

THE DEMAND FOR CREDIT, CREDIT RATIONING AND THE ROLE OF MICROFINANCE- EVIDENCE FROM POOR RURAL COMMUNITIES IN CROSS RIVER STATE

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ABSTRACT

Previous studies on microfinance focused on Credit constraints (Aliou et al, 2001; Liu and Cheng, 2009), and microfinance as a strategy for poverty reduction (Akanji, 2006; Cecilia et al, 2012). Using a large household survey data set, this study examines the demand for credits, determinants of credit rationing and the behavior of formal and informal lenders in six of the eighteen Local Government Areas in Cross River State, Nigeria; Ikom, Bekwarra, Boki, Etung, Ogoja and Yala Local Government Areas. We found that microfinance is an effective strategy for poverty reduction in the state, but it has not achieved optimum results. Well-performed microfinance institutions have contributed to poverty reduction in other places by expanding micro-loan services to the low income rural households with frequent incomes and to the female-headed households. The microfinance institutions have the capacity of reaching out to wider and poorer households if they (develop) innovate the loan products based on the income and expenditure flows of these households. We recommend sustainable and cost-effective socio-economic development of the poor in Nigeria through micro financing. Microfinance institutions in the rural areas of Cross River State should improve their operational efficiency. They are required to significantly expand their rural market penetration. The village-level network is essential.

KEYWORDS: Loan Products, Microfinance Model, Savings, Absolute Poverty, Rural Development

INTRODUCTION

Rural financial markets and institutions have important roles to play in Nigeria's process of economic development and poverty reduction. The lack of access to capital or grassroots financial intermediation is regarded by this study as one of the crucial factors behind the persistence of poverty

and unemployment in Nigeria. The federal and state governments have over the years demonstrated strong commitment to the provision of financial services and economic empowerment of the poor and low income groups. In 2007, 606 community banks were converted to microfinance banks (MFBs). Also 363 de novo MFBs were licensed, resulting in a total of 969 MFBs as at 2010, (Microfinance Newsletter, 2010). These are licensed by the Central Bank of Nigeria (CBN) to conduct microfinance operations such as mobilizing micro-savings and deposits from the public, extending credit and other financial services to them, (Cecilia et al, 2012). The Nigeria Agricultural and Cooperative Bank (NACB), the People's Bank of Nigeria (PBN), and the Family Economic Advancement Program (FEAP) were merged in 2001 to form the Nigeria Agricultural Cooperative and Rural Development Bank (NACRDB), with the aim to strengthen microfinance program in the country. However, poor policy implementation has continuously hampered poverty reduction strategies. In 2007, the federal government, in collaboration with the CBN formulates the Financial System Strategy (FSS) 2020. FSS is part of the overall National Vision 20:2020 which aims to make Nigeria one of the 20 largest economies in the world by 2020 (Eneji et al, 2013). Microcredit is one of the tools for poverty alleviation. Globally, intervention in credit market has been one of the major anti-poverty measures in developing countries, (Bardhan and Udry, 1999; Akanji, 2006). Lending institutions have applied other criteria than interest rate to clear the credit market due to the problems associated with adverse selection and moral hazard (Stiglitz and Weiss, 1981). The rationing techniques used by lenders, have considerable impact on the

access to credit by the poor population in rural communities.

The objective target of the microfinance institutions should be that of improving the access of the low income earners and the poor peasant farmers to formal credit market in a sustainable manner. A number of strategies have been used by microfinance institutions (MFIs) to reach their services out to the poor while maintaining financial viability, including group guarantee, frequent loan repayment, women targeting and sustainable rates of interest (Morduch, 1999; Robert,1977; Charles and Ann, 1996; Aral et al,2009). These microfinance institutions should adopt innovations which would encompass radical changes to the existing rationing criteria and procedures. These innovations could also be adopted by formal financial institutions in a process of microfinance downscaling. The major suppliers of credit in the Cross River State rural financial market are informal lenders (consisting of credits among relatives, NGO groups, and friends) and the new microfinance institutions. The formal financial market in the state has been dominated by (Rural Credit Cooperatives?). In China for instance, a country with global record in poverty reduction efforts, RCCs have been required to lend to rural households at low lending rates of 7-10 percent per annum,(Enjiang and Abdulahi,2010), while receiving favorable treatments and subsidies from the governments. Also, in China both formal and MFIs lenders have to use mainly collateral substitutes for their lending to rural households as legally the farmland and houses are not allowed to be used as loan collaterals in China. The low lending rates of interest from formal lenders and the lack of physical collateral have contributed to wider inclusion of the rural poor population and poverty reduction. They also have a strong poverty orientation, with funding and technical support from international donor agencies. Another good example is the Al-Amal (Islamic) microfinance bank in Yemen, which delivery models are market-driven and sustainable, with women accounting for 60% of total disbursed loans in 2011-2012, (Abhijit et al, 2012). The Islamic bank target women and youth because frustration and lack of opportunity among youth creates a fertile ground for terrorism and social instability.

