

MICROCREDIT PARTICIPATION AND POVERTY REDUCTION AMONG ARABLE CROP FARMING HOUSEHOLDS IN TWO AGRICULTURAL ZONES IN AKWA IBOM STATE, NIGERIA

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Abstract

This study examined the effect of microcredit participation on poverty reduction among a sample of 120 arable crop farmers selected through a multi-stage random sampling in Abak and Uyo Agricultural Zones, Akwa Ibom State, Nigeria. Data collected with the aid of a questionnaire were analysed using descriptive statistics, Mean Per Capital household Consumption Expenditure, Foster, Greer and Thorbecke (FGT) model and the Logistic regression model. Findings revealed that majority (62.5%) of household heads were male and were married (84.2%). Findings also revealed a mean age, household size, education and farming experience of 43 years, 4 persons, 13 years and 11 years, respectively. The major sources of microcredit were: cooperative (31%), money lenders (19%), micro finance, (14.3%), others (10.7%), NGOs (8.3%) and religion/ charismatic societies (4.8%). Result of the poverty status showed that about 45 percent of sampled households were poor while 55 percent were non poor. Of a total of 54 poor households, 35.2 percent were microcredit participants while 64.8 percent were non- participants. Result of the FGT model yielded a Head count ratio of 0.3114 and 0.5823, Poverty gap ratio of 0.1361 and 0.2824 and severity of poverty of 0.0352 and 0.062 for micro-credit participants and non- participants respectively. The differences in the three estimated poverty indices between both groups of households showed that in the absence of microcredit participation, about 27.69 % more individuals was thrown into poverty while an average individual will require additional 14.63% income transfer to bring them to the poverty line. The differences in severity index showed that about 2.68% more individuals suffer severe poverty. Result of the Logistic regression analysis revealed that gender of household head, annual income and participation in microcredit significantly reduced poverty status of households at 10%, 5% and 10% levels, respectively while farm size and educational level significantly increased poverty status respectively at the 5 and 10% levels. The major constraints to microcredit participation in the study area were: high interest rate (23.76%), lack of guarantors (21.3%), short repayment period (17.8%), low loan volume (5.4%), lack of collateral (8.9%), insufficient grace period (8.2%) and stringent application procedure (4.7%).

Keywords: Microcredit, Participation, Poverty reduction, logit regression.

Introduction

The terms “Micro” and “finance” are two words that are usually associated with small loan schemes. While “micro” prefix refers to small size, the Oxford Dictionary, (2013). Defined “finance” as the activity of managing money, especially by a government or commercial organization. According to Charistonenko (2004), microcredit is the extension of small loans to micro entrepreneurs who are low income earners and are too poor to qualify for conventional bank loans, which is channelled towards income generating enterprises. This does

not mean that the microfinance providers themselves are small. They are primarily concerned with credit and savings although in recent times, allied services such as insurance, leasing payment transfer and remittances are being introduced to the mix (Mathison, 2006). As reported by (Nazirwan, 2003), microfinance has been more advanced in order to challenge the need of millions of poor for financial services. Micro finance is the supply of loans, savings, and other basic financial services to the poor. These poor smallholder farmers require diverse range of financial instruments to meet working capital

requirements, build assets, stabilize consumption and shield themselves against risks. Microfinance has also been defined as efforts to improve the access to loans and to savings services for poor people (Shreinner, 2001), and is currently being promoted as a key to development and strategy for promoting poverty reduction, eradication and economic empowerment. In practice, microfinance focuses on providing working capital to people who generate income for themselves in their small business activities including agriculture (Mathison, 2006). In Nigeria, agriculture has been described as the backbone of the economy. However, agricultural production has been in the hands of small scale farmers whose aspirations in terms of expansion of scale of production has been low, small scale farmers have poor resource base and are daily faced with the problem of optimal utilization of their meager resources to raise income and consequently their living standards (Ayiro and Oriwai, 2011). Hence, majority of Nigerian farmers are poor, live in rural areas and the state of rural poverty is no less alarming with very sharp deterioration in the living standard (Ezeh, 2007). Even though numerous policies and programmes such as National Accelerated Food Production Programme (NAFPP) Directorate of Foods, Roads and Rural Infrastructure (DIFRI), National Directorial for Employment (NDE), Better Life for Rural Dwellers (BLRD), Family Support Programme (FSP), Peoples Bank (PB) and Community Bank Schemes (CBS), have tried to alleviate poverty, their results are often disappointing, (Ayiro *et al.*, 2011).

