



DO MICROENTERPRISES REDUCE POVERTY IN RURAL NIGERIA?

Salman Kabir Kayode

Department of Agricultural Economics, University of Ibadan, Nigeria

E-Mail: k_salimonu@yahoo.com

ABSTRACT

There still exist progressively worsening welfare conditions of Nigerians in spite of the country's physical and human resources endowment. The Nigerian Human Development Indicator ranks 158th among 182 countries in 2008 portraying the country among the poorest countries in the world with about 70% of its population residing in the rural areas and farming as their major livelihood enterprise. The farmers are however characterized with low productivity and low income due to poor implementation strategies of government policies among other factors. It is thus widely documented in literature that rural poverty is more pronounced than in the urban area hence the farmers had to engage in non-farm microenterprises as a necessary coping mechanism. In this study, available microenterprises employed by the farmers, income derived, effect on poverty reduction and constraints faced in the enterprises were investigated and suggestions were made. A multi-stage sampling technique was employed in the selection of 169 respondents from Osun State, Nigeria. Data on household socio-economic and demographic characteristics, available non-farm microenterprises engaged in and income realized were obtained with the aid of structured questionnaire. The data obtained were analysed through the use of descriptive statistics, fuzzy set and probit regression analysis. The result revealed that available non-farm microenterprises were charcoal production, blacksmith (metal fabricating), sawmill and firewood sales, tailoring, soap making, cloth weaving and hat making, buying and selling of food and non food items among others. About Forty-five percent of the households had a non-farm microenterprise income share of 45.9% of the total income. The factors that determined participation in non-farm microenterprises were age of the household head, being male, level of education, closeness to the urban area, volume of credit received and remittances. The result of the poverty analysis indicates that larger percentage (43.5%) of farming households whose household heads were not engaged in non-farm microenterprises were living below the poverty line compared with farming households (22.09%) whose household head were engaged in non-farm microenterprises. The major constraints were poor market opportunities and low capital base. The study concludes that microenterprises are useful tools in poverty reduction. It is therefore recommended that formation of social groups be encouraged among the farmers in order to facilitate information sharing, training opportunities on suitable enterprises, and microcredit opportunities.

Keywords: poverty reduction, non-farm microenterprises, fuzzy set, rural Nigeria.

INTRODUCTION

Poverty has been generally conceived simply as situation of low income or low consumption. Broader definition such as being unable to meet basic material needs encompassing food, water, clothing, shelter, education, health as well as basic non-material needs including participation, identity, dignity, etc (Streeten, 1979; Blackwood and Lynch, 1994) has been given as well. The incidence and trend of poverty in sub-Saharan Africa at least in the last two decades has attracted many intervention programmes. It has since become a major concern of academics, policy makers and the international development partners, including the United Nations Development Programme (UNDP) and the World Bank. In spite of Nigeria's physical and human resources endowment, there still exist progressively worsening welfare conditions of its nationals. The Nigerian Human Development Indicator is ranked 158th among 182 countries in 2008 portraying the country among the poorest countries in the world (UNDP, 2009).

Poverty in Nigeria really exist both in urban and rural area. However, the problem is indeed a rural phenomenon like in other many developing countries. The latest Nigeria Living standard Survey (NLSS) reported in NBS (2005) reveals that while urban poor is 43.1 percent

that of rural is 63.8 percent. The poverty analysis in Omonona (2010) also shows that the predominance of rural poverty over urban has been consistent during 1996 to 2004. In 1996, about 70 percent of rural households were poor, as compared with 58 percent of the urban households. In 2004, the incidence of urban poverty declined more rapidly than rural poverty with 64 percent of rural households being poor (a 6 percent decrease) while urban poverty decreased by 15 percent to 43 percent. It should also be reiterated that about 70% of the country's population resides in the rural areas with farming as their major livelihood enterprise. They represent 95 percent of the total food crop farming units in the country and produce about 90 percent of the total food output (Okuneye and Okuneye, 1988). The rural dwellers are however characterized as resource poor with attendant low productivity and low income. Hence they are poor and vulnerable to risk as submitted by several studies (World Bank, 2001; and Okunmadewa, 2003). Though, the government at the three tiers (federal, state and local governments) have staged and implemented some programmes towards alleviating the problem; a very unremarkable result has been recorded due to poor implementation strategies of government policies among other factors (Ayoola, 2001; Akinyosoeye, 2005). The rural



poor therefore had to engage certain coping strategies which of course have socio-economic implications. These strategies among others include rural-urban migration, dual-residency, dependence on remittances, change of type of farm enterprise to another and engagement in non-farm micro-enterprises. According to MEDEP/UNDP (2010), Micro-Enterprise refers to any economic unit engaged in the production and distribution of goods and services at household level. It is primarily of self-employed nature, employing a person in the enterprise and sometimes some family members. The enterprise runs on little amount of capital investment at a fixed market centre or mobile business locations. This sector is identified with features like reliance on indigenous resources, family ownership of enterprises, small scale of operation, labour-intensive, adapted technology, and minimum skill.

