

Determinants of Loan Default and Repayment Rates by Cassava Farmers in the South-South Nigeria: A Case Study of Bank of Agriculture and Union Bank

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Abstract: *Financial institutions play vital roles in extending agricultural credit to Nigerian farmers which transform their socio-economic activities through increased output of crops, especially the staple food crop, cassava. This study was carried out in order to ascertain the determinants of loan default and repayment rates by cassava farmers loan beneficiaries in Bank of Agriculture and Union Bank in South- south Nigeria. Purposive and multi-stage random sampling techniques were used to select a total of two hundred and fifty (250) cassava farmer loan beneficiaries across the states in the South-south Nigeria. The findings revealed that UB gave the highest amount of N3,779,534,400.00 (60%) while BOA gave N1,671,497,140 (26%). Further analysis revealed high repayment rate of 97% and 91% by large scale cassava farmer loan beneficiaries in BOA and UB. Major constraints limiting loan administration by bank officials were: non-repayment of loan by beneficiaries (100%), and delay in repayment of loan (100%) among others, identified by the banks officials. It was recommended that approved loans should be disbursed on time and monitoring and evaluation of loans disbursed should be done regularly and on time, among other recommendations.*

Keywords: Agricultural loan, default rate, repayment rate, cassava farmer loan beneficiaries, BOA, UB, South-south Nigeria.

1. Introduction

Before the ore prosperity in the early 1970s, Nigeria had been largely exporting cocoa, groundnut, cotton, rubber and palm oil. Despite this, the contribution of the agricultural sector to the economic growth and rural development in Nigeria is yet to be fully tapped (FMARD, 2006). According to FMARD (2006) the agricultural sector presently contributes 26% to the nation's GDP. Crop production accounted for 85%, livestock 10% while forestry and fisheries accounted for 5% of the total contributions of agriculture to the nation's GDP (FMARD, 2006). The report further stated that the sector also generated about 90% of the revenue received from non-export goods and created employment for about 1/3 of the labour force in the country (FMARD, 2006).

In spite of the fact that ore still accounts for our major revenue, gearing towards 80 percent and almost 100 percent of our export earnings (CBN, 2003), agriculture, especially cropping, forestry, livestock and fishery is known to be the major activity of Nigerians (Chigbu, 2008). Regrettably, the trend performance has declined over the years. The sector's annual growth rate remained at 5.8 percent between 1990-1993, falling to 3.5 percent between 1997 and 1998 and worse still declining to an abysmal 1.8 percent during the 1999-2001 periods. The agricultural sector is expected to have an annual growth rate of between 7 percent and 10 percent in order to have any meaningful effect on poverty reduction (CBN, 2003).

In 1977, the Agricultural Credit Guarantee Scheme (ACGS) was established with the objective of facilitating farmers' access to credit and help to stimulate agricultural production.

Prior to the establishment of the ACGS, the Nigerian Agricultural Cooperatives Bank was established in 1973 with the primary role of improving the level of agricultural production and promoting the development and growth of cooperatives by assisting farmers to overcome the problem of inadequate fund. The NACRDB Ltd was established in 2000 through merger of the former Peoples Bank of Nigeria, the defunct NACB Ltd and the assets of the Family Economic Advancement Programme in October 2000. In 2011, it became Bank of Agriculture. Complimentary policies aimed at ensuring the achievement of positive impact of ACGS were also implemented. Among such policies was the Rural Banking Scheme (RBS) introduced in 1977. The RBS was mandated to make more banks available to all rural inhabitants, thereby, removing one of the constraints often alleged to be inhibiting banking habits among farmers and other rural dwellers. Commercial banks are limited liability companies that can be owned by private individuals, institutions or government. Some of the commercial banks operating in Nigeria include First Bank of Nigeria Plc, Zenith Bank Plc, Union Bank Plc, Diamond Bank Plc, United Bank of Africa, Ecobank Plc, WEMA Bank Plc, Guaranty Trust Bank, Skye Bank, Enterprise Bank, Stanbic IBTC Bank and Fidelity Bank to mention but a few.

Union Bank was established in 1917 as a colonial bank. In 1979 when the Federal Government acquired 52% ownership of the bank, the bank's name changed from Barclays Bank to Union Bank of Nigeria Plc in order to reflect its new ownership names. Union Bank is a large commercial bank that serves the general public including small and big corporations and organizations. It provides financial services and products such as loans, savings, investments, and debit cards. Its subsidiaries are Union

Home Savings and Loans Plc, Union Trustee Limited, Union Assurance Company Limited, Union Bank United Kingdom Plc, Banque Internationale du Benin, Cotonou, UTL Communications Services Limited, UBN Property Company Limited, Union Capitals Limited, and Union Registrars Limited (Union Bank, 2012).