Nigeria has a poverty rate of about 70% which is very alarming. In rural areas, majority of the population get access to financial services through informal channels such as money lenders, traders, friends or relatives, (World Bank, 2006). Lack of access to credit is generally seen as one of the main reasons why many people in developing economies like Nigeria remain poor. Usually, the poor have no access to loans from the formal banking system, because they cannot put up acceptable collaterals and/or because the cost of the screening and monitoring the activities of the poor, and of enforcing their

contracts, are too high to make lending to this group profitable, (Ezeh, 2007).

The issue of poverty has become a major concern to many Nations particularly the developing countries. Poverty has been defined as a situation where a population is able to meet only its mere subsistence, the essentials of food, clothing and shelter in order to maintain minimum standard of living, (Balogun, 1999). In developing economies and particularly in rural areas, many activities that would be classified in the developed world as financial are not monetized, that is money is not used to carry out those activities. This is often the case when people need the services money can provide but do not have dispensable funds required for those services, forcing them to revert to other means of acquiring them.

Microfinance is the proper tool to reduce income inequality, allowing citizens from lower socio-economic classes to participate in the economy. Moreover, its involvement has led to a downward trend in income inequality (Hermes, 2014). However, microfinance plays an important role in the poverty reduction of a particular country. This is because, in Nigeria, rural dwellers lack access to adequate financial services for efficient inter-temporal transfers of resources and risk coping, and that without well-functioning markets; these farmers do not have much prospect for increasing in any significant and sustainable way their productivity. The traditional Commercial banks typically have no interest in lending to poor rural farmers due to their lack of viable collateral and high transaction cost associated with the small loans that suit them, (UNDP, 2001). Lack of access to formal credit and financial intermediation services impedes agricultural productivity and hampers the efforts to alleviate rural poverty. A micro-finance programme which is able to pool risks across agro climatic areas can provide credits to the poor at affordable costs and can help them become self-employed (World Development Report, (2000/2001). Microfinance has become a worldwide movement as a development activity, a way of helping poor people out of poverty (Ditcher, 2006).

However, the financial sector in Nigeria has failed to serve the poor. With respect to the formal sector, banks and other financial institutions generally require significant collateral, have a preference for high income and high loan client, and have lengthy and bureaucratic application procedures. With respect to the informal sector, money lenders usually charge excessively high interest rates, tend to under evaluate collateral and often allow racist attitudes to the poor. Others (Fengxia, Jing, Allen and Featherstone, 2010; Nimoh *et. al.* 2011; Baffoe *et. al.*, 2016; Anang *et al.*, 2016 and Owusu, 2017) attest to the potential of microcredit in reducing poverty through its productivity and income enhancing potential. Despite this, not much has been done in the study area in attempting to establish a link between microcredit access and poverty reduction. Against this backdrop, this study analysed the effect of Microcredit participation on poverty reduction among arable crop farmers in Akwa Ibom State, Nigeria.

Research Methodology

Study Area

This study was conducted in Akwa Ibom State. The State was created on 23rd September, 1987. It is located in the southeast ecological zone in Nigeria. Uwat (2002) reported that it is one of the coastal states located between Latitude 4^o33¹ and 5^o33¹ North and Longitude 7^o35¹ and 8^o35¹ East. The State has a total population of 7,245, 935,746 (NPC, 2006). Moreover, 73 percent of the population live in the rural areas and are farmers. The State is made up of thirty-one (31) Local Government Areas. Akwa Ibom State is made up of six Agricultural Zones which include Uyo, Eket, Abak, Etinan, Oron and Ikot Ekpene. The people of Akwa Ibom State are predominantly farmers and traders. The major crops grown in the State are cassava, vegetables, oil palm, coconut, plantain and banana. Akwa Ibom State is dominated by Christians.

