

# COOPERATIVE SOCIETY AS A VERITABLE TOOL FOR POVERTY ALLEVIATION AMONG RURAL HOUSEHOLD IN YEWA NORTH LOCAL GOVERNMENT AREA OGUN STATE

*E. O. Akerele and J. O. Y. Aihonsu*

## **Abstract**

This study examined the roles of Cooperative in Poverty Alleviation in Yewa North Local Government Area, Ogun State. The study noted that poverty has ravaged the entire human society and particularly in developing countries. Community members find it difficult to achieve certain things (for instance, finance and business breakthrough) without coming together. Thus, this study notes that through cooperatives, people have been helped especially out of their poverty circle. The study drew a sample size of 100 respondents using questionnaires through a 2-stage sampling technique. Descriptive statistics, Foster-Greer-Thorbeeke (FGT) Test and Regression analysis were used to analyze the data collected. The poverty line adopted was N145 per day for a farmer. The results showed that occupation, household size, formal education, age, cooperative society default, expenditure on non food items and per capital income are the significant variables that determine the poverty status of all respondents. This study reveals that there is a high level of poverty in the study area among the rural households. Therefore, cooperative society needs to improve on its financial assistance towards the rural households.

People join efforts by forming groups or cooperatives when individual efforts cannot sufficiently solve their personal problems for certain problems to be solved such as scarcity, ability to match wants with available resources and seeking ways to augment shortfalls in any given situation is by taking wise decision. The Nigeria as a nation presents a paradox as far as the issue of poverty is concerned, the country is rich but the people living in most parts of the country are poor. Poverty in Nigeria in addition to its overwhelming rural and regional characteristics is also strongly influenced by education, age and nature of employment (Adediran, 2000). The study of poverty in Nigeria indicates that poor children commonly and extremely do not attend schools. Rural households are still poor today, because the benefits of growth are not shared equally to the different regions of the nation. That is some parts of the nation is developed while some other parts remain undeveloped (Oyenuga 2001).

Roy (1980), defined cooperative as a form of organization or association of human beings working voluntarily together on the basis of equality for the promotion of their socio-economic interest. Cooperative as an enterprise voluntarily formed and directed by an association of users applying within itself the rules of democracy and directly intended to serve both its own members and the community as a whole.

The evolution of cooperative is as old as mankind especially the modern form of cooperative movement, evolved right from the cradle of civilization. Long before the birth of cooperative as a consequent form of modern business enterprise, West Africa had been a home of community life in Africa. In Nigeria, the spirit of togetherness is instinctive and the idea of solidarity had always been experienced among sons and daughters in the existence of many kinds of mutual aids institution that is, religious, social, cultural, political and economical.

Both the modern credit cooperatives and the traditional contribution societies emphasize the habit of thrift which individual fails to achieve in isolation but which becomes possible through membership.

## **Effects of Poverty on Nigeria Economy**

According to Alawode (2000) "Nigeria economy has been suffering from severe and persistent regression since the mid 1980. Its Gross Domestic Product (GDP) which was \$93.3 Billion in 1980 is now about one-quarter of century ago". The movement backward was so fast that Nigeria which ranked 20<sup>th</sup> in terms of size of its GDP now ranks 57<sup>th</sup>.

## **Poverty Alleviation in Nigeria**

At independence in 1960 and for the best part of 1960's poverty eradication efforts in Nigeria centered on education which was seen as the key to economic, technological and intellectual development of the nation. "Show the light and the people will find the way", was at that time an often quoted mantra by the Nigeria's First president, the late Nnamdi Azikiwe. Thus, education programmers were implemented alongside Agricultural extension services which increased food production.

In 1960, according to the Federal Office of Statistics (FOS) about 15 percent of Nigeria were poor, but by 1980 this has grown to 28 percent. The FOS estimated that by 1985 the extent poverty was about 46 percent, although it dropped to 43 percent by 1992. However, by 1996, poverty incidence in the country was 66 percent or 76.6 million Nigerians out of a population of 110 million. The UN human poverty index in 1996 which credited Nigeria with 41.6 percent captured the phenomenon more succinctly as the figure placed the nation as amongst the 25 poorest nations in the world. Today, it is estimated that two thirds of the country's 120 million or 80 million people are said to be poor and this is in spite of the fact that since independence Nigeria is said to have realized \$300 billion in oil and gas revenues and development aid (Central Bank of Nigeria (CBN) 2000).