Ettah (2010) discovered that there are two categories of credit operated by the Nigerian Agricultural and Cooperative Development Bank (now Bank of Agriculture), which is the major agricultural credit institution and other commercial banks in his study area, Cross River State. The categories are the short and medium-term credit. The former has a period of up to 2 years repayment period while the latter has 2-5 years repayment period. In order to achieve effective lending, two types of lending schemes are operated by the banks: i) on-lending or indirect lending scheme- where the banks lend to smallholder farmers through recognized organizations. The institutions are expected to have effective organization, adequate resource base and acceptable collateral. ii) Direct-lending scheme – where the banks give credit directly to smallholder farmers, not passing through any intermediary.

Concerning the criteria for lending, the banks and other agricultural credit institutions set a certain level of requirement for different categories of borrowers. Because of the credit institutions' desire to recover their credit as quickly as possible to be able to stay in business, since the credit amount at their disposal is small, only short and medium- terms credits are allowed. The short- term credit is any credit amount not exceeding N100,000.00 repayable within 2 years. For any farmer to be qualified for this credit, he must satisfy the following conditions: i) have capacity to enter into a legally binding contract, ii) produce a completed application form with four recent passport size photographs, iii) provide two guarantors with good social values and one of them a permanent resident of the local government where the project is located, iv) provide evidence of possession of farmland and other agricultural enterprise to which credit will be committed, among others (NACRDB, 2006).

The medium-term credit is any credit amount more than N100,000.00 but not exceeding N300,000.00 and the duration is between 2-5 years. To be qualified for this credit, the farmer must satisfy all the conditions for the short-term credit in addition to the following: i) he should have obtained a short-term credit under the scheme from the bank in the past and must have fully repaid the old credit. Where he has not benefited before, an equitable mortgage would be taken in addition to the provision of guarantor, ii) the scale of operation of the applicant must satisfy the credit volume being requested, and iii) the applicant should also attach the photographs of properties and document to be offered as collateral (NACRDB, 2006).

Cassava has occupied an important position in the list of national non-oil export commodities in sub-Saharan Africa presently. Its demand is far above its supply internationally (Fresco, 1993; Nweke, Spencer and Lyman, 2002). Also, increase in cassava export has negatively affected its supply locally. It is the only crop whose production level has tripled over the past 50 years while its development has been

further advanced in the continent by the activities of the International Institute of Tropical Agriculture (IITA) located in Ibadan, Nigeria. IITA has distributed more productive new varieties that are resistant to a number of diseases as well as drought. African countries produce over 103 million metric tons of cassava per annum with Nigeria accounting for approximately 35 million metric tons per annum (FAOSTAT, 2009). It grows well in different types of soils including marginal soil that cannot support the growth of most crops (Asadu, 2004). It can be processed into many forms including „garri“, cassava chips, flour, bread, starch and beer, among others.

Furthermore, Kormawa and Akoroda (2003) asserted that cassava can be processed into many other forms useful as raw materials in industries like in livestock feed mill, confectioneries, textile and brewery. The forms include cassava chips, pellets, flour, adhesive, alcohol, and starch. It can be said that cassava's multiple uses facilitated its greater utilization in Nigeria and internationally.

There seems to exist the dearth of knowledge on the determinants of loan default and repayment rates by cassava farmers in South-south Nigeria. Therefore, this study was conducted in order to obtain first hand information necessary for policy making. In order to achieve this, answers were sought on the following questions:

- (i) What is the total amount of loans granted by Bank of Agriculture (BOA) and Union Bank (UB) to cassava farmers from 2009 to 2013 in the study area?
- (ii) What are the lending criteria adopted by BOA and Union Bank UB in agricultural loan acquisition by farmers in the study area?
- (iii) What are the loan repayment rates in relation to default rates by the cassava- based farmer loan beneficiaries (CFLB) in BOA and UB?
- (iv) What are the constraints to agricultural loan acquisition by BOA and FBN?

1.1 Objectives of the Study

The broad objective of this study was to compare the loan default and repayment rates of cassava-based farmers in Bank of Agriculture and Union Bank from 2009 to 2013 in South-south Nigeria.

The specific objectives were to:

- (i) compare the total amount of loans delivered to cassava-based farmers by BOA and UB from 2009 to 2013;
- (ii) examine the lending criteria adopted by BOA and UB in loan delivery;
- (iii) compare the loan repayment rate in relation to default rate by the CFLB in BOA and UB from 2009 to 2013 and;
- (iv) analyse the constraints to loan acquisition in BOA and UB in the study area.

1.2 Hypothesis

The null hypothesis tested in this study was:

- i) there is no significant difference between loan repayment and default rates in BOA and UB.

