

CONTRIBUTION OF MICROFINANCE BANKS TO AGRICULTURAL DEVELOPMENT IN CHANCHAGA LOCAL GOVERNMENT AREA, NIGER STATE NIGERIA.

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ABSTRACT

The purpose of this study was to determine the contribution of microfinance banks to agricultural development in Chanchaga Local Government Area of Niger State, Nigeria. Random sampling techniques was used to select 80 agricultural micro credit beneficiaries from list of beneficiaries obtained from Nexus Microfinance Bank, Minna. Structured questionnaires were used to collect the primary data which were analyzed using descriptive statistics and ordinary least square multiple regression analysis. Results showed that mode of disbursement were basically through cooperative societies (56%) and individuals (44%). Loan taken were paid back instalmentally while the loans were in favour of small and medium scale entrepreneurs (41%). Agriculture accounted for 27% of total beneficiaries. Multiple regression analysis indicated that the linear function was the lead equation with amounts of loan received and labour being statistically significant at 1% and farm size 10%. It was concluded that Nexus Micro Finance Bank had contributed positively to agricultural development in the study area. It was therefore recommended that farmers need to be organized into cooperatives, and credit should not only be disbursed in cash but also in kind.

KEYWORDS: Microfinance, agriculture, beneficiaries, medium and small scale entrepreneurs

INTRODUCTION

Lack of access to credit has negatively affected poor farmers and rural dwellers for many years. Rural people need credit to allow investment in their farms and small businesses, to smoothen consumption and to reduce their vulnerability to weather and economic shocks. As they have little access to formal financing institutions poor rural people follow sub optional risk management and consumption strategies and rely on costly informal credit sources (FAO, 2000). To this end, Eluhaiwe (2008) noted that microfinance banks were established in Nigeria in 2005 for the purpose of providing economically active poor and low income earners financial services, to help them engage in income generating activities or expand their businesses.

By definition, microfinance refers to the provision of financial services to poor or low

income clients including consumers and the self employed (Ledgerwood, 2000). According to Robert *et al.* (2004), microfinance refers to a movement that envisions a world in which as many poor and near poor households as possible have permanent access to an appropriate range of high quality financial services including not just credit but also savings, insurance and fund transfers. In addition, according to Eluhaiwe (2008), microfinance is about providing financial services to the poor who are traditionally not served by the conventional financial institutions. Three features distinguish microfinance from other formal financial products. These are: (i) the smallness of loans advanced and or savings collected; (ii) the absence of asset based collateral and (iii) simplicity of operations. Brigit (2006) distinguishes between four general categories of microfinance providers. They are: informal financial service providers, member-owned organizations, Non-Governmental Organization (NGOs) and formal financial institutions. The informal financial service providers include money lenders, savings collectors, money guards, Rotating Savings and Credit Associations (ROSCAS) and input supply shops. For the fact that they know one another well and live in the same community, they understand one another's financial circumstances and can offer very flexible, convenient and fast services. Member-owned organizations include self help groups and credit unions. Like the informal financial service providers, they are generally small and local though they may have little financial skill.

According to Brigit (2006), NGOs involved in microfinance like Grameen bank of Bangladesh and Prodem in Bolivia, have proven to be very innovative, pioneering banking techniques like solidarity lending, village banking and mobile banking that have overcome barriers to serving poor populations. Lastly, formal financial institutions engaged in microfinance are state banks, agricultural development banks, savings banks, rural banks and non bank financial institutions. They are regulated and supervised, offer a wide range of financial service and control a branch network that can extend across the country and internationally.

Cheryl (2001) asserted that micro-financial services are needed everywhere, including the developed world. However, in developed economies intense competition within the financial sector, combined with a diverse mix of different types of financial institutions with different missions, ensures that most people have access to some financial services. Efforts to transfer microfinance innovations such as solidarity lending from developing countries to developed ones have met with little success. However, microfinance has been growing rapidly with \$25billion currently at work in microfinance loans. It is estimated that the industry needs \$250billion to get capital to all the poor people who need it (Deutsche bank, 2007)

As business enterprises, microfinance banks aim at making profit. Hence they prefer to give credit to those engaged in less risky businesses. More or less agriculture does not fall into this category of businesses due to several risks and uncertainties associated with it, ranging from unpredictability of weather, possible outbreak of pests and diseases, to instability of market. Collateral security is not a precondition for granting of credit by microfinance banks.

Another problem is the attitude of some beneficiaries who divert the loans given to them to non farm activities such as marrying more wives, buying motorcycles and cars, and renovating their houses. The general belief is that this is their portion of the "national cake" which they do not need to refund thereby resulting in high default rate. Furthermore, the high illiteracy rate especially among farmers, coupled with the stress of securing loans from banks like filing of forms, submissions of passports, discourage farmers from approaching microfinance banks for credits but rather patronize money lenders who normally give them quick loans at high interest rates. Therefore, the broad objective of this study is to examine the contribution of microfinance banks to the agricultural development of Chanchaga Local Government Area. The specific objectives are to:

1. describe the mode of disbursement and repayment structures of the banks.
2. identify the number of farmers who have benefitted from the banks.
3. determine the effect of loan collected on farmers output.

