

ASSESSMENT OF POVERTY DYNAMICS AMONG FARMING HOUSEHOLDS DURING POST-PLANTING AND POST-HARVEST PERIODS IN NIGERIA

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ABSTRACT

The study on poverty status and its dynamics among farming households during post-planting and post-harvest periods in Nigeria was carried out to assess intra- and inter-changes in households' welfare status for the periods under consideration. Cross-sectional data of 4979 households was analyzed using descriptive, Foster-Greer-Thorbecke (FGT) index and multinomial probabilistic regression model. Households' poverty indices for post-planting and postharvest periods indicate that 3149 (63%) households were poor during the post-planting period and 2899 (58%) households estimated were poor during the post-harvest, this implies that about 250 households were able to escape the threshold of poverty to non-poor during the post-harvest period. Poverty status estimation using the FGT model had average weekly food expenditure threshold of ₦4, 567.27, revealed that households consume average food value of ₦3, 044 per week during post planting and ₦10, 986.25 per week during post-harvest period. Results show that 49.5% of households were absolutely poor while 50.5% of the households relatively poor. Multinomial probit estimate show that gender, household size and remittance, were significant and positively impact poor households both absolutely and relatively while age, access to credit, value of asset, extension contact, health status and location also significantly impact poverty though coefficients were negatively signed however, access to credit and health status were not statistically significant and didn't affect relative poverty status. It was recommended that education of households on family planning to keep moderate both forms of family size for sustainable livelihood; improving direct access of female household-heads to land and tenure security; among others.

Keywords: absolute-poverty, relative-poverty, dynamics, post-planting, post-harvest, Nigeria

INTRODUCTION

Poverty has its multidimensional concepts that measure levels of deprivation encountered by a person, household or community. Indicators of deprivation may focus on factors like income, food, expenditure, access to housing etc. However, poverty is considered to be a measure of deprivation of the basic needs that a person, household or community requires to enjoy a basic standard of living (Momodou, 2016). Poverty is both multidimensional and dynamic in nature with respect to household welfare, which implies that poverty studies have moved beyond conventional poverty analysis. It also considers variations in household wellbeing across poverty lines, time, income and expenditure. This approach queries the conventional view of “the poor” as a homogenous and essentially static population, it shows that for most people who experience it, poverty is not a fixed. Poverty dynamics studies revealed the number of people who experience poverty over a period is far greater than the number of poor at any one single moment of measurement (Zuhumnan, 2018).

This study focused on the poor who are poor at all dates (for which data is available) and those who move in and out of poverty. These entry and exit are obvious hence, poverty is measured in absolute or in relative terms. Poverty can be absolute or relative in its forms. An individual may escape poverty during periods of overall rise in the poverty rate; they also transit into poverty during periods of overall drastic reduction in the poverty rate (Zuhumnan, 2018). Relative poverty is the contribution of consumption variation over time while absolute poverty is that which remains when inter-temporal variability in consumption has been smoothed out. Two categories of poor households are identified. The first group is persistently poor i.e. households that are poor every date for which data is available. The second category is transient poor, which contains households that do not have a consumption level below the poverty line but who are poor sometimes.

Nigeria poverty situation has continued to increase despite that the country is blessed with abundant human and material resources, poverty gap is widening and a greater percentage of the nation is becoming food insecure, that a household is food secure is a function of the household income and asset (or wealth) status. Poverty and household welfare are measured with the use of data on consumption instead income in Nigeria, as compared to other countries at similar levels of economic development (World Bank WB, 2022). Prior to the outbreak of COVID-19, about 4 in 10 Nigerians were living in poverty which reflect the poverty headcount rate. About 40.1 percent of Nigerians lived on less than the national poverty line of ₦137,430 per person per year (WB, 2022). This means that some 82.9 million Nigerians were living in poverty. Poverty was more concentrated in rural areas, where 52.1 percent of the population were poor, than urban areas, where 18.0 percent of the population were poor. Some 84.1 percent of poor Nigerians lived in rural areas. Only this is enough marker of Nigeria’s spatial inequality.