Statement of the problem

It is worrisome that poverty still overwhelms the populace in the country given the abundant resources. The livelihood of the rural dwellers is agriculture (that is, the food producing unit of the country) however; poverty is also more pronounced in the rural area. Considerable efforts have been made to improve the lots of the rural dwellers especially the farmers through different programmes (such as the agricultural credit and fertilizer subsidy) but with little or no success. Given the importance of these programmes; it is rather unfortunate that the implementation processes were described as highly defective as submitted by several studies (Idachaba, 2000; Ayoola, 2001; Yekinni, 2007; Salimonu, 2008; Akramov, 2009; Badiru 2010; Nwosu *et al.*, 2010; and Banful *et al.*, 2010).

The Nigerian government, international developing agencies and the civil society devoted considerable resources towards achieving poverty reduction by funding programmes such as Community Action Programme for Poverty Alleviation (CAPP), Family Economic Advancement Programme (FEAP), Community-based Poverty Reduction Project (CPRP), National Fadama Development Project and Local Empowerment and Environmental Management Project (LEEMP). Others are National Poverty Eradication Programme (NAPEP) and National Special Programmes for Food Security (NSPFS) in collaboration from Food and Agricultural Organization (FAO). Most of the programmes are aimed at achieving food security and alleviating poverty through transfer of new technology and new farming practices developed by research to solve the problems faced by small scale farmers as well as to provide small credit financing for small scale farmers. Irrespective of the efforts made at reducing poverty, the impact largely remained unfelt by the poor (Yusuf, 2008). The problem therefore becomes multidimensional; for instance, based on the 2006 Core Welfare Indicators Questionnaire Survey, it is estimated that only 18 percent of farm households, mainly small scale farmers in Nigeria, have access to financial/credit services (Akramov, 2009). The rural households are therefore reported in different

studies (Reardon *et al.*, 2002; Salimonu, 2006) to have participated or engaged in other micro-enterprises besides farming in order to escape from the vicious cycle of poverty.

The concern of this study becomes more important in that most poverty studies have always conceptualized poverty as one-dimensional. Thus estimating poverty status based on income or expenditure of the households. However, poverty is really multidimensional (Costa, 2003; Qizilbash, 2004) where income or expenditure is only one of the issues. As a result, poverty indices based on one-dimensional approach for any particular area may not give the real picture as desired since other components as psychological, environment, social and housing conditions are not adequately incorporated in the estimates. The forgoing therefore permits us to investigate the poverty status (multidimensionally) and the contributions of non-farm micro-enterprises to poverty reduction in rural Nigeria. The research questions are: What are the available non-farm micro-enterprises employed by the rural households and what are the facilitating factors for engaging in non-farm microenterprises? What is the level of income derived from such enterprises and what share of the total income? To what extent are the households suffering from poverty? What proportion of the households that engaged in non-farm microenterprises are poor compare to those that did not engage? What effect does engagement in non-farm microenterprises has on poverty reduction and what are the constraints or impediments towards engaging in non-farm microenterprises?

Objective of the study

The main objective of the study was to assess the effect of non-farm microenterprises on poverty reduction in Osun State, Nigeria. The specific objectives were to:

- identify available non-farm microenterprises employed by the rural households;
- examine income derived from the enterprises and the share of total income;
- determine the factors influencing engaging in non-farm microenterprises;
- estimate and compare the poverty level of the rural households engaging in non-farm microenterprise and those without non-farm microenterprises;
- identify the constraints faced in engaging in non-farm microenterprises.

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Poverty is a general phenomenon that affects the physical, moral and psychological conditions of man. It manifests in so many ways and dimensions and its perceptions varies that it becomes latently difficult to conceptualize a globally acceptable definition of the syndrome (CBN, 1998). Poverty has always been measured unidimensionally especially with the popular Foster-Greer Thorbeke, FGT (1984) poverty measure.



