

Analysis of Poverty Status among Small Holder Arable Farm Households in South Western Nigeria

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Abstract

The study analysed the poverty status among small holder arable farm household in southwestern Nigeria. Specifically, the study described the socio economic characteristics of the respondents and identified the poverty status of the respondents. A well-structured questionnaire was used to elicit information from 120 selected farm household heads through a multi-stage sampling procedure. The data were analyzed with the use of descriptive statistics and Foster-Greer-Thorbecke (FGT) indices. The results revealed that a fair number of the farmers were already old. The distribution showed that a small proportion of the farmers were female. About 65% of them had a fairly large household size of more than five people which signify advantage in terms of household labour. About 78.67% were married, 27.5% had no formal education while none of the attended a tertiary institution. The poverty incidence, depth and severity were 0.62, 0.13 and 0.06 respectively. The result is indicative of the failure of government at all levels to decisively root out poverty from the country.

1.0 Introduction

For quite some decades ago, the menace of poverty has been a great challenge among many developing countries such as Nigeria. If poverty will be eradicated or alleviated, in any of these nations the agricultural sector must be the first point of call. This is because a big chunk of the teeming population of developing countries is skewed towards the agricultural sector. According to (National Bureau of Statistics, 2019) Agriculture is the main stay of sub-Saharan African countries where it accounts for 25-40% of total GDP and there has been a steady small increase in its contribution to national economy. This is for no other reason but due to the impoverishment of the players in the sector. For instance, Nigeria contributed 21.66% in the first quarter of 2018 and 21.91% in the first quarter of 2019 of the GDP. Also it grew just by 2.46% in the first quarter of 2018 and 3.17% in the first quarter of 2019. The agricultural sector in Nigeria has suffered a gross neglect and hence its potential to lift majority of peasants out of poverty has almost been completely amputated. Although successive governments do come on board every dispensation to lunch programmes aimed at reducing poverty and all the programs were primarily targeted towards the agricultural sector. For instance in 1972, the National Accelerated Food Production Programme and the Nigerian Agricultural and Co-operative Bank was launched. This gave way to Operation Feed the Nation in 1976 to teach the rural farmers how to use modern farming tools. After this was the Green Revolution Programme by another government in 1979 and it was aimed at reducing food importation and increase local food production. In 1986, the Directorate of Food, Roads and Rural Infrastructure (DFRRI) succeeded the green revolution .1993 was the era of Family Support and the Family Economic Advancement Programmes .In 2001 National Poverty Eradication Programme (NAPEP) to replace the previously failed Poverty Alleviation Program was propelled. The present administration has been vigorously pursuing the Agricultural Transformation Agenda (ATA), and heritage from the immediate past government, aimed at permanently banning importation

of all food items. This is believed will have a reminiscent upward review of the material wellbeing of peasants in the agricultural sector.

Each of these mechanisms deployed towards poverty alleviation has always ground to a halt for one reason or the other. Evidences from the living standard of those bearing the brunt abound that such programs have not been able to deliver their mandates. A mere observation of the lifestyle and set up of many community dwellers both in the rural and peri-urban and urban areas is a testimony that all poverty alleviation programmes in Nigeria are just at the margins. Statistical evidence showed that the rate of poverty in Nigeria has persistently been on the increase. For instance, According to the official figures published by the National Bureau of Statistics (NBS), the incidence of poverty in Nigeria between 1980 and 2010 rose from 27.2 percent to 69.0 percent. Recently, NBS (2019), reported that 40 percent of people in Nigeria lived below its poverty line of 137,430 naira (\$381.75) a year and this represents 82.9 million people. The World Bank (2018), revealed that almost half of the Nigerian population is living below the international poverty line of (\$2 per day) while unemployment peaked at 23.1%.

Poverty level is however; higher in the rural areas when compared to the urban areas and most of the rural dwellers are small scale farmers that depend on agriculture for food and income. (Oluwatusin et al 2019, Ajiboye et al 2020). There is no gain saying that the Nigerian poverty livelihood Nexus needs urgent attention. Poverty is multidimensional in nature and scope and it is directly associated with a household income, asset holding, and other economic activities that mutually generate a livelihood strategy and outcomes [Thorbecke 2007]. Poverty can be described as the level of deprivation which includes inadequacies in basic human needs, therefore preventing people from achieving internationally acceptable levels of well-being (Sengul and Tuncer, 2005). Poverty is characterized by disease, low life expectancy, physical and mental retardation. Globally, about 1.2 billion people are in extreme poverty, not living up to a Dollar in a day (IFAD, 2001).