Poverty in Nigeria presents a paradox as it is in the Republic of Congo; the country is resource rich, but most people are poor. As stated in this data afore implies that the rate of poverty and the number of people living in extreme poverty have been very high in Nigeria over time. The poverty rate in the country was at its peak over the period 1995–2000 (66.1% on average) a decline to 40.1% in 2018 which is its lowest level since independence in 1960. The average poverty rates for lower middle- income Africa and globally households were 22.4% and 9.7%, respectively in 2018. The poverty rate in Nigeria is forecast to increase from 42.8% in 2019 to 44% in 2021 before declining gradually across the forecast horizon (WB, 2022). This was linked to COVID-19 pandemic and the associated economic crisis, that drag millions of more people into poverty. The World Bank reported that the COVID-19 crisis is expected to push an additional 10.9 million people into poverty by 2022 in Nigeria. The poverty rate in Nigeria is forecast to decline gradually to reach 22.1% by 2050, versus 9.1% and 2.5% for the projected averages respectively. The number of poor people is projected to increase from 87.3 million in 2019 to peak at about 120 million in 2038 before it will experience a gradual decline to 100 million by 2050.

The Nigerian government need to takes proactive measures in confronting poverty hence, the country will not meet up the Sustainable Development Goal (SDG) of eliminating extreme poverty by 2030 by a substantial margin. An extreme poverty rate in Nigeria is projected up to 41% by 2030, and Goal 1 of the SDGs requires that less than 3% of every country's population should be living in extreme poverty by 2030. Hence the need to examine poverty status, including its dynamic nature of entry and exit from poverty after the planting and harvesting operations in order to evaluate ways and strategies in reducing the effect of poverty in Nigeria. The problem relating to the dearth of poverty and poor welfare in Nigeria has not been adequately analyzed, despite several approaches to addressing the challenges. However, research works on poverty status are scanty at the national level which is the focus of this study. Several studies on poverty and welfare exist and focusing specific regions of the country but has failed to capture the entire country, thus only little data that can't be useful at national levels of government for planning poverty reduction in most developing countries (Momodou, 2016). Against this background, is this research undertaken to assess the poverty status and its dynamics among the households in Nigeria. Specifically, this paper examined the forms of poverty during post-planting and post-harvest periods and determine factors influencing the forms of poverty status in Nigeria. The hypothesis of no significant difference among farm household's poverty status and their food security status was tested.

METHODOLOGY

The study area

The study was carried out in Nigeria situated in the West coast of Africa. The country is blessed with a total land mass of 923,768sqkm and over 70 percent of its populace are engage in agriculture sector mainly at a subsistence level (Emmanuel, 2014). Nigeria has 70.8 million hectares of agriculture land area. Livestock mostly reared by households in Nigeria are the small ruminants like goats (76 million), sheep (43.4million), and cattle (18.4 million) FAO, (2018). Nigeria ranked highest in fish consumption in Africa and also one of the highest consumers in the world up to about 3.2 million metric tons of fish consumed annually. The fisheries and aquaculture subsectors in Nigeria is among the fastest growing in the country. However, it possess a coastline of 853km and over 14 million hectares of inland waters, with total fish production per year is close to 1 million metric tons (313,231 metric tons from aquaculture and 759,828 metric tons from fisheries) FAO, (2018). Forestry also contribute to agriculture and its development despite Nigeria's forest ecosystems are threatened by rapid population growth and economic activities with annual deforestation rate ranging between 0.72 and 2.38percent. With the increasing population, estimated to reach 400 million by 2050, enhanced agriculture productivity through adaptation of new technologies and innovations is necessary to ensure food security and nutrition.

Population and sampling procedure

The entire farming households in Nigeria make up the population of this study. A total of 4979 out of 5000 households was reported to have been retrieved in the process of data clean up and balancing the data sheet. (Living Standard Measurement Survey LSMS, 2019).

