

## **EMPIRICAL ANALYSIS OF POVERTY STATUS AMONG RURAL FARMING HOUSEHOLD IN KWARA STATE, NIGERIA.**

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### **ABSTRACT**

*The study examined the empirical analysis of poverty status among rural household in Kwara state. Data were obtained from primary source using a set of structured questionnaire. A multistage sampling technique was used to randomly select 120 respondents for the study. Data were analyzed using descriptive statistics, Foster – Greer Thorbecke (FGT) and logistic regression model. Results showed that poverty incidence (Po), poverty depth (P1) and Poverty severity (P2) were 77.1, 16.1 and 5.9 percent respectively, indicating that an average farming household needed about 16.1 percent of the poverty line to get out of poverty. The logit regression model results indicated that per capita income, household size, age, educational level, farming experience and access to remittance were the major determinants of poverty in the study area. Government and development agencies should empower the rural people through creation of more jobs in the rural area to reduce the rate of poverty incidence and households should engage in other activities which can help increase income and improve their standard of living.*

**Keywords:** Farming household, Kwara State, poverty, FGT, income, education

### **INTRODUCTION**

Poverty is a worldwide phenomenon which poses a threat to the continued existence of humanities. It is a common syndrome that permeates all regions, beliefs, ethnicity, colours space e.t.c. Poverty is a multifaceted occurrence in nature which is mostly viewed in the context of physical, economic, social, and psychological dimensions (Narayan and Chambers, 2000). The magnitude of its occurrence has informed the decision by the United Nations to declare year 1996 as the “International Year for the Eradication of Poverty” and October 17 of every year slated as the “International Day for the Eradication of Poverty” worldwide. Similarly, from the decade 1997– 2006 has been recognised by the United Nations Decade of Eradication of Poverty (Usman, 2001). Poverty is now acknowledged as one of the pivotal goals of international development agency whereby for instance Poverty reduction is recognized is ranked as one of the topmost goals of Sustainable Development Goals (SDGs) signed by 189 countries in 2015.

Most previous analysis follows the conventional view of poverty as insufficiency in securing basic goods and services (Ravallion, 2007). Others view poverty, in part, from the dimension of human capital development, functional education, healthy living, life expectancy, child mortality rate, good housing, environmental sanitation, portable and safe water supply and adequate nutrition (Englana and Bamidele, 1997).

By and large, the poor have been described as those who cannot satisfy their basic needs of food and nutrition, housing, and shelter, they are also unable to meet social and economic obligations, unemployed and are underprivileged to have access to basic facilities and human well-being also unable to attain minimum standard of living (Aigbokhan, 2002)

Reducing poverty in developing economies is a major challenge faced by the development stakeholders today (UNDP, 2007). Although poverty is a global issue, the case of the phenomenon is peculiar that Nigeria has been tagged as one of the countries that is worst hit by poverty across all dimensions. In fact, it is one of the poorest among the poor countries of the world (UNDP, 2007). The situation is alarming as more than 43% (about 67 million) of the population live below the poverty line (World Bank, 2013). The scourge of poverty is a threat to the Nigerian population as its incidence is on the increase with biting effects more on the rural dwellers where the bulk of the population lives. As stated by NPC (2006), Nigeria is predominantly rural with 63.8% of the population living in the rural areas. In the mid-90s for example, more than 69% of the rural population were regarded as poor against 31 percent in urban areas. The share of the rural areas in the population of the poor also rose marginally from 66% to 68.9% between 1992 and 1996, signifying that more than 48 million poor Nigerians are living in the rural areas. (Anyanwu and Awoseyila 1999).

Again, poverty has become a cankerworm that has eaten deeply into the fabric flesh of the people in developing countries; changing their norms; deteriorating their value and impairing their mentality toward development. Poverty can be chronic or transitory depending on how long poverty is experienced by an individual or a community. Poverty can also be view as absolute or relative term. Most of the people are exposed to absolute poverty in a situation whereby they lack access to resources needed to obtain the minimum life necessities required to maintain physical efficiency).