Globally, the existing studies on credit demand and rationing have focused on the credit rationing imposed by the formal and informal lenders and by the rural poor themselves (Liu and Cheng, 2009; Tony and Charles, 1998). The types of rationing

include quantitative rationing; transaction cost rationing and risk rationing. When financial institutions ration credit supply based on incomes, assets or other collaterals, the poorer households would basically be rationed out of the market and poverty remains (Zhu et al, 2009). Rationing means either a part of the credit applied is granted or sometimes the full amount applied for is disapproved. Informal finance becomes the preferred option of the rural poor, but with higher interest rates. The informal sources have more insider information about the loan applicants which is supposed to reduce the risk of defaults; however, the risk is higher due to the fact that most of the loans are often issued based on family ties and friendship. Credit-worthiness and collaterals are not the primary determinants of the informal lending.

The focus of this study is on types of financial institutions, demand and supply of credits and the method of credit rationing in rural communities of Cross River State, Nigeria. We compared the loan products of the formal and informal financial institutions, their functioning and whether they have reduced the problems associated with adverse selection and moral hazards, thus alleviating poverty in the study areas. We conclude that the rural financial institutions are doing a good job of intermediation following the CBN reforms of the banking sector. However, they need to double their efforts to achieve a greater outreach to the rural poor and disadvantaged groups such as the peasant farmers and female-headed households. In section 2, we present the survey areas and household characteristics. Section 3 is an analysis of econometric models and estimation procedures. In section 4, we discuss our findings, while section 5 offers recommendations and conclusion.

According to the estimates by Financial Access Initiative,(2009), there are about 2.5 billion adults in the world who do not use formal financial services to borrow or save money, with about 80% of the total adult population of Sub-Saharan Africa unbanked. The reason could be due to demand constraints and/or supply constraints. This gap between the demand and the supply of credits is being filled up by micro-finance institutions. Microfinance institutions provide small loans(microcredit) without collateral, collect deposits, sell insurance and money remittances to poor customers who had been initially written off by commercial banks as not being credit-worthy(De-Aghion and Morduch,2005).

Microfinance is pro-poor, it aims to include the poor in the mainstream financial system, providing them with access to credits and savings services. Yunus(2007) defined microcredit as “loans offered with no collateral to support income generating businesses aimed at lifting the poor out of poverty”. However, in our field survey, poor household use microcredit apart from income generating businesses for other purposes which include; emergency and medical needs, household maintenance, children’s school fees, marriages, birth and burial ceremonies, in accordance with customs and traditions.

Studies have shown that loans to poor women were more effective than those to poor men, and women have higher loan repayment rates than men,(Pitt and Khandar, 1998). Lending to women has more positive and direct impact on family welfare than lending to men.

METHODOLOGY

We use primary and secondary data. 50 villages were contacted, involving 2450 households, and a total of 5000 rural dwellers. One class of binary choice models widely applied in credit market and liquidity constraint studies is the Probit Model. In this model, the dependent variable is either zero or one value. In our attempt to estimate the empirical relationship between demand for credit and the probability of being credit constraint by rural poor communities, we use a linear probability model which is a standard regression analysis applied to the binary dependent variable. Numerous studies on credit markets have applied the binary dependent variable and a probit single equation to model the demand for credit and credit rationing (Dutta and Magableh,2006; Crook, 2001; Kochar, 1997; and Zeller,1994; McCullough et al, 2006). The standard least square estimation technique has been observed to encounter some major statistical problems(Green,2003; Ranjula, 2002). We assume that the borrower’s first choice is the formal financial institution which offers credit at a lower interest rate. This is the first priority in the rural poor demand for credit, subject to; (a) the credit market liquidity constraints; (b) loan products, and (c) the borrower’s characteristics. The probability of the loan being approved or disapproved is dependent on these three determinants. The borrower therefore weighs the options between the formal institution borrowing and borrowing from the informal institution. The institutions(lenders) are also involved with the critical decision of

whether to approve the full amount of credit applied for, or partially ration the applicants based on the above three factors which also determine the borrower’s ability and willingness to repay the loan. The capacity and willingness to repay (credit-worthiness) is usually represented by the economic and non-economic variables of the borrower. Aliou et al(2001) using data from Bangladesh and Malawi, provides an analytical framework for examining the determinants of household credit limits and derives implications on information needed to examine the extent to which households are credit constrained.

