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An Assessment of Poverty among the Farming Households in Nassarawa Eggon Local Government Area, Nasarawa State, Nigeria

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ABSTRACT

The study assessed the level of poverty among the farming households in Nassarawa Eggon Local government area, Nasarawa State. Data were generated through primary sources. A total of 150 questionnaires were administered to farming households. A poverty line of 1.25 dollar per day which is exactly 187 naira was estimated. Descriptive statistics and regression model were used in analyzing the data. The results revealed that about 73.3% of the respondents were poor while about 26.7% were non poor. The results from the logit regression revealed that variation in the poverty status (dependent variable) at ($p<0.5$) is influenced by the independent variables. The results also shows that the major coping strategies used by the poor farming households are: skip meals, reduce quantity of food served, purchase less preferred food, sell some assets, look for menial jobs and borrow money from friends and relatives. The study recommend that government should intensify efforts in educating the rural populace on birth control, providing education through scholarships and economic development in terms of employment in rural areas which are the major variables that influence poverty in the study area.

Keywords: determinants of poverty, poverty line, coping strategies etc.

INTRODUCTION

The bulk of agricultural production in Nigeria takes place in the rural populace ironically, the level and incidence of poverty is pronounced in the rural areas. This is as a result of inadequate access to infrastructures and social amenities (NPC, 2004). Poverty is largely a man-made phenomenon, human error or neglects create it, human complacency perpetuates it and evidences are abound that human resources can eradicates it (World Food Council, 1989). A fundamental challenge the world faces today is ensuring that millions of households living in poverty have access to enough food to maintain a healthy life. Poverty is an important topic of discussion among world leaders. These were reflected in the theme of the poor vision 2020 Africa conference held in Uganda (IFPRI, 2004). In Nigeria, about 50% of the population lives below the poverty line, only about 40% have access to safe drinking water. About 55% of the urban population lives in a single room and about 62% have no primary health care facilities and about 60% are illiterates. Most Nigerians feed on one third of the required protein and vitamin intake due to low purchasing power (NPC, 2004). The Nasarawa state government has complemented the efforts of the federal government by procuring and distributing of fertilizer at a subsidized rate and distributing of other inputs to farmers cooperatives. However, despite these measures, poverty among farming households in Nassarawa Eggon local government area of Nasarawa state is a problem that require a multi- faceted approach as well as further insight. In the light of these, the following research questions have been proposed.

- What are the socio-economic characteristics of the respondents?
- What are the levels of poverty among the farming households?
- What are the determinants of poverty among the farming households?
- What are the coping strategies employed by the farming households?
- What are the policy implications that will help reduce the menace of poverty in the study area?

THEORETICAL FRAMEWORK

Poverty is multifaceted and can be defined from different perspectives, depending on which angle poverty is being viewed from. Essentially, poverty has been defined not to encompass material deprivation alone, but also low achievements in education and health also, vulnerability and exposure to risk (Adejobi, 2004). Poverty is also seen as lack of access to basic necessities of life, inability to meet both social and economic obligations and sometimes lack of self-esteem (Olayemi, 1995). Poverty can also be defined as a pronounced deprivation of human well-being. This deprivation may be hunger, lack of shelter and clothing, illiteracy (World Bank, 1992). Based on basic needs approach, poverty can either be absolute or relative (UNDP, 1990, FOS, 1992). Absolute poverty refers to the lack of minimum physical requirements of a person or households for existence (Bennett and Hunt, 1991). Relative poverty can be primary if the physical human subsistence expressed in terms of nutrition, clothing, housing etc are not guaranteed. It becomes secondary if nonphysical needs like participation, security, rule of law, identity etc are not guaranteed (Bennett, 1992, IFAD, 1992). Based on individual circumstances, poverty can be classified into conjectural and structural. Conjectural is a temporary or short-term condition which normally self-sufficient individuals are thrown in terms of crises. It could be man- made or natural disasters or structural adjustment reforms and changes in domestic economic policies that may lead to price change, increased unemployment (Bennett and Hunt, 1991). Structural poverty on the other hand is a long term and persistent condition. It is caused by factors such as limited productive resources, lack of skills for gainful employment, location disadvantages or endemic socio-economic and cultural factors (Bennette, 1992).