Although the issue of poverty is geographically pervasive and historically obstinate across the globe, yet it is more pronounced and worthy of dynamic debate in low-income countries like Nigeria. Hence, scholarly research about poverty will be unrestricted until the monster is completely faced out from the prospect of humanity. Several researchers have written so much about the subject of poverty Bigsten and Shimeles (2003), Aigbokahn (2008) Swanepoel(2005), Aguiyadi and ,Oke (2019), Omoregbee *et al.*, (2013), Adepoju (2012), just to mention a few .This study therefore contributes to the torrents of literature on poverty but with particular reference to smallholder arable farmers and their rural household families in southwestern Nigeria. We attempt to answer some questions pertaining to the socioeconomic status of the farmers and the incidence, depth and severity of their poverty using the common FGT approach. The rest of the paper is organized as follows: section two talks about the material and method, section three discusses the results while the fourth section concludes the paper.

2.0 Material and methods

Sampling technique and data analysis

A multi-stage sampling procedure was used to select the respondents for this study. The first stage involved random selection of Oyo and Ekiti States from the six States in southwestern Nigeria. The second stage was the selection of two Local Government Areas (LGAs) from each state. This followed by a random selection of three communities from each of the selected LGAs. At the last stage, random selection of ten respondents from the selected communities

was carried out. Thus, a total of 120 respondents were used for the study. A well-structured questionnaire and interview schedule were used to elicit information from the respondents. The Information includes the socio-economic and enterprise characteristics of the household heads. The data collected were analyzed with the use of descriptive statistics and Foster-Greer-Thorbecke (FGT) poverty indices.

Model specification

Foster, Greer and Thorbecke (FGT) poverty measures:

The Foster, Greer and Thorbecke FGT (1984) poverty measures were used to examine the poverty profile of small-holder arable farmers based on their income class. (FGT) poverty decomposition model was used to estimate the poverty incidence, depth and severity .These are respectively represented by P_0 , P_1 and P_2 . The three measures are based on a single formula but each index puts a different weight on the degree to which a household or individuals fall below the poverty line. The FGT poverty index is given by:

$$P_{\alpha i} = \sum_{\alpha=0}^n n_i (1 - y_i / z) \frac{\alpha}{N} \dots\dots\dots 1$$

Where $\alpha=0,1,2$

When $\alpha=0$, it signifies the incidence of poverty or head count and the equation becomes

$$P_{\alpha 0} = \sum_{\alpha=0} n_i \frac{(1 - \frac{y_i}{z})}{N} \alpha \dots\dots\dots 2$$

When $\alpha=1$ it conveys the information that there is uniform concern for poverty depth or gap i.e poverty depth or gap and the equation becomes

$$P_{\alpha 1} = \sum_{\alpha=1} n_i (1 - y_i / z) \frac{\alpha}{N} \dots\dots\dots 3$$

Equation 2 and 3 which are poverty incidence or head count and poverty depth or gap represent the income ratio, which measure the proportionate distance of mean income of the poor below the poverty line.

Finally, when $\alpha=2$, it implies that a distinction is made between the poor and the poorest of the poor. This gives a measure of poverty severity. The equation becomes

$$P_{\alpha 2} = \sum_{\alpha=2} n_i (1 - y_i / z) \frac{\alpha}{N} \dots\dots\dots 4$$

Where

P_{α} =weighted poverty index for the ith group

N_i =total number of the household in the group

Y_i per capita income of the household in the sub-group

Z_i =poverty line for the sub-group

$\alpha = 0$ is the incidence of poverty (head count index) and is used to the per capita income of the poor

$\alpha = 1$ is the poverty depth/gap which is defined as the difference between the poverty line and the mean expenditure of the poor

$\alpha = 2$ indicates poverty severity

Q =number of poor households

The contribution of each sub-group to the whole poverty in Ekiti and Ondo States was determined using

$$C_i = P_{\alpha i} N_i (P_{\alpha} N)^{-1}$$

Where C_i =Contribution of the ith group

P_{ai} = the weighted index of the i th group

N_i = total no of households in poverty

Poverty line was also constructed to classify the household into poor and non-poor. Monthly income was used as the proxy for standard of living. In order to calculate per capita household monthly expenditure, total monthly income was divided by total household size, while the mean per capital household monthly income was calculated by dividing total per capita household monthly income by total household size

3.0 Results

Table1

Variables	Frequency	Percentage
Sex		
Male	33	27.50
female	87	72.50
Age (years)		
Less than 30	03	2.50
31-40	20	16.70
41-50	27	22.50
51-60	23	19.10
Above 60	09	7.50
Marital Status		
Single	29	24.20
Married	91	75.80
Household size		
1-5	42	35.00
Above 5	78	65.00
Education		
No formal education	33	27.50
Adult education	19	15.80
Primary education	29	29.20
Secondary education	39	39.50
Farming Experience (years)		
Below 10	07	5.80
11-20	27	22.50
21-30	28	23.30
Above 30	58	48.30
Income from farm (N)		
Below 10000	51	42.50
100,001-200000	59	49.20
200,001-300000	10	8.30
Nil	70	58.20
10,000-100,000	46	38.2
100,001-200,000	01	0.8
Above 200,000	03	2.5