Model Framework and Estimation Procedure:

The borrower’ demand for credit (DC) is defined as:

$$DC=f(R, HHC, LPs, CMLCs) \quad (1)$$

Where DC= Demand for credit

R= Rates of interest

HHC= Household characteristics (assets, incomes, dependency ratio, health status, household head)

LPs= Loan products

CMLCs= Credit market liquidity constraints

However, we stated earlier that for effective coverage and grassroots access to credits, other measures than interest rate are to be used in rationing credits; such that our demand for credit function in equation 1 is reduced to three independent(explanatory variables):

$$DC=f(HHC, LPs, CMLS) \quad (2)$$

These determinants of credit demand and credit rationing are credit constraints and could be expressed in a model form as:

$$\text{Ln}D^* = \sum \ln \beta [\Phi 1Y1, \Phi 2Y2, \Phi 3Y3, \Phi nYn] \quad (3)$$

Where β is the bivariate cumulative normal distribution function. The probit command is based on heavily modified code originally obtained from mathematical policy research, (Houston,2011). The dependent variable(D^*) takes the value 0-1, and can be a continuous or discrete variable. The estimated coefficients, their asymptotic standard errors, t-ratios, significance and the gradient associated with each coefficient are recorded. The gradient is the first partial derivative of $f(D^*)$ with

respect to each coefficient. It is small for the final values of the coefficients. The estimated coefficients for the same model run with the loglinear and multinomial logit commands differs by sign and magnitude. The more simplified form of equation 2 is given in equation 4.

$$D^* = \beta + \Phi Y + \Upsilon \quad (4)$$

Where $D^* = f(\text{HHC, LPs, CMLS})$, a vector of exogenous variables affecting credit market's decision to approve or disapprove loans. β and Φ are the parameters of the model to be estimated. Υ is the stochastic error term or unexplained variation in the vector, D^* . We admit that our factors for modeling credit demand and supply may be biased. This is taken care of by the random disturbance term (Υ). In equation (3), D^* is a binary dependent variable earlier mentioned. Its values are limited to: 0, when the borrower is not rationed out (or not constrained), and 1, when the loan applicant is rationed out (or credit constrained). Rationed out implies that the borrower's application is not approved based on one or three of the aforementioned determinants (decision variables). The standard regression analysis helps us to obtain consistent estimates.

For several low income applicants, there is a probability that they may be rationed out in the formal credit market. This probability can be expressed as:

(a) For the financial institution

$$\text{ProbR} = \{1 \text{ if } \text{prob}(\beta + \Phi Y + \Upsilon > 0), 0, \text{ otherwise} \quad (5)$$

Since these three variables also determine the borrower's decision to borrow from formal or informal financial institutions, the probability of making a choice of credit market for loan application can also be expressed as:

(b) For the borrower

$$\text{ProbAPP} = \{1 \text{ if } \text{prob}(\beta + \Phi Y + \Upsilon > 0), 0 \text{ otherwise} \quad (6)$$

Given the diverse (incomes and assets), household characteristics, from our field survey, we apply a Standard Probit Model to analyze their access to the credit market as well as factors favoring credit constraint in Cross River State. We estimate the credit demand and supply functions for both formal and informal financial institutions in the study

areas. Borrowers and lenders decision is subject to the constraints of the three determinants (independent variables) in the model. Rationing implies that sometimes only a part of the loan applied for is approved and supplied based on partial credit worthiness of the borrower. Also, sometimes the whole loan is disapproved based on the credit unworthiness of the applicant. In the field survey, the risk is high. Due to collateral requirement for borrowing, most rural poor people provide misleading information in an attempt to get their loan application approved. The fear of credit unworthiness or moral hazard is high, leading to adverse selection.

