Ondo (15.6%), Lagos (13.3%), Osun (21.4%), Ekiti (15.4%), and Ogun (26.5%) in the region. The Oxford Poverty and Human

Development Initiatives (OPHI, 2017) reported that the poverty intensity in Oyo State (52.7%) is higher than that of Ondo (45.4%), Lagos (41.4%), Osun (39.7%), Ekiti (39.6%), and Ogun (42.5%) in the region. This is evident that poverty is pervasive in the state.

### Sampling Procedure

The study employed a multi-stage sampling procedure to select the respondents. At the initial stage, random sampling was used to select one ADP zone out of four within the state by employing a table of random numbers which resulted in the selection of Saki Zone. The second stage involved purposive selection of two (2) agriculturally dominant blocks from the selected ADP zone. The third stage involved random selection of five (5) cells from the selected agricultural blocks. Lastly, seven (7) households were selected using random sampling, making the total sample size 140 households.

### Source and Method of Data Collection

This study used data from a primary source, gathering information on household socioeconomic variables such as the age of the household head, school attendance, size of household and farm, income etc. Other questions were asked to assess wellbeing, inquiring about monthly expenditure, medical clinics, road networks, toilets, construction materials and type of fuel used for cooking etc. Data were collected between September to November 2019 through a well-structured questionnaire. Descriptive and inferential techniques were applied using STATA 14.1 Statistical package to analyse the gathered results.

### Analytical Methods

The descriptive techniques used were frequency, mean, standard deviations, and percentages to describe household's socioeconomic characteristics, household poverty status and average poverty exit time, line graph was used to show the relationship between expenditure growth rate and average poverty exit time. A logistic regression model was used to estimate the influence of household socioeconomic variables on poverty.

### Measurement of Poverty

#### Determination of Poverty line

As part of the study, a poverty line was used to classify households as poor or not, based on the poverty line developed by Ruben & Van den Berg (2001), Yunez-Naude & Taylor (2001), Igbalajobi et al. (2013), as well as Oparinde et al. (2018). In this study, the poverty line is the two-thirds of the mean per capita expenditure and was expressed mathematically as follows;

$$Z_j = \frac{2}{3} * y_j \quad \dots \dots \dots (1)$$

Where;

$Z_j$  is the poverty line and

$y_j$  is the mean per capita household expenditure.

$$y_j = \frac{\text{Total per capita household expenditure}}{\text{Total number of household}} \quad \dots \dots \dots (2)$$

The total per capita household expenditure was expressed mathematically as;

### Total household expenditure household size

..... (3)

Households are considered poor when their mean per capita expenditure fell below the poverty line and non-poor when mean per capita expenditure equals or above the poverty line.

#### **Measurement of Poverty Indices**

As a result of constructing the poverty line from household expenditure, Foster et al. (1984) developed the Foster-Greer-Thorbecke (FGT) index to measure poverty incidence (P0), poverty depth (P1), and poverty severity (P2). We used the FGT index because of its simplicity, robustness and wider applicability; it can be expressed mathematically as follows:

$$p_{\alpha}(y, z) = \frac{1}{n} \sum_{j=1}^u \left( \frac{z - y_j}{z} \right)^{\phi} \quad (4)$$

Where;

n = total sampled households

u = number of households below the poverty line

z = the poverty line for the household

y<sub>j</sub> = per capita household expenditure of j<sup>th</sup> household

φ = non-negative poverty aversion parameter and takes on value 0, 1 or 2 for poverty incidence, depth and severity respectively.

$\frac{z - y_j}{z}$  = proportion shortfall of expenditure lower than the poverty line.

Mathematically, poverty incidence (P0) measures the proportion of households below the poverty line as follows:

$$p_0 = \frac{u}{n} \quad (5)$$

As a proportion of the poverty line, the poverty depth or gap (P1) is calculated as follows:

$$p_1 = \frac{1}{n} \sum_{j=1}^u \left( \frac{z - y_j}{z} \right) \quad (6)$$

As a measure of how severe poverty is among households, the severity of poverty (P2) was expressed mathematically as follows:

$$p_2 = \frac{1}{n} \sum_{j=1}^u \left( \frac{z - y_j}{z} \right)^2 \quad (7)$$

#### **Average Poverty Exit Time**

Morduch (1998) provided a statistic to assess the average time taken to exit poverty among poor households. It was expressed mathematically as follows:

$$t_g^j \approx \ln(z) - \ln(X_j) = \frac{w}{g} \quad (8)$$

Taking the average per capita consumption of the poor households per year, we estimated the average exit time of the poor.