The poverty in rural households which has been in increase can be attributed to a number of factors. The important issue is this: its reflections on almost every aspect of living of the people and thus the economy at large. It is seen as inadequate shelter, poor nutrition, low health standard, a generally low standard of living which could also be inferred from the expenditure and consumption of rural household. For decades, most households with the challenge arising from increased cost of living (Okunmadewa, 2000, Federal Agricultural Organisation (FAO) 2004).

Moreover, rural infrastructure in Nigeria has long been neglected while investment in health, education and water supply has largely been focused on the cities. As a result, the rural population has extremely access to services such as school and health, access to safe drinking water, limited educational opportunities, poor road networks, crop yields are low because farmers lack improved farm inputs. In other words, poverty in rural households has been attributed all these problems, among which are social services and infrastructure are limited or non-existent.

Furthermore, Anyaowu (1997), posited that poverty is not just the state of existence, it is a process with many dimensions and complexities usually characterized by deprivation, vulnerability that is high risk and low capacity to cope. Layard (2003), defined absolute poverty by the number of people living below specified minimum level of income, an imaginary poverty refers to the position of an individual or household compared with the average income in the country such as the poverty line. Relative poverty line would then vary with the level of average income over the years. Cooperatives had made efforts in reducing the poor standard of living among poor rural households and they also encourage people to save little money in case of emergency that they may encounter. The study examined the impacts of cooperative societies in poverty alleviation, and also to evaluate the effect of poverty among rural households in the study area.

## **Methodology**

### **Study Area and Methods of Data Collection**

The study area is Yewa North Local Government Area, Ogun State. Both primary and secondary data were used for the study. The primary data were obtained by using structured questionnaires. The secondary data were obtained from published articles, journals, newspaper, books, internet, periodicals and other relevant sources.

### **Sample and Sampling Technique**

A two-stage random sampling technique was used for the collection of data. In the first stage, 10 communities were selected from the Local Government Area, with selection of a cooperative society in each of the communities; while, the second stage involved the selection of ten households in each of the selected cooperative society making a total of 100 respondents.

### **Methods of Data Analysis**

Both descriptive and inferential statistics were used for the study. The descriptive statistics such as: frequency distribution, percentage and cumulative percentages. Inferential statistics such as, Foster-Greer-Thorbeeke (FGT) poverty depth was used analyse the effect of poverty on rural households. The head count measure estimate the absolute number of poor in the study sample. The analysis of poverty status using Foster-Greek Thorbeeke measure which allows for quality measurement of poverty status among group of the population was used in accessing poverty level among rural households in the study area. It involves the ranking of the expenditure in the ascending order of magnitude such that:

$$Y_{11} \leq Y_{21} \leq Y_{31} \leq \dots \dots \dots Y_{q1} \leq Z_1 \leq Y_{(q+1)} \leq \dots \dots \dots \leq N_1$$

FOLLOWING MUKHERJEE AND BENSON (2003), THE FGT MEASURE FOR THE  $i^{th}$  SUB-GROUP IS GIVEN BY:

$$P_{\alpha} = 1/N \sum_{ni} (1 - Y_i/Z_i)^{\alpha} \quad (1)$$

WHERE: A = NON-NEGATIVE PARAMETER (A = 0,1,2,3)

P = Poverty status of the household (I = if the rural households are poor. 0=otherwise)

