Impact of Non-governmental Organizations (NGOs) on Rural Poverty Alleviation in Southwestern Nigeria

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Abstract

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The incidence, depth and severity of poverty of rural people and influencing rural poverty were investigated in the Southwestern Nigeria. Multi-stage stratified random sampling procedure was used to collect data from 200 clients and 200 non-clients of NGOs in the study area. Linear multiple regression was used to determine the magnitude of contribution of variables affecting poverty in Southwester Nigeria. Results of the Forster-Greer-Thorbecke indices showed that at annual poverty line of-N54, 776. 77, incidence (45.50%), depth (20.17%) and severity (10.98%) of poverty among the non-clients were higher than among the clients (29.50, 9.02 and 3.68% respectively). Relative poverty line among clients was above N141.60 ($1) per day while it was lower among the non-clients. The F-values indicated that the poverty model Itad good fit (p < 0.01) and the Chow's test-values established significant difference in poverty model between the clients and non-clients (p < 0.01). The study revealed that gender and poverty indicators were determinants of poverty among non-clients but not among clients. Socio-cultural spending was a positive and significant variable in the poverty models (p <0.01). It also showed that belonging to the clients' group alleviated poverty as well as enhanced savings of respondents. The study concludes that microfinance delivery efforts of the NGOs enhanced poverty alleviation among clients in the area.

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Keywords: Non-governmental organization, poverty, poverty alleviation, Southwestern, and Nigeria

Introduction

Nigeria is endowed with abundant human and material resources. In spite of these, it has been classified as one of the poorest countries of the world in terms of its per capita income, consumption standard, provision of basic needs, shelter and over all economic performance (Umoh and Ibanga, 1997). The concern for poverty is expressed at the global level (IMF, 2000; IFAD, 2001 and Khan, 2000). IFAD (2001) reported that about 1.2 billion people were in "extreme consumption poverty" globally. More than two thirds of them were in Asia and about one quarter in Sub Saharan Africa. The need to reduce or alleviate poverty made the world bodies like the United Nations and World Bank to recommend microfinance as a panacea for the ailment in the poverty stricken nations (Microfinance Summit, 1997; Dichter, 1999).

Microfinance has attracted the attention of policy experts worldwide in recent years because of its success stories in poverty alleviation especially in Asia. The Asian Development Bank (2000) and Asian

Development Bank (2005) defined microfinance as the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and, their microenterprises. Microfinance services are provided by three types of sources, namely, formal institutions, such as rural banks and cooperatives, semiformal institutions, such as non-government organizations, and informal sources such as *esusu* groups, money lenders and shopkeepers.

Lack of access to credit by smallholder farmers often result in low level of investment in farm inputs, which may result in low level of output and eventually low income to the entrepreneur (Zeller and Sharma, 1998). Similarly, non-farm business like food processing, cottage industry and produce marketing that engage rural women, who form the majority of the vulnerable group (Adeyeye, 2003) become frustrating with credit crunch. Past poverty alleviation efforts were concentrated in the urban to the neglect of the rural sector (Job, 1998). These factors contribute to the high level of poverty in the rural areas. The actors that achieve prominence in Sub-Saharan Africa adjustment environment have been the nongovernmental organizations (NGOs). While service NGOs are not entirely new, post 1980 phenomenon in the continent have achieved a rapid growth in numbers, resources deployed and general recognition as development actors since the 1980s, since Sub-Saharan African countries indebtedness appeared to be due mainly to excessive state intervention, NGOs and the private sectors were viewed as the more logical, efficient and ideologically suitable alternatives.

Non-governmental organizations (NGOs) have been providing microcredit to the rural smallholders in Nigeria (Adebayo, 1997; UNCDF, 1997; Olomola, 2001; and

Adeyeye, 2003). According to Adebayo (1997), a good number of NGOs in Nigeria have focused on the declining state of agricultural inputs and poverty. The focus of NGOs in the provision of agricultural inputs and in alleviating poverty has made theme the best reliable alternative institutions for rural people in terms of improving their socio-economic conditions. In spite of this, poverty continues to rear its ugly head among the rural people. What then is the incidence, depth and severity of poverty in the study area, and what is the impact of the NGOs on poverty alleviation?

