

IMPACT OF POVERTY REDUCTION PROGRAMS ON MULTIDIMENSIONAL POVERTY IN RURAL NIGERIA

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ABSTRACT

Poverty reduction is the goal of all rural development programs embarked upon by Nigerian government. This is important because poverty is a critical problem in Nigeria and the rural areas are mostly affected. This study examined the impact of government programs on the multidimensional poverty of rural Nigeria by using the 2006 Core Welfare Indicator Survey (CWIQ) data. Fuzzy set approach was used to compute the multidimensional poverty index of rural Nigeria. Tobit regression was used to examine the impact of poverty alleviation programs on multidimensional poverty index of rural Nigeria. The results show that the multidimensional poverty index for rural Nigeria is 0.3796. It is also reflected that some development programs had negative impact on multidimensional poverty index of rural Nigeria. Household head in the South South region were multidimensionally poor than those in other regions. The government should intensify efforts on programs that had positive impact on multidimensional poverty index of rural Nigeria. Also, it should be ensured that government programs get to the targeted people

Keywords: Fuzzy Set, Multidimensional poverty, development programs

INTRODUCTION

Poverty reduction is a subject that has been reemphasized as one of the brightest indicators of human progress. The economic recession of the 1980s worsened Nigeria's economic fortunes, resulting in declining economic growth, increasing unemployment, galloping inflation, high incidence of poverty, worsening balance of payment conditions, debilitating debt burden and increasing fiscal deficits, among others. Available data showed that 65.6 percent of the population - (about 67.5 million) - was poor in 1996. Although the proportion reduced to 54.4 percent in 2004, given the projected population, there were about 72 million poor people in the country (FGN, 2006). Suppose that in 2006 poverty remains at its 2004 level, more than 76.16 million people would be poor. These scenarios present some worrisome situations because the number of poor people is annually increasing.

Previous governments have embarked upon several programs in order to reduce poverty. Precisely, after the Austerity Measure of 1982 failed to yield desired results, the Structural Adjustment Program (SAP) was implemented in 1986. Though some benefits were achieved at the initial stage of implementing SAP, such benefits could not trickle down to the poor. Rather, the incidence of poverty increased (Aigbokhan, 1999). Also, adverse macroeconomic shocks that inhibit economic growth, and inability of some proposed reforms to tactically address unfavorable macro-economic performances are notable among the factors that contributed to increasing poverty (Aigbokhan, 2000). Other programs embarked upon include National Directorate of Employment (NDE), the Family Support Program (FSP), the National Agricultural Land Development Agency (NALDA), Directorate for Food, Roads, and Rural Infrastructure (DFRRI), Family Economic Advancement Program (FEAP) and National Poverty Eradication Program (NAPEP) (Osinubi, 2003).

Minimum wage policy and Universal Basic Education (UBE) are also means of combating poverty. However, given the low response of households to escape from the scourge of poverty, it can be said that many of these programs have not made significant impacts.

It should be noted that previous poverty reduction programs in Nigeria did not fully achieve their objectives. It is also important to note that poverty problem in Nigeria is largely a rural phenomenon. Also, higher incidence of poverty profile in Nigeria's rural areas have been traced to some environmental problems associated with agricultural production, high vulnerability to health hazards (Alayande and Alayande, 2004), low level of education, high fertility rate, lack of access to improved seeds and inputs, and poorly developed social infrastructural facilities (Okunmadewa, 2002), among others. Similarly, due to lack of appropriate insurance against income shocks, rural poverty is often worsened because farmers dispose their productive assets such as land, livestock, equipment (etc.) in order to meet immediate consumption needs (Alayande and Alayande, 2004). Also, farming households face serious risks from inadequate rains/drought, degraded land, input shortages, disease outbreak and low prices for agricultural products.

Essentially, this study raises two main issues. First is the fact that poverty measurement in literature has graduated from the uni-dimensional income/expenditure approach to multidimensional approach that is based on nutrition, health, education, sanitation, housing quality, ownership of asset/fulfilment etc. (an offshoot of Sen's capability theory (Sen, 1985; 1987). Previous approaches to analyze poverty in Nigeria have focused on the income/expenditure approach with little attention on multidimensional poverty assessment. Second is the fact that we are not sure whether some poverty alleviation programmes had made significant positive impact on poverty reduction. This is considered important given the multidimensional nature of poverty. The objective of this study is to examine the effects of poverty reduction interventions on rural households.