This has always resulted into indices like Poverty Incidence, Poverty Gap and Poverty Severity among households in a particular area based on per capita income or expenditure. It could also be based on asset owned by households (Filmer and Pritchett, 1998; 1999). The emerging literature on poverty has viewed it as multidimensional and its measurement would not be sufficient based only on one entity say income, expenditure or asset (Baran *et al.*, undated; Costa, 2003). Other components that ensure a good living as psychological, environment, social and housing conditions are therefore included in a multidimensional approach to poverty measurement using fuzzy set (Baran *et al.*, undated).

Microenterprise is a word made from two; micro and enterprise. Micro refers to 'small unit' while an enterprise usually refers to a 'business unit'. According to Harper (1984), an enterprise is defined to include any economic unit engaged in the production and distribution of goods and services whether it employs one person (the proprietor) or more, whether or not it uses fixed capital, whether or not it has fixed location for the business. However, the definition varies from one country to another based on indices like number of workers, stock size, capital base and the utilized technology among others. Fajimi and Omonona (2010) defined Small and Medium Enterprise based on National Economic Reconstruction Fund (NERFUND) as an enterprise with an asset base not exceeding ₦200, 000, 000.00 excluding land and working capital with staff strength of not less than 10 and not more than 300. For the purpose of this study, microenterprise is defined primarily as self-employed nature, employing the owner of the enterprise and sometimes some family members (MEDEP/UNDP, 2010). The primary occupation of the rural dwellers is agriculture though operated on a small scale basis. The conception of the study is that farmers engage in other enterprises apart from agriculture with some degree of linkages to agriculture in some instances. Those enterprises are referred to as Non-Farm Microenterprises. Fajimi and Omonona (2010) also submitted that the microenterprises have been identified as the means through which the rapid industrialization, job creation, poverty alleviation and other development goals of these countries can be realized. A rural enterprise project has the potential of providing an avenue for the rural women not only to improve their socio-economic wellbeing, but more so to increase their entrepreneurial abilities and personal empowerment (Jarrah and Laily, 1999).

RESEARCH METHODOLOGY

The study was carried out in Osun State, Nigeria. The state was carved out from the old Oyo state in 1991. It is situated in Southwestern part of the country. The state is bordered in the west by Oyo state, in the east by Ondo and Ekiti State, in the north by Kwara state and south by Ogun State. It has a land area of 8,882.55 square-kilometres and a population of 2, 203, 016 (1991 population census). The study area falls on Latitude 8°10' to the north and Latitude 6°05' to the south. It is also marked by Longitude 4° to the west and Longitude 5°4' to the east. The mean annual temperature is between 21.1°C to 31.1°C. Rainfall varies from 1100millimetres per annum in the southern part to 800millimetres per annum in the northern part. While the raining season starts in the late March and ends in October, the dry season stretches from November to early March. Soil types range from Itaganmodi series (fiabile red clay), Araromi series to sedentary, sandy and loamy soils. The traditional language is Yoruba and the capital is Osogbo. The study area is chosen being one of the poor states in Nigeria (NBS, 2005). Also, available studies elucidating and issuing validated statements as regards the effect of non-farm microenterprises on poverty reduction in the study area are very scarce. An attempt to fill this void further provides a basis for this study and Osun State as the study area.

Sampling techniques and sample size

A two-stage sampling procedure was used in the collection of primary data in Osun State. The first stage involved a random selection of 30 rural communities from the three agro-ecological zones of the state's Agricultural Development Programme. The second stage involved a random selection of households from each of the communities with probability proportionate to size of each community. A total of 190 rural households were sampled, however data from 169 respondents were eventually used. Others were not included due to inconsistencies. Data collected included some socio-economic/livelihood and demographic characteristics, available non-farm microenterprises and the corresponding income received, constraints faced in engaging in the non-farm microenterprises, poverty related information such as housing characteristics, educational attainment, feeding/nutritional status, perception of poverty, level of income among others. The distribution of respondents across the zones is as given in Table-1:

Table-1. Distribution of respondents sampled across the zones.

Zones	Number of respondents	Engaged in non-farm microenterprises (ENM)	Not engaged in non-farm microenterprises (NENM)
Iwo	79 (46.7)	30(39.0)	49(53.3)
Osogbo	48 (28.4)	28(36.3)	20(21.7)
Ife/Ijesa	42 (24.9)	19(24.7)	23(25.0)
Total	169(100.0)	77(100.0)	92(100.0)

Figures in parenthesis are the percentage sampled



Data analytical techniques

Analytical tools employed in this study were Descriptive Statistics, t- statistics, Probit Regression and Fuzzy Set. The descriptive statistics were frequency counts and percentages, mean, standard deviations. These were used to categorize and catalogue the responses of ENM and NENM households.