Sampling Technique and Sample Size

Multi-stage random sampling techniques was used to select 120 farmers for the study. At first stage, two Agricultural Zones namely; Uyo and Abak were purposively selected. This is because they are among the major food producing

agricultural zones in the State. At the second stage, three Local Government Areas were randomly selected from each agricultural zone; this includes: Itu, Ibesikpo and Ibiono Ibom (Uyo Agricultural Zone), and Abak, Oruk Anam and Ukanafun (Abak Agricultural Zone), which gave a total of 6 Local Government Areas. Stage three involves the selection of one community from each of the six Local Government Areas, making a total of six communities. In stage four, 20 respondents were randomly selected from each of the communities which gave a total sample size of 120 respondents in the ratio of sixty each of microcredit and non- microcredit participants, respectively.

Analytical Techniques

The study used descriptive and inferential statistics. In order to assess the extent to which microfinance contribute to poverty reduction in the study area, two sets of analysis were carried out. In the first analysis, relative poverty indices such as the Head Count Ratio, the Poverty Gap Ratio, and Severity of Poverty were estimated for both Microcredit and non- microcredit participants with a view to assessing differences in the aforementioned parameters (with and without microcredit participation) using the Foster, Greer and Thorbecke (FGT) Model of poverty. In the second analysis, participation in micro credit was included as a subset of several other socioeconomic characteristic of farmers and regressed against their poverty status to determine whether it significantly increase or decrease poverty among respondents using the Logistic regression analysis. The models are specified as follows:

The Mean per Capita Household Consumption Expenditure Approach

This approach was adopted to determine the poverty line. In measuring poverty, the first stage was to establish the poverty line. Nigerian government computed three levels of poverty using the Mean Per Capita Household Consumption (MPCHHE) which stood at N100,

203.30 per year in its 2010 National Bureau of Statistics (NBS) study. For the first level of poverty called the core poor, one third (1/3) of the MPCHHE or N33, 401 were set as the poverty line. For the second level of poverty called moderate poor, 2/3 of MPCHHE or N66, 802.20 were used as the poverty line. Those with more than two third (2/3) of the MPCHHE were regarded as non-poor. In this study, the poverty line adopted was the second level of poverty i.e. 2/3 of the MPCHHE or N66, 802.20, hence, any respondent whose MPCHHE was more than N66,802.20 was regarded as non-poor, while those whose MPCHHE less than N66, 802.20 were regarded as poor households

Foster, Greer and Thorbecke (FGT) Model of poverty

Having established the poverty line, the Foster, Greer and Thorbecke (FGT) model of poverty analysis was adopted. The formula for FGT is presented as:

$$P\alpha = 1/n \quad P\alpha = 1/n \sum_{i=j}^q \left[\frac{z - y_i}{z} \right]^\alpha$$

Where z = poverty line

q = number of individuals living in the household
 y_i = expenditure of household in which i individual lives

α = FGT index and takes the value of 0, 1 and 2

The quality in bracket $\left[\frac{z - y_i}{z} \right]^\alpha$ is the proportionate shortfall of expenditure or income below the poverty line

- (i) If the α is raised to 0 then the poverty index measured is the Head Count Ratio or incidence of poverty
- (ii) If the α is raised to 1, then the poverty index measured is the Poverty Gap Ratio or intensity of poverty. This implies the proportion that the average poor will require to at least get to the poverty line.
- (iii) If the α is raised to 2, then the poverty index measured is the Severity of poverty. However, the closer this value is to 1 the higher the seriousness of poverty

The Logistic regression model

This was used to estimate factors influencing the poverty status of respondents in the study area.

The dependent variable Y_i is the poverty status which is represented with a binary (1 or 0). Value 1 was assigned to the poor households, while 0 was assigned to the non-poor households. The implicit form of the model is stated as: $Y_i = X_i B + e_i$.