Objectives of the study were to: (i) determine the incidence, depth and severity of poverty of clients and non-clients of NGOs in the area of study and (ii) examine the factors that significantly influence rural poverty.

Methodology

The study was conducted in Oyo and Ondo States in southwestern Nigeria. The region is endowed with a large amount of natural and human resources, including a wide expanse of fertile land, forest and water resources, mineral resources, good climatic conditions, wide industrial base and highly-educated and enterprising populace (CBN, 1998). Except for Lagos State, like the rest of the country, more people are gainfully employed in agriculture than any other occupation (NPC, 1998). The farmers are small holders planting mainly tree crops (such as cocoa, oil palm and kola nut) and arable crops (like cassava, maize and yam). Other productive activities in the rural sector include food processing, produce buying, petty trading, weaving and carving, pottery, blacksmithing and fishing among others.

Primary data-were employed. Data were obtained from a field survey of rural communities comprising clients and non-

clients of microfinance institutions. Multistage stratified random sampling procedure was used in this study. NGOs in this study were selected from those belonging to Community Development and Microfinance Roundtable (CDMR) which is the umbrella body for the duly registered microfinance institutions in Nigeria (Olomola, 1999; Women's World Banking, 2003). They featured prominently in the United Nations Capital Development Fund microfinance report on Nigeria (UNCDF, 1997). The three NGOs in the study area that met this criterion are: Farmers Development Union (FADU) and Country Women and Development (COWAD) and Country Women Association of Nigeria (COWAN).

A preliminary investigation was carried out on the NGOs in Oyo and Ondo States. The investigation revealed that COWAN and FADU are the two topmost microfinance NGOs in terms of outreach (number of clients served and spatial coverage). This study therefore purposively selected COWAN in Ondo State and FADU for Oyo State. Investigation revealed that both COWAN and FADU operate in all the Local Government Areas in Ondo and Oyo State respectively.

Lists of clients were obtained from the records of the NGOs. One hundred (100) clients were randomly selected from the list of rural based clients in each of the NGOs. This added up to two hundred (200) clients of NGOs. Equal proportions of non-clients with similar enterprises as clients were selected from communities where clients were chosen such that the total number of non-clients also added up to two hundred (200). In all, four hundred (400) respondents welt selected for the study. The survey was carried out between January and June 2004.

The tools used in this study were the p-alpha measures: of poverty and multiple regression models. The t-test of significance of variables and models were performed at alpha levels of one, five and ten percent. Chow test was performed to test for significant difference between equations for clients and non-clients.

The poverty line was set at two thirds of the mean of annual per capita consumption. This poverty line was employed in the calculation of the measures of poverty. These measures of poverty are called p-alpha measures, the poverty gap index or the Foster-Greer-Thorbecke Index (Job, 1998; Balogun, 1999; Adeyeye, 2001; Akinlo, 2001). The index was calculated using the following formula $P\alpha = \frac{1}{N}\sum_{i=1}^{n}\left(\frac{Z-Yi}{Z}\right)a$ ....(2)

Where Z is the poverty line, q is the number of respondents below the poverty line; N is the total number of respondents.

Y_i is the consumption of the respondent i, a is the Forster-Greer-Thorbecke (FGT) parameter, which takes the values of 0, 1 or 2, depending on whether we are measuring the incidence, depth or severity of poverty. The three measures were obtained for the clients and non-clients as well as for the pooled data.

Consumption expenditure was used as a proxy for poverty against which we regressed certain respondents' socio-economic variables, This specification followed Adeyeye (2003). Consumption is inversely related to poverty. Any parameter that will increase consumption will alleviate poverty. Thus, the model included those variables that had impact upon consumption of rural dwellers. Most of the explanatory variables were derived form the consumption function.