Y; = Expenditure per person in the  $i^{th}$  household,q

H<sub>i</sub> = Size of the  $i^{th}$  household

q = Number of household below the poverty line

Z = Poverty line value or the household per capital expenditure

N = Number of persons in the sampled household

Where a=0 it implies zero concern for poverty incidence or poverty depth

Equation (1) then reduces to head count of poverty. That is

$$P_{0i}/N \sum_{ni} (1 - Y_i/Z_i)^0 \quad (2)$$

where a = 1, it conveys the information that there is a uniform concern of poverty depth. Therefore,

equation (1) becomes:

$$P_{1i} = 1/N \sum_{ni} (1 - Y_i/Z_i) \quad (3)$$

Where PU is the poverty gap between the  $i^{th}$  poor household and poverty line. Following from the equation (2) and (3) the per capital expenditure gap ration which measures the proportionate distances of per capital expenditure of the poor below the poverty line is estimated as the ratio of  $P_{1i}$  to  $P_{0i}$  (i.e  $P_{1i}/P_{0i}$ ). Finally, when a = 2, it implies that a distinction made within the poor and poorest, equation 1 reduces to FGT index, which is a distinctive index of the severity of poverty. FGT for the group is given as:

$$P_{2i} = 2/N \sum_{ni} (1 - Y_i/Z_i)^2 \quad (4)$$

### Regression Analysis Model

$$Y = \beta_0 + \beta_1 X_1 + U$$

Y = Dependable variable

$X_i$  = Independent variable

$\beta_0$  = Constant/Intercept

$\beta_i$  = Coefficient of  $X_j$

U = Error Term

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + U$$

Where: Y = Poverty level

$X_1$  = Age (years)

$X_2$  = Educational level (years)

$X_3$  = Household size (no. of person)

$X_4$  = Loan obtained (N)

$X_5$  = Productive asset (value in W)

$X_6$  = Cooperative society default (percent)

$X_7$  = Expenditure on non food item (N)

$X_8$  = Expenditure on food item (N)

$X_9$  = Per capital income

U = Error term.

**Results and Discussion Table 1: Socio-Economic Characteristics of the Respondents**

Variables	Frequency	Percentage
Age		
<30	7	7.0
31-40	23	23.0
41-50	26	26.0
51-60	36	36.0
Above 60	8	8.0
Marital Status		
Single	9	9.0
Married	82	82.0
Widowed	3	3.0
Divorced	6	6.0
Religion		
Christian	43	43.0
Muslim	56	56.0
Others	1	1.0
Educational Level		
No formal	5	5.0
Primary	30	30.0
Secondary	44	44.0
Tertiary	21	21.0
Household Size		
<3	9	9.0
4-6	56	56.0
7-9	27	27.0
10-12	8	8.0
Occupation		
Self-employed	12	12.0
Trader	28	28.0
Farmer	37	37.0
Civil servants	17	17.0
Artisan	6	6.0
Member of Coop, Society		
Yes	97	97.0
No	3	3.0
Types of Cooperative		
Coop. Thrift & Credit Soc.		59.0
Marketing Coop. Society	59	35.0
Housing Cooperative	35	4.0

Producer Coop. Society	2	2.0
Rate of Performance	46	46.0
Satisfactory	36	36.0
Excellent	15	15.0
Average	3	3.0
Fair		
Means of Assistance	83	83.0
Through loan	12	12.0
Through supply of inputs	5	5.0
Through marketing		

Standard of Living		35.0
Average Very low	35 45 13	45.0
Excellent Very poor	7 >	13.5
Total	100	7.0
		100.0

**Source: Field Survey 2009**

The results in Table I showed that age distribution of 85 percent respondents, were within the range of 31 and 60 years, which implies that majority of the respondents fall under active and agile labour force age category and this explains the facts that they have increased likelihood to earn higher income. Also, 82 percent of the respondents were married which shows that majority of the respondents have sizeable number of households. This would have consequential effect on household expenditure thus increase the likelihood of the poverty amongst the respondents. It was found that religion does not have any impact on poverty reduction. The result showed that 95 percent of the cooperators have formal education, implying that the level of education is moderately high among the cooperators.