The regression estimates are the first stage, (Green 2001). In the second stage, we apply Heckman's 2-step selection model, using probit estimates of the first stage to construct the inverse mills ratio (IMR). This further corrects selection bias, leaving us with more consistent estimates of factors influencing the demand and supply of credits in Cross River State. When inverse mills ratio is significant, it indicates that sample selection bias existed and that such procedure was necessary to minimize the error.

Households with high income and assets have low demand for credits from the informal sources, as this source charges higher. They get most of their loans from the formal credit market that charges lower interest rates. Thus, it is the lower income/assets households that have a high demand for credits (especially from the informal sources). Also, it is the latter who have highest barrier to accessing credits, (especially formal credits). We found that poor households have less access to formal sources of credit at subsidized rates of interest. Unlike the very high constraints to formal credits, the informal loans are sometimes given based on social network, family relationship in the villages and mutual help. In this type of loan, the level of education, occupation, age and wealth are not very significant determinants.

The value of household consumer durables, health and social status are rather the most important determinants. The probability of a household to access credits from MFIs increases with the value of family houses, family productive assets and the size of livestock and farms. Households that engage in commercial activities have income generating opportunities. They are more likely to apply for loans from MFIs. This is linked to their demand for money for investment in their business and their

frequent cash incomes for repayment of the loans before the high-interest accumulates. Farmers who cultivate and harvest crops seasonally may not find it lucrative to borrow huge amount of money from the MFIs due to the long gestation period of their crops and the high interest rates involved. In all, we observed that most of the loans from the 3 sources goes to the household heads. 85% of the household heads are men. Where arable land and household assets are determinants of lending, female borrowers are rationed out. Traditionally, women do not own land, thus loans are most likely rationed in favor of men, with high social and material constraints on female applicants. Single-parent

household headed by female are many, and they all have this difficulties in accessing credits.

RESULTS AND ANALYSIS

Factors which affect the household decision to apply for loan include family characteristics, the dependent ration, household income, farm assets, industrial and commercial activity, and the lending policy. While the characteristics of household and household head such as the dependency ratio, family size, occupation of household head, sex of household head are non-financial factors that also determine lending.

Table 1: Binary Probit Estimation Results

Variables	S/N	Definition of variables	Coef.	Std. Err.	z-stat.
FXL	1	Family Size	0.521	0.304	2.10
NLB	2	No. of Capable Labor	0.241	0.446	2.84
DPR	3	Dependency Ratio	0.036	0.353	-0.38**
ICA	4	Industrial and Commercial Activity	-4.65E-04	0.064	1.64
HH/FS	5	Household Family Status	3.441	0.223	2.32***
SHH	6	Sex of Household Head	0.568	4.33E09	1.05
OHH	7	Occupation of Household Head	0.022	0.486	3.07
AHH	8	Age of Household Head	6.84E-05	5.14E-02	0.88
ALO	9	Arable Land Owned	2.509	3.055	1.36
AAVL	10	Annual Average Value of Livestock	0.608	0.634	2.45*
AAVC	11	Annual Average Value of Crops	2.102	0.661	1.97***
HHY	12	Household Incomes	3.066	0.328	0.08
LFMF	13	Loan from Microfinance	-0.077	4.01E-22	3.02
LRCCs	14	Loan from RCCs	2.85E-06	0.067	-2.44
LFIs	15	Loan from Informal Sources	1.669	2.890	-0.35
HHDS	16	Household De-saving Circumstances	4.138	-0.357	1.06
HHE	17	Household Education	-2.80E-04	1.562	2.81
VHHRs	18	Value of Household Residential House	2.033	0.489	-1.76
cons			3.340	0.461	2.11

Dependent variable:LFMF

No. observations: 894

LR chi-square (36):80.96

Prob.>chi-square:0.0013

Pseudo R²: 0.349

Percentage predicted correctly: 86.4

Note: *, **, and *** denotes significance at 1%, 5% and 10% respectively.

We use the binary probit estimation technique, the results which are the determinants of application for (formal) credit and credit constraints are shown in table 1.

The selection correction term (inverse of mills ratio) is observed to be negative and statistically

significant at 1% level. This implies that the sample selection bias in the estimation of determinants of

being credit constraint clearly exists. In further research, taking into account this additional regressor is necessary to raise efficiency and reliability of results.

