

## Socioeconomic Determinants of Loan Repayment among the Agric. Loan Scheme beneficiaries in Kaduna State. A Case Study of Unity Bank PLC.

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**Abstract:** The study examined the socioeconomic factors influencing loan repayment among the beneficiaries agricultural loan scheme in the Unity bank of Nigeria PLC in Kaduna metropolis. Multi stage sampling technique was used in the study in which seven branches of the unity bank of Nigeria plc were purposively selected and in each branch 10 beneficiaries who collected agric loan in 2007/2008 cropping season were selected using simple random sampling technique making a total sample size of seventy respondents. The data were collected using structured questionnaire and analyzed using simple descriptive statistics and multiple regression analysis. The result of the analysis revealed that, majority (75.72%) of the loan beneficiaries were males and those with age range of 21-40 constituted 75.72% with a mean age of 38.6. Majority (51.42%) of the respondents collected above ₦200,000 as a loan. Beneficiaries who repaid ₦1, 000-₦20, 000 and more than ₦100, 000 out of the total amount collected constituted 24.29% and 27.14% respectively. The result of the z-test revealed a significant difference between the amount applied by the farmers and the amount disbursed by the Unity bank plc. The result of the Double log multiple regression analysis revealed that age of respondent ( $p < 0.001$ ) and farmers production yield ( $p < 0.01$ ) significantly influence loan repayment by the respondents. The major problems encountered by the respondents include, high bureaucratic procedures, high rate of interest and amount given was short of amount applied for. The bank should increase the share of agriculture in the loanable funds available to it and relaxed the bureaucratic procedures involved before accessing the loan. Government need to come up with a policy of lowering the interest rate on loans to agricultural sector and provide efficient extension services to farmers so as to improve the yield obtainable from their farming enterprise and hence their income.

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### I. Introduction

Agricultural financing has become a topic of considerable importance especially in developing countries as capital availability is one of the most important factor in determining the rate of agricultural and rural development. There is no doubt that a successful agricultural production depends on capital finance as well as prudent management of the production process. Capital finance plays an important role in agricultural production by making necessary, the adoption of improved production technologies and methods of farming. According to Francis and Baker (1986), shortage of capital impedes the economic development of small farmers in developing countries. Inadequate financial usage have been identified as the major constraints to increasing food production and modernizing agriculture in Nigeria (Ogungbile and Olukosi 1991, Njoku 2002). Taking into account the importance of credit in terms of improving efficiency as well as expanding agricultural production, the federal Government of Nigeria established the Agricultural Credit Scheme fund in 1977 to encourage commercial banks to provide credit for agricultural production with ownership and shareholding capital of 60% and 40% in favour of the federal ministry of finance and central bank of Nigeria respectively. The fund guarantee 75% of any default in bank loans granted to agricultural sector and it was increased from the initial N100 million to N1.0 billion and N3.0 billion in 1999 and 2001 respectively, the limit for guaranteed non-collateralized loans to individuals rose from N5000 to N20000 while collateralized loans to individuals increased from N200000 in 1977 to N1.0 million in 2001 (Nnanna et al 2003). The limits of loans to cooperative societies and cooperate bodies were similarly increased to N10 million in 2001, from N1.0 million and N5.0 million in 1977 and 1999 respectively (Nnanna et al 2003). The financial system in many developing countries is confronted with severe limitations including fragmentations of credit institutions, widespread delinquency and defaults as well as management deficiencies (Nasiru et al 2006). Credit in peasant farmers hand will enable them overcome their financial expenditures, enjoy huge profit, satisfaction, greater welfare, and discover new and improved products to satisfy a large market that will generate the zeal to embark on a large scale production (Ijere and Okorie 1998). There is no doubt that a successful agricultural production depends on capital finance as well as prudent management of the production process. While farmers are complaining of the bank failure to

release fund in good time, more often the funds were inadequate and high cost of loan processing. Banks on the other hand accused farmers of mismanagement of funds leading to inefficient allocation of funds as well as diversion of funds to nonagricultural and sometimes non-productive uses. They also accused farmers of having misconception about bank loans being regarded as a national cake instead of depositor's money. Low recovery rate in farming sector and failure in loan repayment were identified as the main reason why the formal sector is reluctant in lending to small scale farmers, since it face negative net margins as a result of bad debt and overdue cost (Akinwumi, 1998 and CBN, 2009). In Nigeria the acclaimed importance of credit in agribusiness promotion and development, not withstandingtheir acquisition, management and repayment have been burdened with numerous challenges (Afolabi 2010). It is against these backdrops that this research was undertaken with the following objectives to; Describe the socioeconomic characteristics of respondents; find out the proportion of total lending granted to agricultural sector by Unity Bank Plc in the study area; compare the amount of loan applied for by the farmers and the mount disbursed by the bank; find out the influence of some socio economic characteristics of respondents on loan repayment and major problems associated with loan acquisition.