Probit model

The model was employed to ascertain the factors influencing engaging in non-farm microenterprises. The presence of only two categories of households, ENM and NENM thus inform the use of the model. The Probit model constrains the estimated probabilities to be between 0 and 1 and relaxes the constraint that the effect of the independent variable is constant across different predicted values of the dependent variable. This is normally experienced with the Linear Probability Model (LPM) (Sebopetji and Belete, 2009). The probit model assumes that while we only observe the values of 0 and 1 for the variable Y, there is a latent, unobserved continuous variable Y* that determines the value of Y. The other advantages of the probit model include believable error term distribution as well as realistic probabilities (Nagler, 1994). We assume that Y* can be specified as follows:

$$Y^* = X' \beta + \varepsilon, \quad (1)$$

where $\varepsilon \sim N(0, 1)$. Then Y can be viewed as an indicator for whether this latent variable is positive:

$$Y = \mathbf{1}_{\{Y^* > 0\}} = \begin{cases} 1 & \text{if } Y^* > 0 \text{ i.e. } -\varepsilon < X'\beta, \\ 0 & \text{otherwise.} \end{cases} \quad (2)$$

Where

Y = Vector of dependent variable (1 for ENM households; 0 for NENM households)

X = Vector of explanatory variables

β = Probit coefficients

ε = Random error

The explanatory variables included in the model are:

X_1 = Household size (number)

X_2 = Age of household head (years)

X_3 = Gender (Dummy)

X_4 = Education level (years)

X_5 = Years of farming experience (years)

X_6 = Farm income (₦)

X_7 = Marital status (Dummy)

X_8 = Volume of credit received (₦)

X_9 = Distance from urban centre (Km)

X_{10} = Remittances (₦)

Fuzzy set

Classical studies of poverty may be criticized because a person who earns 1 cent above the threshold is not considered poor while another who earns 1 cent less than the threshold is defined as poor; however, there is no appreciable difference in their quality of living (Baran *et al.*, undated). Issues like this are finally resolved where other indicators of poverty are identified and operated as fuzzy set as a multidimensional poverty measure. Fuzzy literarily means blurred or indistinct. It therefore follows that isolating a single variable as measure of poverty would not give a much desired outcome. A fuzzy set X is therefore required as used by Baran *et al.*, undated; Costa, 2003 and Oyekale and Okunmadewa, 2008.

Given an m-dimensional fuzzy vector X of the form:

$$X = [x_1, x_2, x_3, x_4, x_5 \dots, x_m] \quad (3)$$

Where X is the vector of some variables conceived as poverty indicators x_k ($k = 1$ to m variables/attributes) x_k is a fuzzy variable/attribute that may represent any economical, cultural, social or environmental factor for n-households; for the purpose of this study, some 15 household attributes¹ as contained in the Core Welfare Indicator questionnaire (CWIQ)² were used. The i th household has a score of 1 if does not possess the k th attribute and zero otherwise. The degree of poverty of i th household measured as a weighting function of the m attributes (x_{ik}) specifies the poverty ratio P of the i th household.

$$\text{Poverty ratio } (P_i) = \frac{\sum_{k=1}^m x_{ik} w_k}{\sum_{k=1}^m w_k} \quad (4)$$

The intensity of deprivation of x_k is captured with the weight (w_k) attached to the k th attribute as proposed by Cerioli and Zani (1990) in the expression below:

$$w_k = \log[n / \sum_{i=1}^n x_{ik} n_i] \geq 0 \quad (5)$$

The weighted average of the poverty ratio of the i th household P_i measures the multidimensional poverty ratio of the population in a particular set.

$$\text{Multidimensional poverty} = \frac{\sum_{i=1}^n (P_i) n_i}{\sum_{i=1}^n n_i} \quad (6)$$

The 15-dimensional poverty measure was constructed for the all households, those that engaged in non-farm microenterprise and those that did not engage.

¹The attributes are: ownership of telephone, mattress, radio, modern stove, generator, at least bicycle, occasional food problem, always have food problem, roof made of mud or thatch or wood, housing unit is single room, housing has no toilet facilities, sources of drinking water are unprotected well or rain water or river or lake or pond household members not involved in project decision making, household members consider themselves poor and sufficient income from non-farm microenterprise. The last indicator was included by the author.

² CWIQ has being in used by National Bureau of Statistics pilot survey on poverty studies since 1999.