From econometric perspective, as shown in the value of chi square, all specifications appear to give a reasonably poor goodness of fit. The R2 for the regression is 0.349. This shows that the explainability of the independent variables for the explained variable is poor. In other words, they have not worked favorably for the demand and supply of credits in the area. However, all the explanatory variables tested against the null hypotheses are not zero, they are significant. Thus, we reject the null hypothesis that these variables neither determine nor constrain the demand and supply of credits in the state. The regression results show that these variables have played a significant role in determining the demand for credit and credit rationing. The probability of households applying for credits increases with household total income and decreases with high level of poverty, dependency ratio as well as de-saving circumstances. Food security and health are basic survival needs which these poor must satisfy before they can save, buy assets or invest in business. Poverty is an outcome of economic, social and political processes that interact with and reinforce each other in ways that can ease or exacerbate the state of deprivation in which the poor live, (Akanji, 2006). Households with less education, and have

less productive investment opportunities have lower demand for loans, and also have higher constraints to accessing loans. The probability of household demand for loans from informal sources increases with the de-saving circumstances. These circumstances include concrete house building project, children education and the number of children/dependant in the household, health condition of the family, huge expenditure on burial and marriage ceremonies etc. This probability decreases with the average household income per capita and income from wage and non-farm operations (see table 1 and table 2). This is consistent with our field findings that household demand for credits from informal sources is a function of household income and de-saving activities. The formal and informal sources of loan granted affect consumption and savings because the interest rates are not the same. The purpose is to meet consumption and maintain family social status as well as for short term liquidity. When the household total assets and income levels are low, their demand for credit is low, because they have very high constraints to access credit. Thus, the objective of using these loans from microfinance to reduce poverty and empower the disadvantaged group is defeated.

RESULTS FROM PRIMARY DATA

From the 50 villages and 2450 households investigated, the obtained the following results:

Table 2: Means and Mean Deviations of some key Indicators in the Sampled Areas

Indicators/LGA	Bekwarra	Ogoja	Ikrom	Boki	Etung	Yala
n/v	600	350	450	300	200	300
Average Family Size	5.4	4.5	5.6	5.00	5.8	6.0
Per Capita Net Incomes(Naira)	66,000	80,000	100,000	110,000	130,000	82,000
St. Dev.	(4,219.2)	(4,538.6)	(4,825.3)	(5,233.2)	(6,153.6)	(4,662.3)
Average Household Incomes(Naira)	180,000	200,000	220,000	240,000	260,000	210,000
Cropping (%)	0.152	0.084	0.184	0.21	0.2	0.17
Average Cultivated land Area(acres)	8	6	10	12	14	9
Animal Production (%)	0.3	0.1	0.2	0.1	0.1	0.2
Commercial activities	0.2	0.14	0.16	0.2	0.13	0.17
Consumption (%)	0.07	0.15	0.2	0.22	0.2	0.15
Savings (%)	0.1	0.15	0.15	0.2	0.25	0.15
MFIs Borrowers	78(9.524)	100(12.210)	140(17.094)	216(26.374)	200(24.420)	85(10.378)
Informal Borrowers	200(19.802)	120(11.881)	160(15.842)	200(19.802)	180(17.823)	150(14.851)

Note: n/v=valid number of responses; 150 Naira=1USD.

Source: Survey Data, 2012.

The results in table 2.1 show that microfinance institutions in the rural areas of Cross River State have not significantly penetrated the rural communities. The Gini Coefficient of $0.53 < 1$, indicates that income distribution is not equal in the

sampled areas. This also affects consumption and savings as shown in table 2. MFIs should improve their operational efficiency. They are required to significantly expand their rural market penetration. The village-level network is essential.

Table 2.1: Sampled Percentages of MFIs Penetration of Rural Communities in the sampled LGAs

Household Characteristics	Percentage
Average Income of Household (Gini-Coeff.)	0.53
Rate of Household Supported	0.15
Loan Recovery Rate	0.9
Core-poor household supported	0.04
Household in commercial activities	0.3
Rate of full-time housewives	0.65
Household in farming	0.84
Household with at least 6 members	0.79
Female-headed Household	0.4

Two clear distinctions are found between two categories of household and the credit sources: Loans from relatives, friends and other social

groups target more percentage of the poor and achieved wider outreach, but more costly. They are accessed by household with low income level to

meet their consumption demands. The second category of the household with high level of per capita income, more income sources from commercial and productive activities such as cropping, livestock, poultry, fishery etc. These households are more likely to access credits from the formal sources than the former, and less attracted to the informal loan sources than the former. Their borrowings are more for investment purposes than for consumption.