$$t_g^{avg} \approx \frac{\ln(z) - \ln(\mu_p)}{g} \quad (9)$$

Where;

μ<sub>p</sub> = the average per capita consumption expenditure of the poor households below poverty line.

$$T_g = \frac{1}{u} \sum_{j=1}^u t_g^j = t_g^j = \frac{1}{u} \sum_{j=1}^u \frac{\ln(z) - \ln(X_j)}{g} = \frac{w}{g} \quad (10)$$

Where;

u is households whose per capita consumption expenditure falls below poverty line,

X<sub>j</sub> is per capita consumption expenditure in the j<sup>th</sup> household, and

W is watts index.

#### **Logistic Regression Model**

Following Gujarati (2004) and Green (2005), the functional form of the logistic regression model is as follows:

$$P(Y_j=1) = \frac{1}{1+e^{-z_j}} \quad (11)$$

Where;

P(Y<sub>j</sub>=1) is the probability that household is poor

P(Y<sub>i</sub>=0) is the probability that household is not poor

Z<sub>j</sub> is the vector of the independent variables.

Then 1-P(Y<sub>j</sub>=1) represents the probability that households are poor.

$$1-P(Y_j=1) = \frac{1}{1+e^{-z_j}} \quad (12)$$

$$\frac{P(Y_i=1)}{1-P(Y_i=1)} = e^{z_i} \quad (13)$$

The natural logarithm of equation (13) gives the ratio of the probability that a household is poor to the probability that the household is not poor.

$$L_j = \ln \frac{P(Y_i=1)}{1-P(Y_i=1)} = Z_j \quad (14)$$

$$Z_j = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \beta_{13} X_{13} + \varepsilon_0 \quad (15)$$

Where;

Z = rural household's poverty status (if poor=1, if non-poor=0)

ε<sub>0</sub> = errors term

β<sub>1</sub>, β<sub>2</sub>, ..., β<sub>10</sub> are the parameters to be estimated

β<sub>0</sub> = Intercept.

X<sub>1</sub>-X<sub>13</sub> are explanatory variables described on table 1

The marginal effect will be obtained by differentiating equation (15) to show the predictive power of the explanatory variables (Green, 2005).

$$\delta_j = \frac{\partial p_j}{\partial x_i} = P_j(\beta_j - \sum_{k=0}^j P_k \beta_k) = P_j(\beta_j - \bar{\beta}) \quad (16)$$

Table 1: Variable used in the analysis.

Variable	Description	Measurement	hypothesized sign(s)
Age	Age of household head	Years	±
Sex	gender of household head	Male=1, female=0	-
Marital status	Marital status of household head	Married=1, otherwise=0	+
Household size	Number of people living in the same house	Number of persons	+
Level of education	Years spent in school by household head	Years	-
Other occupations	Household heads engaged in non-farm and off-farm activities	Yes=1, otherwise=0	-
Remittances	Remittances received from family and friends	Naira	-
House materials	House built with mud	Yes=1, otherwise=0	-
Toilet	household does not have access water closet, pit latrine or pan/bucket latrine	Yes=1, otherwise=0	+
Clinic	No clinic within 2 km distance from home	Yes=1, otherwise=0	+
Road network	household have access to good road networks	Yes=1, otherwise=0	-
Cooking energy	household uses dirty cooking fuel (dung, wood or charcoal)	Yes=1, otherwise=0	+