Concept of microfinance

Microfinance is often defined as financial services for poor and low income clients. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as Microfinance Institutions (MFIs). These institutions commonly tend to use new methods developed over the past 30 years to deliver very small loans to unsalaried borrowers, taking little or no collateral. These methods include group lending and liability, pre-loan savings requirements, gradually increasing loan sizes, and an implicit guarantee of ready access to future loans if present loans are repaid fully and promptly (Microfinance Gateway, 2009).

The aim of microfinance, according to Adebosin and Ashagidi (2007), is not only to inject credit into agricultural production process but also to build up a rural financial market that would provide lasting access to financial services by creating a relationship between those with financial resources and those who need them. CBN (2007) pointed out that the role of Micro Finance Banks (MFBs) is the provision of financial services to the small and medium enterprises and small scale farmers who are traditionally not served by the conventional financial institutions in the urban and rural areas.

METHODOLOGY

Study Area

Chanchaga is one of the 25 Local Government Areas, LGAs, of Niger State. It lies on latitude $9^{\circ}37'N$ and longitude $6^{\circ}33'E$. It is found in the southern guinea savannah vegetation zone of Nigeria with a population of 201,429 according to 2006 population census (Federal Government of Nigeria official gazette, 2007). Chanchaga has a mean annual rainfall of 1330mm with the highest monthly rainfall of about 300mm in September. The rainy season is normally between April and October. Temperature rarely falls below $22^{\circ}C$. The peaks are $40^{\circ}C$ (February –March) and $35^{\circ}C$ (November –December).

The soil types of Chanchaga range from any sandy-loam to clay-loam, hence food crops such as yam, rice, maize, groundnut and vegetables like spinach, okra, tomato, pepper are widely cultivated. The major occupation of the inhabitants is agriculture either on full time or part time basis.

Method of data collection

The primary data for this study was collected using structured questionnaire and personal observation, while the secondary data was obtained from text books, journals, seminar papers, proceedings and the internet. The internet provided access to relevant websites and WebPages.

Sampling technique and sample size

A list containing names and addresses of beneficiaries of agricultural micro-credit was obtained from Nexus Micro finance bank located along Tunga Low cost road Minna, Nigeria, from which 80 beneficiaries were randomly selected. The respondents were traced through their addresses and each was issued a copy of the questionnaire to fill. Respondents who could not complete the instrument were interviewed. Out of the eighty respondents only seventy-two responses which were appropriately completed were used for the analysis of data.

Data Analysis

The data was analyzed using descriptive statistics and multiple regression analysis. The descriptive statistics include mean, percentage and frequency tables. Multiple regression analysis was used to determine the contribution of Microfinance Banks to agricultural development in the study area. One dependent variable and five independent variables were employed with the following relationship:

$$Y = f(X_1, X_2, X_3, X_4, X_5, e)$$

Where Y = value of output in Naira (₦) of maize, rice and yam.

X_1 = Amount of loan received Naira (₦).

X_2 = Interest rate on borrowed capital Naira (₦).

X_3 = Technical assistance from Microfinance Bank (Dummy variable 1 yes or 0 otherwise).

X_4 = Farm size in hectares

X_5 = Labour in Naira (₦)

e = Error Term

RESULTS AND DISCUSSION

Mode of disbursement of the loans

Mode of disbursement is the way and manner a financial institution, in this case microfinance bank, grants loans to the qualified beneficiaries. Below is the distribution of respondents based on mode of loan disbursement.

Table 1: Mode of loan disbursement

Mode of disbursement	Frequency	Percentage
Individual	32	44.4
Co-operative	40	55.6
Total	72	100

Source: Field Survey 2009

According to Table 1, 44.4% of the respondents reported that they were given the loans on individual basis while the remaining 55.6% stated that they got the loans through their various co-operatives. That is to say, for increased security, banks may decide to give preference to co-operatives rather than individuals. In addition, this practice saves the bank transaction cost and lowers default rate.

Repayment Plan

Loans can be paid back either in full or installmentally i.e. in bits. Installmental repayments give more flexibility to the beneficiary than total repayment at a time, and lowers default rate.

Table 2: Distribution of respondents by repayment plan

Repayment plan	Frequency	Percentage
In full	0	0
Installmentally	72	100
Total	72	100

Source: Field Survey 2009

Table 2 above indicates that all the beneficiaries agreed that the loans are paid back in installments. Microfinance banks are meant to serve the poor and the less privileged in the society. For this reason, they normally demand for installmental repayment of loans since their beneficiaries may not be able to pay in full at once. This practice is more convenient for the beneficiaries than total payment at once. Table 2 above indicates that all the beneficiaries agreed that the loans are paid back in installments. Microfinance banks are meant to serve the poor and the less privileged in the society. For this reason, they normally demand for installmental repayment of loans since their beneficiaries may not be able to pay in full at once. This practice is more convenient for the beneficiaries than total payment at once.