METHODOLOGY

Study area

Nigeria is one of the Sub-Sahara African (SSA) nations located in the western part of Africa. The country has 36 States plus the Federal Capital Territory (FCT) - Abuja. It has 774 Local Government Areas (LGAs) being controlled by the States and FCT. It shares a 4047 km (2515-mile) border with Benin (773 km), Niger (1497 km), Chad (87 km), Cameroon (1690 km), and has a coastline of at least 853 km. Nigeria is the most populous country in Africa. The United Nations estimates that the population in 2004 was at 131,530,000 with the population distributed as 48.3 percent for the urban and 51.7 percent for rural and population density at 139 people per square km. National census results in the past few decades have been disputed. The results of the most recent census by the Government have been released which gave a population of 140,003,542 (FRN, 2007).

Data and Sampling Procedure

The study used data collected during the 2006 National Core Welfare Indicator Questionnaire (CWIQ) Survey according to NBS 2006. A two-stage cluster sample design was adopted in each LGA. The first stage involves the Enumeration Areas (EAs), while Housing Units (HUs) constitute the 2nd stage. The National Population Commission (NPopC) EAs as demarcated during the 1991 Population Census served as the sampling frame for the selection of 1st stage sample units. In each LGA, a systematic selection of 10 EAs was made. Prior to the second stage selection, complete listing of

Housing Units (and of Households within Housing Units) was carried out in each of the selected 1st stage units. These lists provided the frames for the second stage selection. Ten (10) HUs were then systematically selected per EA and all households in the selected HUs were interviewed. The projected sample size was 100 HUs at the LGA level. The sample size using other defined reporting domains (FC, senatorial, state and geo-political zone) varied, depending on the number of the LGAs that made the reporting domain. Overall, 77,400 HUs were drawn at the national level out of which 59567 were from the rural areas. Also, sampling weights were constructed for each sample, thus making the data representative of the entire population in Nigeria.

Computation of Multidimensional Poverty Indices

Multidimensional poverty index were to be computed using the Fuzzy Set theory originally developed by Zadeh (1965). This approach had been widely applied to poverty analysis by authors like Cerioli and Zani (1990), Martinetti (2000), Costa (2002), Dagum (2002), Costa (2003) and Deutsch and Silber (2005). Zadeh (1965) characterized a fuzzy set as a class with a continuum of grades of membership. Therefore, in a population A of n households [A = a₁, a₂, a₃,a_n], the subset of poor households B includes any household a_i ∈ B. These households present some degree of poverty in some of the m poverty attributes (X).

The welfare attributes considered in this study were material of the roof of the house, material of the walls of the house, material of the floor of the house, housing unit type, number of rooms per person, main source of drinking water, problems with supply of drinking water, water treated before drinking, type of toilet facility, type of refuse collection, maintain good drainage, maintain good sanitation, dwelling has window/door net, owns the dwelling, problem satisfying food needs, problems paying school fees, problems paying house rent, problems paying utility bills, problems paying for health care, improved household economic state, improved community economic state, members perceived household to be poor, security situation of the community, own an electric iron, own a charcoal iron, own a refrigerator, own a personal computer, own a mattress or bed, own a watch or clock, own a modern stove, own a gas cooker, own a fan, own a mat, own a VCR, own furniture, own a bicycle, own a motorcycle, own a vehicle, own a canoe, own a donkey, own a camel, education level of head of household, own a generator, source of electricity, main fuel used for lighting, main fuel used for cooking, own a television, own a fixed line telephone, own a mobile phone, own a radio, member provide materials, member provide labour, member provide management, member provide funds, use bed net to prevent malaria, use insecticide against malaria, use anti-malaria drug, use fumigation against malaria, use insecticide treated net, area of land owned (hectares), number of cattle and other large animals, number of sheep, goats, etc. owned, time to supply of drinking water, time to food market, time to nearest public transportation, time to nearest primary school, time to nearest secondary school, time to nearest health clinic or hospital, time to nearest all seasons road. A detailed description of the procedures for welfare indicator aggregation using fuzzy set had been provided in Oyekale *et al* (2009).