Poverty has the consequences of breeding social disillusion with respect to what the societal objectives are and members' responsibilities towards attainment of these objectives. It is a common trend in our society that the majorities of populace spend more than 90% of their disposable income on consumption with little or nothing for saving. The low saving will lead to reduced productivity as there is little or none to plough back into

the economy which would lead to impeded slow growth rate. All these culminate into vicious cycle of poverty among the populace.

Food and Agriculture Organization, FAO (2012) reported that nearly 870 million people in the world were suffering from chronic undernourishment between the year 2010 and 2012 where majority of them are from developing countries. These world statistics of food hunger and undernourishment is alarming, the eradication of such hunger remains the major global challenge facing both developed and especially the developing countries (FAO, 2012). The major threat facing the world today is that how to feed the ever-increasing population of over 7 billion people subject to climate change, urbanisation, technological progress, food trends, wealth sharing, conflicts, peace, and state of natural resource constraints etc. (FAO, 2012). Nigeria has the highest economic growth rates in Africa, averaging 7.4 percent over the last decade (a developing economy with plenty of natural and human resources), yet it retains a high level of poverty with about 54 percent living below \$2USD daily (World Bank, 2013).

Poverty in Nigeria remains significant despite high economic growth, and it is considered one of the symptoms or manifestation of underdevelopment. Poverty entails lack or inadequate income and denial to the necessities such as education, health services, clean water, and sanitation (World Bank, 2007) which are essential for human survival and dignity. It was estimated that rural poverty accounts for nearly 63 percent of poverty worldwide, reaching between 65 and 90 percent in some countries in sub – Saharan Africa (Khan and Anyanwu 2005). This means that the affected group would not be able to participate effectively in national development. Poverty in this sense would result in a vicious cycle reproducing itself in perpetuity.

### **Objectives of the study**

The main objective of this study is to ascertain the determinants of poverty among rural farming households in Kwara State, Nigeria

The specific objectives are to:

- describe the socio-economic and demographic characteristics of the households,
- profile the poverty status among the rural household,
- examine the determinants of poverty among the household.

## METHODOLOGY

This study was carried out in Kwara State, Nigeria. The state is in the north central zone of the country. It lies between latitudes 7°45'N and 9°30'N and longitudes 2°30'E and 6°35'E. With a population of about 2.37 million (NPC, 2006), the state is made up of four zones – A, B, C and D, with sixteen Local Government Areas (LGAs). The people of the state comprise the Yoruba, Fulani, Nupe and Baruba. Agriculture is the mainstay of the people of the state with over 80 per cent of the population living in rural areas [National Bureau of Statistics (NBS), 2005. Data Collection and Sampling Procedure Primary data were used for this study. This involves multistage sampling technique. The first stage is the purposeful selection of one zone out of the four ADPs zones in the state. The second stage involves selection of two local government areas which include Ilorin south and more local government areas. The third stage involves systematic selection of Five villages from each of the two local government areas and the last stage is the random selection of 12 households from each of the selected villages. These rural farming were selected from the list of households who were into smallholder farming production. The data used for the study was obtained with the use of structured questionnaire coupled with interview schedule.

### Analytical Techniques

Descriptive statistics which included percentages, tables, means, and mode were used to socio-economic characteristics. The poverty status of the households was analysed using the Foster, Greer and Thorbecke (FGT). The formula is given as follows:

$$P\alpha = 1/n \sum_{i=1}^q (y - z/z)$$

Where  $P\alpha$  = Foster Greer and Thorbecke index ( $0 \leq P\alpha \leq 1$ ),  $\alpha$  = the degree of concern for the depth of poverty (value of 0, 1 and 2) .

- i.  $P_0 = (1/n)q = q/n$  When  $\alpha = 0$ , it measures poverty incidence or headcount, that is, the proportion of the population that is poor or those that fall below the poverty line.
- ii.  $P_1 = 1/n \sum (z-y)/z$  when  $\alpha = 1$ , it measures the depth of poverty or poverty gap, that is, the proportion of the poverty line that an individual below the poverty line requires to attain the poverty line.
- iii.  $P_2 = 1/n \sum (z-y)^2 / z$  When  $\alpha = 2$ , it measures the severity of poverty; that is how severe poverty. n is the sample population.

q is the number of the poor in the sampled population, and z is the poverty line given as 2/3 or 1/3 of the estimated mean per capita household expenditure. For this study, the widely used 2 USD (₦720) per day which is equivalent to \$365 per annum (₦262,800) was used as the poverty line.

