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Demand for Institutional Credit from the Nacrdb by Small Scale Farmers in Imo State, Nigeria.

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This study was designed to investigate the demand for institutional credit among small scale farmers in Imo State. A sample of 40 livestock and 50 food crop farmers were selected respectively using multistage random sampling technique. Data were collected with a well structured questionnaire administered to a total of 90 randomly selected farmers. Data collected were analyzed using descriptive statistics, inferential statistics and ordinary least square multiple regression technique. Results showed that farm income, interest rate, household size, distance to the bank, expenditure on labour, level of education and farming experience are important factors influencing the demand for institutional credit by farmers. It is recommended that inorder to raise the level of farmers' income and their standard of living, there is need for credit demand and utilization for farm production. **[J. S. Orebiyi et al. Demand for Institutional Credit from the Nacrdb by Small Scale Farmers in Imo State, Nigeria. International Journal of Agricultural Science, Research and Technology, 2011; 1(2):83-87].**

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1. Introduction

The major threat to peace in the world today next to nuclear weapons are those posed by hunger and starvation. Famine is presently ravaging populations in part of the developing nations of Africa and Asia, thus making the advanced nations to increase their food aids to these nations (Anyanwu, 1998). No wonder, the United Nations Millennium Development Goal calls for halving hunger and poverty by 2015 in relation to 1990 (FAO, 2001). Of the eight millennium development goals, eradicating extreme hunger and poverty depends mostly on agriculture. Although, Nigerian Agriculture has the potential of providing enough food for her population (Anyanwu, 1998), self sufficiency in food production has been a mirage as this aspect has not been met. Nigeria has not been able to provide food for her population of over 140,000,000 (NPC, 2006). This is evident in the declining contribution of the agricultural sector to the overall Gross domestic product from 43% in 2001 to 31.2% in 2002. It has also failed to meet the needs of the growing population (CBN, 2002). This was confirmed by the population growth rate of 3% per annum with a corresponding food production which has increased by only 1.5% per annum in the last 5 years (CBN, 2006).

Nigerian small scale farmers apart from providing 90% of the nation's food, also contributes to Gross Domestic product and provide the largest source of rural employment (Olayide et al, 1980). However, the contribution of small scale farmers to the national objective of employment creation and income generation makes it imperative to assist them with production credit.

Agricultural credit is defined as the process of obtaining control over the use of money, goods or services in the present in exchange for a promise to repay at a future date (Adegeye and Dittoh, 1985). Credit motivates the farmer thereby encouraging him to invest in new opportunities. It has the capacity to energize or motivate other factors of production, acts as a catalyst that activates the engine of growth, and constitute the power or key to unlock talents, abilities and opportunities (Boehlji and Eidman, 1984). Access to credit can engender increased agricultural output and improved economic well being of the rural population (Ejiogu and Onubuogu, 2003).

Credit in the hands of poor farmers will also enable them reap the economies of scale, discover new and better products, create demand where none existed and provide utilities to satisfy a widening market (Ijere and Okorie, 1998). Realizing the role of credit in enhancing the productivity of the rural farmers, and the problems faced by small farmers in

accessing credit from the conventional banks, the Federal Government of Nigeria established the Nigerian Agricultural and Co-operative Bank (NACB) in 1973. The NACB was thereafter merged with the people's bank of Nigeria (PBN) and Family Economic Advancement Programme (FEAP) to form the Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB) in 2000. Yet farmers' credit needs have not been met and some credits granted are misappropriated.

In view of this therefore, it has become imperative to analyze the demand for institutional credit from the NACRDB by small scale farmers and make policy recommendations that will launch agriculture into a higher level.

The objective of this paper is therefore to describe the socio-economic characteristics of small scale farmers in Imo State; determine the amount of credit demanded by farmers and the amount of loan granted to them by the NACRDB and determine factors influencing credit demand by farmers in the area.

2. Material and Methods

The study was carried out in Imo state. Imo state has 27 Local Government Areas. Multistage Random Sampling technique was used in the study. Nigerian Agricultural Co-operative and Rural Development Bank was purposively selected as it was established purposively to cater for the small scale farmers in particular and the agricultural sector in general. A list of loan beneficiaries from the bank was collected from the lending officers of the bank in Owerri. From the sampling frame of 180 farmers, 90 respondents (farmers) were randomly selected. The data covered the beneficiaries from 2005-2007 so as to ensure that these loans actually matured for repayment.