The table shows the distribution of the socioeconomic characteristics of the farmers. As displayed in the table, the sex distribution showed that a small proportion of the farmers were

female. This amount to 27.5% of the respondent while the rest are male farmers. The age distribution shows that 2.5% of the farmers were less than 30 years of age. While those about 50 years accounted for about 20% of the respondent. This showed that youth were not adequately represented in arable farming in the area thoughts most are still within the productive years of less than 50. And most of them will not embrace farming especially in the rural areas where most of their youths migrate to the urban center to eke out livelihood. Those they were between 31 and 40 years make up 17% of the total sample. Likewise those that were between 41 and 50 are 22.5% these two age groups are the dominant group, having a percentage of about 41% all together. This reflects the fact that productivity and physical strength are complement. The distribution shows that a fair numbers of the farmers were already old. The distribution according to the marital status, 75.80 were married while the rest were single. The result revealed that about 65% of them had a fairly large household size of more than five people which signify advantage in terms of household labour. Quite a substantial number of them had no formal education at all while about 16% had adult education. More than 50% of them had primary and secondary education. None of them had a tertiary education. This shows that highly educated people had other engagements than small scale arable farmers. Distribution according to year of experience shows that many of them are very old time farmers having more than three decades of farming experience. It is very disheartening that despite these years of hard work as peasants they have not expanded their frontiers in order to navigate to large scale farming and hence out of a life of poverty.

Distribution according to annual income showed that the farmers were not making a good deal of money from the sales of their farm produce. The highest annual income was 300000 which amounted to 25000 monthly. This is one of the reasons why it is pretty difficult for them to break through the hurdles of poverty. The result was deplorable when the income was analyzed on household per capita basis. It is evident that these are the people who are living from hand to mouth and consumed more of their farm produces themselves, rather being a profit-making agripreneurs. They need a third party intervention to be able to break loose from the rife of poverty. Distribution according to income from other occupation showed that 58% of them did not have any secondary means of livelihood. Diversification of enterprise is not only possible through administrative acumen but also through the cash endowment of the entrepreneur. This will open up other streams of income and hence limit the widespread of poverty. These folks, however, continued to revolve round this vicious cycle of poverty by not engaging in other nonfarm activities there by availing themselves of the opportunities to have a meaningful succor in periods of crop failure and income shocks. The PCE was achieved by dividing the total expenditure of a household with the household size. Distribution according to PCE showed that 62% of them fell below N62 naira a day, which is very ridiculous in respect of the economic situation of the country. Unfortunately N62 is the poverty line. The remaining 38% of them was above the poverty line of N62.

Poverty status and Foster-Greer-Thorbecke (FGT) poverty indices of the respondents

Table 3 shows the extent of poverty among the households. The result indicates that the majority, 62% of the households were poor, while 38% were non poor. This implies that most of the small scale farmers in the study area are poor; Table 4 displayed the Foster-Greer-Thorbecke (FGT) indices. The result reveals that the poverty incidence (Po) was 0.62 implying that in the study area, 62% were poor among the small scale farming households. The poverty depth P₁, of 0.13 indicated that the average income of the poor in the state was 13% less than the poverty line while the severity of the poverty (P₂) of 0.06 showed that the incomes of the poor were very close to the poverty line. Hence, little effort is needed to move them to the poverty line.

Poverty status	frequency	Percentage
Poor	74	61.66
Non-poor	46	38.34

dgdg

Poverty status	P ₀	P ₁	P ₂
	0.62	0.13	0.06

P₀: Poverty incidence; P₁: Poverty depth; P₂: Poverty severity

4.0 Conclusion:

The study analyzed the poverty status among small holder arable farm household in southwestern Nigeria. A well-structured questionnaire was used to elicit information from 120 selected farm household heads through a multi-stage sampling procedure. The data were analyzed with the use of descriptive statistics and Foster-Greer-Thorbecke (FGT) indices. The results revealed that a fair number of the farmers were already old. The distribution showed that a small proportion of the farmers were female. About 65% of them had a fairly large household size of more than five people which signify advantage in terms of household labour. About 78.67% were married and 27.5% had no formal education while none of the attended a tertiary institution. The poverty incidence, depth and severity were 0.62, 0.13 and 0.06 respectively. The result is indicative of the failure of government at all levels to decisively root out poverty from the country. Since many of the peasants did not engage in a secondary occupation, they have deliberately availed themselves of the financial cushioning they could receive due to failures from their primary income source. We propose that these peasants should be proactive in terms of enterprise diversification in order to heighten their livelihoods. They should handle farm work as real business and no longer just a tradition of merely achieving food security goal while the market gains are secondary. This could be tasking, though, in terms of expanding their frontiers beyond small scale, switching to permanent cropping and other types of agribusiness such as fishery and poultry and value addition. Though it may be too late for many of them to seek for formal education, but we encourage them to limit the chances of their offspring in inheriting their poverty by enrolling them in schools. Government, who is the major creator of safety nets should act with deep compassion and lift many of these folks out of penury through several of their poverty alleviation programmes that have proved worthless over the decades.

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