



Poverty Status and Rural Households Income: A Synergic Linkage in Southwest, Nigeria

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Abstract

The study assessed the determinants of rural farming households' poverty status in Nigeria using the six states of Southwest geopolitical zones as a case study. A multi-stage sampling technique was used to select six hundred (600) rural farming households across Ogun, Oyo and Ondo states. A well-structured questionnaire was used to elicit needed information from the respondents. The data were analyzed using descriptive statistics (percentages, frequency and means), FGT poverty dimension and regression analysis. The result revealed that 54.0 percent of the respondents were male with 48.0 percent being married. Furthermore, the poverty line of ₦1245.04 per person per day obtained was a reflection of limited resources among the farming households in the study area. The results tend to suggest problems of food insecurity among poor farming households. The determinants of poverty were age of the household head ($r=-0.247$, $p<0.05$), marital status ($r=0.210$, $p<0.01$) and household size ($r=0.181$, $p<0.01$). The study concluded that age, marital status and household size are the major determinants of poverty in the study area. The study recommended the need to control large households in Nigeria as it leads to an increase in poor welfare by way of the introduction of birth control measures.

Keywords: FGT; Households; Poverty; Rural; Nigeria

Introduction

The empirical evidence on rural poverty is underreported since about 75% of Nigerians reside in rural areas, and depend on agriculture (Omotayo et al., 2022). Poverty is the situation arising from a lack of basic human needs which prevents people from reaching international well-being levels (Omotoso & Omotayo, 2024a). This scenario arises as a result of failure in institutional and market distribution channels which now lead to low life expectancy as a result of diseases, and physical and mental retardation. On the international level, more than a billion people lives less than a dollar/day which made them to be under as extreme poverty threshold. These people were nationalities in developing countries such as South Asia (44%), sub-Saharan Africa (24%) and East Asia (24%), Latin America and the Caribbean (6.5%) (Mutengwa et al., 2023). Poverty is largely a rural phenomenon within these regions with majority of them living on less than a dollar a day (Wassmann et al., 2019)

In Nigeria, rural poverty levels in rural areas are tends to be high (Owuor et al., 2007). Report of National Poverty Survey researched from 2010 to 2018 shows that the areas under urban

regions have a lower poverty level (about 43.9%) compared with rural areas (64.1%) (Omotoso et al., 2022) whereby the average National Poverty Incidence was 60% (NBS, 2016). Globally, research has indicated that the issue of poverty has been adequately tackled with evidence seen in majority of Sub-Saharan countries of Africa still living in extreme poverty (Omotoso & Omotayo, 2024a). In Southwest Nigeria, agriculture is seen as livelihood sustainability of households because about 70% of the populations live in the rural areas depends on it for their livelihood sustainability as also seen in developing countries of the world (Omotoso & Omotayo, 2024a)

Problem statement

Poor people live without fundamental freedoms of action and choice that the better off take for granted (Danso-Abbeam et al., 2018). They often lack adequate food, shelter, education and health. The deprivations that keep them from leading the kind of life that every one values. They also face extreme vulnerability to ill health, economic dislocation, and natural disasters (Omotayo et al., 2021) and they are often exposed to ill treatment by institutions of the state and society and are powerless to influence key decisions affecting their lives.



These are several dimensions of poverty (WHO, 2019)

Poverty is an unacceptable deprivation in well-being (WHO, 2019). It exists when there is lack of the means to satisfy critical needs. Poverty can be regarded as the status, objective or subjective, of an individual or a population. Poverty will have an objective definition once observable and measurable indicators exist that are used to approach the material or other aspects of the lives of individuals (Mwangi et al., 2021). On the other hand, the subjective definition of poverty is when judgment (including value judgment) of individuals is taken into consideration in order to investigate their welfare (Omotoso et al., 2023)

Reducing poverty is an important development policy issue because economic growth is obviously associated with poverty reduction. Nigeria has experienced a high incidence of poverty alleviation (Ofori et al., 2021). The worrisome aspect of this phenomenon is the spatial differences in the incidence of poverty in Nigeria. The World Health Organization (2019) declares that Nigerian poverty level is getting worse by the day and more than four in ten Nigerians live in conditions of extreme poverty of less than \$320 per capita per month, which could hardly provide for a quarter of the nutritional requirements of healthy living. The report ranked Nigeria 146 out of a total of 174 countries in its Human Development Index (HDI), which measures achievement in terms of life expectancy, education and real income per capita. Poverty has been identified as a rural phenomenon and its interventions will be effective only if the correct poverty causing factors are identified

In recent years, because of the large prevalence of poverty, reducing it has been of great concern to many developing countries for the past few decades (Omotoso et al., 2022). This situation has created the quest for poverty reduction strategies which have been at the center stage of development programmes and policies. The progress towards the global target of halving, between 1990 and 2015, the proportion of people living in extreme poverty, has been very slow (Danso-Abbeam et al., 2018). The main problem lies in the fact that despite the high poverty rates in Nigeria little is documented on policy related determinants of rural poverty among farmers especially arable crop farming households, making it very

difficult to effectively set and implement sustainable antipoverty programmes. Hence, the objective of this study is to determine the synergic linkage in poverty status among rural farming households in Nigeria.

Methodology

Study area

The study was carried out in selected States (Ogun, Oyo and Ekiti) of Southwestern Nigeria. Southwestern Nigeria comprises six states which are Lagos, Ogun, Oyo, Osun, Ondo and Ekiti. The Southwest lies between latitude 5°N and 9°N of the equator and longitudes 2.50 and 6°N east of the Greenwich Meridian. 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. The vegetation pattern of the states is of rainforest in the south and guinea savannah in the north. Figure 1.1 shows the position of the study area in the map of Nigeria.