Credit constraint arises from a wedge between what the MFIs are willing and able to lend (Stiglitz and Weiss, 1981). The lender has exclusive choice of whom to grant the loan; and the amount of credit supply is strictly based on the MFIs' loan products or lending policy. The credit rationing is an exclusive decision of the lender, while the credit constraint is a result of the lender's rationing and

some peculiar household characteristics which limit their demand for credit. In most cases, the actual amounts which the borrowers received were less than the optimum amount applied for. All constraint can be removed by treating their determinants, and innovating the MFIs' business model.

In table 2.2, the loan cycle is divided into 1st, 2nd, 3rd, and 4th quarters of 2010-2012. We use the analysis to show the imbalances between different class of household and their access to microcredit in percentages. These microfinance institutions were established to respond to the loan and savings needs of the marginalized poor. Table 2.1 provides evidence that the rich and middle-rich income households, rather than the poor and absolute poor households, are the major beneficiaries of the MFIs loan.

Table 2.2: Loan Access Rates in the Study Areas 2010-2012

Loan Cycle	Households				
	Rich	Middle-rich	Poor	Absolute Poor	Total
Q1	30%	40%	25%	5%	100%
Q2	30%	30%	35%	5%	100%
Q3	20%	30%	40%	10%	100%
Q4	22%	34%	29%	15%	100%

We use information gained by directly asking households, to find the determinants, the possibility of credit constraint, and rationing out of the absolute poor households. The microfinance institutions often experience a surge in seasonal demand for credit. The main surges are in the second and third quarter (Q2 and Q3) of every year. The source of such seasonal changes is farming as the major occupation of households in the area. The middle-rich family control "Isusu", so when they get the formal loan, they invest a part of it in the informal, loan to the poor who pay higher interest and use it to buy farm inputs in the planting season. The low interest rate for farmer's input is high-jacked in the middle.

The informal loan sources also discriminated against female borrowers more than the formal sources, especially for unmarried female and female-headed household.

It is not only the lowering of interest rate that matters, but also other household characteristics

mentioned in this study are necessary conditions for the demand and rationing of credits. Most female borrowers that are discriminated against for cultural reasons are perceived by this study to be highly resilient, have potential to end reasonable income, have abilities to repay the loan, and they play more prominent role in household poverty alleviation than their male counterparts. More support should be given to those lenders that have extended loan services to the poor communities with wider outreach and favorable lending/screening policies to prospective borrowers.

DISCUSSION

The informal source of credit is more popular in the rural areas of Cross River State than the formal source. A popular informal credit source in the area and other parts of Nigeria is the Rotating Savings and Credit Association (ROSCA). Participants make regular contributions (agreed sums) to a fund which is given in part or in full to each member in rotation.

In Bekwarra, it is called Ibam, in Yala it is called Iligii, in Ogoja it is called Alipku; In Igbo community it is called Isusu, and in Yoruba community, it is known as Ajo-adako. It teaches the participants savings culture and encourages them to avoid wasteful spending. Different groups in the society participate in the Ibam, such as women group, petty traders, farmers, palmwine tappers, teachers, commercial drivers and cyclist. Though the Isusu induces savings, the incentive to save does not adequately carter for the problems of high rate of loan default, hence the credit risk is very high. The role of microfinance is expected to be making micro-credits available to the poor, to fill the gap created by traditional commercial banks, and the primary objective is that of poverty reduction and women empowerment at the grassroots. However, rigorous quantitative evidence of the nature, magnitude and balance of microfinance impact is still lacking in our study area. We expected that microfinance is much better for the poor than any other form of finance, such as the high risk-informal money lenders or profit-oriented commercial banks. However, their approach to financial services (loan products) have not widely covered the very poor as the target group. The microfinance institutions need to put more focus on educating their potential borrowers on savings, remittances and financial literacy; rather than on obsessive interest rates and collaterals that are beyond the reach of the poor which it was intended to benefit. There are financial illiterates with very low level of education, who are very productive in their trades, but who do not know or have access to formal financial institutions. Their trades include cropping, animal husbandry, palm wine tapping, and petty trading, catering /restaurant services. Also most of the poor who are rationed out of credit are assetless. They do not have things to put forward as collaterals in making loan applications. They are generally categorized as credit-risks and the transaction costs of making microcredit and tiny deposits are very high. Thus, the traditional commercial banks whose main motive is profit maximization often avoid serving this poor and low-income clientele. Greater number of the rural poor in our study areas is too poor to do anything productive with credits. They are struggling to secure basic survival of food, rent, and healthcare before they can graduate to micro-credit. Their daily lives are full of vulnerability to financial needs. They operate in a hash and costly business environment. Their income sources are very limited to farming, petty trading or palm wine tapping which hardly translate into better nutrition and