Data for this study were collected from both primary and secondary sources. Primary data were collected through the use of structured questionnaires. The secondary information were obtained from textbooks, internet, library, journals, magazines, seminar papers, etc. Data were analyzed using simple descriptive statistics such as percentage, means and frequencies, ordinary least square multiple regression technique.

In using the ordinary least square multiple regression technique, four functional forms: linear, semi-log, double log and exponential equations were tried. The model with the highest value of coefficient of multiple determination (R^2), highest no of significant variables as well as the significance of the F-test was selected as the lead equation.

The model is stated implicitly as:

$CD = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, e)$

Where

CD = Total amount of credit demanded (₦)
X_1=Annual farm income of respondent (₦)
X_2=Value of interest payment (₦)
X_3=Age (Years)
X_4=Level of education (Number of years spent in school)
X_5=Household size (Number)
X_6=Farming experience (Years)
X_7=Distance to the bank (Kilometres)
X_8=Labour Expenses (₦)
e=Error term

It is expected apriori that;

$X_1, X_4, X_5, X_6, X_8, > 0$; $X_2, X_3, X_7 < 0$

3. Results and Discussion

Table 1 shows that the mean age of respondents was 49 years, indicating that majority of the respondents were middle aged farmers who are still active, vibrant and dynamic and are more likely to adopt innovations better and faster than their older counterparts. As the farmer gets older, his ability to withstand stress reduces hence lack the stamina to face the tediousness involved in farming, this dependents also increase to the extent that his personal disposable income is no longer adequate to carry his family needs, thus giving rise to the demand for credit to meet his farm capital and family consumption needs. This finding is in line with that of Nwaru (2004). The mean number of years spent in school for those who use bank credit was 7years, indicating that the respondents in the area are moderately educated. Education is an investment in human capital which is able to raise the quality of skill of man, narrow his information gaps and increase his allocative abilities thereby leading to more productive performance (Orebiyi, 2000).

The table further showed that the respondents were reasonably experienced. This is indicated in their mean years of experience which was found to be 13 years. The implication is that they are well experienced in farming and can therefore understand the need for credit and access it. This could be due to the fact that their much experience in farming may have exposed them to the benefits of using credit. Onu, Amaze and Okunmadewa (2000) explained that experience correlates positively with age. The mean household size of the respondents was 6 per household persons. The average family size implies that the farmers spend a modest amount on feeding, clothing, children school fees and hospital bills etc. A reasonable proportion of the respondents who used NACRDB credit/loan beneficiaries were males (52.22%) while (47.77%) were females. Men have access to credit facilities more than women who contribute more to food production in the area. This is consistent with the assertion made by Tanko (1994)

that women do not get the same as men in their access to critical farm resources and services such as farm land, credit and improved input due to cultural, traditional and sociological factors. The table further revealed that majority of the farmers, 87.77% were married while 10% were widows. A lesser proportion 2.22% were single farmers. This implies that the bank seems to be more favourably disposed to granting loans to married farmers who possibly are seen to be more responsible and stable within the community. Single and widowed farmers may not be able to provide the collateral and surety often required for the loan. The table further revealed that the mean annual income was N262,722 which is however very low. The higher the level of annual farm income of respondents, the higher will be the likelihood of the amount of credit he would obtain from the Nigerian Agricultural Co-operative and Rural Development Bank. This view is consistent with Okerenta (2005).

Socio-economic characteristics of the farmers.

Table 1. socio-economic characteristics of the respondents

Variables	Frequency	Percentage
Age		
30-39	6	6.67
40-49	37	41.11
50-59	43	47.78
60 and above	4	4.44
Educational level		
0	13	14.44
1-6	30	33.33
7-12	35	38.89
13 and above	12	13.33
Sex		
Male	47	52.22
Female	43	47.78
Farming experience		
1-10	32	34.44
11-20	48	53.33
21-30	12	12.22
Marital Status		
Married	79	87.78
Single	2	2.22
Widowed	9	10.00
Household Size		
1-3	2	2.22
4-6	50	55.56
7-9	38	42.22
Annual Income		
101-200	26	28.89
201-300	44	48.89
301-400	10	11.11
401-500	3	3.33
501-600	7	7.78
Total	90	100.00

Table 2 shows that the mean amount of credit demanded was N231,896.29. This implies that most of the farmers demanded loan within the range of the bank policy of N250,000 maximum for micro credit. The implication is that the amount of credit demanded is low hence the farmers production level has remained at subsistence level.