2. Methodology

This study was carried out in South-south Nigeria which is made up of Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers States. The area lies between longitude 4° 15" E – 9° 30" E and latitude 3° 35" N – 7° 00" N. It extends over 70,000km² and has a total population of 15,647 million which is about 10 percent of the country's population (NPC, 2006). Cassava is the major staple crop produced by people in the study area. They also rear chicken, goats, sheep and pigs and engage in business activities to sustain their livelihood. Purposive, multi-stage and random sampling techniques were employed for the study. Akwa Ibom, Cross River and Rivers States were purposively selected because they predominantly produce cassava in large quantity. A total of two hundred and fifty (250) cassava farmer loan beneficiaries (CFLB) were randomly selected across the three states using a multi-stage sampling technique. Primary data were gathered by administering two sets of well-

structured questionnaires to the CFLB and the bank officials (Managers and Loan Officers). The data gathered were analysed using descriptive statistics such as frequency distribution tables and percentages. The null hypothesis was tested using Z-test at 5% level of significance.

3. Results and Discussion

The results of the findings of this study were presented and discussed based on the specific objectives of the study.

3.1 Amount of loan delivered to CFLB by Bank of Agriculture and Union Bank (2009-2013)

The result of the amount of loan granted to cassava farmers by BOA and UB is shown in Table 1. The results of the total amount of loan granted to cassava farmers by BOA and UB from 2009 to 2013 in South-south Nigeria is shown in Table 1.

Table 1: Total amount of loans granted by BOA and UB between 2009 – 2013 in South- south Nigeria

Year	BOA	% of Total loan	UB	% of Total loan	Total
2009	227,800,000	28	552,805,000	68	780,605,500
2010	220,300,000	23	616,301,000	64	836,601,000
2011	460,800.00	36	668,000,000	53	1,128,800,000
2012	130,697,140	10	855,428,000	65	986,125,140
2013	631,900,000	32	1,087,000,400	54	1,718,900,400
TOTAL	1,671,497,140	26	3,779,534,400	60	5,451,032,040

Source: Field survey, 2014

In Table 1 the result showed that UB granted a total amount of N3,779,534,400.00 while BOA granted a total amount of N1,671,497,140.00 between 2009 -2013. But the amount granted by UB was higher in all the years except in 2013. The grand total of the loans granted by all the banks studied was ₦ 5,451,032,040.00. The result also implied that the amount of loans granted to the cassava farmers in the study area differed from time to time. Ihiodu and Ukpak (1996) attested to the fact that when financial support is provided to farmers, they will be able to acquire capital goods. It could also be said that farmers will be able to adopt innovative technologies and expand their farming operations. This is important for socio-economic development as their propensity to save and consume will increase (Kuye, 2015).

3.2 Lending Criteria Adopted by BOA and UB in Loan Delivery in the Study Area

The lending criteria adopted by BOA and UB in granting and delivering loans to farmers in the study area were examined. The result obtained is shown in Table 2. The result of the data analysed as shown in Table 2 revealed that similarity exist in the lending criteria adopted by the two banks in granting and delivering agricultural loans in the area of filling the application form and opening individual/group account. The two banks were dissimilar in other areas like the minimum deposit in the loan account (BOA required 10% for agricultural loan while UB required 25%), interest rate (BOA charged 12% while UB charged 21%) and taking insurance policy with the Nigerian Agricultural Insurance Corporation (NAIC) required for all categories of farmers by UB. Bank of Agriculture did not require NAIC policy for small-scale farmers. The result showed the flexibility in acquiring loan with BOA in the study area (Kuye, 2015).

Table 2: Lending criteria for granting loan to farmers by BOA and UB in South-south Nigeria

Financial institutions	Lending Conditions
BOA	i. opening of an individual account
	ii. filling of application forms
	iii. 10% minimum deposit for agric loans and 20% for non-agric loans
	iv. civil servant guarantor or personality as guarantor for short-term loan
	v. collateral security such as automobiles, land and landed properties such as buildings for medium-term and long-term loans.
	vi. interest rate charged is 12%
UBN	i opening of saving/current/deposit account by individual/group
	ii. filling of application forms
	iii. Central Bank of Nigeria guarantee
	iv. 25% of loan amount in the account
	v. taking insurance policy with NAIC
	vi. interest rate charged is 21%
	vii. possession of land and landed properties as collateral for long-term loans.

Source: Field Survey, 2014

3.3 Loan repayment in relation to default rates by CFLB in BOA and UB from 2009 to 2013 in the study area

The loan repayment is the rate at which loans are being repaid by the beneficiaries while default rate is the rate or percentage of loan not being repaid by the beneficiaries. The results of loan repayment and default rates were obtained from the responses by the bank officials in the two financial institutions studied. The results obtained were presented for small-scale, medium-scale and large-scale farmers in Table 3.