RESULT AND DISCUSSIONS

Socio-economic and demographic characteristics of ENM and NENM households

The ENM and NENM households were categorised as shown in Table-2 based on socio-economic and demographic characteristics. The table reveals that the households almost exhibit similar characteristics especially with variables such as sex, marital status, farming experience and farm size. The size of the farm under cultivation further had the support of existing literatures (Amoo, 2006; Salimonu, 2008) that rural household is operating on a small scale basis. However,

significant differences were noted in household size, remittances and total monthly income. Though, the study shows that the percentage of those who had less than primary education was generally high (above 60 percent) for all the respondents; they were still more among NENM households. A striking observation in the result is that both remittances and volume of credit received between the two groups were significantly different. This could probably be responsible for the significant difference in the monthly income as shown in the Table and partly why the ENM households had the potential to really engage in non-farm microenterprises.

Table-2. Socio-economic and demographic characteristics of ENM and NENM households.

Household characteristics	ENM households (n=77)	NENM households (n=92)	t-values
Age (years)	47.6	50.1	1.94*
Sex (percentage male)	69.9	67.2	-
Marital status (percentage married)	92.1	94.5	-
Household size	5	7	2.89***
Educational status (percentage less than or equal to primary education)	60.12	66.76	-
Farm size (ha)	2.1	2.3	0.99
Years of farming experience (years)	25.23	26.45	1.21
Remittances (monthly in ₦)	3567.00	2112.00	2.09*
Membership of farmers' or cooperative group	68.92	59.34	-
Monthly total income(₦) ³	14,358.59	8142.76	1.79*
Volume of credit received (annual)	10041.45	4532.98	2.34**

*** Significant at $P < 0.01$ **, Significant at $P < 0.05$, *Significant at $P < 0.05$

Available non-farm microenterprises, income derived and share of total income

Ten major non-farm microenterprises as identified in the study area are as presented in Table-3. Buying and selling of either food or non food items had a highest participation in the study area (27.3 percent) and this was followed by Grinding and grating of food/raw food items (14.3 percent) such as cassava, maize, pepper and the likes. Hat making, cloth and basket weaving had the lowest frequency among the respondents (2.6 percent). Sawmill and sales of fire wood had the highest mean

income of ₦11214.5 though with just four respondents. Hat Making, cloth and Basket weaving had the least mean income of ₦2900.98. The total income from each microenterprise depicts the magnitude of the share of total income (both farm and non farm) as further shown on the last column in the table. Overall, the non-farm microenterprises contributed 45.9 percent to the total income received by the households with Buying and selling of food and non-food items having the largest share of 0.13127.

**Table-3.** Available non-farm microenterprises, income derived and share of total income (n = 77).

Available non-farm microenterprises	Frequency of engagement*	Mean income derived per month (₹)	Share of total income
Charcoal production/selling	7(9.1)	4214	0.02668
Blacksmith (Metal Fabricating)	4(5.2)	4578.67	0.016565
Sawmill and sales of fire wood	4(5.2)	11214.5	0.040571
Buying and selling of food or non food items	21(27.3)	6911.12	0.13127
Tailoring	7(9.1)	3011.34	0.019066
Soap making	10(13)	3509	0.031738
Hat making, cloth and basket weaving	2(2.6)	2900.98	0.005248
Grinding and grating	11(14.3)	11908.5	0.118481
Bicycles and motorcycle repairs	7(9.1)	6621.12	0.041921
Commercial motorcyclist	4(5.2)	7590.08	0.02746
Total	77(100.0)	6590.593	0.459

* Figures in parenthesis are the percentage response of engagement

Determinants of engagement in non-farm microenterprises

The determinants of engagement in non-farm microenterprises were pursued using Probit model. STATA 10 statistical software was employed. The result shows that the chi-square value of 91.43 is statistically significant ($P < 0.01$) which implies that the model has a good fit to the data. The intercept of 0.1921 is significant ($P < 0.05$) and it represents the autonomous participation index in non-farm microenterprises for all the households. Of the ten variables hypothesised as determinants of engagement in non-farm micro enterprises; only six were found to be statistically significant at various levels. The significant variables were age (-0.5191), being male (0.3277), number of year of education (0.0187), volume of credit received (0.9101), distance from urban centre (-0.5422) and remittances (0.1176). In line with a priori, all

the significant variables had the expected signs that depict the effect they have on the participation among the respondents. Accordingly, the age had a negative sign which implies that as rural households age increases; the tendency for them to engage in non-farm microenterprises reduces. The signs of other variables were positive as expected. The marginal effect on the last column of the Table implies that the probability of the households engaging in non-farm microenterprises increases by 0.3632 percent, 0.4121 percent and 0.1267 percent, respectively if years spent in school, volume of credit received and remittances increase by one percent. On the other hand, that the probability of the households engaging in non-farm microenterprises decreases by 0.1724 percent and 0.1903 percent, respectively if age and distance from urban centre increases by one percent.