Design and data collection methods

The study used longitudinal design with instruments and methodologies adapted from the survey report in fourth wave (2019/2020) of the General Household Survey and the World Bank Living Standard measurement Survey (LSMS) for farming households in Nigeria. The wave 4 data was considered as a cross sectional data during the post-harvest and post-planting periods for the purpose of this study. Data focus for the study was on the household and agricultural microdata, which include detail information on food security and household income (farm and non-farm) for the post-planting and post-harvest periods. This is a national representative dataset of 5000 households in Nigeria with approximately 1500 urban households in the wave (NBS, 2019).

Methods of data analysis

Data for this study were analyzed using descriptive statistics, FGT poverty index and multinomial probabilistic regression model. Descriptive statistics (frequency, percentages and mean) were used to summarize the distribution of poverty indices among households. The Foster-Greer-Thorbecke (FGT) index estimated the poverty line, while multinomial probit regression model was used to determine the factors that affect poverty status of households. Spearman correlation coefficient was used to test the hypothesis of no difference between the poverty status of households and their food security status.

Foster-Greer-Thorbecke (FGT)

The Foster-Greer-Thorbecke (FGT) index was used to estimate the poverty line, poverty gap and severity of deprivation of the poor households. The poverty line determines the threshold of income or expenditure that separate the poor and non-poor people. However, the headcount ratio alone may not be a sufficient proof to determine the populations of people living above or below the poverty line. Measuring the poverty gap (i.e. how far below the poverty line is a household from the poverty line or depth of poverty) captures the average shortfall in expenditure of the households living below the poverty line. A Square of the poverty gap (severity of poverty) gives an indication of inequality among the population living below the poverty line, which is a measure of the severity of deprivation of those living in absolute poverty (Momodou, 2016). While the poverty gap has improved significantly in the developing world over the years, sub-Saharan Africa has not succeeded in significantly closing this gap (Momodou, 2016).

A well-known FGT poverty index satisfies both monotonicity and transfer axioms as against crude index obtained through head count ratio which violates both the monotonicity and the transfer axioms. It is specified as:

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^Q \left(\frac{z-y_i}{z} \right)^{\alpha} \quad (1)$$

Where, α which is a parameter that measures the incidence, depth and severity of poverty respectively, with the values of 0, 1 and 2 are indicators of poverty aversion by the household (Foster *et al.* 2010).

n = total households in number

q = food insecure households in number

z = Cut off between food-poor and food non-poor households representing the poverty line or threshold.

y_i = the measure of per adult equivalent expenditure of i^{th} households.

Multinomial probabilistic regression

To determine the factors that affect poverty forms, the multinomial logit was employed. The three (3) forms of households poverty identified were: Non-poor, relatively poor and absolutely poor. Due to fact that the dependent variables were categorized, numerical values were assigned to the qualitative variables (dummies)

2= non-poor; 1 = absolutely poor and 0 = relatively poor.

According to Hoffman and Duncan, (1988), a single explanatory factor X_i in the multinomial probit specification, the probabilities of each household fall into one category or the other $j = 1, 2$ and 3 are:

$$P_{11} = \frac{\exp(\beta_{11} + \beta_{12}X_i)}{1 + \exp(\beta_{12} + \beta_{22}X_i) + \exp(\beta_{13} + \beta_{23}X_i)}, j = 1 \quad (2)$$

$$P_{12} = \frac{\exp(\beta_{12} + \beta_{22}X_i)}{1 + \exp(\beta_{12} + \beta_{22}X_i) + \exp(\beta_{13} + \beta_{23}X_i)}, j = 2 \quad (3)$$

$$P_{13} = \frac{\exp(\beta_{13} + \beta_{23}X_i)}{1 + \exp(\beta_{12} + \beta_{22}X_i) + \exp(\beta_{13} + \beta_{23}X_i)}, j = 3 \quad (4)$$

The parameters specific to the 1st, 2nd and 3rd alternative forms of poverty β_{11} and β_{21} , β_{12} and β_{22} , and β_{13} and β_{23} respectively. The factors included in the explanatory variables are: X_1 = age, X_2 = gender, X_3 = household size, X_4 = literacy, X_5 = non-farm employment, X_6 = credit access, X_7 = value of asset, X_8 = remittance, X_9 = extension contact, X_{10} = health status and X_{11} = location.

