

EFFECTS OF THE EUROPEAN UNION MICRO PROJECT PROGRAMME ON THE POVERTY STATUS OF FOOD CROP FARMERS IN IMO STATE, NIGERIA

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ABSTRACT

The study evaluates the effects of the European Union Micro Project Programme (MPP6) on the poverty status of food crop farmers in Imo State. Primary data were collected with structured and validated questionnaire from one hundred and ninety eight farmers comprising of farmers in the beneficiary and non-beneficiary communities. The analytical tools used for the study include; descriptive statistics and the Foster, Greer and Thorbecke (FGT) model. The FGT poverty measure showed that the poverty headcount for households in the beneficiary and non-beneficiary was 52 and 60 respectively; indicating that incidence of poverty was higher among households in the non benefitting communities than households in the benefitting communities. Thus the European Union should establish more infrastructural facilities particularly in the non-benefitting communities as this will bring about the development of the rural communities.

Keywords: Micro project programme, Poverty and Small scale farmers.

INTRODUCTION

One of the central issues of development economics is that government and policy makers are focusing on how to improve the socio-economic wellbeing of the people and thereby reduce poverty. According to the World Bank (1997), poverty is hunger, lack of shelter, being sick and not being able to go to school. Not knowing how to read, not being able to speak properly, not having a job, fear for the future, losing a child to illness brought about by unclean water, powerlessness, lack of representation and freedom.

Poverty is one of the greatest challenges facing Nigeria of today (CBN, 2010; World Bank, 2009). This is unfortunate given the country's rich resources in agriculture, oil wealth, human capacity and friendly geo-climatic conditions. Indeed, it is estimated that over 70 percent of Nigerians are classified as poor, and half of this number lives in absolute poverty (World Bank, 2009). In Nigeria, poverty has been established by past studies (World bank, 1997; FOS, 1999; Etim and Edet, 2007) as being more prevalent in rural areas. Rural poverty refers to a situation in which rural inhabitants, groups, communities and societies at a given point in time experience a level of income below that which is needed to provide a desirable minimum living standard (Rahji, 1997). The condition of most rural communities in Nigeria especially the dearth of infrastructure and the high poverty level of the people have placed severe limitations in their ability to harness available resources for a sustainable livelihood (Nnadi and Amaechi, 2004). According to World Bank survey (2002), about 70% of Nigerians are poor and living on less than one dollar per day. This situation persists in the Niger delta region of the country despite their enormous contribution to the economic growth of the country. Predominant in the rural

areas of the region are farmers who are engaged in the production of various food crops. Regrets were expressed in Ijere (1992) that the rural sector which produces 95% of the food crops in the country has been traditionally linked with poverty arising from lack of access to basic infrastructural facilities amongst others. Abah (2010) noted that the rural areas are characterized by depressingly meagre annual per capita income, low productivity, poor liveable houses and various forms of social and political isolation. It was for these reasons that the European Union intervened basically in the Niger Delta region with the construction of micro projects such as borehole, health centres, market stalls, box culverts and feeder roads in the rural communities. According to the Food and Agricultural Organization (FAO, 2005), rural infrastructure plays crucial role in economic development, poverty reduction and empowerment of the poor.

Thus with the EU (MPP6) intervention programme basically in the areas of infrastructural development it was not known whether the infrastructure intervention made significant impact on the farm performance of the food crop farmers, it was uncertain the extent the farm income, productivity and poverty status of the beneficiaries were affected by such variables as relative distances to access portable water supply, health centres, roads, schools, markets and the cost incurred to access these infrastructural facilities.

Thus, there is the need, for research to ascertain if the scheme has impacted on the socio economic development and reduction of poverty among the respondents in the beneficiary communities. This will guide policy makers in making the decisions that will strengthen the project and benefit the respondents in the study area. The impact of the project as well as its ability to reduce poverty will guide the government, donor agencies and relevant stakeholders in knowing areas of further improvement especially in designing the project in the study area.

The specific objectives are to analyse the socio-economic characteristics of beneficiaries in the study area and ascertain the impact of the scheme on the poverty status of the farmers.

MATERIALS AND METHODS

The study was carried out in Imo State. The state lies within latitude $5^{\circ}40'$ and $7^{\circ}25'$ north of the equator and Longitude $6^{\circ}50'$ and $7^{\circ}25'$ east of the meridian. The State covers a land area of $7,480\text{km}^2$ with a population of 3,934,899 (NPC, 2006). The state is characterized by tropical climate with high humidity and temperatures that ranges between 1500mm to 2300mm and 34°C to 37°C respectively). The State is divided into three main agricultural zones, namely Owerri, Okigwe and Orlu. It is further divided into 27 local government areas. The main crops grown in the area include cassava, cocoyam, yam, maize, melon and vegetables. Imo state was purposively chosen for the study because it was among the six Niger Delta states that benefitted from the European Union Micro project program EU (MPP6).