Table-4. Determinants of engagement in non-farm microenterprises (n = 169).

Variables	Coefficients	t-value	Marginal effects
Constant	0.1921	2.5625**	1.8633
Household size	0.0231	0.0034	0.2181
Age of household head	-0.5191	-1.9487*	-0.1724
Gender	0.3277	3.112***	0.1045
Education level (years)	0.0187	2.6291***	0.3632
Years of farming experience	-0.0041	-1.1124	-0.0011
Farm income	1.5981	0.1983	0.1231
Marital status	0.0121	0.1998	0.2144
Volume of credit received	0.9101	2.5198***	0.4121
Distance from urban centre	-0.5422	-2.1011**	-0.1903
Remittances	0.1176	2.1987**	0.1267

Chi-Square = 91.43*** ($P > \text{Chi Square} = 0.0000$)

Log likelihood = -158.99104

Pseudo $R^2 = 0.445$

*** Significant at $P < 0.01$ **, Significant at $P < 0.05$, *Significant at $P < 0.05$



Multidimensional poverty of the households

Based on the 15 attributes of the households as listed in the methodology, the poverty indices for each household were generated. The distribution for all the households, ENM and NENM households are as shown in Table-5 below. The result shows that the average poverty indices for the least poor in all, ENM and NENM households were 7.473 percent, 7.01 percent and 8.12 percent, respectively. The average poverty indices for poorest in all, ENM and NENM households were 90.12 percent, 70.02 percent and 90.12 percent, respectively. A critical analysis of the result also depicts that the percentage of the least poor households for ENM households was greater than the NENM households of just 16.3 percent. In other words, a larger percentage of

households were observed within poverty indices 0.5 to 1 (50-100 percent) for the NENM households than recorded for the ENM households. This difference becomes further justified by the average poverty indices of 19.2 percent for the ENM households as against the 27.06 percent estimated for the NENM households. The overall average multidimensional poverty for all the households was 0.2375 and could be used to set a standard (poverty line) for the study area. In any case, if the ENM and the NENM household are examined with 0.2375 as the poverty line; then 22.09 percent and 43.5 of the ENM and NENM households respectively were living below poverty line. This result is in congruence with the outcome of Core Welfare Indicator Survey of Abia State, Nigeria as analysed by Oyekale and Okunmadewa (2008).

Table-5. Multidimensional poverty of the households.

Range of poverty indices	ENM households (n=77)		NENM households (n=92)		All households (n=169)	
	Frequency (percentage)	Average poverty	Frequency (percentage)	Average poverty	Frequency (percentage)	Average poverty
0.0<0.1	21(27.3)	0.0701	15(16.3)	0.0812	36(21.3)	0.07473
0.1<0.2	26(33.8)	0.1124	26(28.3)	0.1252	52(30.8)	0.1188
0.2<0.3	15(19.5)	0.2309	20(21.7)	0.2532	35(20.7)	0.2436
0.3<0.4	5(6.5)	0.3011	10(10.9)	0.3119	15(8.9)	0.3083
0.4<0.5	3(3.9)	0.4123	9(9.8)	0.4911	12(7.1)	0.4714
0.5<0.6	3(3.9)	0.5219	3(3.3)	0.5333	6(3.6)	0.5276
0.6<0.7	2(2.6)	0.6098	3(3.3)	0.6782	5(3.0)	0.6508
0.7<0.8	2(2.6)	0.7002	3(3.3)	0.7108	5(3.0)	0.7065
0.8<0.9	0(0.0)	0	2(2.2)	0.8007	2(1.2)	0.8007
0.9<1.0	0(0.0)	0	1(1.1)	0.9012	1(0.6)	0.9012
Total	77(100)	0.1921	92(100)	0.2707	169(100)	0.2375

Figures in parenthesis are the percentages of respondents in the poverty groups.

Constraints faced in engaging in non-farm microenterprises

The multiple response constraints militating engagement in non-farm microenterprises are as shown in

Table-6. Low capital base and poor marketing opportunities were unanimously identified by the households.

Table-6. Constraints faced in engaging in non-farm microenterprises.