HOUSEHOLD DETERMINANTS OF POVERTY

Gender

Bennett (1992) reports that the gender of the head of household cannot be determined a priori. This is because while several studies have revealed that female headed households are likely to be poor than male headed households. Others have found that female headed households have lower likelihood of poverty than male headed households compared to some ethnic groups (FAO and UNDP, 200).

Marital status

Some studies have shown that married household heads are poorer; this is in agreement with (Omonoma, 2000, FAO and UNDP, 2005) who also added that it is more differential to women than men when other factors are held constant.

Household size

The larger the numbers of less active adults and childrens, the higher the burden on the active members in meeting the cost of minimum household nutrition. Hence, the higher the probability or intensity of poverty and vice-versa (Hassan and Habu-1991, World Bank 1996, FOS, 1999, Omonoma, 2000).

Age

The age of the household head has been found to be negatively related to the probability of poverty in many studies (World Bank, 1996).

Education

The higher the educational attainment, the lower the likelihood of poverty for all households. (World Bank, 1996, FOS, 1999, FAO and UNDP, 2005).

Employment

The greater the number of households members receiving apprenticeship or formal training, the lower the odds of poverty in which the impact is slightly stronger among households (World Bank,1996, FOS,1999, Omonoma, 2000, FAO and UNDP, 2005).

Household production enterprise

The poor are people who may have agriculture as a single source of income (Omonoma, 2000, FAO and UNDP, 2005).

Farm size and commercialization products

It has been found that the larger the farm size, the higher the commercialization also the lesser is the probability of such households to poverty. However, it depends on enterprise combinations (FOS, 1999, Omonoma, 2000).

Health and hygiene (social services)

It is hypothesized that the farther away the households to health services, the higher the probability of poverty and vice-versa (FOS, 1999, Omonoma, 2000, Watstaff and Vend 2003).

MEASUREMENT OF POVERTY

Poverty line

Poverty line is regarded as the monetary cost to a given person, at a given place and time of reference level of welfare. People who do not attain this level are deemed poor and those who do are non-poor (Ajakaiye, 2001).

Objective poverty line

Sen. (1981) outlined objective poverty line into two that is: the food energy intake and cost of basic needs expressed as:

$E = (K, Y)$

$E (K/Y) = Z$

Where E = the requirement level of energy

K = food energy level which is a random variable

Y = expenditure level

Z = poverty line

Subjective poverty line

Scitovsky (1978) stated that psychologists, sociologists and others have argued that the circumstances of the individual relative to others in some reference group influence perceptions of well-being at any given level of individual command over commodities. Subjective poverty line has been based on answers to minimum income questions (MIQ)

Head count ratio

Head count ratio express poverty in a single index that is the ratio of the member of poor to total population.

$H = Q/N$

Where Q = member of the poor

N = total sample population

This gives the proportion of the population with income below poverty line (Ajakaiya, 2001)

The poverty gap/ income short fall

According to the World Bank (1993), the poverty gap ratio or income gap is the difference between the poverty line and mean income of the poor expressed as a ratio of the poverty line.

Composite poverty measure

Sen. (1981) incorporates the head count index, the income gap and the gini coefficient.whqich is given by;

$S = H [I + (1 – 1) GP$

Where N is 1`=E (2 –Yi)

1-1/QZ

I = the average income short fall as the percentage of the poverty line

Yi = income of the poor households

Z = poverty line income

Qz = number of households with income below 2

H = headcount ratio

N = total number of households

GP = gini coefficient amount of the poor = 0 < GP>1

The physical quantity of life index (PQLI)

It measures how society will satisfy certain specific life where several social characteristics are been achieved (Ajakaiye, 2001). This line index is based on the following indicators;

Infant mortality

Life expectancy

And literacy which are represented as

PQL = F (Im, E, Lt)

Where Im = infant mortality

E = life expectancy

Lt = literacy

Index Human development

This is most recent composite index derived by the UNDP (UNDP, 1990). , it focuses on human development, it incorporates income and non-income factors, these factors include, longevity, knowledge and income which the variables of the index

HD = F (e0, Lt, Y)

Where e0 = life expectancy at birth

Lt = literacy rate

Y = per capita income (Ajakaiye, 2001)

Relative poverty measure

Relative poverty line is set at one half of the mean income or at 40^{th} percentile of distribution. There are two main kinds of relative measures.