Table 2. Amount of Credit demanded by respondents

Credit demanded (₦000)	N	%
101 - 200	34	37.78
201 - 300	43	47.78
302 - 400	10	11.11
401 - 500	2	2.22
501 - 600	1	1.11
Total	90	100

Amount of Credit granted to small scale farmers by the NACRDB

Table 3 shows that the mean amount of loan granted to the farmers was ₦211,655.56. The mean amount of loan demanded by farmers was found to be ₦231,896.29. This implies that the amount of credit granted to the farmers was very close to their credit demand.

Table 3. Distribution of respondents by loan size granted by the NACRDB

Credit granted (₦ 000)	N	%
101-200	2	46.66
201-300	43	47.77
301-400	3	3.33
401-500	2	2.22
Total	90	100

Factors Influencing Credit Demand Of Small Farmers

To identify the factors that determine credit demand of small scale farmers, four functional forms of the multiple regression models were fitted into the field data as shown in table 4. The table shows that the double log function was chosen as the lead equation, based on having the highest value of the coefficient of multiple determinations (R^2), conformity with apriority expectations and having more significant variables.

The results showed that Farm income (X_1), Interest (X_2), household size (X_5), Distance to the bank (X_7), Expenditure on Labour (X_8) were significant at 1% while the coefficients of level of education(X_4), farming experience (X_6),were significant at 5%, hence the greater they are, the higher the credit demanded by the farmers. Also, it implies that these variables are important factors

influencing the amount of credit demanded by the small scale farmers in the study area hence, they have a huge influence on the credit demand of the farmers. This finding agrees with those of Ohajianya and Onyenweaku (2003) who found a positive relationship between level of education, household size and farming experience and amount of credit demanded. However, age (X_3) was negative and not significant at 5% implying that the older one gets, the less the amount of credit demand. This is consistent with the findings of Mbah (2009) who found age of farmers insignificant and conforms with the apriori expectation.

R^2 (coefficient of multiple determination) were found to be 0.8344 implying that 83% of the variability in amount of credit demanded by farmers was explained by the combined effect of the independent variables.

Table 4. Estimate of multiple regression result on factors influencing credit demand of farmers.

Variable	Linear Form	Semi log Form	Double log Form	Exponential Form
X_1 (Farm Income)	13.6614 (3.2611)**	1.4291 (1.3428)	0.0864 (2.7961)**	0.0075 (3.1251)**
X_2 (Interest payment)	-10.9314 (-1.2115)	-9.3042 (-1.1463)	-0.0774 (-3.7212)**	-0.0072 (-3.2727)**
X_3 (Age)	-16.2908 (-1.0965)	-4.9888 (-1.2792)	-0.0713 (-1.1708)	-0.0047 (-1.5167)
X_4 (Education)	13.0026 (1.0907)	2.0614 (2.5346)*	0.0648 (2.1457)*	0.0093 (1.1926)
X_5 (HH size)	14.3817 (1.0928)	3.0114 (1.0144)	0.0593 (5.0684)**	0.0058 (1.2341)
X_6(Farming experience)	15.2091 (3.2486)**	3.1792 (2.9942)**	0.0726 (2.3121)*	0.0094 (3.2414)**
X_7 (Distance to bank)	-16.4193 (-1.0969)	-3.8793 (-1.2151)	-0.0667 (-2.9513)**	0.0071 (2.9583)**
X_8 (Expenditure on labour)	21.06794 (2-5914)**	3.4026 (1.0826)	0.0842 (3.8802)**	0.0092 (2.3947)*
Constant	147.3908	118.4213	98.7214	83.1052
R^2	0.5103	0.3968	0.8344	0.6018
F-Value	10.6313**	7.0857**	51.1275**	15.351**
N	90	90	90	90

* = Significant at 5%; ** = Significant at 1% :

4.Conclusion and Recommendation

From the findings of this study, the Nigerian Agricultural Co-operative and Rural Development Bank has fund for agricultural financing but most farmers do not demand for the institution credit due to their inability to provide the required collateral of two guarantors, and meet other credit conditions set out by the bank.

Credit still plays an important role in promoting better farm income in the study area.

Based on the findings of this study, the following recommendations are proffered:

Inability to provide collateral greatly affect the farmers' demand for credit. The bank should therefore review their policy as it affects collateral in order to make their loan more accessible to farmers.

The farmers should as much as possible endeavour to embrace the demand of Agricultural credit for increased purchase of farm input, adoption of new innovations and improved technological system for increase production which will help break the vicious cycle of poverty. The government should formulate credit policies that will improve the level of education in the rural areas thereby increasing the level of awareness of agricultural credit. This can be achieved through education schemes and extension services.

Farmers can form co-operatives and pool their resources together for increased productivity in crop and livestock production.

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