Source: Authors review of literatures

## RESULTS AND DISCUSSION

### Socioeconomic characteristics

Table 2 showed that more than a quarter (32.86%) of respondents were 51-60 years old, less than a quarter (15.0%) were between 61-70years, small portion (4.29%) were less than or 30years of age, less than a quarter (20.71%) were 41-50years, small portion (12.86%) 31-40years while less than a quarter (14.29%) were greater than 70years of age, the mean age was approximately 53years which is an indication that most of the respondents were old people. Aboaba et al. (2019) supported this finding, that majority of people living in rural areas are old. There were 66.43 % of male household heads and 33.5 % of female household heads, indicating that males are the dominant household head in the study areas. This is in line with finding of Oyekale et al. (2019). In addition, Larger proportion (84.29%) of the respondents were married, small portions (5.71%) and (0.71%) were single and divorced respectively while lower portion (9.29%) are widowed, this implies that there are more married people in the rural household. The result supports that of Igbalajobi et al. (2013) and Oparinde et al. (2018) that reported majority of sampled household heads in rural areas as married. The study further revealed that 52.14% of the households had 4-6 members, 38.57% had 1-3 members, 7.86%

had 7-9 members and just 1.43% had more than 9 members. The average household size was approximately 4 people, suggesting a substantial labour force available to heads of households in farming activities. Moreover, In terms of education, 43.57% of these households had primary level education, 32.14% secondary level and 5.71% tertiary level, whereas 18.57% did not have any formal qualifications. These findings suggest that most of the household heads were educated, which potentially increases their capacity to adopt new practices when they are exposed (Ashaolu et al., 2015). Furthermore, Majority of the respondents (70.0%) practices farming as their major occupations, less than a quarter (20.71%) were traders, lower portion (7.14%) were artisans while very small portion (2.14%) were engaged in other occupation. Almost all (95.0%) of the household heads cultivated between 1-3hectares of land, lower portion (3.57%) cultivated between 4-6hectares of land while the small portion (1.43%) cultivated above 6hectares of land. The mean area of farm cultivated was approximately 1.62 hectares, which is an indication that most of the household heads are small holders. This finding corroborates that of Oparinde (2017), Oparinde et al. (2018) and Oyekale et al. (2019) that majority of rural households are small holders.

**Table 2: Socioeconomic characteristics of respondents**

Variable	Frequency	Percentage	Mean	Standard deviation		
<b>Age (years)</b>						
<30	6	4.29	53	14.2		
31-40	18	12.86				
41-50	29	20.71				
51-60	46	32.86				
61-70	21	15.00				
>70	20	14.29				
Total	140	100.00				
<b>Sex</b>						
Female	47	33.57				
Male	93	66.43				
Total	140	100.00				
<b>Marital Status</b>						
Single	8	5.71				
Married	118	84.29				
Divorce	1	0.71				
Widowed	13	9.29				
Total	140	100.00				
<b>Household Size (number of person)</b>						
1-3	54	38.57	4	1.76		
4-6	73	52.14				
7-9	11	7.86				
10-12	2	1.43				
Total	140	100.00				
<b>Education Level</b>						
No formal education	26	18.57				
Primary	61	43.57				
Secondary	45	32.14				
Tertiary	8	5.71				
Total	140	100.00				
<b>Primary Occupation</b>						
Farming	98	70.00				
Trading	29	20.71				
Artisan	10	7.14				
Others	3	2.14				
Total	140	100.00				
<b>Farm Size (hectares)</b>						
1-3	133	95.00	0.88	1.62		
4-6	5	3.57				
>6	2	1.43				
Total	140	100.00				

**Source: Field survey data analysis, 2019**

#### **Estimation of poverty line**

The result in Table 3 revealed that the annual average expenditure per capita was ₦14 3,288.52, which means that each household spends an average of ₦143,288.52 annually. The poverty line was ₦95,525.68. As a result, households are considered poor if their average annual expenditure per person falls below ₦95,525.68 and non-poor if their average annual expenditure per person is ₦95,525 or more.

**Table 3: Measurement of poverty line**

Variable	Amount (₦/year)
Total household expenditure	69,984,000
Per capita household expenditure	20,060,395.20
Mean per capita expenditure	143,288.52
2/3 mean per capita expenditure	95,525.68

Source: Field survey data analysis, 2019

#### Decomposition of household poverty status

According to Table 4, the prevalence of poverty was 0.32, which means that 32% of the households had an annual household consumption expenditure level below ₦95,525. The implication is that less than half of the households were poor and supports the findings of Yusuf et al. (2015). The poverty depth registered at 0.11, demonstrating a need among the poor households for 11% of the poverty line expenditure to achieve freedom from poverty. This agrees with the findings of Tsegaye et al. (2014), who acknowledged a 9.5% poverty depth in Gozamn District, Ethiopia. With regards to severity of poverty, 0.050 recorded implying that 5% of rural households were identified as poorest amongst their peers; consequently, governmental action is necessary to supply welfare indicators such as quality healthcare, well-developed roads networks and clean water services. Such a result ties in with the data provided by Ogunniyi et al. (2011) and Oparinde et al. (2018), who both reported similar levels of severity at 5.3% and 5.4%.