Average income; this is the average income of the poorest at 10 or 20% of the population while the second kind is the number or population of people whose income are less than or equal to the predetermined percentage of the mean income say 50% or less of the mean income (Ajakaiye, 2001).

METHODOLOGY

The study was conducted specifically in Nassarawa Eggon local government area of Nasarawa state. Nassarawa Eggon comprises of five (5) districts which are; Umme, Alogani, Alizaga and Agugi. Nassarawa Eggon lies between latitude 8 43 and 8 45 north and longitude 8 30 and 8 34 east. It is bounded to the south of Lafia the state capital to the north by Akwanga, to East by Wamba and to the West by Kokona local government areas. The vegetation of area is the savannah type. There two major season which are; rainy and dry season. Crops grown includes; groundnuts, yam, cowpea, cassava, maize, melon, rice, guinea corn etc. fruits such as mango, guava, cashew, pawpaw among others are also grown in the study area. The population of the place was 149129 (77888 males and 71241 females) as at 2006 population census (NPC, 2006). Most of the people are peasant farmers who combine farming with trading; only few of them are civil servants. A total of 150 farming households were randomly selected from the study area, direct survey and oral interview was conducted among the selected farming households in Nassarawa Eggon local government area. Data were collected on socio-economic characteristics of the respondents such as; household size, age, access to credit facilities, income from farm and non- farm activities, coping strategies among others.

Analytical tools

Descriptive statistics such as; mean, standard deviation, coefficient of variation and percentage were used to achieve the socio- economic characteristics of the respondents and to identify the level of poverty among the farming households. The logit regression model was used to determine the level 0f poverty among the farming households which was also used to establish relationship between poverty and the various factors affecting it. The logit model has shown to be more precise and appropriate in analyzing the relationships involving dependent variable and set of independent variables (Capps and Krammer, 1985, Akinola, 1987, Adesina and Seidi, 1995).

Theoretically, the logit model is expressed as

U = Bo + B1X1 + B2X2 + …………BnXn

Where U = dependent variable

Bo = intercept

B1….n = estimated parameters

X1….n = set of independent variables.

For this study, the logit regression model for the relationship between socio-economic

characteristics of the respondents and the likelihood of poverty was specified as;
Likelihood of poverty = (1 for non-poor households and 0 for poor households)

X1 = house size (number)
X2 = access to credit
X3 = expenditure on health
X4 = expenditure on education
X5 = number of literate adult male
X6 = number of literate adult females
X7 = farm size (hectare)
X8 = income farm activity
X9 = income from non-farm activity

RESULTS AND DISCUSSIONS

Table 1: socio- economic characteristics of respondents

Poverty status	**frequency**	**percentage %**
Poor	110	73.3
Non poor	40	26.7
Total	150	100

*Source: field survey, 2012

The result from table 1 revealed that 73.3% of the farming households in Nassarawa Eggon local government area live below the poverty line of 1 dollar per day which was estimated to be exactly 187 naira per day which are considered poor while about 26.7% of the respondents who lived above poverty line of 187 naira are deemed non-poor.

Table 2: Logit regression result on determinants of poverty

Variables	**B**	**Std. Error**	**t**
Constant	-.462	.283	-1.633
Household size	-.078	0.28	-2.826
Access to credit	0.82	.089	.914ns
Expenditure on health	-.344E-006	.000	-3.774**
Expenditure on edu.	1.78E-006	.000	1.669ns
No. of literate female	.079	.028	2.806*
Farm size	.153	.073	2.092ns
Income from farm	1.69E-007	.000	.547ns
Income from nonfarm	2.82E-006	.000	5.971**

*Source: field survey, 2012.