The regression model is here specified as:

$C_j = 1_{0j} + 1_{1j}IHH_j + 1_{2j} HHS_j + 1_{3j} ARS_j + 1_{4j} SEX_j + 1_{5j} NRS_j + 1_{6j} HAI_j + 1_{7j} HHO_j + 1_{8j} DDM_j + 1_{9j} DDR_j + 1_{10j} EDUC_j + 1_{11j} ABI_j + 1_{12j} AOL_j + 1_{13j} SCA_j + 1_{14j} Saved\_gr_j + 1_{15j} HOUSE_j + 1_{16j} MOPO\_EXP_j + 1_{17} MMG + e_j$ $1_{1j}, 1_{2j}, 1_{3j}, 1_{6j}, 1_{10j}, 1_{11j}, 1_{12j}, 1_{15j}, >0;$ $1_{8j}, 1_{9j}, 1_{13j}, 1_{14j}, 1_{16j} <0;$

$1_{4j}, 1_{5j}, 1_{7j}, 1_{17j} = \pm$ ……………………..(2)

Where,

C_j = Per capita consumption expenditure of respondents (naira) for equation]. This included expenses on food, clothing, children education, house rent, health care and energy (electricity/ kerosene) consumption. 1_{0j} = the autonomous consumption for equation j

1_{ij} = vector of coefficients of variables (i = 1, 2, ..., 17) for equation j

j = 1 for clients and 2 for non-clients of microfinance NGOs in equation (2).

IHH_j = Income of respondent in 2003 (naira) HHS_j = Adult equivalent family size of the respondents. This is generated by using IFPRTs Adult Equivalent Consumption Units per Age and Gender (Teller, *el al.* 2001) to convert each family member to their adult equivalent.

ARS_j = average age of respondent and spouse (years)

SEX_j = gender of respondent (male = 1, female = 0)

NRS_j = number of spouses of respondent

HAI_j = household asset index score of respondent (HAI)

HAI_j was created by assigning weights to a set of household assets (Adeyeye, 2003) such as: bicycle/motorcycle -15, radio - 1 0, table - 6, clock/watch - 4, bed - 5, chair/bench -4, lamp/lantern - 3, concrete slab for drying of produce - 15, rainwater reservoir 15. Items received half the value if they are not working. HHO_j = enterprise of respondent (farmer = 1, non-farmers = 0)

DDM_j = distance of the family dwelling unit to the nearest market (km)

DDR_j = distance of the family dwelling unit to the nearest tarred road (km)

$EDUC_j$ = educational attainment of respondents (years of formal education)

MMG = membership of microfinance group (clients = 1, non-clients = 0)

ABI_j = amount of business investment in year 2003 (naira)

AOL_j = amount of loan obtained in year 2002 (naira)

SCA_j = expenses on socio-cultural activities (naira)

$Saved\_gr_j$ = amount of weekly savings in group/society (naira)

$HOUSE_j$ = index indicating the type of dwelling of a respondent

HOUSE caries the following indices based on description of the dwelling units of respondents: painted house 5, house plastered with cement in and out 4, house plastered with cement inside only 3, house without cement plastering 2, and house roofed with thatch 1. $MOPO\_EXP_j$ = Poverty indicator (MOPO_EXP = 1 if expenditure is less than two-third of mean expenditure, and 0 otherwise)

e_j = the stochastic term [$e_j \sim N(0, s^2)$].

The two equations for clients and non-clients of microfinance NGOs were subjected to Chow's test (Koutsoyiannis, 2001).

Results and discussions

Data in Table 1 show the consumption expenditure of respondents as proxy for poverty. Clients spent between N21, 600.00 and N263, 250.00 on consumption while the non-clients spent between N13, 500.00 and N295, 200.00. Only 8.50 percent of clients and 6.50 percent of the non-clients spent above N200, 000.00. The mean consumption expenditure of clients (N87, 692.45) was significantly higher than that of the non-clients (N76,637.88).