TOBIT REGRESSION ANALYSIS

The impact poverty reduction interventions on the households multidimensional poverty index was done based on access to developmental projects and their perceptions of how their well-beings have being affected by those implemented projects.

The equation to be estimated is specified as:

$$M_i = \nu + \phi_i \sum_{i=1}^6 Z_i + \pi_i \sum_{i=1}^{24} D_i + \delta_i \sum_{i=1}^5 G_i + s_i \quad \dots\dots\dots 1$$

Where M_i is the censored multidimensional poverty index. In this case, $\mu_B(a_i) = M_i$ if $\mu_B(a_i) > z$ and 0 otherwise. ϕ_i , π_i and δ_i are the estimated parameters, while ν is the constant term and s_i is the error term. The variables are defined

as:

- Z_1 = age of respondent (years).
- Z_2 = household size
- Z_3 = marital status (Married = 1, 0 otherwise)
- Z_4 = nature of job of house head (agriculture = 1, 0 otherwise)
- Z_5 = sex of house head (male = 1, female = 0)
- Z_6 = education of the household head (no education =1, 0 otherwise)
- D_1 = school construction improved life (yes =1, 0 otherwise)
- D_2 = school rehabilitation improved life (yes =1, 0 otherwise)
- D_3 = health facility construction improved life (yes =1, 0 otherwise)
- D_4 = health facility rehabilitation improved life (yes =1, 0 otherwise)
- D_5 = sanitation project improved life (yes =1, 0 otherwise)
- D_6 = road construction improved life (yes =1, 0 otherwise)
- D_7 = tarring/grading of roads improved life (yes =1, 0 otherwise)
- D_8 = transport services improved life (yes =1, 0 otherwise)
- D_9 = sinking of wells/boreholes improved life (yes =1, 0 otherwise)
- D_{10} = piping of water improved life (yes =1, 0 otherwise)
- D_{11} = rehabilitation of piped water improved life (yes =1, 0 otherwise)
- D_{12} = agriculture inputs on credit improved life (yes =1, 0 otherwise)
- D_{13} = availability of agricultural inputs improved life (yes =1, 0 otherwise)
- D_{14} = buyers of agricultural produce improved life (yes =1, 0 otherwise)
- D_{15} = availability of extension services improved life (yes =1, 0 otherwise)
- D_{16} = veterinary services improved life (yes =1, 0 otherwise)
- D_{17} = availability of consumer goods improved life (yes =1, 0 otherwise)
- D_{18} = availability of employment improved life (yes =1, 0 otherwise)
- D_{19} = housing ownership improved life (yes =1, 0 otherwise)
- D_{20} = availability of police services improved life (yes =1, 0 otherwise)
- D_{21} = credit facilities improved life (yes =1, 0 otherwise)
- D_{22} = electrification improved life (yes =1, 0 otherwise)
- D_{23} = rehabilitation of electric facility improved life (yes =1, 0 otherwise)
- D_{24} = reforestation improved life (yes =1, 0 otherwise)
- G_1 = north-west geopolitical zone (yes =1, 0 otherwise)
- G_2 = north-east geopolitical zone (yes =1, 0 otherwise)
- G_3 = north-central geopolitical zone (yes =1, 0 otherwise)
- G_4 = south-west geopolitical zone (yes =1, 0 otherwise)
- G_5 = south-east geopolitical zone (yes =1, 0 otherwise)
- s_i = error terms.

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table 1 shows the distribution of household sizes in rural Nigeria. The household size range of 4-6 had the highest percentage of 39.74 and mean of 5. It has the variability index of 16.33 percent. The household size range of 19 and above had the lowest percentage of 0.21 and mean of 22. Its variability index was 19.04 percent. The household size of range 1-3 had highest variability index of 40.23 percent and mean of 2. The household size of range 10-12 had lowest variability index of 4.35 percent and mean of 7. For all the respondents, average household size is 5.