improved health. They find it difficult to save. Many of the "active housewives" just sit at home and are at the mercy of their husbands for all their financial needs, which the latter always complain "I cannot afford it". They are active but are totally left out by the formal banking sector. Their poverty is comparable to a sickness like malaria which has many symptoms such as: high blood pressure, high body temperature, fever, headache, and anemia, lack of appetite, fatigue and drowsiness. Young girls of school age drop out of school due to unwanted pregnancies, which they cannot afford even contraceptives. Hiv-Aid patients cannot afford their retroviral drugs. Children drop out of school for lack of school fees, with resultant child labor, sex trades and child trafficking. There is extreme hunger, poor health, and early deaths which are preventable if household income sources are diversified. Lack of access to credits has disrupted several planting seasons. Farmer's adoption of innovation is also affected, as improved variety seeds, hybrid livestock, pesticides, and fertilizers are very expensive. The costs are beyond the reach of the poor, who are the backbone of peasant agriculture,(Eneji et al, 2012). Thus, these peasants are subjected to deeper poverty in multi-dimensions, misery and exploitation due to their inability to access formal credits without collaterals. For instance, MFBs require applicants to have a stable income generating activity in order to be credit-worthy and qualify for loan, however, the absolute-poor households neither have stable incomes nor the start-up capital for income-generating activity. The role of credit in rural agricultural development is well documented by other researchers such as Baker, 1973; Howse, 1974; Malton, 1978; Nwagbo and Llebani, 1984; Ojo, 1981). Experience in Nigeria, India, China, Bangladesh and elsewhere shows that unless credits are made available on suitable terms, majority of small scale farmers will be seriously handicapped in adopting profitable technologies (Ogunfowora et. al, 1972; Miller, 1975; Agom, 2001, Eneji et al, 2011).

Understanding the role of microfinance in poverty reduction in Cross River State is very important. Microfinance is the provision of all kinds of financial services (microcredit, savings, insurance, money remittances etc) to the poor household. Proponents of microcredit believe that the provision of credit to the poor household is a powerful strategy for rural poverty alleviation. Access to loan affords the poor with the needed financial assets to start their own income -generating activities that will ultimately

increase their per-capita income, thus raising them from absolute poverty. Governments, international development organizations (such as USAid of microfinance programs in Zimbabwe, India and Peru), Non-Governmental organizations (NGOs), and other aid agencies around the world have been instrumental to the spread of microfinance as an effective tool for poverty reduction. Micro-credit is seen as a relatively powerful tool in achieving the Millennium Development Goals (MDGs) in particular the goals of (a) Eradicating extreme poverty and hunger, (b) Achieving universal primary education and (c) Promoting gender equality and empowering women, (NEEDS 2004-2007).

In our study areas, narrow access, untimely services, smallness of the amount, are some of the factors working against effective delivery. The poor people are not naturally lazy. They are shrewd, diligent, and aspiring as the rich ones. They work hard daily from sunrise to sunset, 6 days a week, except Sunday or Friday where they go to Church or Mosque respectively to worship their God, and hoping for a way out of poverty. However, without capital to adopt innovation, their efforts amount almost to nothing, poverty is still living with them and inside them. Their weak economic foundation makes them lose market competitiveness. Their consumption demand is very low which is not healthy for the rural economic development. Women are worse hit. They are family-oriented, faithful, thrifty and prudent. They are also more likely to repay their loans on time than most men who are favored in the informal loan. The discrimination on women applicants should be removed. Women devote all their resources to family well-being as they are emotionally attached to their home. If they had money, they cook good meals, buy new clothes for the children, the health and education of the family is also directly affected by their income. However, in our study areas, 55% of the women are full-time housewives. There is a saying "give me fish, I will eat it today, teach me to fish and I will eat for a life time". If these women are given start-up capital for their own small scale enterprises, it will have a positive multiplier effect on their income and consumption. Microfinance institutions in these areas should renovate their loan products in order to significantly enhance women's economic and social position in the household.