The Likelihood Ratio Chi Square and the Linear-by-Linear Association are also

significant at p < 0.05 and p < 0.01 levels of significance, respectively. Variation in consumption was greater among the non-clients (79.11%) than among the clients (67.44%). This is an indication of consumption smoothening effect of microfinance on the clients (ADB, 2000; ADB, 2005). Higher percentage of non-clients' consumption expenditure was on food (62.55%) compared to the clients (56.70%) as in Table 2. This implies that the non-clients are poorer than the clients. Expenditure of respondents on ceremonies, religious activities, association/clubs and extended family members were grouped under socio-cultural spending. These were 17.11 per cent of the items on Table 2 for the clients and 13.91 per cent for the non-clients. Generally, this category of spending reduces real consumption and savings of individual which may also lower business investment However, the clients were observed to spend more of their socio-cultural expenses on positive events like group/networking activities and training programmes that enhanced their productivity while the non-clients spent more on ceremonies which are considered frivolous (items 8 and 11 on Table 2). For instance, at a focused group discussion (FGD) session, FADU members of Cocoa Farmers Association of Nigeria in Lagelu Local Government of Oyo State highlighted their programme of events to include participation in the State's Trade Fare, visitation to Research Stations and collaboration with the government in the on-going efforts to raise the production level of cocoa in Nigeria. They also had various training programmes for members and provided professional advice to members experiencing problems on their farms. In a similar session with Ifira Women Development Association, COWAN members revealed how they assist each other to improve their businesses. They also

participated in training programmes organized at COWAN Head Office in Akure.

Clients spent between N540.00 and N67, 500.00 while non-clients spent between N450.00 and N65, 750.00 on socio-cultural activities in 2003. About 22 per cent of the respondents who committed more than N20, 000.00 to such claimed that they had special ceremonies like naming, marriage, funeral and special thanksgiving. The mean socio-cultural expenditure for clients (N15,001.52) was significantly higher (p<0.01; t-value = 2.62) than for the non-clients (N10, 663.78).

Poverty among the respondents

The relative poverty line (two-third of mean annual per capita consumption expenditure) calculated from Table 1 gave N58,461.63 for the clients, N51,091.92 for the non-client and N54, 776.77 for the pooled data. The poverty line of $1 per day set by the World Bank (UNCDF, 1997; ADB, 2000; ADB, 2005) was calculated to be N-51, 684.00 at a mean exchange rate of N141.60 to a US dollar. A crucial finding was that the relative poverty of the non-clients fell below this amount by N552.08 while Ifeat for the clients was above it by N6,777.63. However, the one for the pooled data, though higher than $1 per day was between these two categories of respondents. Twenty five percent of clients and forty one percent of non-clients in this study fell below the $1 per day poverty line. These results are in conformity with the study of Ogwumike (2002) and CBN (1998). For consistency and ease of comparison, this study used the relative poverty line of N54, 776.77 obtained from the pooled data in Tables 3 and 4.

Incidence of poverty as shown in Table 4 was observed to be lower for the clients (29.50%) than for the non-clients (45.50%). The z-test of difference of the proportion of the poor among the clients

and non-clients (value = -3.30) was significant p d" 0.01. This makes it possible to infer, with much confidence, that the non-clients were poorer than the clients of microfinance NGOs in the study area.

The depth (P₂) of poverty gives the percentage by which respondents' expenditure fell below the poverty line. The P, was lower for the clients (9.02%) than the non-clients (20.17%) while it was 14.59 per cent for the pooled data. Thus non-clients

sunk deeper into poverty than the clients of microfinance NGOs.

Similarly, the severity of poverty (P_2) was more among the non-clients (10.98 %) than the clients (3.60 %). All the respondents had a P_2 of 7.33 percent which was lower than 9.4% reported for the zone by the Central Bank of Nigeria. Higher incidence, depth and severity of poverty among the non-clients imply that NGO

Table 1: Annual consumption expenditure of respondents

n= 400

Expenditure (N)	Category of Respondents (Freq. =Frequency, % = Percentage) Clients Non-clients				Pooled Freq.	%
	Freq.	%	Freq.	%		
1 – 50000	48	24.00	79	39.50	127	31.75
50001 – 100000	99	49.50	70	35.00	169	42.25
100001- 150000	19	9.50	23	11.50	42	10.50
150001-200000	17	8.50	15	7.50	32	8.00
200001-250000	13	6.50	10	5.00	23	5.75
250001 +	4	2.00	3	1.50	7	1.75
Total	200	100.00	200	100.00	400	100.00
Minimum	21, 600		13, 500		13, 500	
Maximum	26, 3250		29, 5200		29, 5200	
Mean	87, 692.45		76, 637.88		82, 165.16	
Median	64,620		58, 038.75		60, 660	
Standard Deviation	59, 142.43		60, 628.22		60,070.31	
Coefficient of variation	67.44		79.11		73.11	
Skewness	1.37		1.38		1.35	
Kurtosis	0.96		1.39		1.12	
t-value					-1.85*	
Likelihood Ratio χ2					19.81***	
Linear-by-Linear Association					3.56*	