**Table 4: Estimates of household poverty status**

Variable	Result
Mean per capita expenditure	143,288.52
Poverty line(₦)	95,525.68
Poverty headcount	0.32
Poverty gap	0.11
Poverty severity	0.05
Poor (%)	32
Non-poor (%)	68

Source: Field survey data analysis, 2019

#### Average time taken to exit poverty

The result on table 5 revealed that if the average consumption expenditure of the poor households grows at 1%, it will take the households 42.08years to exit poverty or be at the poverty line, however, it will take 8.42years and 4.21years if consumption expenditure grows at 5% and 10% respectively. This result is in tandem with Tsegaye et al. (2014) that reported poverty exit time of 4.4 years if income grew at 6.5% among Gozamn district of Ethiopia.

**Table 5: Estimates of average poverty exit time**

Watts Index	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Growth	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1
Time Taken	42.08	21.04	14.03	10.52	8.42	7.01	6.01	5.26	4.68	4.21

Source: Field survey data analysis, 2019

#### Relationship between Time Taken to Exit Poverty and Growth of Expenditure

Figure 1 revealed that an inverse relationship existed between expenditure growth and average poverty exit time, increasing consumption expenditure at a constant rate annually will result to fewer time to exit from poverty. The result showed that if household expenditure grows at 10% it will take the poorer households 4.21years to exit poverty or be at the poverty line.