According to CBN Statistical Bulletin (2005), the target for MFIs is to increase the share of microcredit as a percentage of total credit to the

economy from 9 percent in 2005 to at least 20 percent in 2020; and the share of microcredit as a percentage of GDP from 0.2 percent in 2005 to at least 5 percent in 2020. A second target is to eliminate gender disparity by ensuring that women's access to financial services increase by 15% annually, that is, 5% above the stipulated minimum of 10% across board. Households in the study areas were accessed based on socio-economic status. The extremely poor households are below average affected by micro finance services. Some slot interests allow for substitution and rationing out of the poor. The middle-rich, rich and richest households have benefited the most, because they have assets and higher returns on investment. This category of people do not even live in the rural area, they come in, and out to the urban areas. This has not significantly changed the poverty situation in the rural neighborhood, and may not change by 2020 without changing the target of MFIs services.

POLICY RECOMMENDATIONS

Although new lending methodologies are adopted by the Cross River State government to make microfinance reach out to wider coverage of the communities, poor households with lower income would access the loans if the lenders could adopt further innovations. By re-designing loan products and services, rationing credits in favor of female-headed households and removing of all forms of discrimination.

The feat of microfinance is below the target levels. They will need to double their efforts within the rural geography; where there is concentration of absolute poverty. Effective micro financing should provide financial inclusion at the grassroots. One would expect microfinance to have positive correlation with entrepreneurship, self-reliance, employment, increased household incomes and consumption demand; but a negative correlation with poverty. MFIs should target high-poverty areas. We recommend collateral-free loans to the poor in Cross River State. It is difficult to find many financial institutions operating in the very remote rural villages where low-income households live. Households in the remote villages sampled had little knowledge of MFIs. We recommend poverty reduction and economic development of poor areas by effective microfinance. Rural infrastructure; electricity, roads, schools, healthcare services, good transport infrastructure could complement microfinance.

The financial institutions should teach the rural poor how to invest/save money for school fees, healthcare, business, old age, for emergencies like sudden illness etc. Teaching the peasants the discipline of saving, its advantages will help them to form a good habit of not making wasteful spending on deaths, births and marriage ceremonies beyond their means. The tradition and custom of extravagant lifestyle should be discarded.

In order to ensure that poor rural households actually benefit from microcredit, there should be a database at each local government alongside with the microcredit offices, the state government and the community finance department, where potential borrowers are properly screened.. Such databases of applicant farmers and traders could help in management, coordination and supervision of microcredit. Periodic training courses on fish farming, livestock breeding, bee farming, poultry, rabbit, cocoa, peanut, yam, rice, cassava, mushroom farming etc at the grassroots could reduce the risk of loan failure. Selection and timing of loan objectives should be designed to meet target. Microcredit policies and operation procedures should be more transparent, the people charged with the loan should make funds accessible to the rural poor with positive effect. The loan disbursement should be in bulk while loan repayment should be by installment suited to the rural dwellers' income generating activities. Suitability means to finance purchase of inputs during planting season, and repayment only after the harvests which is usually in the last quarter of the year. Disbursement in bulk rather the usually small size of loans with frequent repayments is need to boost the rural economy.

CONCLUSION

Both formal and informal credit market institutions play supplementary role of financial intermediation in Cross River State. The low income households and female-headed households have more credit constraints and are more likely to be rationed out than the middle income households and the male-headed households. Households with commercial and industrial activities (productive assets) often apply and succeed in getting loans from the formal credit institutions in the study areas, while the low income households resort to the informal credit institutions. Female-headed households are rationed discriminately in the informal credit market. However, the informal financial sources have less information asymmetry as they have basic

insider information about applicants. Part of the reason for below average performance of formal financial institutions in the state has been their limited knowledge of the poor and absence of a closer relationship between the formal and informal financial institutions. A linking framework is necessary. Their loan products designing need to be innovated and improved for wider coverage. This insider information about rural household characteristics has helped to improve credit worthiness and reduced loan default. The core poor households are yet to receive remarkable benefit from microfinance in Cross River State. Many of them have no access to loan, and for about 15% that have access to loan, the recovery rate of the loan is 90%. Low income households engaged in farm productions and animal husbandry should also be given wider access to formal borrowing as this will encourage entrepreneurship, self-employment and poverty reduction. Microfinance Banks in the state in particular and Nigeria as a whole have rarely effectively discharged their expected functions. Their loan products involve many practical difficulties arising from their operations, economic characteristics and financing needs of low income households.

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