The explicit form of the model is stated as follows:

$$Y_i = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + B_7 X_7 + B_8 X_8 + B_9 X_9 + B_{10} X_{10} + B_{11} X_{11} + e_i$$

Y_t = Poor or non-poor (Dummy, takes the value 1 for poor, 0 otherwise)

B_0 = Intercept

B_1 = the Coefficients

e_i = error term

X_1 = Age of the household head (Years)

X_2 = Sex (Dummy, takes the value 1 if male and 0 otherwise)

X_3 = Marital status (Dummy, takes the value of 1 if married and 0 if otherwise)

X_4 = Household size (number)

X_5 = Educational level (years of formal schooling)

X_6 = Farm size (In hectares)

X_7 = Yearly income (in Naira)

X_8 = Farming Experience (in years)

X_9 = Dependency ratio (Number of non-working members in the household divided by the number of working members)

X_{10} = Participation in microfinance (Dummy takes the value 1, if benefited from Microfinance Bank Loan and 0 if otherwise).

X_{11} = Amount of credit access from microfinance outfits (in Naira)

Result and discussion

Socioeconomic Characteristics of Respondents

Table 1 presents the socioeconomic characteristics of respondents in the study area. Table 1 showed that most of the respondents, (40.0%) interviewed were at the age bracket of 36-45 years, this implies that most of the respondents were mostly at their active age of life and therefore had greater opportunity to perform more work so as to increase their productivity and improve their standard of living hence reducing

poverty. While, (27.5%) were at the age bracket of 18-35 years; (30.0%) were at the age bracket of 46-65 years and (2.5%) were 60 years. The mean age of the respondents was 42 years. Obo (2018) reported the dominant age bracket of 51-60 years with a mean of 43 years in the study area.

The result further showed that majority (62.5%) of the respondents were male while (45.5%) of the respondents were females. This can be attributed to the predominance of the male headed household in both rural and urban areas of Nigeria and the tedious nature of farming operation which require hand tools. Also, result showed that majority (84.2%) of the respondents were married, (13.3%) were single, (0.8%) were divorced and (1.7%) were widowed. Bassey, Edet and Okeke (2015) reported that majority (50%) of farmers in the study area were married. Obo (2018) also reported that about 53.3 percent of farmers in the study area were married. Household size survey result showed that majority (51.7%) of the respondents had 4-6 people in their households, (21.7%) (1-3) persons, (25.8%) had (7-10) and (0.8%) had above 10 people in their households with a mean of 5 persons. As reported by Obo, (2018), the high household size implied that a substantial part of farm income will be channel into solving domestic problems than for farm expansion. He explained further that it might also imply abundant labour which can be harnessed for farm work since marriage is usually associated with children. Bassey, Edet and Okeke, (2015) reported a dominant household size of 6-10 persons (45%) in the study area.

Majority (52.5%) had secondary education, 36.7% had primary education, 2.5% attended tertiary education while 8.3% had no formal education. The mean year of education among respondents was 13 years. This implied that respondents were mostly literate. In the study area, Bassey, Agom and Edet, (2015) reported that about 89.2 percent of farmers were educated. A survey of income status of respondents revealed that majority (62.5%) of the respondents earned above ₦150, 000, while (1.7%) of the respondents earned ₦5,000 – 50,000, (5.0%) earned ₦ 50,001-100,000 and (30.8%) of the

respondents earned ₦100,001 – 150,000 in a year.

In terms of farm size, result showed that, majority (67.5%) of the respondents had about 0.5 to 1.5 Hectares of land, (30.8%) of the respondents 2.0-2.5 hectares, while (1.7%) of the respondents had about 3.0 Hectares of land. The prevalence of respondents with farm sizes of 0.5 to 1.5 hectares reflects the subsistence nature of farming that is practiced in the study area. Experience wise, 35 percent of respondents had 6-10 years of farming experience, 19.2% of the respondents had 1-5 years of farming, , 22.5% had 11-15 years of farming experience while 23.3 percent of the respondents had above 15 of farming with a mean of 13 years of experience.. In the study area, Bassey, Agom and Edet, (2016) reported that majority (44.2%) of farmers had more than 15 years of farming experience. Obo, (2018) further reported a mean experience of 11 years among cassava farmers in the study area. Considering sources of funding, the survey revealed that majority (35.8%) of the respondents had their financial support from cooperative; 24.2 percent of the respondents had their financial support through bank, 15.0 % had their financial support through Friends while 25.0 % of the respondents had their financial support from, personal savings.