SAMPLING TECHNIQUE AND DATA COLLECTION

The Multi stage sampling technique was employed in selecting the study sample. In the first stage, the state was stratified into three Agricultural zones namely Owerri, Okigwe and Orlu. Secondly, from each of these zones, two local government areas were randomly selected making a total of six local government areas. In the third stage, four rural communities comprising of two beneficiary and two non-beneficiary communities were purposively selected from each of the selected local government areas, making a total of twenty four (24) autonomous communities. In the fourth stage, two villages were selected from each of the autonomous communities thereby given a total of forty eight villages. The sampling frame comprised the list of food crop farmers in each village within the selected autonomous communities who are

registered with the state ADP. From the sampling frame, five farmers were randomly selected from each village thereby given a total of 240 farmers for both the beneficiary and non-beneficiary communities. The sampling was designed to generate a total of 240 respondents; however after data management only 198 questionnaire representing 83% were used for the analysis. Data were collected from primary and secondary sources. The infrastructures considered are schools, market, health centres, water and roads. Other information such as farmers' socio-economic features and income from farming activities were elicited.

ANALYTICAL PROCEDURE

The data collected was analyzed using descriptive statistics and the Foster, Greer and Thorbecke (FGT) poverty model.

The Foster, Greer and Thorbecke (FGT) Model

Measurement of Poverty

The Foster-Greer-Thorbecke (FGT) (1984) measurement was adopted. It combines information on the extent of poverty (as measured by the *Headcount ratio*), the intensity of poverty (as measured by the *Total Poverty Gap*) and *the severity of poverty*.

The Foster, Greer and Thorbecke (FGT) model is expressed as thus

$$FGT\alpha = \frac{1}{N} \sum_{i=1}^H \left(\frac{z - y_i}{z}\right)\alpha \tag{1}$$

Where: z is the poverty line, defined as 2/3 of the mean per capita consumption expenditure N is the number of respondents, H is the number of poor (those with per capita expenditure below the poverty line z), y_i are individual per capita consumption expenditure and α is a "sensitivity" parameter. The higher the FGT statistic, the more poverty there is in an economy. The FGT measure corresponds to other measures of poverty for particular values of α .

For $\alpha = 0$, the formula reduces to:

$$FGT_0 = \frac{H}{N} \tag{2}$$

This is the Headcount ratio, or the fraction of the population which lives below the poverty line.

If $\alpha = 1$ then the formula is:

$$FGT_1 = \frac{1}{N} \sum_{i=1}^H \left(\frac{z - y_i}{z}\right) \tag{3}$$

Equation (3) is the average poverty gap, or the amount of consumption expenditure necessary to bring everyone in poverty right up to the poverty line, divided by total population. This can be thought of as the amount that an average person in the economy would have to contribute in order for poverty to be just barely eliminated.

If $\alpha = 2$, then the formula is:

$$FGT_2 = \frac{1}{N} \sum_{i=1}^H \left(\frac{z - y_i}{z}\right)^2 \tag{4}$$

Equation (4) which is the severity of poverty index is the mean of the squared proportion of the poverty gap.

RESULTS AND DISCUSSION

Socio Economic Characteristics of Farmers in the Area

Table 1: Distribution of the Respondents According to their Socio-Economic Characteristics

Variables	Beneficiaries of European Union (MPP6)	Non-beneficiaries of European Union (MPP6)
Age		
31 – 40	18.18	20.00
41 – 50	21.82	25.46
51 – 60	38.18	36.36
61 and above	21.82	18.18
Mean	51.86	50.77
Educational attainment		
No formal	1.82	3.64
Primary	43.64	46.36
Secondary	33.64	28.18
Tertiary	20.90	21.82
Total	100	100
Farm size		
1 – 3	77.27	73.64
4 – 6	15.45	20.00
7 and above	7.28	6.36
Mean	2.92	2.98
Sex		
Male	72.73	89.09
Female	27.27	10.91
Household size		
1 – 3	3.64	8.18
4 – 6	24.55	19.09
7 – 9	47.27	40.00
10 and above	24.54	32.73
Mean	9	8
Occupation		
Farming	55.45	53.64
Others	44.55	46.36
Income		
10000-50000	24.17	25.83
51000-100000	32.50	34.33
101000-150000	20.00	17.50
151000-200000	10.83	12.34
201000 and above	12.50	10.00

Source: Survey data, 2014

According to Table 1, the mean age of the respondents was 51years, indicating that majority of the respondents is still economically active and productive. This finding is consistent with that of Abiodun, et.al (2013) that the mean age of farmers was 55.3years. The mean number of years spent in school was 8years, indicating that the respondents in the area are moderately educated. This is consistent with the findings of Oguoma *et al* (2010) that education leads to improvement in efficiency of farmers. The mean household size of the respondents was 6 persons. This implies that the relatively large household size is an advantage in the area of labour force supply for agricultural production in the area and this is consistent with the findings of Bulus and Adefila (2014). The majority (77% and 74%) of the farmers cultivated between 1 and 3 hectares, which

indicates that the respondents are peasant farmers. Also, majority (32.5% and 34.33%) of the farmers had between ₦51,000 to ₦ 100,000 as their monthly income and this shows that farmers in the area were producing at subsistence level probably as a result of the condition of infrastructural facilities that may not support large-scale and commercial production.