Household size composition largely determines the way in which a household is able to respond to changes. This affects the amount of labour, determine food and nutrition requirement of household and household food security. The occupational distributions of the respondents showed that 37 percent of the respondents were involved in farming indicating that there is a predominance of farming in the study area. 97 percent of those interviewed were cooperative members which implies, that they all have access to loan from the society to improve their standard of living and reduce their poverty level. The type of cooperative has no significant effect on poverty reduction. The result showed that 46 percent of the cooperators are satisfied with the rate of their cooperative society's performance while 36 percent say the society rate of performance is excellent; this implies that rural households were satisfied with the level of performance of the cooperative society's they belong to.

It can be concluded from the finding that cooperative majorly assist its members by giving them loan as 83 percent of the members benefited from it. The standard of living of about of about 45 percent respondents is very low and that shows the degree of poverty.

**Table II: Poverty Analysis Results**

Items	Average capital expenditure per annum	Incidence (P <sub>J</sub> )	Depth (P <sub>i</sub> )	Severity (P <sub>2</sub> )
<b>Age group (years)</b>				
<30	9166.3922	0.5882	0.2259	0.1051
31-40	6901.6496	0.6250	0.3506	0.2209
41-50	3771.9060	0.7000	0.3022	0.1874
51-60	3282.8700	0.8462	0.4100	0.2198
Above 60	3214.8837	0.8182	0.4191	0.2319
Total	5701.7186	0.7015	0.3345	0.1881
F value	1.991	0.855	1.202	0.994
<b>Marital Status</b>				
Single	5354.6667	0.6000	0.2371	0.0961
Married	5798.0899	0.7049	0.3372	0.1917
Widowed	1558.3333	1.0000	0.6537	0.4272
Total	5701.7186	0.7015	0.3345	0.1881
F value	0.164	0.326	0.967	1.191
<b>Occupation</b>				
Farming	4052.9666	0.8182	0.4554	0.2793
Civil servant	3876.8571	0.5000	0.1402	0.393
Trader	7944.9702	0.6429	0.2416	0.1213
Artisan	7604.4444	0.3333	0.2141	0.1375
Paid worker	8496.8307	0.4444	0.1522	0.6268
Transporter	5552.4000	0.8000	0.2412	0.0763
Others	2237.1429	1.0000	0.5029	0.2529
Total	5701.7186	0.7015	0.3345	0.1881
F value	0,782	1.395	2.722**	2.715 **
<b>Household size</b>				
1-4	7058.5762	0.6286	0.2631	0.1328
5-8	4469.6517	0.7586	0.3928	0.2301
9-12	1558.3333	1.0000	0.6537	0.4273
13 and above	1893.3750	1.0000	0.5793	0.4237
Total	5701.7186	0.7015	0.3345	0.1881
F value	0.946	0.854	2.273***	2.808**

Source: Field Survey, 2009

Table II showed that farmers aged between 51 and 60 year above have pronounced poverty between 81 and 84 percent poverty incidence respectively. Farmers with age less than 30 are less susceptible to poverty; this may be attributed to their ability to do other job apart from farming because they are still within their active age brackets. The values of P<sub>i</sub> and P<sub>2</sub> confirm the fact with the poverty status among the age groups. The incidence of poverty in the whole study area is 0.70; this implies that 70 percent of the rural dwellers were actually poor. The poverty depth (P<sub>i</sub> value) for the rural dwellers was 0.334, this implies 33 percent. For the rural households using FGT model was 0.1881. This conveys that the severity of poverty in the study area is 18.8 percent.

Poverty incidence is higher among the married respondents. This shows that majority of the married respondents are living below the poverty line due to pressure of family expenses on the respondents income. Poverty is higher among the farmers in the rural area and they live below poverty line. The result revealed that households with 13 and above have high poverty incidence indicating that household size the higher the poverty level.