Source of micro credit available to farmers Distribution of respondents according to Source of micro credit access

Table 2 presents the distribution of respondents based on their sources of microcredit participation. The result showed that majority (31%) of the respondents accessed credit from cooperative societies, 19 percent borrowed from family and friends, 14.3 percent borrowed from Micro finance Banks, 11.9 percent borrowed from local/ traditional money lenders while 10.7, 8.3 and 4.8 percentages borrowed from other sources (such as churches, meeting places, self-help groups, rotatory savings etc.), NGOs and religious/ charismatic societies, respectively. The high use of credit from cooperative, self- help groups, rotatory saving groups, money lenders, religious groups as well as friends and relatives in the study area was previously reported by Bassey, Offor and Etim (2018).

Table 1: Socio-economic characteristics of respondents of the respondents

Characteristics	Frequency	Percentage
Age (years)		
18-35	33	27.5
36-45	48	40.0
46-65	36	30.0
Above 60	3	2.5
Mean	42	-
Total	120	100
Sex		
Male	75	62.5
Female	45	37.5
Total	120	100
Marital Status		
Married	101	84.2
Single	16	13.3
Divorced	1	0.8
Widow	2	1.7
Total	120	100
Family Size (numbers)		
1-3	26	21.7
4-6	62	51.7
7-10	31	25.8
Above 10	1	0.8
Total	120	100
Educational level (years)		
Non-formal	3	2.5
Primary	10	8.3
Secondary	44	36.7
Tertiary	63	52.5
Total	120	100
Farm Size (Hectares)		
0.5-1.5	81	67.5
2.0-2.5	37	30.8
3.0	2	1.7
Mean	1.5	
Total	120	100
Years in Farming		
1 – 5	23	19.2
6 – 10	42	35.0
11 – 15	27	22.5
Above 15	28	23.3
Total	120	100

mmm

Source: Field survey, 2016

Table 2: Frequency and Percentage Distribution of Respondents according to Credit Sources

Credit sources	Frequency	Percentage
Microfinance Banks	12	14.3
NGO.s	7	8.3
Family and friends	16	19
Local / traditional money lenders	10	11.9
Cooperative societies	26	31
Religious/ charismatic societies	4	4.8
Others (self-help groups, meeting Places, rotatory savings)	9	10.7
Total	84*	100

* signifies multiple responses

Source: Filed survey, 2016

Poverty status of respondents in the study area

Table 3 shows the result of analysis of poverty status of respondent based on their participation and non- participation in microcredit which was computed using the Mean Per Capita household Expenditure of household. Result revealed that about 55 percent of households were classified as non-poor, while 45% were classified as poor. A breakdown of this showed that, of the total number of 54 (45%) poor households, 19 (35.2%)

were microcredit participants while 35 (64.8%) were non- micro credit participants. Considering non-poor households, of a total of 66 (55%) non-poor households, 41 (62.1%) were microcredit participants while 25 (37.9%) were non participants. The percentage differences in poverty status (25.6%) between both categories of households further explained the potential of credit in reducing poverty among farmers.

Table 3: Distribution of respondents based on their poverty Status

Status	Microcredit participants		Non-participants		% diff	Total	%
	No.	%	No.	%			
Poor households	19	35.2	35	64.8	25.6	54	45
Non-poor households	41	62.1	25	37.9	24.2	66	55
Total	60		60			120	100

Source: Field Survey Data, 2016

Analysis of poverty among microcredit and non- microcredit participants

The result of the relative poverty analysis which was carried out using the Foster, Greer and Thoorbecke (FGT) model is presented in Table 4. The Table, showed that when relative poverty was measured with microcredit participation, the Head count index was 0.3114, depicting that about 31.14 percentage of farm household's participants were poor. The income gap ratio or intensity of poverty was 0.1361. This denoted that the poor individual income transfer required about 13.61 percent to bring them back to the poverty line. The Severity of poverty was 0.0352 which showed that 3.5 percent of individuals suffered from severe poverty.