Constraints	ENM households (n = 77)	NENM households (n = 92)
Inadequate information profitable microenterprises	12 (15.6)	34 (37.1)
Low capital base	62 (80.6)	84 (91.5)
Lack of good road network	45 (58.5)	48 (52.3)
Poor marketing facilities	61 (79.3)	83 (90.5)
Poor credit facility	59 (76.7)	71 (77.4)



CONCLUSIONS AND RECOMMENDATIONS

Once again, this study is also concluding on a sad note that poverty still overwhelms the rural populace in the country with poverty incidence higher for the households that did not engage in non-farm microenterprises. The usual outcome of various studies is that poverty is more pronounced in the rural area. The result of the analysis does not imply absence of poverty even among those who diversify their income source through engaging in non-farm microenterprises; it has only been assessed in relative terms. This therefore urgently calls for a quick policy intervention if somewhat failures are still recorded in our poverty alleviation programmes. A number of policy implication thus emanate from the study. The study submitted that a number of non-farm microenterprises are practicable in the rural area but was not really exploitable by the rural dwellers due to poor credit facilities and poor market. This could lead to underutilization of resources.

The volume of credit received was also found to influence engagement in non-farm microenterprises. There is therefore the need to enliven the rural credit programmes with periodic feed back mechanism from the rural populace in order to assess the success. The problem however becomes complicated when the households squeezed themselves and invest only to be face with the problem of poor market and poor road network. A policy redirection through which rural areas are link to markets and urban centres therefore needs to be revisited. This would go a long way in motivating the rural populace to become more interested and invest in microenterprises; hence become less hit with poverty syndrome. The study also calls for social inclusion programmes where the women can also play significant role in improving the households living conditions by a significant empowerment towards engaging in microenterprises. The extension package as it were could also be made more dynamic where training needs that are demand driven are featured in the rural areas with effective monitoring.

REFERENCES

- Akinyosoye V.O. 2005. Government and Agriculture in Nigeria: Analysis of Policies, Programmes and Administration. Macmillan Nigeria Publishers Limited, Yaba Lagos, Nigeria.
- Akramov K. T. 2009. Decentralization, agricultural services, and determinants of input use in Nigeria. Discussion Paper 941. Washington, D. C. International Food Policy Research Institute.
- Amoo Z.O. 2006. Production potentials of food crop farmers in Oyo state. Unpublished PhD Thesis, Department of Agricultural Economics, University of Ibadan, Nigeria.
- Ayoola G. B. 2001. Essays on the Agricultural Economy 1, A Book of Readings on Agricultural Development Policy and Administration in Nigeria. ISBN 978-33454-3-5 TMA Publisher, Ibadan.
- Barán B. A. Rojas D Britez and L. Barán. Measurement and analysis of poverty and welfare using fuzzy sets1. www.cnc.una.py/cms/invest/download.php?id=115572,95, 1.
- Badiru I.O. 2010. Review of Small Farmers Access to Agricultural credit in Nigeria. IFPRI; Nigeria Strategy Support Programme; Policy Note No. 25.
- Banful A.A., Nkonya E and V. Oboh. 2010. Constraints to Fertilizer Use in Nigeria Insights from Agricultural Extension Service; IFPRI; Development Strategy and Governance Division. IFPRI Discussion Paper 01010, July.
- Blackwood D.L and R.G. Lynch. 1994. The Measurement of Inequality and Poverty: A Policy Maker's Guide to the Literature. World Development. 22(4): 567-578.
- Central Bank of Nigeria, CBN. 1998. A Profile of Regional/Zonal Poverty in Nigeria: The case of Enugu Zone. A paper presented by Enugu Zonal Unit Research Department of CBN, at the 7th Annual Conference of Zonal Research Units Benue State, Nigeria.
- Costa M. 2003. A Comparison between Unidimensionally and Multidimensional Approaches to the Measurement of Poverty, an Integrated Research Infrastructure in the Socio-Economic Science. IRISS Working Paper Series No. 2003-02.
- Fajimi F.O and Omonona B.T. 2010. Women Participation in Agro-allied Small and Medium Scale Enterprise and Its Impact on Poverty Alleviation in Oyo State Nigeria. Journal of American Science. 6(12).
- Filmer D. and L.Z. Pritchett. 1998. Estimating wealth effects without income or expenditure data- or tears; Educational enrolment in India. World Bank Policy Research Working Paper, No 1994, Washington DC; World Bank (also published in Demography. (2001). 38(1).
- Filmer D. and L.Z. Pritchett. 1999. The effect of household wealth on educational attainment; Evidence from 35 countries' Population and development review. 25(1).
- Foster J., Greer J. and E Thorbecke. 1984. A Class of Decomposable Poverty Measures Econométrica. 52: 761-766.
- Harper Malcolm. 1984. Small Business in the Third World. Guidelines for Practical Assistance. London, Intermediate Technology Publications.