*-p≤0.10, ***-p≤0.01
Source: 2004

Table 2: Average annual consumption expenditure of respondents on items

| Item | Category of Respondents (Freq. = Frequency, % = Percentage) | | | | | |
	Clients Average	%	Non-clients Freq.	%	Pooled Freq.	%
1. Food	49,721.62	56.70	47, 936.99	62.55	48, 829.30	59.43
2. Clothing	8, 111.55	9.25	7, 016.46	9.16	7, 564.00	9.21
3. Education	5, 542.16	6.32	3, 712.17	4.84	4, 627 .16	5.63
4. Transportation	2, 411.54	2.75	1, 853.24,	2.42	2, 132 .39	2.60
5. House rent	3, 036.83	3.46	985.33	3.90	3, 011.08	3.66
6. Health care	2, 148.46	2.45	1, 046.17	1.36	597.32	1.94
7. Energy	1, 718.77	1.96	1, 423.74	1.86	1, 571 .26	1.91
8. Associations/groups	5, 743.86	6.55	1, 982.34	2.58	3, 863 .10	4.70
9. Religious obligations	3, 683.08	4.20	3, 114.72	4.06	3, 398 .90	4.14
10. Remittances	2, 294.88	2.62	025.66	1.34	1, 660 .27	2.02
11. Ceremonies	3, 279.70	3.74	4. 541.06	5.93	3, 910 .38	4.76
Total	87, 692.45	100	76, 637.88	100	82, 165.16	100

Source: 2004

microfinance delivery was actually alleviating poverty among the clients in the study area.

Results of regression analysis

Data in Table 5 shows the regression output of the poverty model. Seven variables were significant under the clients' poverty model. These were Income ($ë_1$ $_1$), adult equivalent family size ($ë_2$ $_1$), average age of respondents and spouse ($ä_3$ $_1$), asset index ($ë_6$ $_1$), years of formal education ($ë_{10}$ $_1$), amount of business investment ($ë_{11}$ $_1$) and socio-cultural expenses ($ë_3$ $_1$). The variables had positive coefficients and conform to theoretical expectations except SCA, which was hypothesized to be negative. The positive coefficient of SCA in this study (0.46) showed that for every additional naira spent by a client on socio-cultural activity, consumption increased by 46 kobo. This supports the findings in Table 2 that more of the clients' socio-cultural spending was on group and networking related activities that helped to improve their productivity. The marginal propensity to consume (MFC) for clients was 0.63. This implied that clients spent 63 kobo of every naira earned on consumption. The coefficient of HHS, (733.52) indicated that a unit increase in adult equivalent family size would increase consumption of a client by N733.52. This was a drain on the per capita income of the client which was capable of increasing their poverty level. The coefficient of ARS$_1$ ($ë_3$ $_1$) revealed that as clients and their spouses advanced in age, their consumption expenditure

increased by N451.25. The implication is that clients and their spouses were still within the productive years, which enabled them to work together for improved livelihoods.

The coefficient of HAI, was 337.12 meaning that a unit increase in clients' asset index would increase per capita consumption by N-337.12. This suggests that clients needed improvement in their assets, which could be made possible by improving their resource base. The coefficient of ABI_1 was 0.17. Thus, for every one naira invested by a client in a business, consumption level was raised by 17 kobo. This implies that access to adequate investment fund by clients of NGOs would increase their wealth or reduce poverty.

