

Analysis of Poverty Determinants and the Coping Strategies among Rural Farming Households in Afikpo South Local Government Area of Ebonyi State, Nigeria.

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Abstract: *Analysis of Poverty Determinants and the coping strategies among farming household in Afikpo South Local Government Area of Ebonyi State was studied using one hundred respondents selected using multi-stage random sampling technique. Structured questionnaire was used to gather information as relates to the objectives of the study. Percentage response and probit analysis were used to address the objectives of the study. The results of the study revealed that majority of the farmers were male, youths and married. The major determinants of poverty were educational level, income level and meal per day. The poverty alleviation strategies adapted the respondents farming; trading, transportation, rice milling business and food vendors. The recommendations proffered included; the need for policies to enhance farmers' access to education in order to increase their managerial skills of scarce resources, diversification of income through engaging into different business ventures and access to improved production inputs*

Key words: *Poverty, Rural Farming*

Introduction

Poverty is a global phenomenon but the effects manifest most in the rural areas of sub Saharan Africa and South East Asia (.Okumadewa, 2007). Nigeria one of the sub Saharan Africa despite its natural resources endowment, yet poverty keeps on spreading widely. This is true when it is realized that according to Iheke, (2010), over 70% of the Nigerian population is classified as poor with 35% living in absolute poverty. Poverty is said to exist, when people live and survive in less than \$1 per day or and deprivation of access to basic necessities of life (Igbuzor, 2006). The characteristics of poverty according to Lele and Adu-Nyako, (1991) are low income and investment racket underutilized and/or unutilized natural resources, rapidly increasing population, near absence of social infrastructures such as portable water, school and access roads pervasive gullibility, powerlessness, disease, insecurity and ignorance and high level of vulnerability. Poverty as reported by Obadan, (2001) has many manifestations and dimension, include joblessness, over indebtedness, economics dependence, lack of freedom, inability to provide the basic needs or own assets, and lives in dirty localities and this puts pressure on a physical environment contributing to the environmental degradation.

The effect of poverty in rural households are disturbing as they (household) are easily predisposed to negative changes in environmental, socio-cultural, political and economic conditions which make them more impoverished. These conditions according to Federal Office of Statistics (FOS) (2001) and Iheke (2010), include worse hit by food insecurity, risk averse to avoid losing the mearge resources at their disposal, earn low income because of poor social amenities and unfavorable government policies.

The high vulnerability of the rural households to poverty nictitated on the dire need to alleviate their poverty status through among others initiating programmes that will boost their source of livelihoods. In most rural areas of sub Saharan Africa, agriculture is their major vocation and the need to raise the productivity of the agriculture through the use of improved technology and to improve their capability to market and distribute their products to enhance their income is essential .(Okumadewa, 2007).

In Nigeria, successive governments in the state , Local Governments and Federal have formulated numerous poverty alleviation programmes and policies. Chiefly among them, include Agricultural Development Programmes (ADP), the National Agriculture and Land Development Authority (NALDA), and the Strategic Grains Reserves Programmes (SGRP). (Aneke, 2006) Despite these numerous poverty alleviation programmes and policies in Nigeria, yet no significant impact had been recorded on the welfare of the people. The reasons

for this include corruption and poor targeting as the poor nor the rural populace benefited but the bureaucrats and absentee farmers (Kadurumba et al, 2010).

In many rural area of Africa,, households over decades have adapted various coping strategies to adverse effects of poverty on their livelihoods. However, information on level of poverty and its determinants and they coopingn strategies adopted by farming households in the study area are lacking. It is these knowledge gaps that this study tends to fill..

Specifically, Objectives of the Study are to;

1. determine the socio-economic characteristics of farming household..
- . access determinants of poverty among rural farming households in the study area.
2. identify the farmers' poverty alleviation strategies.

Materials and Methods

The study was conducted in Afikpo South Local Government Area of Ebonyi State. Afikpo south L.G.A comprises of seven (7) communities namely, Nguzu Edda , Ekoli Edda, Ebuwam Edda, Owutu Edda, Amangwu Edda, Amaoso Edda, and Oso Edda.

Afikpo South L .G. A. is located at 050.27N and longitude of 07.33E. It has a population of about one hundred and fifty seven thousand, seventy two (157,072) people (NPC 2006). It occupies an area land of about three hundred and seventy eight (378) km²

It is bounded in the East by Eriyi L.G.A. of Cross River state, in the West by Ivo L.G.A of Ebonyi State in south by Afikpo North L.G.A of Ebonyi state and in the North by Ohafia L.G.A of Abia State.

Afikpo South L.G.A. is fully involves in crop production such as tomatoes, pepper, rice, maize, yams, vegetable, cassava and cocoyam. Animal production that predominates in the area includes poultry, goat, sheep, piggery and fishery. Other economic activities of the people include hunting petty trading, civil service, and barbing etc.

Multi-Stage random sampling technique was used to select towns and respondents. In the first stage, five town were selected out of seven. Secondly, ten villages out of twelve were selected from each of the towns. . This brought to a total of fifty farmers. Finally, two farmers were selected from each of the villages. This brought to a total of one hundred (100) respondents.