The logit regression was used to examine the major determinants of level of poverty among the household (Gujarati and Porter 2009). The logistic is expressed as:

$$Z_i = B_0 + B_1X_1 + B_2X_2 + \dots + B_nX_n + e_i$$

Z<sub>i</sub> = the binary poverty status. It takes the value of 1 if households is poor, 0 if otherwise,

B<sub>0</sub> = Constant

i = 1..... 100, X = independent variables; n = number of independent variables 1-8; e = error term

The hypothesized independent variables used are:

X<sub>1</sub> = Per capita income of the household ( N ), X<sub>2</sub> = Household size (adult equivalent), X<sub>3</sub> = Age of the household head (years) ,X<sub>4</sub> = Gender of the household head ( 1 if male, 0 if otherwise), X<sub>5</sub> = Farm size(ha), X<sub>6</sub> = Educational status of household head (years) X<sub>7</sub> =Marital Status X<sub>8</sub> = Access to remittance (D=1 if household has access to remittance, 0 if otherwise) (X<sub>9</sub>)=Farming experience (Years).

## **RESULTS AND DISCUSSION**

### **Socioeconomic Characteristics of Farming Households**

The socioeconomic characteristics of the respondents are presented in Table 1. Table 1 presents the demographic characteristics of the respondents. The table reveals there are about 102% male headed households while there are 18% female headed household in the study area. This is not unconnected to the fact that man assumes the responsibility to head the household especially in the rural area thus providing more than two thirds of the workforce in agriculture.

From Table 1, majority of household head (48.33%) fell within 46 and 55years, this made up the bulk of the practicing farmers in the study area. This was quite understandable given the fact that most of the farming household within this age bracket are still actively involved in farming activities as they are likely to be rightful owners of farmland.

Table 1 also showed that 53.33% of the respondents had no formal education, 35.85% had only primary education while 8.3% had secondary education only and 3.3% of the respondents had tertiary education. This indicates that the level of educational attainment by the household head was low, and this could negatively affect their level of awareness of new agricultural practices and modern technologies that could take them off from poverty.

It was found that majority of farm household heads (86.6%) were married. This implies that most of the respondents were matured and able to take care of their households. The

benefits derivable from group action suggest that when man and woman work together, they stand a better chance of success than when each works as an individual.

**Table 1: Socioeconomic Characteristics of the Respondents**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
Household Head (Sex)		
Male	102	85
Female	18	15
Household Head (Age)		
15-25	9	7.5
26-35	15	12.5
36-45	12	10
46-55	58	48.33
Above 56	26	21.66
Household Head Education		
No formal education	36	53.33
Primary education	32	35.85
Secondary education	22	8.33
Tertiary education	31	3.3
Household size		
1-4	9	7.5
4-7	34	28.33
8-10	60	50
11-14	10	8.33
Above 15	7	5.83
Marital status		
Single	6	5
Married	104	86.6
Divorce	4	4.4
Widow	6	5

Source: Field Survey, 2020

### **Household Expenditure Profile**

The distribution of respondents according to household expenditure profile is presented in Table 2.

**Table 2: Household expenditure profile**

Household expenditure item	Household expenditure(₦)/day	Total expenditure/ month
Food	350.00	10,500
Housing	50.00	1500
Health	80.00	2,400
Education	120.00	3,600
Transport	100.00	3,000
Total	700	21,000

Source: Field Survey, December 2022

The main household expenditure is on food, transport, health, and education. Expenditure on food constitute about 50% of total expenditure per month. The food items vary from garri, rice, yam beans, palm oil to vegetables and fruits. On the average, a rural farming household spend about ₦10,500 per month on food items. This implies that the household spend more on necessities of food than any other household expenditure. On the average the total household expenditure per day is on partly ₦700 which is below the standard USD 2 per day Thus, there is every tendency of household being poor because they could not spend up to poverty line.

### **Poverty Status of Households**

The poverty status of rural farming households in the study area is presented in Table 3.