Sampling Techniques and Data Analysis

Multistage sampling procedure was used to select 600 rural farming households across the selected states (Oyo, Ekiti and Ogun) in Nigeria because they are primarily known for their subsistence farming. First stage involved the selection of two (2) Zones from each states making 6 zones. Second stage involved random selection of two (2) blocks from each of the six (6) ADP zones respectively making 12 blocks. Stage three involved random selection of four (4) cells from each of the 12 blocks making 48 cells. While the last stage involved random selection of thirteen (13) rural households from each of the 48 cells making six hundred (600) rural farming households. Primary data were collected using structured interview guide.

Analytical Method

Descriptive statistical tools such as tables, means and percentages were used to analyse the poverty line. However, the analysis used household expenditure as a proxy for income, as income was very difficult to obtain.

$$Z = 2/3 Y^* \dots\dots\dots 1$$

Where,

Z = Poverty line measured in Naira. This was defined as the minimum level of consumption required and individuals or households falling below the threshold were considered poor. This



was used to establish the poor and non-poor farming households.

Y^* = Mean of per capita household expenditure, measured in Naira and derived as the average of per capita household expenditure

Tobit regression model was used to analyzed the synergy linkage between household poverty and income from livelihood activities

Result and Discussion

Table 1: Socioeconomic distribution of the respondents

Variables	FREQUENCY	PERCENT
GENDER		
Male	324	54.0
Female	276	46.0
AGE (years)		
Less than 35	192	52.0
36 - 46	318	53.0
47 - 57	78	13.0
Above 57	12	2.0
MARITAL STATUS		
Single	60	10.0
Divorced	72	12.0
Married	288	48.0
Widowed	126	21.0
Seperated	54	9.0
EDUCATION		
Non formal	288	48.0
Primary	114	19.0
Secondary	144	24.0
Tertiary	54	9.0
FARM SIZE (Hectares)		
Less than 5	264	44.0
5-10	300	50.0
11-15	18	3.0
Above 15	18	3.0
PRIMARY OCCUPATION		
Farming	390	65.0
Artisian	102	17.0
Trading	72	12.0
Civil servant	36	6.0
Income (₦)		
(<)10000	270	45.0
10,001 – 20,000	66	11.0
20,001 – 30,000	120	20.0
30,001 – 40,000	64	14.0
Above 40,000	60	10.0
Total	600	100.0

Estimated Poverty Line

The poverty lines were estimated based on per day expenditure among farming households in the study area. Results showed that the mean annual household food expenditure on food among the farming households was estimated as ₦11,226.11 while the poverty line was estimated as ₦1245.04 per person per day. This implies that any farming household living below ₦1245.04 on person per day was categorized as poor household. This implies that farming households in the study area could not meet the daily needs of the entire farming household. Considering the mean household size of 6

Socio-economic characteristics of the respondents

Table 1 shows the socioeconomic characteristics of the respondents in the study area. The results of the descriptive statistics revealed hat 54% were male while 46% were female. Thus, this implies that male dominate farming activities in the study area. The table also shows that 48% of the respondents were married with 27% having no formal education. About 44% of the respondents have less than 5 acres of farm size with 65% choosing farming as their major occupation.

persons per household, this was lower than the international poverty threshold of \$1.25 per person per day for people living in sub-Saharan Africa and Asian countries (Mutengwa et al., 2023; Omotoso & Omotayo, 2024b). This result tends to suggest problems of food insecurity among farming households. In other words, this amount may not be able to meet the minimum daily calorie in-take of 2250 Kcal required per person per day.

Estimated Determinants of Poverty

Table 2 showed the determinant of poverty among the respondents' household in the study



area. It revealed age, marital status and household size are statistically significant at 5%, 1% and 1% respectively to their poverty level. This lends credence to some author's finding such as (Danso-Abbeam et al., 2018; Shen et al., 2021) that as the age of the household head increases, poverty level decreases. Education also enhances the ability to derive, decode and evaluate useful information as well as improves the quality of labour (Mutengwa et al., 2023).

Table 2: Determinant of poverty among rural household in the study area

Variable	Coefficient	T	Sig
Constant	0.325	0.94	0.346
Gender	0.155	1.575	0.119
Age	0.247	2.036**	0.045
Marital status	0.210	2.804***	0.092
Household size	0.181	2.915***	0.073
Farm size	0.041	0.412	0.681
Education	-0.190	-1.589	0.115
Income from Primary Occupation	0.119	0.993	0.323

Note. *, ** and *** denote significant at 10%, 5% and 1% respectively

Conclusion

The poverty line of ₦1245.04 obtained was a reflection of limited resources among the farming households in the study area. The results tend to suggest problems of food insecurity among poor farming households. If farming households are to improve on food security, then there is the need to provide them with adequate compensation scheme. This can be done through provision of credit facilities. This will encourage them to produce more irrespective of the cost of production and increase in income. Finally, the determinants of poverty among farming households were age, marital status and household size. The result of the determinants of poverty serves as criteria for policy interventions.

Recommendation

Therefore, the rural farming households need to be targeted with periodic training on improved agricultural production technologies such would enhance increase in farming and related products especially for the less educated ones. There is need for regular sensitization and increased mobilisation of the rural farmers to form farmers' cooperative group especially for those who do not belong to any group because of it immense benefits. Agricultural Development Programmes (ADPs) should be supported financially for intensive

participation of rural farmers in agricultural technologies training to improve on their welfare status. New technologies can be accepted through persuasion. One way to achieve that could be through well organized workshops. There is also need to control large households in Nigeria as it leads to increase in poor welfare by way of introduction of birth control measures. This action had been successfully used in some countries especially China to reduce large households with some attracting incentives. Hence, birth control programmes could ensure that farming households have manageable family sizes so as enhance their welfare

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