$P_{ij} = \rho$ (individual use of income alternative j) we consider that Y_{i1} , Y_{i2} and Y_{i3} are perspectives of poverty, Non-poor, relatively poor and absolutely poor, as forms of poverty each household must exhibit.

If a household is non-poor;
 $Y_{i1} = 1, Y_{i2} = 0, \text{ and } Y_{i3} = 0 \quad (5)$

If a household is relatively poor
 $Y_{i1} = 0, Y_{i2} = 1 \text{ and } Y_{i3} = 0 \quad (6)$

If absolutely poor
 $Y_{i1} = 0, Y_{i2} = 0 \text{ and } Y_{i3} = 1 \quad (7)$

Generally, the Multinomial logit defines probabilities as a function of X_i of unknown parameter μ

$$P_1 = \frac{\exp(\mu X_i)}{\sum_{j=1}^3 \exp(\mu X_j)} \quad (8)$$

Wanyaina *et al.* (2010) describe multinomial model as the probability function of reference source of income as personal savings. Hence, in this study, for each perspectives of poverty there are $3 - 1 = 2$. A household must fall into at least more than one form of poverty depending on his socio-economic characteristics.

The decision is to ensure that each household is categorized under one form of poverty in order to reveal its status during the post planting and post-harvest periods.

Spearman correlation for two samples

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}} \quad (9)$$

Where, r = correlation coefficient; x = values of food calorie (kcal) variable in a sample; \bar{x} = mean of the values of food calorie (kcal); y = values of food expenditure. \bar{y} = mean of the food expenditure (\bar{y}) and \sum = summation.

Measurement and a priori expectations of variables

Variable	Definition and measurement	Expected sign
Poverty Status	D= 0 Non-poor, D= 1 if Relatively poor, D = 2 Absolutely poor	±
Gender	D = 1 if male, 0 if female	±
Household size	Household size in numbers	±
Literacy	D= 0 if not literate, 1= if literate	±
Non-Farm Employment	Value of earnings form NFE in naira	+
Access to credit facility	D = 1 if accessed, 0 if no access	+
Value of asset	Naira value of asset(s) possess by household	+
Remittance	Value of money sent or gift in naira from	+
Extension contacts	Frequency of extension contact in number	+
Health Status	D = 0 Sick/ill, 1 if healthy	±
location	D = 1 if rural, 2 if urban	±

RESULTS AND DISCUSSION

Poverty status of the households during post-planting and post-harvest periods

Results of table 1 described poverty indices and it forms over time in the study area and revealed that 63% of households were poor during the post planting period, while 58% of the households were poor during the post-harvest period. Results revealed that households consume average food value of ₦3, 044 per week and make a Monthly Average Household Expenditure (MAHE) of ₦12,176 during post planting, compared to households' monthly food consumption of ₦10, 986.25 per week and MAHE of ₦43,945 during post-harvest period. Food shortfall (gap) was 38% during post-planting and 31% during post-harvest periods. Also, severity of households' poverty status was 26% during post planting and 21% during post-harvest periods. Specifically, there were 37% non-poor households during post planting and 42% non-poor households during post-harvest periods.