A well structured questionnaire was administered to the farmers to collect primary data on specific poverty indices like educational attainment, type of food consumed, income level, amount expended on household and on socio-economic characteristics such as family size, age, sex, marital status etc. Secondary data were collected from text books, journal, periodicals, published and unpublished thesis.

Percentage and frequencies were used to capture the socio-economic characteristics of the rural family households. The probit analysis was used to capture the determinants of poverty among the rural farming hold.

The Probit analysis was used to capture the determinants of poverty among the rural farming house hold. The model can be stated as:

$$1^*_i = \beta T x_i + e_i \quad (1)$$

$$Y_i = 0 \text{ if } 1^*_i = T \quad (2)$$

$$Y_i = 1 \text{ if } 1^*_i > T \quad (3)$$

Where Y_i represents a limited dependent variable which simultaneously measures the level of poverty and the level of is an underlying latent variable that indexes adoption. T is an observed threshold level, X is the vector of independent variables affecting poverty level, β^T is a vector of parameters to be estimated, and g_i is the error term. If the non observed value of 1^* is greater than T , the observed variable T_i becomes a continues function of the independent variables and O otherwise.

The model is specified in an implicit form as follows:

$$Y = F(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8 + e_i)$$

Where; gender (X_1), household size in persons (X_2), dependency ratio (X_3), meal per day (X_4), educational level in years (X_5), Farm size in hectare (X_6), level of income in naira (₦) (X_7) and extension contact (X_8).

Results and Discussion

Table 1 indicated that majority of the respondents (60%) were male, while 40% female. This implies that male headed households naturally have more risk bearing ability to adoption of poverty alleviation programme because of their high income accessibility compares to the female. Table 4.2 indicates that 90% of the total respondents were married and 10% were single. This agrees with Uchechi and Okewole (2010), who reported that married people could imply larger household size with more mouths to feed, thus resulting in few households' farm outputs being sold. This could aggravate poverty.

Furthermore, majority of the respondents (40%) fell between age range of 20-40 years, while 24% fell between 41-60 years. Less than 20 years and 61 and above range were occupied by 18% of the respondents respectively. Majority of the respondents (64%) were middle aged farmers who are economically active and can easily scout round to cater for daily needs of the family resulting in poverty reduction.

Moreover, 33% of the respondents had no formal education and 67% had formal education. This implies that farmers in the study areas were educated and likely to influence their agricultural innovation adoption behaviors for high productivity to ensue. The educated has more earning capacities compared to uneducated because of among others easy access to information (FAO 2007). This finding agrees with Babatunde, (2009). In addition, 35% of the respondents had years of farming experience below 11 years, while 65% had above 11 years. Long number of years of farming equip farmers in making rational decision in among others efficient resource use for high farm productivity and increased income to result. Majority (83%) of the respondents had household size below 11 persons, while 17% had 10 household size above 11 persons. Large household could mean more source of family and hired labour in order to conserve money to have been paid to hired labourers as well as to generate more income for the family in order to cushion poverty effects in the family. These aforesaid opportunities are only possible if the members of the household are of labour age.

From the table above, majority (30%) of the respondents had level of income that were ranged between ₦202 to ₦350, 22% earned less than ₦150 per day, 27% earned between ₦151 to ₦201, while 21% had income level ranged from ₦358 and above. This finding agrees with Babatunde (2007), who opined that there is correlation between income and poverty level, since income is the major determinant of household expenditure. The income of the household is a function of number of persons working in the household and at-times the level of education.

The coefficient of gender had negative relationship with level of poverty and was not significant as contained in Table 3. The negative sign of the variable indicates that female household is more likely to be poverty incapacitated than the male counterpart. This is because the male household is often more energetic to strive for livelihood sustenance as well has more access to factors of production such as land in order to improve on his family income (Babatunde, 2007).

The coefficient of household Size was negatively related to poverty level and significant at 5% probability level. The negative sign implies that the more the household members that comprises of children, students or unproductive aged ones such as children and old men and women, the higher the consumption rate of the family's farm produce and with little left to be sold in order to generate income to solve other household's basic needs, (Nwaru 2003).

The coefficient of the meal per day was positive and significant at 10% level of probability. This signifies that the number of times of meal per day, particularly balanced ones is an indication of poverty level. The number of meals per day and the composition of each meal vary for rural households according to the season, the size of the previous harvest and the sustainability of income from non-farm activities. Unammah, (2003) reported that large segment of the rural dwellers in South Eastern Nigeria are impoverished as many eat once or twice a day with cassava product being eaten in the breakfast, lunch and dinner in different forms.