Table 1: Range distributions of household sizes and house head ages in rural Nigeria

<i>Household size</i>	Frequency	Percentage	Mean	Standard Deviation	Coefficient of variation
1-3	19219	32.6915	2.0765	0.8354	40.2312
4-6	23363	39.7404	4.9151	0.8026	16.3293
7-9	11281	19.1890	7.7700	0.7954	10.2368
10-12	4228	7.1918	10.1239	0.4407	4.3531
13-15	408	0.6940	13.7843	0.8100	5.8763
16-18	166	0.2824	16.8313	0.7912	4.7008
19 and above	124	0.2109	21.6532	4.1222	19.0374
Total	58789	100	5.0401	2.8867	57.2747
<i>Age of house head</i>					
15-19	273	0.4644	17.8205	1.1412	6.4039
20-24	1580	2.6876	21.8690	1.4798	6.7667
25-29	4624	7.8654	26.6713	1.4521	5.4444
30-34	6085	10.3506	31.0508	1.3540	4.3606
35-39	6855	11.6603	36.1628	1.4130	3.9073
40-44	7112	12.0975	40.8756	1.2630	3.0899
45-49	6843	11.6399	46.1586	1.4186	3.0733
50-54	6366	10.8286	50.8671	1.3216	2.5981
55-59	4347	7.3942	56.2471	1.3808	2.4549
60-64	5089	8.6564	60.7286	1.2280	2.0221
65-69	3220	5.4772	66.1416	1.4444	2.1838
70-74	2899	4.9312	70.6657	1.1727	1.6595
75-79	1360	2.3134	76.0294	1.3711	1.8034
80-84	1184	2.0140	80.5329	1.1203	1.3911
85-89	435	0.7399	85.8000	1.2178	1.4193
90 and above	517	0.8794	93.4971	3.2077	3.4308
Total	58789	100	47.3860	15.6225	32.9686

Source: Computed from the 2006 CWIQ data.

The table also shows the distribution of house head ages in some specified ranges. It shows that the age range of 40-44 had the highest percentage of 12.10 and mean of 40.8. Those in the age range of 15-19 had the lowest percentage of 0.46 and mean of 18. The age range 20-24 had the highest variability index of 6.77 percent and mean of 22. The age range 80-84 had the lowest variability index of 1.39 percent and mean of 81. In the total respondents, average age

MAXIMUM LIKELIHOOD ESTIMATES OF TOBIT REGRESSION FOR MULTIDIMENSIONAL POVERTY

The impact of poverty reduction programmes on multidimensional poverty index of rural household heads in Nigeria. This was achieved using Tobit model. The regression parameters and diagnostic were estimated using Maximum Likelihood Estimated (MLE) technique. The software package used is the LIMDEP version 7.0. In assessing this impact a censored regression model made up of 36 regressors was specified. Out of these regressors, 5 were regional variables, 5 were socio-economic variables, 24 were household heads perception of impact of developmental projects on their welfare. The results presented in table 2 below were obtained after 6 iterations.