Results also showed that 87.70 percent of the households experienced poverty during the entire study period. Absolute poverty that is attributed to permanent possession of being poor for the two time periods revealed that 49.50% of the poor households experienced chronic poverty while 50.50% of the poor households were relatively poor, which implies that households were moving in and out of poverty for the post planting and post-harvest periods. This suggests that impact of poverty on households during the post-planting period is more severe hence intervention programmes to alleviate poverty should be drafted towards the post planting period (hunger period) to cushion the effect of poverty severity. This is in consonance with, Jallan and Ravalon (2000) and Duclos *et al.* (2006) who described these forms of poverty experienced by individuals and households for extended periods or throughout their entire lives as chronic, and the other form of poverty experienced as the result of a temporary fall in income or expenditure as transitory. Although transitory poverty may exist over a longer period, the household resources are averagely sufficient to keep the household above the poverty line, hence a pointer to appropriate timing of organized intervention programmes to target such period of transitory poverty in to order to alleviating poverty and improving household welfare in Nigeria.

Factors influencing forms of farming households' poverty

A multinomial logit regression model was used to estimate the factors that influenced the poverty status of households in the study area as shown in Table 2. Results revealed that the Wald chi-square value of 1176.30 means the variables in the model are fit to explain the determinants of the poverty status of rural households. Also, the probability value of 0.0000 for the chi-square shows the overall significance of the model at a 1 percent probability level ($p < 0.01$). The pseudo R-squared revealed that 25.17 percent of variation in poverty status of households was jointly explained by the significant explanatory variables.

Table 1. Forms of poverty and its indices for post-planting and post-harvest periods

Variables	Post planting (n = 4979)	Post-Harvest (n = 4979)
No. of households (frequency)	3149	2899
Percentage of poor households (%)	63	58
Percentage non-poor (%)	37	42
Poverty Head count (ratio)	0.63	0.58
Gap (ratio)	0.38	0.31
Severity (ratio)	0.26	0.21
Forms of Poverty:	Frequency	Percentage (%)
Absolute (chronic) Poverty	2162	49.50
Relative (Transient) Poverty	2205	50.50
Total poverty	4367	87.70

Note: estimates using ₦ 4567.27 weekly food consumption expenditure and Monthly Average Household Expenditure (MAHE) of ₦ 18,269.08

Source, Researchers' Computation, 2022

Table 2. Multinomial logistic regression to determine factors influencing the perspectives of Poverty

Variables	Marginal Effects	Absolute			Relative		
		Coefficient	Robust Std. Error	P> z	Coefficient	Robust Std. Error	P> z
Age	-0.0024	-0.0265	0.0038	0.000***	-0.0165	0.0031	0.000***
Gender	0.1264	1.3851	0.1323	0.000***	0.8680	0.1125	0.000***
Household Size	0.1052	1.1529	0.0361	0.000***	0.7233	0.0281	0.000***
Literacy	-0.0075	-0.0783	0.1119	0.484	0.0392	0.0948	0.679
Non-farm employment	-0.0029	-0.0413	0.1113	0.711	0.4747	0.0947	0.616
Access to credit facilities	-0.0391	-0.3942	0.1510	0.009***	-0.0725	0.1155	0.530
Log Value of Asset	-0.0313	-0.3086	0.3783	0.000***	-0.1160	0.0310	0.000***
Remittance	0.0516	0.5663	0.1810	0.002***	0.3589	0.1586	0.024**
Extension contact	-0.0528	-0.5929	0.1563	0.000***	-0.4060	0.1166	0.001***
Health Status	-0.0108	-0.5929	0.0613	0.084*	-0.0376	0.0504	0.456
Location	-0.1239	-0.1061	0.1140	0.000***	-0.4614	0.0931	0.000***
Constant		0.1130	0.5959	0.850	-1.1558	0.5096	0.023**
No. of observations		4355					
Wald-chi-square (χ^2)(12)		1176.30					
Prob>chi-square (χ^2)		0.0000***					
Pseudo R ²		0.2517					
Log likelihood		-3249.85					

Source, Researchers' Computation, 2021. *, **, and *** represent level of significance at 10%, 5% and 1% respectively.