- Idachaba F.S. 2000. Agricultural Policy Process in Africa: Role of Policy Analysts. ECAPAPA Monograph Series 2.
- Jariah M. and P. Laily. 1999. Economic Empowerment of Rural women through Micro-Enterprise. In: Maimunah, I. and Aminah, A. (Eds.). Women and Work: Challenges in Industrializing Nations. London: Asean Academic Press. pp. 133-152.
- Micro-Enterprise Development Programme (MEDEP)/UNDP. 2010. Micro-Enterprises, Development for Poverty Alleviation ISBN: 97899946-916-5-4. Micro-Enterprise Development Programme (MEDEP)/UNDP Ministry of Industry (MOI), Kathmandu, Nepal.
- Nagler J. 1994. Interpreting Probit Analysis. New York University. Webpage: <http://www.nyu.edu/classes/nagler/quant2/notes/probit1.pdf>
- National Bureau of Statistics. 2005. Poverty Profile for Nigeria, Federal Republic of Nigeria.
- Nwosu F. O., Oguoma N.N.O., Ben-Chendo N.G. A. and Henri-Ukoha. 2010. The Agricultural Credit Guarantee Scheme: Its Roles, Problems and Prospects in Nigeria's Quest for Agricultural Development. Researcher. 2(2).
- Okuneye P. A. and M. Y. Okuneye. 1988. Underdevelopment and Increased Labour Productivity: A Linear Programming Analysis of Family Farms in Nigeria. In: Adejobi, A.O., P.M. Kormawa, V.M. Manyong, and J.K. Olayemi (2003). Optimal Crop Combination under Limited Resources Conditions: Application of Linear Goal Programming (L.G.P) Model to Smallholder Farmers in the Drier Savannah Zone of Nigeria. <http://www.tropentag.de/2003/abstracts/full/347.pdf>.
- Okunmadewa F. 2003. Risk, vulnerability in agriculture: concept and context. A paper presented at staff seminar, Department of Agricultural Economics, University of Ibadan, Nigeria.
- Omonona B.T. 2010. Quantitative Analysis of Poverty in Nigeria. International Food Policy Research Institute. Policy Brief No. 17.
- Oyekale A.S. and F. Y. Okunmadewa. 2008. Fuzzy Set Approach to Multidimensional Poverty Analysis in Abia State, Nigeria. Research Journal of Applied Sciences. 3(7): 490-495.
- Qizilbash M. 2004. On the Arbitrariness and Robustness of Multi-Dimensional Poverty Rankings. Research Paper No. 2004/37, World Institute for Development Economics Research (WIDER).
- Reardon T. K., G. Stamoulis and P. Winters. 2002. Promoting Farm/Non-farm Linkages for Rural Development: Case Studies from Africa and Latin America. (Rome, Food and Agriculture Organization of the United Nations).
- Salimonu K. K. 2008. Access to Fertilizer Subsidy among Food Crop Farmers in Osun State, Nigeria. International Journal of Agricultural Economics and Rural Development. 1(2): 1-7.
- Salimonu K.K. and Yekinni O.T. 2006. Determinants of Participation in Off-farm Income Activities among Food Crop Farmers in Akinyele Local Government Area of Oyo State, Nigeria. Book of proceedings, Annual Conference NAAE. pp. 167 -172.
- Sebopetji T.O. and A. Belete. 2009. An application of probit analysis to factors affecting small-scale farmers' decision to take credit: a case study of the Greater Letaba Local Municipality in South Africa. African Journal of Agricultural Research. 4(8): 718-723.
- Streeten P. 1979. From Growth to Basic Needs. Finance and Development. 19(2): 1847-1864.
- UNDP. 2009. Nigeria 2009 Human Development Report. Oxford University Press, New York, USA.
- World Bank. 2001. Dynamic risk management and the poor: developing a social protection strategy for Africa. Africa Region Human Development Series. Washington DC, USA.
- Yekinni O. T. 2007. Political Economy of Agricultural Policy Implementation in Nigeria: Oyo State as a case study. A Research Project Submitted to F. S. Idachaba Foundation for Research and Scholarship, Ibadan, Nigeria.
- Yusuf S. A. 2008. Social Capital and Household Welfare in Kwara State, Nigeria. Journal of Human Ecol. 23(3): 219-229.