The coefficient of educational level in years had positive relationship to the level of poverty and significant at 1%. The positive relationship is consistent with Eze and Akpa, (2010) who opined that education helps to make one to be objective in evaluating innovation which will positively influence his farm output, for more income. More so education diminishes poverty while poverty restricts access to education. In many developing countries, poverty has become a major constraint for access to and utilization of the education. In order to fight against poverty, education has been instrumental. Human capital is focused to human agency which basically uses skill and knowledge to enhance production possibilities (Idachaba, 2005). In contrary to a priori expectations, the coefficient of the extension contact was negatively related to poverty level and was significant at 1% risk level. The negative value of coefficient of extension could be attributed to nonchalant attitudes of the extension agents in the discharge of their duties of transferring improved technologies to farmers. In effect, farmers are left with low yielding crop varieties and low breeds of animal, resulting in low yields and consequently low income (Rogers, 2003; Ume, Okpukpara and Arene, 2005).

Table 4 shows that all the respondents (100%) engaged in different farming activities such as crop production, poultry keeping, pig rearing and others for alleviating their poverty status. Studies (Idachaba, 2005 and Iheke, 2010) show that farming is rural based activities. In addition, 55% of the respondents engaged in petty trading such as food stuff dealers, store keepers and among others as means of poverty alleviation. Moreover, 69% engaged in farming labour. Lots of able bodied and energetic youths are engaged in farm as hired labour, especially now the cost of labour is very high in most rural areas. This finding agrees with Ezedinma, (2003). Also, 54% engaged in Transportation business, either as vehicle owners, drivers or driver mates in order to earn income to take care of their other needs. More so, 53% engaged in Rice milling business either as owner or employee. Finally, 56% engaged in food vendor activity as source of livelihood and as well as poverty reduction strategy. These food vendors who are predominantly women perform this task mostly in rented apartment, using wheelbarrow or carrying their wares on their heads.

Conclusion and Recommendation

The major conclusions drawn from the study were; most of the respondents were literate and male headed household. The determinants of poverty level in the study were level of education, income level, and meal per day. The major poverty alleviation strategies adopted by households were farming, petty trading, rice milling, transportation and food vending. Based on the results of the study, the following recommendations were proffered:-

1. The rural farmers should be encouraged to diversify their source of earning income as a strategy against income risk.
2. There is need to increase farmers' access to market so as to avoid selling their produce at farm gate where prices are lower in order to boost their income.
3. Provision of rural employment opportunities outside farming is essential as this will increase the income of the household in order to cater for their basic needs.
4. Government should encourage new entrants and experienced ones to remain in farming through increasing their access to improved production inputs and credit.
5. Rural road network should be rehabilitated and new ones should be constructed should for easy evacuation of farmers' output to urban areas and transportation of agricultural inputs into the rural areas for farmers' easy access.
6. There is need for policy options that will encourage formation of cooperative societies by the farming households. Cooperative aids in capacity building, acquisition of credit and provision of production inputs at low costs.
7. Encouraging farmers to engage in educational programmes such as adult education and conferences and workshop in order to increase their adoption behavior, managerial skills and versatility for high farm output.

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Table .1: Distribution of the Respondents According to Farming house hold Socioeconomic characteristics

Variable	Frequency	Percentage (%)
Gender		
Male	60	60
Female	40	40
Marital Status		
Married	54	54
Single	29	29
Divorced	7	7
Widow	10	10
Age		
Less than 20 years	18	18
21-40 years	40	40
41-60 years	24	24
61-70 years	18	18
	33	33
Educational Level Nonformal education		
Primary education	28	28
Secondary education	27	27
Tertiary education	12	12
Farming Experience		
1- 10 years	35	35
11- 20 years	40	40
21-30 years	25	25
Land Holding		
Inheritance	60	60

Purchased/rent	30	30
Gift	10	10
House hold size	40	40
1-5		
6-10	43	43
10-15	17	17
Income Level		
Less than ₦150/day	22	22
₦151-₦201	27	27
₦202-₦350	30	30
₦351-₦450	21	21

Source: Computation from Survey Data; 2015

Table 2: Probit Regression Analysis of the Determinants of Poverty Level.

Variable	Coefficients	Z-value
Constant	-8.131161	-2.82**
Gender (X ₁)	-0.854.609	-1.18
Household size (X ₂)	-0.2109904	-1.11
Dependency ratio (X ₃)	-0.4210773	-2.07*
Meal per day (X ₄)	1.523.887	1.73**
Education (X ₅)	0.0245532	0.37***
Farm Size (X ₆)	0.7588164	1.46
Income level (X ₇)	0.0355215	3.80***
Extension contact (X ₈)	-1.150782	-1.17

Probit > chi² = 0.0000

Log likelihood = -17.761981

Pseudo R² = 0.7341

Source: computed field data, 2011.

Note * significant at 5%, ** significant at 10% and *** significant at 1%

Table 3: Distribution of Respondents According to Strategies for Poverty Alleviation

Strategies	Frequency	Percentage (%)
Farming	100	100
Petty trading	55	55
Civil service	36	36
Farm labour	69	69
Jobber/loader	23	23
Transportation	54	54
Palm wine tapping	22	22
Rice milling	53	53
Hunting	27	27
Food vendor	56	56
Recharge card vendor	26	26

*Multiple Responses.

Source: Field Survey, 2015