## **II. Methodology**

The study was conducted in Kaduna metropolis in Kaduna local government area, Kaduna state. The area has a population of over 1,563,300 people (NPC2006). The area lies along longitude 7 degrees and latitude 10.5 degrees and altitude of 640m above sea level and is characterized by two distinct seasons; dry season which starts from November to March and wet season which begins in April and ends in October.

### **Sampling Technique and Sample Size**

Multi stage sampling technique was used in the study in which Unity bank of Nigeria Kaduna Main branch was purposively selected and beneficiaries of the banks agric. Loan were also selected among the beneficiaries of loans advanced by the bank during the 2007/2008 cropping season. From the list of agric. Loan beneficiaries 70 respondents were selected using simple random sampling technique.

### **Data collection procedure**

The data were collected from the beneficiaries of the loan scheme unity bank Plc for the 2007/ 2008 cropping seasonand the instrument for the data collection was a pre tested structured questionnaire. The information solicited from the respondents included; the socioeconomic characteristics of the respondents as well as information related to their loan acquisition from the bank such as amount applied for, amount approved as well as the amount of money disbursed and the amount repaid. Secondary data were also collected from the unity bankand information solicited include; the amount of loan granted to agriculture and the amountof loansrepaid by the beneficiaries.

### **Data Analysis**

The data were analyzed using descriptive statistics (including frequency, percentage, mean and Z test) and multiple regression analysis.

### **Specification of Multiple Regression Models**

The linear multiple regression analysis was used to determine the influence of socio economic characteristics on the loan repayment by the beneficiaries. The linear multiple regression model can be specified as follows:

$$Y=b_0+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+\mu \dots\dots\dots 1$$

Where

Y= Amount repaid by the beneficiaries (₦)

X<sub>1</sub> = Age of respondents

X<sub>2</sub>= Household Size

X<sub>3</sub> = Gender

X<sub>4</sub> = Educational level

X<sub>5</sub> =Output (kg)

b<sub>0</sub> = Constant term

b<sub>1</sub>-b<sub>5</sub> = Regression Coefficients

μ = Random error term

## **III. Results And Discussions**

The socio economic characteristics of respondents are presented in Table1. As shown in the table majority (75.72%) of the loan beneficiaries were maleswhich agrees with the findings of Eziheet al(2007) who reported that majority (82.3%) of the loan beneficiaries were males,It also conforms with the findings of Jibril et al (2007) who reported that 58% of the loan beneficiaries were males. This shows that males had more accessibility to credit facilities than men even females contributes immensely to agricultural production in the country. Majority (75.72%) of the were beneficiaries within the age range of 21-40 constituted implying that

most of the beneficiaries are in their active stage in life capable of contributing immensely to agricultural production. As indicated in the table majority(83.98%) of the respondents were literate which implies that they are capable of taking rational decision in their farming operation in terms of managing their farms. Majority(55.72%) of the respondents had 1-10 years of experience in farming while25.71% were having above 20 years of experience in farming.

**Table 1:** Distribution of Respondents according to their demographic characteristics

Variable	Frequency	Percentage
<b>A. Gender</b>		
Male	53	75.72
Female	17	24.28
<b>B. Age</b>		
21-30	17	24.29
31-40	36	51.43
41-50	15	21.42
51-60	2	2.86
<b>C. Education Level</b>		
Never been to school	11	16.02
Adult Education	15	21.74
Primary Education	9	12.86
Secondary School	14	20
Tertiary Education	21	30
<b>D. Farming Experience</b>		
1-5	16	22.86
6-10	23	32.86
11-15	5	7.14
16-20	8	11.43
Above 20	18	

**Size of Loan collected by the Respondents**

The distribution of respondents according to the size of loan collected is presented in Table2. The table revealed that 51.42% of the beneficiaries collected over N200, 000 as a loan which contradicts the findings of Ochi and Nnanna (2007) who reported that majority(70%) of the beneficiaries collected N20,000-N 100,000 as aloan.Respondents who collected N50, 000-N100, 000 and 101,000-N200,000 constituted 22.86% each which implies that most of the beneficiaries were small-medium scales farmers which constituted more than 75% of the farming populace in Nigeria.

**Table 2:** Distribution of respondents according to the amount of loan collected from Unity Bank.

Amount (N)	Frequency	Percentage
Less than 50,000	2	2.86
50,000-100,000	16	22.86
101,000-200,000	16	22.86
Above 200,000	36	51.42
<b>Total</b>	<b>70</b>	<b>100</b>

**Comparative Analysis of the Amount Applied for By the Farmers and the Amount Disbursed**

The estimated Z test results for the mean difference between the amounts of loan applied for by the farmers and the amount disbursed by the Unity Bank Plc Kaduna is presented in Table 3. The table revealed that the means of the amount applied for and the amounts disbursed by the banks were statistically different at both one and two tailed tests (p<0.05). this implies that the farmers were given less of the amount applied for as loan which may be due to the fact that the bank considers the loanable funds available to it, the size of the enterprise into which the loan will be invested and the collateral presented to the bank by the farmer.The findings agree with that of Obohet al. (2007) whom reported that loan size received by the farmers was far lower than the amount applied for.