The non-clients' poverty model:

Data in Table 5 also show that the six significant variables in the non-clients' poverty model were IHH_2, SEX_2, ABI_2, SCA_9, HOUSE, and $MOPO\_EXP_2$. The variable's were positive except SEX_2 and $MOPO\_EXP_2$ that were negative. Moreover, all except the

Table 3: Poverty of respondents based on poverty line of two-thirds of the mean annual per capita expenditure (N54,776.77)

N = 400

Assessment	Category of Respondents (Freq. = Frequency, % = Percentage)					
	Clients		Non-clients		Pooled	
	Freq.	%	Freq.	%	Freq.	%
Poor	59	29.50	91	45.50	150	37.50
Non-poor	141	70.50	109	54.50	250	62.50
Total	200	100.00	200	100.00	400	100.00
z-value ж					-3.30***	

ж - z-test of difference of two proportions for the poor
Source: Data analysis, 2004 1

Table 4: The p-alpha measures of poverty (Forster-Greer-Thorbecke (FGT) Indices)

N = 400

Poverty line	*Two-thirds of mean expenditure* - N54, 776.77		
	Clients	*Non-clients*	*Pooled*
Incidence (P_0) (%)	29.50	45.50	37.50
Depth (P_1)(%)	9.02	20.17	14.59
Severity (P_2)(%)	3.68	10.98	7.33

† This is equivalent to $386.84 at an average exchange rate of N141.60 to $1 at the Parallel Market
Source: Data analysis, 2004

SCA$_2$ conformed to theoretical expectations. Non-clients spent 43 kobo of expenses on socio-cultural activities, which was found to be more on ceremonies.

The marginal propensity to consume was 0.90, which was higher than that of the clients. Non-clients spent 90 kobo of every naira earned -on consumption expenditure. This supported the finding that the non-clients were poorer than the NGOs' clients since they spent larger proportion of their income on consumption.

Also, poverty indicator (MOPO_EXP$_2$), which was not a determinant of consumption for clients, was highly significant here and thus formed one of the key determinants of consumption for non-clients. The coefficient of MOPO_EXP$_2$ was -15, 613.39 meaning that moving a non-client out of poverty will improve his/her consumption expenditure by N-15, 613.39. The negative coefficient of SEX$_2$ (-0.05) indicates that female gender impacted more on per capita consumption of non-clients so that enabling their consumption potential may reduce poverty. This variable was not significant under client consumption model. The implication of this is that activities of the NGOs which are pro-women were paying off. Non-client women in the area are thus encouraged to join NGOs so as to alleviate their poverty. A unit increment in HOUSE$_2$ of a non-client will improve consumption by N5, 208.05. Unlike the clients who needed improvement in other forms of assets (HAI$_2$), non-clients needed improvement in their dwelling units.

The pooled poverty model: The poverty model as shown in Table 5 for the pooled data had 10 significant variables. These were income, average age of respondents and spouse, number of spouses of respondent, asset index, occupation, membership of microfinance group, amount of business investment, socio-cultural spending, weekly contributions in group/ society and poverty indicator. The significance (p < 0.01) of Chow's F-value (11.05) indicated that different variables explain the variability in the clients' poverty model and the non-clients' model.

The marginal propensity to consume was 0.83 which is to say that an average smallholder in the area spent 83 kobo of every naira earned on consumption. It is important to note that NRS was negative and highly significant. Thus, marrying more wives might stress the per capita income of respondents and increased their poverty especially where such wives were not contributing to the family income generation. HAI was positive and highly significant. This implied that a unit increase in asset index score of any respondent increased consumption by N344.40. Poverty alleviation programme in the area could aim at increasing the productive asset of the people.

MMG was positive and significant (p < 0.01). It indicated that membership of microfinance group increased consumption in the area by N6918.42. Therefore, becoming client of NGOs was a poverty reduction decision in the area. Significant (p < 0.01) negative coefficient of HHO implied that farmers in the area spent less on consumption than non-farmers. It suggests that they were poorer than non-farmers. This might be due to the

fact that they got most of their food items directly from the farm which they might not adequately account for.