However, when the relative poverty was measured without microcredit participation, poverty incidence increased seriously. For instance, the Head count Index increased to 0.5823, moving more individuals by 27.69 % into poverty. The Income gap ratio widened to 0.2824 while the severity of poverty also increased to 0.0620, implying that about 6.2 % of individuals now suffer from severe poverty. The estimated differences in poverty indices between both groups of farming households showed that in the absence of microcredit participation, about 27.69 % more individuals could be thrown into poverty while an average individual will require additional 14.63 % income transfer to bring them to the poverty line. The differences in severity index showed that about 2.68 % more individuals will suffer from severe poverty. This finding

indicated that participation in microcredit reduces poverty and support those of Oyinbo and Olaleye, (2016). In the study area, Bassey, Agom and Edet, (2016) reported a head count ratio of 0.4814

and 0.8040, the income gap ratio or intensity of poverty of 0.1663 and 0.3262 and the severity of poverty of 0.0542 and 0.0970 between off-farm and non- off-farm income earners, respectively.

Table 4: Relative poverty indices with and without microcredit participation

Poverty indices	H ($\alpha = 0$)	I ($\alpha = 0$)	FGT ($\alpha = 2$)
1.	Poverty indices with microcredit participation		
	0.3114	0.1361	0.0352
2.	Poverty indices with non- microcredit participation		
	0.5823	0.2824	0.0620
Increase/ decrease	0.2769	0.1463	0.0268 mmm

Source: Field survey data, 2016

Logistic regression estimate of factors influencing poverty status of the respondents

The Maximum Likelihood estimates of the parameters in the Logistic regression model characterizing the likelihood of a household being poor or non-poor is dependent on a number of explanatory variables one of which is access to microfinance amongst other. A likelihood ratio test of overall significant of the logit model gave a calculated Chi- square value of -22.419793, which was significant at the one percent level of probability ($p < 0.01$), suggesting that the model has a strong explanatory power. The pseudo R^2 value of the model was 0.7285. Thus the explanatory variables used in the model are collectively able to predict nearly 73% of the likelihood of a respondent being poor based on expenditure frame work. However, the parameter estimates of the binary logistic provide only the direction of the effect of the independent variables on the dependent (response) variable: estimates do not represent actual magnitude of change on probabilities. In order to derive the magnitude of the impact of independent variables on the probability of being poor the marginal effect which measures the expected change in an independent variable were also estimated and discussed.

The results showed that among the explanatory variables, sex of the respondents ($p < 0.10$) annual income ($p < 0.05$) and participation in microfinance ($p < 0.10$) had a negative and significant relationship with the likelihood of being poor. Suggesting that poverty reduces as the three aforementioned factors increases. In addition, the marginal effect suggest that a unit

increase in the number of female headed households, yearly income of the respondents and participation in microfinance will more likely reduce the odd of a household being poor or living in poverty by 3.3%, 0.004% and 8.9%, respectively. This findings for annual income corroborates those of Akpan, Patrick and Amama (2016) and Olawuyi and Adetunji, (2013). The negative relationship between participation in microcredit and poverty status is expected because credit is expected to reduce liquidity challenges among farm households and broaden their investment horizons. This finding supported those of Oyinbo, and Olaleye (2016),

Conversely, educational level ($p < 0.10$) and farm size ($p < 0.05$) had a positive and significant relationship with poverty. Also the marginal effect suggests that a unit increase in educational level and farm size will increase poverty by 0.3% and 5.3%, respectively. This is counter intuitive, as one could expect that increasing educational level will reduce poverty. But this is not the case here, this could be because of the present high level of unemployment in the country where most highly educated people are not gainfully employed, hence, living with very low income which increases their poverty level. This finding conflicts with those of Akpan, Patrick and Amama (2016) and Okoro, Akpaeti and Ekpo, (2015). Also increasing farm size increases poverty. This could be because most farm households lack finance to purchase improved varieties of farm inputs and or mechanize their farm for higher productivity, hence; they are still using hand implements which led to low productivity and low income. In this case,

expanding their farm may not increase their farm profit, and may not lead them out of poverty.