Table 2 shows the distribution of the respondents according to their poverty status

Table 2: Distribution of the Respondents according to their poverty status in the study area

Poverty indicators	Beneficiary of EU(Mpp6)	Non-beneficiary of EU(Mpp6)
Poverty incidence	0.5245	0.6000
Poverty depth	0.2818	0.3255
Poverty severity	0.1789	0.2392
Poverty line	25026	

Source: Survey data, 2014

Poverty Profile of the Respondents in Beneficiary and Non-Beneficiary Communities

To address the impact of the EU (MPP6) on the poverty status of the beneficiaries, the study employed the mean per capita consumption expenditure, the poverty incidence index, the poverty gap and the squared poverty gap to measure the poverty line. The poverty line was computed as 2/3 of the mean per capita consumption expenditure and this gave a poverty line of ₦25026.55/month for respondents in the beneficiary communities. The result of the poverty profile of the respondents as presented in table 2 revealed that about 52% and 60% of farmers in the beneficiary and non-beneficiary communities were below the poverty line respectively. This indicated that poverty incidence was higher among farmers in the non-beneficiary communities. Farmers in the non-benefiting communities also had higher depth and severity of poverty than their counterparts. This could be attributed to the absence of functional infrastructural facilities in the non-beneficiary communities. From the perception of respondents, the unavailability of these infrastructural facilities has negatively affected their productivity and their livelihood pattern

CONCLUSION

The study revealed that poverty incidence, depth and severity were higher among farming households in the non-beneficiary communities than farming households in the beneficiary communities. Therefore, the study concluded that poverty was more prevalent among farmers in the non-beneficiary communities due to the absence of basic infrastructural facilities which have invariably affected their productivity and livelihood pattern.

RECOMMENDATIONS

The European Union should establish more infrastructural project particularly in the communities where they did not intervene as this will bring about the reduction of poverty in these areas. Also, the European Union should widen their scope of operation to include direct investment in agriculture; this is because agriculture remains the major economic activity of the rural people.

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REFERENCES:

- Abah, N. (2010) Development Administration: A Multi-Dispensary Approach. Enugu: John Jacob Classic Publishers.
- Abiodun, E. O., Titilope, O. O., and Nurudeen L. O., (2014) Effect of Rural Infrastructure on Profitability and Productivity of cassava Based Farmers in Odogbolu Local Government Area, Ogun State. *Journal of Agricultural Sciences. Vol. 59, No 2, Pp 187-200*
- Bulus, J. S., Adefila, J.O (2014). The Study of Rural Infratructural Facilities in Kajuru Area, Kaduna State of Nigeria. A spatial Analysis for planning. *International Journal of Humanities and Social Sciences* 4(2); 286-295.
- Central Bank of Nigeria (2010). Statistical Bulletin, CBN Publication, Abuja, Nigeria.
- Etim, N.A. and Edet, G.E. (2007) Determinants of Rural Poverty among Broiler Farmers in Akwa Ibom State. In Proceedings of the Nigerian Society for Animal Production on Sustainability of the Livestock Industry in an Oil Economy, 2007; Calabar; NSAP, pp410
- Federal Office of Statistics (FOS) (1999): Poverty Profile for Nigeria, 1980 – 1996, Abuja,
- Food and Agricultural Organization (2005): Comprehensive Africa Agricultural Development Programme. FAO Corporate Document Repository.
- Federal Office of Statistics (1999) National Planning Commission. The Federal Republic of Nigeria, Abuja
- Foster, James, J. Greer, and Erik Thorbecke, (1984), ‘A Class of Decomposable Poverty Measures’, *Econometrica* 52: 761-66
- Ijere, M. (1992) Leading Issues in Rural Development. Enugu; Acena Ventures
- National Population Commission (NPC). National Population Census Figures, Nigeria; 2006
- Nnadi, F.N and Amaechi, E.C.C.I (2004). Rural Sociology for Development Studies. Custodab Investment, Owerri, Nigeria.
- Oguoma, N. N. O., Ohajianya, D. O. and F. O. Nwosu (2010) Performance of Small – Scale Fish Farm Operators in Resource Use in Imo State, Nigeria. Imo State, Nigeria. *Pakistan Journal of Social Sciences*, 7; 8-13
- Rahji, M. A. Y. (1997). Dimensions of rural Poverty and the Food Self-Sufficiency Gap in Nigeria. In Proceedings of the Nigerian Association of Agricultural Economists Annual Conference on Poverty Alleviation and Food Security in Nigeria, 1999, Ile-Ife; NAAE, PP33-37.

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Schiller, B.R. (1980). *The Economics of Poverty and Discrimination*. Prentice Hall International Inc.

World Bank (1997), *Poverty and Welfare in Nigeria*.

World Bank. (2002). *Inadequate Infrastructural Facilities as a Measure of Poverty*, World Bank Economic and Social Studies Review. 44 (1)

World Bank, (2009): *A Sourcebook for Poverty Reduction Strategies*. Vol. 1, Khigman R. (ed.) Washington D.C: The International Bank for Reconstruction and Development: the World