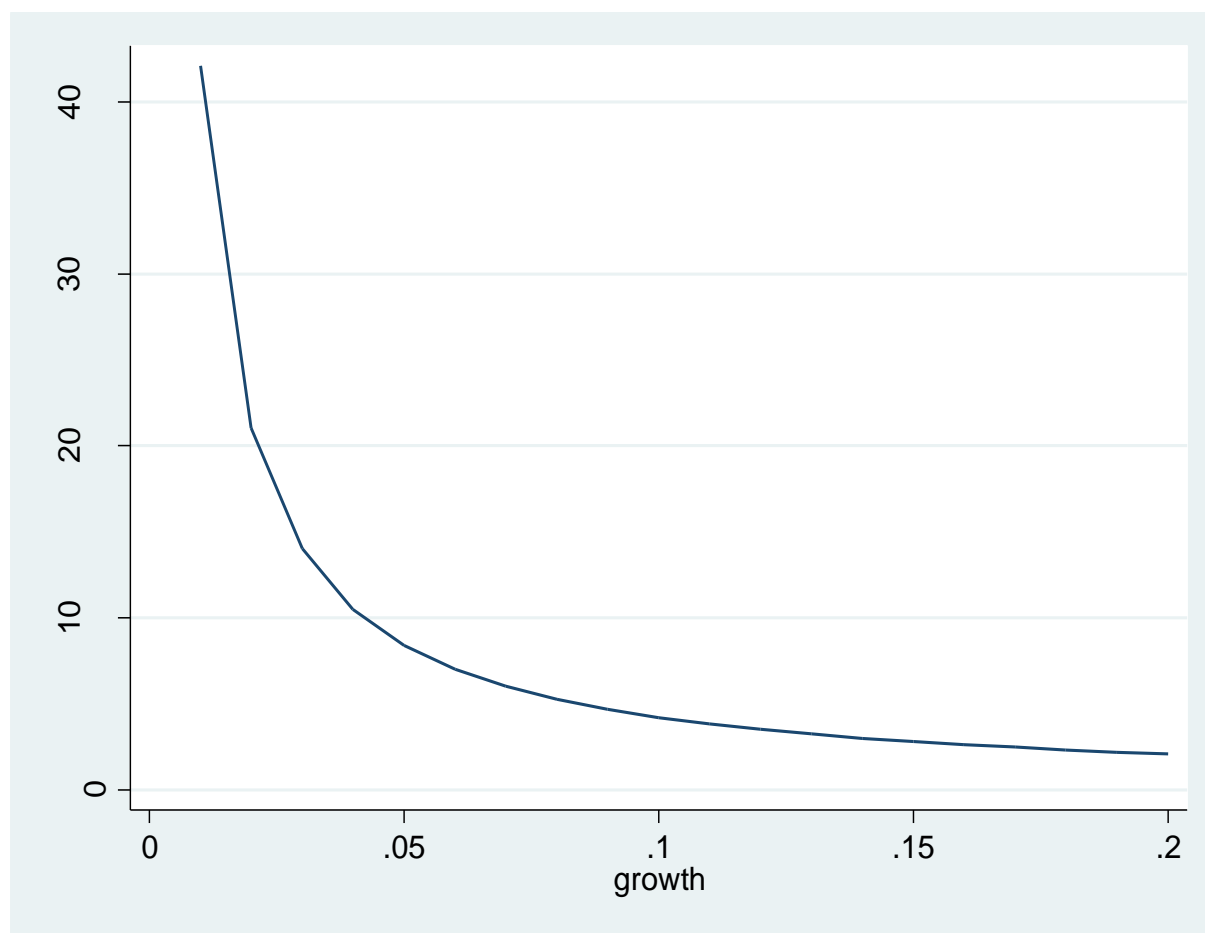


Figure 1. Relationship between Time Taken to Exit Poverty and Growth of Expenditure  
Source: Field survey data analysis, 2019

### Socioeconomic Determinants of household Poverty Status

The diagnostic tests (Wald  $\chi^2$  (12) and Prob >  $\chi^2$ ) of binary logistic regression model as shown in table 6 revealed that the model was well specified and fit at 1% ( $p < 0.01$ ) level. The pseudo  $R^2$  shows that the significant variables explained about 26.06% of the variation in poverty. The result revealed that level of education ( $p < 0.05$ ), other occupation ( $p < 0.01$ ), remittances ( $p < 0.05$ ), road networks ( $p < 0.05$ ) and cooking energy ( $p < 0.05$ ) negatively influence poverty status while household size ( $p < 0.01$ ) and house materials ( $p < 0.1$ ) had positive influence. As a result of the marginal effects of household size, households with larger members are more likely to be poor if their size increases by 1%. The reason is that as family size increases, there will be more dependent individuals, resulting in a heavier burden on the household for food and non-food costs. This is in line with the result of Tsegaye et al. (2014) and Oyekale et al. (2019). Increase in years spent in school by 1% reduces household poverty status by 1.3%; this result emphasizes the need to strengthen human capacity development through education. This is because education exposes individuals to innovative farm practices which could result to better output and

improved income which will invariably translate to improved welfare. This is in line with Tsegaye et al. (2014), however, it is contrary to that of Aboaba et al. (2019) who found out that higher level of education without entrepreneurial skills increases household poverty status. In contrast to households without other livelihood activities, households engaged in other occupational activities are likely to experience a 30.6% reduction in poverty. The implication of this result is that households that diversify their livelihood source have lower chance of being poor. The finding is in line with that of Aboaba et al. (2019). Increase in local remittances reduces household poverty status. This is because remittances increase the financial strength of the households which will invariably improve the welfare status of the rural household. The poverty status of households whose houses were built with mud is likely to increase by 24.4% compared to their counterparts whose houses were built with concrete materials. Good road network reduces the probability of the households to be poor by 17.6%. The implication is that households that have access to good road networks have lower chance of being poor as against those that did not have access to good road network, this is possible as good road network enables the households to take their farm produce to nearest market

for sale at ease, this will increase the income of the households and stamp out poverty. This is in tandem with that of Olagunju et al. (2012). When compared to

households using dirty cooking energy (dung, wood, charcoal), households using clean cooking energy (stove) are likely to be 16.1% less poor.