Table 5: Regression output of the poverty model

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			N = 400
Variable Clients' model		_Non-clients' model_	_Pooled' model_
Constant	24972.36(5.69)***	3478.62(1.30)	29831.44(6.22)***
IHH	0.63(12.66)***	0.90(34.94)***	0.83(21.50)***
HHS	733.52(1.98)**	0.03(1.27)	-0.01 (-0.74)
ARS	451.24(2.52)***	0.23(1.18)	0.20(2.00)**
SEX	-0.01 (0.40)	-0.05 (-2.31)**	-0.03 (-1.67)
NRS	-0.01 (-0.71)	0.00(0.18)	-13133.30 (-2.15)**
HAI	337.12(2.43)**	-0.04 (-0.99)	344.40(3.01)***
HHO	-0.03 (0.89)	0.02(0.64)	-7267.3 1(-3. 13)***
DDM	0.03(1.14)	0.01(0.13)	-0.01 (-0.53)
DDR	0.02(0.65)	-0.03 (-1.51)	0.03(1.64)
EDUC	733.52(1.98)**	-0.01(0.16)	-0.01 (-0.99)
MMG	-	-	6918.42(2.30)**
ABI	0.17(2.82)***	0.24(3.73)***	0.23 (4.33)***
AOL	0.04(1.10)	-0.02 (-0.86)	-0.34 (-1.30)
SCA	0.46(4.36)***	0.43 (3.48)***	0.46(5.61)***
Saved-gr	-0.21 (-1.33)	-0.01 (-0.41)	-12.50 (-3.37)***
HOUSE	0.02(0.64)	5208.05 (2.04)**	0.01 (0.53)
MOPO EXP	-0.02 (-1.13)	-15613.39 ((-2.97)***	-10914.30 (-2.83)***
R²	0.95	0.98	0.94
Adjusted R²	0.94	0.97	0.93
F- value	382.43***	1442.16***	544.84***
Chow's F-value			11.05***

*,**, *** - Significant at 10, five or one per cent, Figures in parenthesis are t-values
Source: Data analysis, 2004

The idea of farmers being poorer is supported by earlier findings of Canagarajah _et al._ (1997) that persons working in agriculture constitute a higher proportion of the poor. Ogwumike (2002) also reported high incidence of poverty among farmers. Thus, farmers in the area like in other parts of the country needed poverty alleviation more than non-farmers. Poverty indicator (MOPO_EXP) showed that poverty impaired consumption in the area as it reduced consumption by N10,914.30. Thus, the poverty alleviation efforts of various governmental and non-governmental organizations in the area were in the right direction.

Conclusion

The following are the major findings of the study. The relative poverty line of N54,776.77 in this study was higher than N141.60 poor people among the

clients (0.30) was significantly (p < 0.01) lower than among the non-clients (0.46).

Client's poverty model revealed that the marginal propensity to consume of the clients was 0.63, a naira spent on socio-cultural activities will improve clients' consumption by 46 kobo, a unit increase in adult equivalent family size will increase clients' consumption by N733.52, one year increment in average age of clients and their spouses will increase per capita consumption of clients by N 51.25, a unit increase in asset index score will increase his consumption by N337.12, and a naira invested by client will raise consumption by 17 kobo. All these variables have direct relationship with clients' per capita consumption expenditure. The non-clients poverty model showed that the marginal propensity to consume of the non-clients is 0.90. One naira spent on socio-cultural activities will improve non-clients per capita consumption by 43 kobo. Increasing the consumption potential of the female non-clients will reduce poverty among the group. A unit increment in dwelling index will improve consumption of non-clients by N5, 208.05, and poverty indicator reduced per capita consumption of non-clients by N15,613.39.

The pooled poverty model showed that all respondents had a marginal propensity of 0.83, increase in number of spouse of respondents will raise poverty level, one unit increase in asset index score will increase consumption by N344.40, membership of NGOs will improve the consumption by N6,918.42, being in fanning business reduced consumption expenses of a smallholder by N7, 267.31, and poverty indicator reduced per capita

consumption of smallholders in the area by N10,914.30.

Poverty was a determinant of per capita consumption among non-clients of NGOs but not among clients. Membership of NGOs is essential for poverty alleviation in the area especially among women. Improvement in dwelling units of non-clients will alleviate their poverty while the same effect will be achieved if other forms of assets are improved upon among the clients.

Most significant factors in the poverty models showed that the activities of the nongovernmental organizations have achieved success in alleviating poverty in the area of study; thus refuting the criticisms against the programme that, it is yet to have impact, and it offers illusion of a quick fix. It is recommended that individuals in the area should join themselves to microfinance groups to alleviate their poverty. Also, poverty alleviation efforts in the area should be geared towards increasing the productive asset base of the people.

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