**Table 3: Poverty status analysis of rural farming households**

Income sources	Poverty incidence (P <sub>0</sub> )	Poverty depth (P <sub>1</sub> )	Poverty severity (P <sub>2</sub> )
Farming as primary occupation	0.771	0.161	0.059
Core Poor (77%)			
Moderately poor (16%)			
Non –poor (6%)			
Farming as secondary occupation	0.650	0.281	0.07
Core Poor (65%)			
Moderately poor (28%)			
Non –poor (7%)			

Source: Field Survey December, 2022

The FGT poverty index was used to measure the level of poverty among the respondents in the study area. Poverty incidence ( $P_0$ ), Poverty depth ( $P_1$ ) and Poverty severity ( $P_2$ ) were the poverty parameters estimated. The poverty incidence ( $P_0$ ) among the farming household was 0.771 implying that about 77.1 percent of the household were poor based on the set poverty line, while the poverty depth ( $P_1$ ) among the household was 0.161, indicating that an average farming household would need to spend about 16.1 percent of the poverty line (365 USD) to get out of poverty. Poverty severity ( $P_2$ ) among the respondents was 0.06, showing that the poverty severity among the rural farming household was about 6 percent it could be deduced that poverty existed among the household. From the results, household that has farming as secondary occupation, poverty incidence  $P_0$  was 0.650 which means about 65 percent of the household were poor, while the poverty depth ( $P_1$ ) among the household was 0.281, indicating that an average farming household would need to spend about 28.1 percent to get out of poverty line. The study thus showed that about 65 per cent of the respondents consumed less than 2USD per day, that is, they were below the poverty line. Therefore, they were considered being poor.

### Determinants of Poverty among Farming Households

Estimates of the logit regression on the determinants of poverty among farming households is presented in Table 4.

Table 4: Estimates of the logit regression analysis

Independent variables	Coefficients	Standard error	Parameter std. error
Per capita income ( $X_1$ )	0.766	2.498	-4.059
Household size( $X_2$ )	-1.8016	0.9951	1.8104
Age ( $X_3$ )	-5.7363	2.526	-2.229
Gender ( $X_4$ )	0.2788	0.5796	0.481
Farm Size ( $X_5$ )	0.034	1.98	-0.241
Educational level ( $X_6$ )	4.7756	2.2740	2.1001
Marital status( $X_7$ )	-0.342	2.632	-1.082
Access to remittance ( $X_8$ )	2.6354	5.5324	0.2956
Farming experience ( $X_9$ )	2.9428	1.0778	0.8747

Source: Field Survey December, 2020



From the regression table, the result showed that per capita income, household size, age, educational level, farming experience and access to remittance were the major determinants of poverty in the study area. The coefficients of household size and age of respondents were negative but statistically significant in influencing poverty in the area. This implies that increase in the value of any of these variables will increase the probability of being poor. As the household head is getting older, the likelihood of being poor is increasing. This corroborated the findings of Igbalajobi *et al.* (2013) who reported that as a person gets older, he declines in strength and productivity thereby increases his chances of being poor. Increase in household size will also increase the chance of being poor and the probable reason might be the over dependency on household head for basic needs. On the other hand, income, education level, farming experience and access to remittance were positive and significantly affect the level of poverty in the study area. An increase in the value of any of these variables increases the likelihood of not being poor. For instance, higher farm income will increase the marginal propensity of the household to spend above the poverty line. Increase in access to remittance will stabilise household incomes during the lean period of farming. This is line with Nicholas *et al.* (2000) which states that, remittances as a source of income growth is a potential means of poverty reduction. Moreover, increase in educational level might likely increase the chance of not being poor. Education has described as an agent of adopting innovative technologies that could better production and thereby maximise output.

## **CONCLUSION AND RECOMMENDATIONS**

The results of the findings revealed high incidence of poverty among the rural farming households. From the findings of the study, it could be concluded that per capita income, households' size, age, education, access to remittance and farming experience were factors that determined the level of poverty in the study area. There should be creation of more jobs in the rural area. This would reduce the rate of poverty incidence among these groups of people. Also, household heads should try and control the household's size. This could be with modern family planning techniques. Apart from farming, households should engage in other activities which can help increase income and improve their standard of living. Therefore, diversifying to these activities could assist in the achievement of the goal of poverty reduction in the economy.

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