**Table 6: Logistic Estimates of Effect of Socioeconomic Characteristics on Poverty Status**

Variable	Coefficient	Robust Std. Err.	Z	P>z	Marginal Effects
Age	-0.014	0.011	-1.340	0.180	-0.004
Sex	0.508	0.330	1.540	0.123	0.132
Marital status	0.613	0.385	1.590	0.111	0.159
Household size	0.310***	0.087	3.560	0.000	0.080
Level of education	-0.052**	0.026	-1.960	0.020	-0.013
Other occupations	-1.181533***	0.348	-3.390	0.001	-0.306
Remittances	-7.03e-06**	2.84e-06	-2.470	0.013	-1.82e-06
House materials	0.940*	0.510	1.850	0.065	0.244
Toilet	0.186	0.518	0.360	0.720	0.048
Clinic	0.425	0.692	0.610	0.539	0.110
Road network	-0.680**	0.347	-1.960	0.050	-0.176
Cooking energy	-0.621**	0.305	-2.040	0.042	-0.161
Constant	-0.864	0.979	-0.880	0.378	
<b>Diagnostic test</b>					
Pseudo R <sup>2</sup>	0.2606				
Wald chi <sup>2</sup> (12)	46.09***				
Prob> chi <sup>2</sup>	0.000***				
Log pseudo likelihood	-64.998204				
No of obs.	140				

\*, \*\*, and \*\*\* denote significant at 10%, 5%, and 1% levels respectively

## CONCLUSION AND POLICY IMPLICATION

The study examined the level of consumption poverty and the average time it will take poor households to escape poverty. It confirmed the prevalence of poverty and the role of household socioeconomic characteristics in poverty alleviation strategies. As observed, it will take the poor households 4.21 years to move out of poverty if household consumption expenditure grows at 10% annually. Increase in household size widens poverty while education of household heads, diversification into non-farm and off-farm activities, remittances from family and friends, good road networks and utilization of clean cooking fuel reduces poverty. The implication of the above is that improved education, promotion of economic growth through livelihood diversification, provision of good road networks coupled with policies that control household size could help to alleviate poverty. The study recommends a multifaceted approach to alleviating poverty. There should be investment in human capacity development; this can be achieved by strengthening, funding and monitoring basic and adult education programmes. Capacity development and skill acquisition programmes that will enable the households enjoy stable and consistent flow of income should be pursued by government in the study area. Infrastructural facilities that would foster rural-urban linkages should be set up by relevant local and regional governments. Moreover, government and non-governmental

organizations should support awareness and sensitization programs about family planning strategies that will help control family size to a level that can be adequately supported by household heads.

## REFERENCE

- Aboaba, K.O., Adenle, E. O. Sowunmi & A. I. Akinade (2019). Nexus between poverty and livelihood diversification among rural households in Nigeria: A Multidimensional Poverty Index Approach. *International Journal of Advance Research and Publication*, 3(5), 168–175.
- Adepoju, A. (2018). Determinants of multidimensional poverty transitions among rural households in Nigeria. *International Association of Agricultural Economist Conference Paper*. Vancouver, British Columbia, Canada.
- Agunbiade, M.O., & Oke, J.T.O. (2019). Poverty analysis of cassava farming households in Osun State. *Journal of Development and Agricultural Economics*, 11(1), 9–14. doi: 10.5897/JDAE2017.0867.
- Ajakaiye, D.O., & Adeyeye, V.A. (2001). Concept, measurement and causes of poverty in Nigeria. *CBN Economic and Financial Review*, 39(4), 1–17.
- Ashaolu, O.F., Momoh, S., Philip, B.B., & Tijani, I.A. (2015). Microcredit effect on agricultural