**Table 3:** Estimated Z-test Results on the Mean Difference of the Amounts Applied for by Farmers and Amounts Disbursed by Unity Bank Plc.

Statistical Parameter	Variable 1 (Amount applied)	Variable 2 (Amount disbursed)
Mean	255528.57	227071.43
Known variable	1	2
Observations	70	70
Hypothesized mean difference	0	
Z	137461.06	
P(Z<=z) one-tailed	0	
Z-critical one-tailed	1.644853627*	
P(Z<=z)	0	
Z-critical two-tailed	1.959963985*	
*=-significant at p<0.05		

**Repayment made Out of the Total Loan Collected as of December, 2009**

The distribution of respondents according to the repayment made is presented in Table4. As shown in the table majority (57.15%) of the respondents repaid N1-N80,000 out of the total amount collected as loan while those that repaid N80,001-N100,000 and above N100,000 constituted 15.71% and 27.14% respectively, this clearly shows a low repayment rate which may be attributed to loan diversion by the beneficiaries, crop failure or other socioeconomic factors as agricultural production is full of risk and uncertainties. According to Ateret al. (1991), reasons for low repayment among the farmers in less developed countries ranged from deliberate refusal to pay by some farmers to non repayment of loans arising from loss of income due to devastating effect of crop failure and ill health.

**Table 4:** Distribution of Respondents According to the Repayment made out of the Total Loan Collected as of December, 2009

Amount (₦)	Frequency	Percentage
1000-20,000	17	24.29
20,001-40,000	8	11.43
40,001-60,000	8	11.43
60,001-80,000	7	10.00
80,001-100,000	11	15.71
Above 100,000	19	27.14
<b>Total</b>	<b>70</b>	<b>100</b>

**Factors influencing Loan Repayment among the Loan Beneficiaries**

The results of the Linear multiple regression analysis for the socio economic factors influencing loan repayment among the respondents is presented in Table5. As shown in the table the R –square which is the coefficient of determination was 50.6 implying that 50.6% of the variation in the amount of loan repaid by the farmers was due to explanatory variables included in the model which is higher than the 46.7% and 36% reported by Ifeanyi and Ogbukwa (2012) and Okeet al (2007) respectively. The regression coefficients with respect to age, gender, educational level and yield were positive implying that these variables influence loan repayment positively however only the regression coefficients with respect to age (p<0.001) and yield (p<0.01)were significant, implying that the higher the age of respondents and yield obtained the more the respondents ability to repay the loan. The regression coefficient with respect to household size was negative implying that household size had negative influence on loan repayment. Therefore the larger the household size the more likelihood that the loan might be diverted for house hold consumption thereby affecting the repayment rate. However the value was not significant.HoweverIfeanyi and Ogbukwa (2012) reported negative and significant influence of household size on loan repayment.

**Table 5:** Estimated Result of the Influence of some Socio-Economic Features of Respondents on Loan Repayment.

Predictor	Coefficient	t- value
Constant	0.2989	0.33
Age	1.8223	3.54***
Household size	-0.1169	-0.78
Gender	0.3794	0.94
Education Level	0.1952	0.91
Yield	0.3725	2.09*
<b>R-square = 50.6%</b> <b>Adj. R-square = 44.6%</b>	<b>***=significant at (p&lt;0.00 1)</b>	<b>*=significant at (p&lt;0.01)</b>

**Constraints Associated with Loan Acquisition**

The major problems encountered by the farmers included bureaucratic procedures (52.86%) this may be attributed to the fact that the bank has to ascertain that the beneficiary is credit worthy which the farmers view it as a delay in releasing the loan.High interest rate (55.71%) as the rate was higher than the rate of interest charged by the Bank of Agriculture, hoever it is still lower than the rate charged to other sectors of the economy. Inadequacy of the amount given (92.86%) , this can be attributed to failure of the farmers to meet the requirements for the amount applied for or the inadequacy of the loanable funds

**Table 7:** Distribution of Respondents according to constraints encountered while acquiring loan.

Constraints (N=70)	Frequency	Percentage
1. High Bureaucratic Procedures	37	52.86
2. High Interest rate	39	55.71
3. Late approval	34	48.57
4. Late disbursement	26	37.14
5. Amount given inadequate	65	92.86

## Conclusions and Recommendations

Males dominated the patronage to the bank in the area and most of the beneficiaries were youth most of whom were literate. Farmers were small scale in nature and not given the amount they applied for. There was low repayment of loans among the beneficiaries and the major factors influencing repayment were the age of the respondent and yield of crops obtained from his farm. The bank should increase the share of agriculture in the loanable funds available to it and relaxed the bureaucratic procedures involved before accessing the loan. Government need to come up with a policy of lowering the interest rate on loans to agricultural sector and provide efficient extension services to farmers so as to improve the yield obtainable from their farming enterprise and hence their income.

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