Table 2: Tobit Results of multidimensional poverty response in rural Nigeria

Variable		Coefficients	Standard Error
school construction improved life (dummy)	(D ₁)	-0.0529	0.0051***
school rehabilitation improved life (dummy)	(D ₂)	-0.0848	0.0049***
construction of health facility improved life (dummy)	(D ₃)	-0.0295	0.0065***
rehabilitation of health facility improved life (dummy)	(D ₄)	-0.0710	0.0067***
Sanitation project improved life (dummy)	(D ₅)	0.0006	0.0066
road construction improved life (dummy)	(D ₆)	-0.0030	0.0083
tarring/grading of roads improved life (dummy)	(D ₇)	-0.0739	0.0067***
transport services improved life (dummy)	(D ₈)	-0.0773	0.0080***
sinking of wells/boreholes improved life (dummy)	(D ₉)	-0.0713	0.0050***
piping of water improved life (dummy)	(D ₁₀)	-0.0442	0.0124***
rehabilitation of piped water improved life (dummy)	(D ₁₁)	-0.0954	0.0162***
agriculture inputs on credit improved life (dummy)	(D ₁₂)	0.1396	0.0129***
availability of agricultural inputs improved life (dummy)	(D ₁₃)	-0.0690	0.1090***
buyers of agricultural produce improved life (dummy)	(D ₁₄)	-0.0760	0.0063***
availability of extension services improved life (dummy)	(D ₁₅)	-0.0615	0.0128***
Veterinary services improved life (dummy)	(D ₁₆)	-0.0131	0.0107
availability of consumer goods improved life (dummy)	(D ₁₇)	-0.0579	0.0062***
availability of employment improved life (dummy)	(D ₁₈)	-0.0084	0.0134
Housing ownership improved life (dummy)	(D ₁₉)	-0.0732	0.0052***
availability of police services improved life (dummy)	(D ₂₀)	-0.0336	0.0069***
credit facilities improved life (dummy)	(D ₂₁)	0.0238	0.0161
electrification improved life (dummy)	(D ₂₂)	-0.0676	0.0065***
rehabilitation of electric facility improved life (dummy)	(D ₂₃)	-0.1224	0.0088***
reforestation improved life (dummy)	(D ₂₄)	0.0717	0.0143***
age of respondent in years	(Z ₁)	0.0006	0.0001***
Household size	(Z ₂)	-0.0039	0.0008***
marital status (dummy)	(Z ₃)	-0.0150	0.0069**
nature of job of house head (dummy)	(Z ₄)	0.1007	0.0040***
sex of house head (dummy)	(Z ₅)	-0.1176	0.0077***
Northwest geopolitical zone (dummy)	(G ₁)	-0.0277	0.0072***
northeast geopolitical zone (dummy)	(G ₂)	-0.1880	0.0069***
northcentral geopolitical zone (dummy)	(G ₃)	-0.1312	0.0071***
southeast geopolitical zone (dummy)	(G ₄)	-0.0305	0.0075***
Southwest geopolitical zone (dummy)	(G ₅)	-0.1244	0.0076***
Constant		0.3365	0.0099***
Sigma	(σ)	0.4208	0.0021***

Source: Author's computations from the 2006 CWIQ data

***-denotes significance at 1%, and ** at 5%.

The result shows that sigma (σ) is 0.4208 with a t-value of 202.25. The sigma is statistically significant at one percent ($p < 0.01$). In addition, 30 out of 36 parameters estimated in the model are statistically significant ($p < 0.10$). The intercept is 0.3365 and this represents the autonomous multidimensional poverty level of the household heads in rural Nigeria.

Development projects' variables

The household heads that indicated that building of school have impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0529 ($p < 0.01$) to become 0.2836. The household heads that indicated that rehabilitation of school have impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0848 ($p < 0.01$) to become 0.2517. The household heads that are of the opinion that construction of health facility has impact on their welfare have the coefficient of -0.0295. This implies that they have autonomous multidimensional poverty of 0.3070 which is lower to those with contrary opinion (0.3365). The household heads that indicated that of rehabilitation health facility has impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0710 ($p < 0.01$) to become 0.2775.

The coefficient of household heads that indicated that tarrying/grading of roads have impact on their welfare is -0.0739. This means that they are associated with lower level of multidimensional poverty. They have autonomous multidimensional poverty 0.2626 while the autonomous multidimensional poverty of those with the view that tarrying/grading of roads does not have impact on their welfare is 0.3365. The household heads that indicated that provision of transport services have impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0773 ($p < 0.01$) to become 0.2592. The household heads that indicated that sinking of well/borehole have impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0717 ($p < 0.01$) to become 0.2648.

The household heads that indicated piping of water has impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0442 ($p < 0.10$) to become 0.2923. The household heads that indicated that rehabilitation of pipe water has impact on their welfare are associated with lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0954 ($p < 0.01$) to become 0.2411. The household heads that indicated availability agricultural input on credit has impact on their welfare are associated with higher level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth increased by 0.1396 ($p < 0.01$) to become 0.4761. The household heads that indicated that because agricultural inputs are readily available have impact on their welfare are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0760 ($p < 0.01$) to become 0.2605.

The household that benefited from government initiative to ensure better marketing of agricultural produce are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0161 ($p < 0.01$) to become 0.3204. The household heads that indicated that availability of extension services have impact

on their welfare are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0165 ($p<0.01$) to become 0.3200. The household heads that indicated that the government ensures that consumer goods are made available are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0579 ($p<0.01$) to become 0.2786.