- production: A comparative analysis of rural farmers in Ogun State, Nigeria. *Int. J. Appl. Agric. Res.*, 7(1), 20–31.
- Chukwuma, D.C. (2013). Poverty trap in Nigeria; a multidimensional perspective. Department of Economics, Nnamdi Azikiwe University, Awka, Nigeria.
- Foster, J., Greer, J., & Thorbecke, E. (1984). A class of decomposable poverty measures. *Econometrica*, 52 (3), 761–766.
- Greene, W.H. (2005). *Econometric Analysis*. New York: Pearson Education.
- Gujarati, D.N. (2004). *Basic Econometric*. New Delhi: Tata McGraw Hill.
- IFAD (International Fund for Agricultural Development). (2012). Enabling poor people to overcome poverty. [www.ifad.org](http://www.ifad.org). Accessed August 2018.
- Igbalajobi, O., Fatuase, A.I., & Ajibefun, I. (2013). Determinants of Poverty Incidence among Rural Farmers in Ondo State, Nigeria. *American Journal of Rural Development*, 1, (5), 131-137.
- NBS (National Bureau of Statistics) (2018). The review of the Nigerian economy. Federal Office of Statistics. Federal Republic of Nigeria.
- NPC (National Planning Commission) (2004). National economic empowerment and development strategy. Economic and Social Studies Review. Federal Republic of Nigeria.
- Ogunniyi, L.T., Adepoju, A.A., & Olapade-Ogunwale, F. (2011). Comparative Analysis of Poverty and Income Inequality among Food Crop and Livestock Farmers in Ilesa Metropolis, Osun State. *Global Journal of Human Social Science*, 11(5), 1-7.
- Okunola, A.M., & Ojo, O.S. (2019). Household poverty measurement and its determinants among rural farmers in Ondo state, Nigeria. *Poverty & Public Policy*, 11(4), 277-290.
- Olagunju, F.I., Ololade, R.A., Ayinde, O., Oke, J.T.O., & Babatunde, R.O. (2012). effect of infrastructural facilities on rural farmer's poverty level in Oyo state. *International Journal of Applied Research and Technology*, 1(2), 109 – 120.
- Olutumise, A.I., & Ajibefun, I.A. (2019). Evaluation of poverty status and time-taken to exit poverty among food crop farmers in Nigeria. *Journal of Agricultural Faculty of Gaziosmanpasa University*, 36(2), 97-106. doi:10.13002/jafag4471
- Omoniyi, B.B. (2018). An examination of the causes of poverty on economic growth in Nigeria. *Africa's Public Service Delivery and Performance Review*, 6(1), 165-175.
- Omoniyi, B.B. (2016). Impact of poverty on economic growth: A comparative analysis of Nigeria and Ghana. Unpublished PhD thesis. Ado-Ekiti: Department of Agricultural Economics, Ekiti State University.
- Onyeiwu, S. (2021). Nigeria's poverty profile is grim. It's time to move beyond handouts. Available at: <https://globalupfront.com/2021/06/28/nigerias-poverty-profile-is-grim-its-time-to-move-beyond-handouts/> (Accessed: 1 April, 2025).
- Oparinde, L.O., Ogunbusuyi, O., Aturamu, O.A., & Oladipo, C.O. (2018). Food crop farmers' health and poverty status nexus in Ondo state, Nigeria. *Journal of Poverty Investment and Development*, 43, 47–55.
- Oparinde, L.O. (2017). Effect of production and climate-related risks on the output of small-holder cassava and maize farmers in south-western, Nigeria. Unpublished Ph.D. Thesis. Akure: Department of Agricultural and Resource Economics, Federal University of Technology, Akure.
- OPHI. Oxford Poverty and Human Development Initiative (2017). OPHI country briefing 2017: Nigeria. URL: [www.ophi.org.uk/multidimensional-poverty-index/](http://www.ophi.org.uk/multidimensional-poverty-index/)
- Oyekale, T.O., Aboaba, K.O., Adewuyi, S.A., & Dada, D.A. (2019). Multidimensional poverty among rural households in Ogun State, Nigeria. *Journal of Agribusiness and Rural Development*, 4(54), 335–344. <http://dx.doi.org/10.17306/J.JARD.2019.01287>
- Ravallion, M., Shaohua, C., & Prem, S. (2007). New Evidence on the Urbanization of Global Poverty, Policy Research working paper No. 4199 (Washington:world bank); <http://econ.worldbank.org/docsearch>.
- Ruben, R., & Van den Berg, M. (2001). Non-Farm Employment and Poverty Alleviation of Rural Farm Households in Honduras. *World Development*, 29(3), 549-560.
- Tsegaye, M., Lemma, Z., & Belaineh, L. (2014). Analysis of rural poverty and exit time: the case of gozamn district of east gojjam zone, Ethiopia. *Journal of Economics and Sustainable Development*, 5(27), 310-321
- World Bank. (2013). Nigeria: Where has all the growth gone? A poverty update. Report 78908–NGA. Washington, DC: World Bank.
- Yunez-Naude, A., & Taylor, J.E. (2001). The determinants of non-farm activities and incomes of rural households in Mexico with emphasis on education. *World Development*, 29(3), 561-572.
- Yusuf, S.A., Ashagidigbi, W.M., & Bwala, D.P. (2015). Poverty and risk attitude of farmers in North-Central, Nigeria. *Journal of Environmental and Agricultural Sciences*, 3, 1-7