Number of farmers that have benefited from the banks

Based on the information gathered from various Microfinance Banks in Minna, micro credits are disbursed in four major areas, namely: commerce, small and medium scale enterprises, communication and agriculture. The table below shows the break down.

Table 3: Micro-credit beneficiaries based on categories

Categories of loan beneficiaries	Frequency	Percentage
Commerce	115	23.23
SmallMedium Enterprise	205	41.41
Communication	37	7.48
Agriculture	138	27.88
Total	495	100

Source: Nexus Microfinance Bank, Minna, 2009

Table 3 reveals that majority of the loans given out by microfinance banks are in favour of small and medium scale enterprises like tailoring, hair dressing and the like followed by agriculture. This implies that about 28% of loans disbursed by microfinance bank are for various agriculture purposes like crop production, fishery, and animal husbandry. Also, about 23.33% and 7.48% of beneficiaries were granted with loans in commerce and communication categories respectively.

Effect of loan disbursement on output

The effect of loan disbursement on the output realized by farmers was examined using ordinary least square (OLS) multiple regression analysis. Various functional forms were fitted to the data and the lead equation (equation of best fit) was chosen based on: (i) The explanatory power of the model (ii) Number of statistically significant explanatory variables (iii) Magnitude of estimates regression coefficient (iv) Conformity of signs of estimated regression.

Table 4: Ordinary Least Squares estimates of factors affecting the output of beneficiaries

Variable	Linear	DoubleLog	Semi log	Exponential
Constant	-145920.0 (-3.533)	-0.675 (-0.668)	-3827830 (-5.101)	11.602 (77.522)
Loan	3.204 (13.985)***	1.124 (2.062)***	735722.76 (6.223)***	6.601E.6 (7.236)***
Interest	-0.413 (-0.831)	-0.102 (-0.662)	-465915.4 (-4.086)***	8.93E.007 (0.497)
Technical Assistance	24538.772 (0.769)	- -	- -	0.075 (0.651)
Farm size	16647.808 (1.708)*	0.258 (3.934)***	163404.59 (3.355)***	0.027 (0.773)
Labour	-0.585 (-2.955)***	0.070 (1.287)	-15725.144 (-0.388)	-3.89E.007 (-0.543)
R ²	0.835	0.959	0.874	0.588
R ² Adjusted	0.822	0.951	0.847	0.557
F Statistic	66.800***	112.262***	32.825***	18.872***

Source: Computed From Survey Data, 2009

Results in Table 4 indicate that the lead equation is the linear functional form. It has an R^2 value of 0.835. This implies that about 83.5% of the variation in the value of output (y) is explained by **variables ($x_1 - x_5$) included in the model. The remaining 16.5% is as a result of non-inclusion** of some important explanatory variables as well as errors in estimation. The F-statistic (66.800) is also significant at 1% level. This indicates that the variables adequately explained the model.

Out of the five variables modeled only three, namely: loan, farm size and labour input had significant effect on value of output. The estimated regression coefficient for loan is 3.204% which is positive as expected and significant at 1%. This implies that amount of loan received by beneficiaries had significant effect on the total value of output. It also indicates that as the amount of loan received increases, the output also increases.

The same can also be said of farm size which is significant at 10% with a positive regression coefficient of 16647.808. This shows that as the farm size of beneficiaries increases, their output also increases. Though labour was significant at 1%, it had a negative regression coefficient of ---0.585, meaning that as the cost of labour decreases the value of output increases. In addition interest rate charged by microfinance banks and technical assistance provided by them do not in anyway affect the value of output obtained by beneficiaries (according to the lead equation).

CONCLUSION AND RECOMMENDATIONS

Conclusions

Microfinance banks contribute positively to agricultural development in Chanchaga Local Government Area of Niger State. This is because there is a positive and significant relationship between the amount of loan received and the output of farmers as indicated by the regression analysis results. Loans were granted to cooperative groups more than individuals. Small and medium enterprises were granted loans more than other categories of beneficiaries.

Recommendations

Based on this, the following recommendations were made:

1. Farmers should organize themselves into co-operatives so as to easily access credit facilities from microfinance banks. This gives the bank more confidence to disburse agricultural micro-credit and also reduce default rate.
2. The Agricultural Credit Guarantee Scheme of the government, which is an existing means of giving agricultural loans to farmers should be reviewed and made more functional. This will motivate microfinance banks to give out agricultural microfinance with minimal consideration of the risk involved.
3. To reduce the incidence of loan diversion by beneficiaries for purposes other than which they were collected, microfinance banks should disburse agricultural loans not only in cash but also in kind.

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