Table 5: Logistic regression estimates for the determinants of poverty among respondents

Explanatory Variable	Coefficient/Standard error	Z Value	Marginal Effect
Intercept	-2.29676 (3.6266)	-0.63	
Age	-0.023661 (0.05332)	-0.44	-0.00475
Sex	-1.88560* (1.38852)	-1.89	-0.33719
Marital status	1.16230 (1.38852)	0.84	0.18988
Household size	0.07872 (0.23075)	0.34	0.0157962
Educational level	0.17577* (0.08959)	1.96	0.03527
Farm size	2.67478** (1.03274)	2.59	0.53672
Annual income	-0.00017** (0.00007)	-2.37	-0.00004
Farming Experience	-0.00232 (0.09455)	-0.02	-0.00047
Dependency ratio	4.05928 (2.86862)	1.42	0.81453
Participation in Microfinance	-6.53755* (3.72161)	-1.76	-0.89558
Amount access	2.86e-07 (0.00002)	0.01	5.74e-08
Number of Observations	= 120		
Pseudo R²	= 0.7285		
Prob chi²	= 0.0000		

Source: Output of computer printout

Constraints Faced by Farmers in accessing microfinance in the study area.

Table 4 shows the distribution of respondents according to constraints faced in the study. As evidenced in the table, high interest rate ranked 1st (23.7%), followed by lack of guarantor which was ranked 2nd (21.3%). Short repayment period (17.8%), low loan volume (15.4%), lack of collateral (8.9%) and insufficient grace period (8.2%) were ranked 3rd, 4th, 5th and 6th, respectively. The low ranking of lack of collateral is justified in that majority of micro credit schemes relied more on guarantors since majority of small scale farmers are poor and rarely afford the huge collateral demand by formal lenders.

Possession of collateral will increase microcredit access because given that it assures the lender that the loaned amount is safe and can be recovered by disposing the collateral in case of default. The high ranking of interest rate can be a problem because interest often adds up to the original borrowed sum. Hence higher interest rate will place a higher repayment burden on the borrower by lengthening the repayment period. Empirical studies by Basse, Nyong, Umoh and Okon (2014), Nwaru *et al.*, (2011), Okon *et al.*, (2017) and Ajari and Tijana, (2009) reported that higher interest rate reduces access to credit. Also, lack of surety will reduce participation in microcredit because most micro finance institutions operates

more with sureties given the non-acquisition of collateral by most rural farmers. Availability of surety is necessary because rural loan schemes in rural areas are characterized by high rate of loan defaults. Bassey, Nyong, Umoh and Okon (2014), reported that availability of surety

increases credit access in the study area. The low ranking of stringent application procedure and insufficient grace period reflects the ease of acquiring credit from microcredit institutions and well as the rigid recovery procedure associated with informal sources of credit.

Table 6: Distribution of constraints faced by farmers in accessing microcredit

Type of Constraint	Frequency	Percentage	Rank
Lack of collateral	15	8.9	5 th
High interest rate	40	23.7	1 st
Stringent application procedure	8	4.7	7 th
Lack of guarantor	36	21.3	2 nd
Low loan volumes	26	15.4	4 th
Short repayment period	30	17.8	3 rd
Insufficient grace period	14	8.2	6 th
Total	169*	100	

*Signifies multiple responses. Source: Field survey, 2016

Conclusion

The study examined the potential of microcredit participation in poverty reduction among arable crops farmers in Akwa Ibom state, Nigeria. Findings further evidence of the potential of microcredit in reducing poverty in the study area. It has also shown that poverty status of respondents were affected by a set of farmer's socioeconomic variables. Also, several constraints militating against microcredit participation by farm households were examined. The study concluded that policy measures aimed at reducing poverty in the study area should be directed towards enhancing microcredit participation by rural farm households.

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Recommendations

- (i) To further enhance participation in microcredit, government and financial stakeholders should evolved an enabling law that will regulate informal lending sectors as this will not only reduce the outrageous interest charged but will also ensure uniformity in interest charged and specify minimum loan durations and volumes.
- (ii) Government should provide basic infrastructural facilities such as good roads, schools, hospitals, constant power supply, to enhance farmers' wellbeing and reduce poverty.

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