Poverty is dynamic and was categorized into relative-poor, absolute-poor and non-poor. Households with a weekly food expenditure cut-off less ₦4567.27 are considered poor while households with a food expenditure cut-off greater than or equal to ₦4567.27 are considered non-poor. Relative poverty occurs when a household is poor either during the post planting or the post-harvest period and absolute when a household is poor in both periods.

The effects of factors on poverty status of households were examined by regressing eleven independent variables against households that were absolutely and relatively poor, and nine of the variables were statistically significant for absolute poverty and seven of the variables were statistically significant for relative poverty. Age, gender, household size, access to credit, value of assets, received remittance, extension contact, health status and location are variables that significantly influence absolute poverty status; while, age, gender, household size, value of assets, remittance received, extension contact and location were factors influencing relative poverty status in the study area. Coefficients of age, literacy, access to credit facilities, value of assets, extension contact, health status and location of household were negatively signed and significant at 1 percent level for both absolute and relative forms of poverty; except health status which was at 10 percent level for absolute form of poverty. This implies that increase in the value of these factors will reduce the level of absolute poverty status of households in the study area.

Explicitly, increase in the age of household head though with negative sign connote experience and contrary to the findings of Asogwa and Umeh, (2012) who reported that more elderly household heads are less likely to be food secure as compared to the younger household heads. Increased access to production credit facilities will allow household heads purchase more resources, and hence, make them leave the poverty cycle. This aligns with the study of Jabo *et al.* (2017) who found that there is a significant positive impact of access to formal credit on the food security situation in the study area during post-planting and post-harvest period which conversely increase food security status of households and inversely reduce the food poverty situation of the farming households. Extension contact and location were negatively signed but significant at 1 percent level for relative poverty status which implies increase in number of extension contacts or visits to farming households and households' locations especially those that live in urban areas are most likely to reduce relative poverty. Also, gender, household size, and remittance were positively signed and significant at 1 percent level, while remittance received is significant at 5 percent level. This implies that, gender especially female headed households, increased household size will increase households' poverty due to the limited access to productive resources and predominantly high dependency ratio experienced in female-headed households.

Results on Table 2 show the coefficients of age, value of asset, number of extension contacts and location were statistically significant at 1% level and negatively signed for relative poverty status. This implies that, the likelihood of older household heads, value of assets own by households in naira and the number of extension visits to households tend to influence poverty escape and move more households to be food secured. On the other hand, results show that age, access to credit number of extension contacts and location coefficient were negatively signed and significant at 1% level however, coefficient of health status was also negative and significant at 5% level. This connote improvement in the employment of these variable will enable households escape form absolute poverty level to relative poverty or even food secured status.

Marginal effects value for age of household heads is negative and revealed that increase in age of the household heads will lead to 0.24 percent reduction in their poverty status either relative or absolute. This is consistent with Azeez *et al.* (2015), who affirmed that age of household head has negative correlation with poverty status. That is, the older the respondents, the lesser the probability of being poor. This is contrary to *a-priori* expectation however, the mean age of the respondents' show that they are in their economic and active age bracket. Hence, the ability of the respondents to work in order to earn income which can be used to meet their basic needs. The marginal effects of gender showed that male-headed households are less likely to be relatively poor. This implies that the poverty level of female-headed households would be 12.64 percent higher compared to male-headed households for both absolute and relative poverty statuses. This may be because female-headed households have limited access to productive capital and assets than their male-headed counterparts. The above corroborates the findings by Adeoti (2014), Adekoya (2014) and Amao *et al.* (2017). In addition, the marginal effects of household size revealed that an increase in household size increases the probability of being poor by 10.52 percent. This implies that the larger the members household, the higher the probability and tendency of them being poor. The above is in line with the findings by Anyanwu (2010), Masood and Iqbal (2010) and Adekoya (2014) who found that a positive relationship exist between household size and probability of being poor.