The household heads that indicated that more personal houses were built are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0732 ($p<0.01$) to become 0.2633. The household heads that indicated that police services was available to them are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0336 ($p<0.01$) to become 0.3029. The household heads that indicated that there was a project on electrification in their area are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.0676 ($p<0.01$) to become 0.2689. The household heads that indicated that rehabilitation of electric facility have impact on their welfare are associated lower level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth decreased by 0.1224 ($p<0.01$) to become 0.2141. The household heads that indicated that the project of reforestation in their area has impact in their welfare are associated higher level of multidimensional poverty. That is, they have autonomous multidimensional poverty in-depth increased by 0.0717($p<0.10$) to become 0.4082.

Regional variables

The result shows that the household heads in the North-West are associated with lower level of multidimensional poverty than household heads in the South South zone. It implies that household heads in North West zone will have there autonomous multidimensional poverty level decreased by 0.0277 ($p<0.01$) to become 0.3088. The household heads in the North East associated with lower level of multidimensional poverty than household heads in the South South zone. That is, household heads in North East zone will have there autonomous multidimensional poverty level decreased by 0.1880 ($p<0.01$) to become 0.1485. Also in the North Central, the household heads are associated with lower level of multidimensional poverty than household heads in the South South zone. This implies that household heads in North Central zone will have there autonomous multidimensional poverty level decreased by 0.1312 ($p<0.01$) to become 0.2053.

In the South East, the household heads are associated with lower level of multidimensional poverty than household heads in the South South zone. That is, household heads in South East zone will have there autonomous multidimensional poverty level decreased by 0.0305 ($p<0.01$) to become 0.3060. In the South West, household heads are associated with lower level of multidimensional poverty than household heads in the South South zone. That is, household heads in South West zone will have there autonomous multidimensional poverty level decreased by 0.1244 ($p<0.01$) to become 0.2121.

Socio-economic variables

The result also shows that an increase in the age of the household head will increase the likelihood of that household to be multidimensional poor by 0.0006 ($p < 0.01$). This is because as one grows older asset acquisition decreases relative to the young ones. An increase in household size will decrease the likelihood of that household to be multidimensional poor by 0.0039 ($p < 0.01$). Being married is associated with lower level of multidimensional poverty than those that are not married. That is, those that are married will have their autonomous poverty in-depth decreased by 0.0150 ($p < 0.05$) to become 0.3215. This is because as household head gets married there is the possibility of acquiring more assets than their counterparts that are not married.

Those that were employed in agriculture is associated with higher level of multidimensional poverty than those that are not engaged in agriculture. That is, those household heads that are into agriculture will have their autonomous poverty in-depth increased 0.1007 ($p < 0.01$) to become 0.4372. This may be associated with low productivity, subsistence level of production, declined soil fertility, high price of inputs such as fertilizer, etc. This is in accordance with what NBS (2005) reported. Being male is associated with lower level of multidimensional poverty than the female. It implies that the household heads that are male will have their autonomous poverty in-depth decreased by 0.1176 ($p < 0.01$) to become 0.2189. This is similar to what was found out by Ningaye and Ndajanyou (2006).

CONCLUSION

This paper has been able to show that some of the government programmes had positive impact on multidimensional poverty index of rural Nigeria. Linking the rural area via road construction/rehabilitation is important in reducing rural poverty because it could enhance their economic activity. Provision of health centre or rehabilitation of the existing one is important in reducing multidimensional poverty of the rural dweller. The healthier people are the better for them to engage in productive economic activity that would boost their economy. As it has been well known, health is wealth. Construction of school or rehabilitation of the existing one, also impact positively on multidimensional poverty of the rural dweller. Rural electrification has been identified as one of the factors that reduced the multidimensional poverty of the rural dweller. Government programmes such as reforestation and provision of agriculture inputs on credit had negative impact on multidimensional poverty index of rural household head. North East has the lowest multidimensional poverty. Farming households were multidimensionally poorer than those who were not into farming. Female household heads were poorer multidimensionally.

The government should embark on programmes that would reduce multidimensional poverty of female household head and pull farmers out of poverty.

Most of the rural dwellers are involved in one agricultural activity or the other, the bulk of the food produced in the country comes from the rural area yet, the people are poor. Various shocks such as erosion, climate change, pest could have been responsible for deepening poverty of rural dwellers who are into agriculture. There is need to intervene in the situation. In addition, the subsistence nature of agriculture in the rural area should be replaced with large scale of production and more sophisticated tools should replace the crude implement being used.

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