Where R^2 = 0.623

** = significant at 5%

* = significant at 1%

ns = not significant

Results from table 2: revealed that R2 = 0.623 signifies that 62% variation in the dependent variable (poverty status) is influenced by the independent variables included in the regression. However, the f-value (12.293) shows that independent variables included in the regression model which were significant imply that they exert significance influence on the poverty status of the farmers.

Table 3: coping strategies used by the poor farming households

	Coping strategies	frequency	Percentage%
A	Skip meals	60	54.54
B	Reduce meal	20	18.18
C	Less preferred food	5	9.09
D	Sales of assets	10	4.55
E	Look for menial jobs	10	4.55
F	Borrow money	5	9.09
Total		110	100

Source: field survey, 2012.

The results from table 3, revealed the coping strategies used by the poor farming households.

DISCUSSIONS

The socio-economic characteristics of the respondents in the study area presented in table 1 revealed that 73.3% of the respondents are poor while 26.7% of the respondents are non-poor. This implies that households whose per capita income is below the poverty line are classified poor while those above the poverty line are non-poor. Majority of the poor farming households have household size more than 5-6 members. This means that the larger the size, the higher the chances of households to be poor (Hassan and Habu, 1991, FOS.1991, Omonoma, 2000 and Adejobi, 2004). Results from the stepwise regression analysis revealed that six (6) out of the nine(9) variables are selected as significant among the six (6) variables, two (2) were negative while four (4) were positive indicating their directions and magnitude to poverty among farmers in the study area. The positive signs obtained from access to credit, expenditure on education, number of literate females, farm size, income from activity and income from non-farm activity of the likely to be poor with decrease in any of these variables. While the negative signs on household size and expenditure on health implies these variables are likely to increase the level of poverty of the households (Adejobi, 2004 and IFPRI, 2003). The study shows the major coping strategies used by the poor farming households in the study area which are; meal skipping, menial jobs and reduction in the quantity of food served. They sometimes do have supplementary feeding like “kunu” which is a local diet while on the farm or at home.

ECONOMIC IMPLICATION

Inadequate economic growth is the main cause of poverty in Nigeria. A combination of several complex factors leads to poverty.

Low economic growth

The growth of economy is mainly for poverty reduction. In developing countries that is employment generating and with expert base is desirable in order to achieve growth that poverty reducing with equity.

Macroeconomic shocks and policy failure

As many economies in the world faced microeconomic disequilibrium, mostly in the balance of payment due to expansive aggregate demand policies, terms of trade shocks and natural disasters, it become necessary to undertake major policy reforms. In the process, such economies become vulnerable to poverty.

Labor market deficiencies

The poor most abundant resource is their labor, a virile labor market is important to reducing poverty and income equality.

Migration

Migration rates do reduce poverty especially when the majority of individuals who migrate are skilled workers. On the other hand, individuals who emigrate vacate jobs in labor markets. Employment is a key determinant of poverty. Therefore, gainful employment is important for individual to earn income and escape from income poverty.

Human resource development

Continued investment in human capital with improvements in efficiency is necessary to sustain reduction in poverty.

Health /diseases

Good health is basic to human welfare and a fundamental objective of social and economic development.

Debt burden

The productive sector such as agriculture, manufacturing etc are equally constrained leading to low productivity, low capital utilization, under employment and low purchasing lower thereby subjecting the masses of people to poverty.

Governance

The persistent of poverty in several countries has been linked to the lack of popular participation in governance and decision making as well as weak institutional base.

Environmental degradation

Environmental degradation is a cause of accentuate poverty and at the same time poverty can be a cause of environmental degradation.

Crime and violence

A steady increase in crime and violence has degraded the quality of life to a varying extent in many countries of the world.

CONCLUSION AND RECOMMENDATION

The study revealed that majority of the farming households in the study are poor. Where house hold size, income sources are the major determinants of household poverty. Based on the findings of this study, it is recommended that government should intensify efforts in educating the rural populace on birth control so that each household would have sizable members. Economic development policies should be formulated and implemented. Particular attention should be given more to rural populace in terms of employment, credit facilities, and social amenities among others in order to improve the farmers' standard of living.

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