The marginal effects of access to number of extension contacts revealed that the poverty status of relatively poor households that have access to extension agents is likely to reduce by 5.28 percent compared to their counterparts that have no access to extension agents. Furthermore, the marginal effect for households health status show that healthier household heads will relatively experience 1.4 percent reduction in poverty status. This is in line with Peter and Bassey (2019) who argued that variations in health status are not actually due to poverty but due to the health outcome issues but recommended that improvement in health outcome of the population is a necessity for poverty reduction in

Nigeria. Results also show that marginal effects of remittance received by farming households on relative poverty status indicate an increased poverty status by 5.16 percent. This is contrary to the study of Olowa *et al.* (2013) who found that 10 percent rise in domestic remittances caused a decline in Poverty Incidence (PI), Poverty Gap (PG) and Squared Poverty Gap (SPG) by 1.80 percent, 1.60 percent and 1.60 percent; while 10 percent rise in foreign remittances reduced PI, PG and SPG by 0.86 percent, 0.62 percent and 0.62 percent respectively in rural Nigeria. Also, marginal effects of location (rural/urban) revealed that the poverty status of poor households that are urban based are likely to reduce by 10 percent compared to farming households in the rural area. For the households in the rural areas, the severity of poverty is 0.2613 and 0.0856, and this pointed that there was a higher level of poverty among households in the rural areas than the urban areas of the study area. This is in line with Adebo and Ajiboye (2015) in their work on poverty reduction in Osun State Nigeria who found that based on the poverty line of ₦5668, the depth of poverty was 0.3889 for rural and 0.1875 for the urban dwellers.

Hypothesis testing the relationship between household food security and poverty

Table 3 result indicate a very weak negative correlation suggesting that the more food secure households are the less the poverty experienced among the households. Also, the result also show that the relationship is highly significant and not just a random sampling error.

Table 3. Test of relationship between household food security and household poverty

variable	coefficient	P-value	Decision
HHPCFC (kcal)	0.0053	0.0002	Reject Ho
HHPCFE (₦)			

PCHHFC-per-capital food calorie, PCHHFE-per-capital household food expenditure
Source, Researchers’ Computation, 2021.

CONCLUSION AND RECOMMENDATIONS

Assessment of household poverty status and it dynamics during post-planting and post-harvest periods in Nigeria concluded that, households’ weekly food expenditure during post-planting periods was consistently lower than the food expenditure threshold, while it was higher for the post-harvest periods, hence most households that were transiently poor in post-planting periods escaped out of poverty during post-harvest period.

Factors influencing poverty status include age, access to credit, value of asset, remittance, extension contact and location would reduce poverty status; while gender and household size would increase poverty of households, and unregulated child birth would worsen households' welfare by deepening absolute poverty of the household. On the other hand, age, value of asset, extension contact and location also would reduce relative poverty status of households, while increased household size would drift more households into absolute poverty. Poverty status indices during post-planting was higher than in the post-harvest period with respect to headcount, gap and severity but have relatively equal share of absolute and relative poverty status in all. The study concluded that poverty was more severe on households during the post-planting period; and is multidimensional and dynamic hence, the wellbeing and how poor people or households fare overtime in terms of income and expenditure capability during hunger (post-planting) and surplus (post-harvest) periods. In real life, people's productions, incomes and general welfare are not secure; both are susceptible to changes that may lead to reduced capacities to earn and spend.

It is recommended that, households' heads be enlightened on the need to keep moderate family size by appropriate birth control measure by the Community Health Extension Workers (CHEW) since the results of larger household size has direct relationship with poverty status. Accessible and affordable credit facilities should be made available to desiring households for ease of adoption of new technologies and expansion of production scale and sustenance during period of hunger. Extension workers through who households are educated should be given more motivation so that innovative information can spread more efficiently to enable households escape the poverty line. Moreover, policies to boost productivity of farm and non-farm household enterprises through improved direct access of female household-heads to land and tenure security, credit and other productive resources will avail female household heads productive and investment opportunities as their male counterparts, thereby reducing gender inequality in households' food security and wellbeing in Nigeria.

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