**Table III: Factors Affecting Poverty Level of the Respondents**

Variable Code	Variable Name	Regression Coefficient	T-value
$\beta_0$	Constant (intercept)	-110.709	-0.879
X <sub>1</sub>	Age	-0.064	-1.571
X <sub>2</sub>	Educational level	0.051	1.251
X <sub>3</sub>	Household size	0.120	2.972**
X <sub>4</sub>	Month obtained loan	0.037	0.938
X <sub>5</sub>	Productive asset	0.065	1.739
X <sub>6</sub>	Cooperators default rate	^0.035	-0.906*
X <sub>7</sub>	Expenditure on non food items	-0.076	-1.937***
X <sub>8</sub>	Expenditure on food items	-0.006	-0.157
X <sub>9</sub>	Per capital income	0.938	5.212*

R=0.9391, R<sup>2</sup>= 0.882, Adjusted R<sup>2</sup>=0.870, F-value=73.631\*

\*=Significant at 1 percent; \*\*=Significant at 5 percent; \*\*\*= Significant at 10 percent

Source: **Field Survey 2009.**

The results in Table IH indicate that about 87.0 percent of poverty adjusted variability on poverty alleviation; employing cooperative societies as a veritable tool is explained by the explanatory variables in the model. Other variables not included in the model will explain about 13 percent of the variation poverty of poverty level.

**Age (X<sub>1</sub>):** Contributed negatively to (poverty alleviation) exploiting cooperative society as a veritable for poverty alleviation in rural household; hence it is not a significant explanatory variable meaning that less attention should be placed on the estimate.

**Educational level (X<sub>2</sub>):** The educational level coefficient was a positive variable yet not significant. The positive value shows direct relationship between educational level and poverty alleviation. The implication of the findings is that the chances of poverty alleviation increases with higher educational status.

**Household Size (X<sub>3</sub>):** The household size of membership function was a positive variable and statistically significant at five percent. The positive value shows a direct relationship with poverty alleviation. The implication of the finding is that the increase in size of household leads to increased participation in cooperative activity which has positive impact on poverty alleviation. Thus the null hypothesis which stated that there is no significant relationship between membership of cooperative society and poverty alleviation should be rejected while the alternative hypothesis which states that there is a relationship should accepted.

**Loan obtained (X<sub>4</sub>):** The coefficient of the amount of loan obtained was positive. This indicates that if rural dwellers had better access to stable loan obtained, incidence of poverty will systematically nose dive

**Productive asset (X<sub>5</sub>):** It is also a positive variable. The coefficient of its regression was positive; this indicates that if rural dwellers have better acquisition, poverty alleviation would better be achieved.

**Cooperators default rate (X<sub>6</sub>):** The coefficient of regression of cooperative society default was a negative variable. This indicates that it was a negative variable. It was however significant at one percent meaning that, if cooperators default in servicing credit facilities obliged them, there will be insufficient facility for genuine cooperators, the cooperative society may gradually run bankrupt.

**Expenditure on non food item (X<sub>7</sub>):** The result shows this as a negative variable, it was significant at 10 percent. This indicates that since the co-operators are mostly farmers, expenditure on non-food items such as drugs, transporting clothing, shelter and so on

will consume a larger percentage of their income.

**Expenditure on food items ( $X_8$ ):** The expenditure on food items coefficient was a negative variable. Also, it was not statistically significant. This explains that since most of the co-operators are farmers. Food items would consume an insignificant proportion of their income.

**Per capita income ( $X_g$ ):** This was a positive variable. It is statistically significant at one percent. This indicates a direct relationship between poverty alleviation and per capita income level of individual co-operators. Co-operators with higher per capita income would have low susceptibility to incidence of poverty.

### **Conclusion and Recommendations**

The study revealed that there is high level of poverty in the study area among the rural household and that the farmers are aware of the benefits to be derived from the existence of cooperative societies in their areas and the roles it plays in alleviating poverty. Also, this study notes that through cooperative people have been helped especially out of their poverty circle. It is in recognition of this that the study proposed some solutions so that the society can be more effective in cooperative activities. Therefore, cooperative societies need to improve their ability to provide more for the rural households.

There is need to increase the income of the respondents by increasing the number of cooperative societies and also encouraging them by provision fund and basic amenities for the smooth running of the organization. Also, cooperative societies should provide credit facilities more often to rural household, so as to increase their capital which will in turn increase their returns. Finally, training should be organized by cooperatives for rural households in their areas of specialization.

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