Table 3: Loan repayment and default rates of by category of CFLB in BOA and UB in the study area

Financial Institutions	Category of farmers	Repayment Rate (%)	Default rate (%)
BOA	i. Small scale	85	15
	ii. Medium-scale	92	8
	iii. Large-scale	97	3
UBN	i. Small-scale	91	9
	ii. Medium-scale	91.33	8.67
	iii. Large-scale	81	19

Source: Field Survey, 2014

The result revealed that UB recorded the highest repayment rate of 91% among the small-scale CFLB within the period of study while BOA recorded a repayment rate of 85% only. But among the medium-scale farmers BOA had the highest repayment rate of 92% while the repayment of UB was 91.33%. Among the large-scale farmers, the repayment rate in BOA was 97% while that of UB was 81%. This result implied that BOA had better repayment rate from medium-scale and large-scale farmers, whereas UB had higher repayment rate from small-scale farmers. (Kuye, 2015). The default rate was generally low among the farmers in the two banks with the exception of small-scale farmers in BOA which recorded 15% and large-scale farmers in UB which also recorded 19%. The high repayment rates recorded by BOA and UB were close to the 90% loan repayment reported by Oke *et al.* (2007) in BOA by farmers in South-west Nigeria. According to Ojiako and Ogbukwa (2012) among the reasons given for the high repayment rate of low default rate was the sound lending policy which demanded that bankers approve loan applications only for the SME that were believed to have low probabilities of loan default. This policy was also applicable to farmers applying for loan facilities in financial institutions. Also, Olagunju and Adeyemo (2007) recorded high repayment rate of 78.02% from farmers who obtained loan from BOA in Oyo and Ondo States of South-west Nigeria. They attributed the high rate of repayment to the effect of the merger of NACB, assets of the defunct Family Economic Advancement Programme (FEAP) and the Peoples Bank of Nigeria (PBN). Nevertheless, the reported cases of high loan repayment rate among smallholder farmers in the South-western area of Nigeria could be due to formation of functional co-operatives societies among farmers in the region (Oriako *et al.* 2012).

3.4 Constraints to loan administration in BOA and UB in South-south Nigeria

The constraints militating against loan administration in BOA and UB to cassava farmers in the study area were analysed. The result is shown in Table 4 and 5.

Table 4: Percentage distribution of constraints to loan administration as indicated by BOA and UB officials in the study area

Source: Field Survey, 2014

Parameters	Frequency (N=9)	Percentage (%)
Non-repayment of loan by beneficiaries	9	100
Delay in repayment of loans	9	100
Diversion of agric loan to Non-Agric sector	9	100
Inability of farmers to produce collateral	7	77.78
Inadequate fund for loan disbursement	1	11.11
Low patronage due to lack of awareness by farmers	7	77.78
Unsteady government policies	2	22.22
High default rate	9	100
Inadequate monitoring and evaluation	9	100
Uneven distribution of agricultural loan	4	44.44
Illiteracy of farmers	9	100
High cost credit administration	6	66.67
Lack of farmers awareness about bank product innovation	9	100
Total	9	100

Table 5: Percentage distribution of general problems faced by BOA and UB as formal sources of agricultural loan in the study area

Identified general problems	Frequency (N=9)	Percentage (%)
General weakness in extension linkage role	9	100
Inadequate on-the-spot supervision and continuous monitoring	9	100
Problem of identifying genuine clients	4	44.44
Problem of inadequate rural branches to serve rural customers	8	88.89
Most farmer loan beneficiaries are not exposed to ICT	9	100
Most farmers perceived loan as part of national cake	9	100
Low or lack of profit from farm enterprises	1	11.11
Risk and uncertainty	9	100
Dishonesty and fraud by some loan beneficiaries	7	77.78
Granting of loan to portfolio farmers	8	88.99
Total	9	100

Source: Field Survey, 2014

The results of the analysis of constraints that financial institutions (BOA and UBN) were facing while

administering loans to cassava farmers and their general problems as a source of agricultural loan in the study area were presented below in Tables 4 and 5. Among the problems mentioned by the banks which affect effective administration of loans were non-repayment of loan by farmers (100%), delay in repayment of loans (100%), diversion of agricultural loans to non-agricultural sector (100%), inability of farmers to provide collateral security where there is need for it (medium and long- terms loans) (77.78%), low patronage by farmers due to lack of awareness about loan (77.78%), high default rate among farmers (100%), illiteracy level among farmers (100%), high cost of loan administration (66.67%), lack of farmers awareness about bank products innovation (100%), general weakness in extension linkage role (100%), poor supervision and monitoring by bank officials (100%), inadequate number of rural branches of banks (88.89%), non- exposure of loan beneficiaries to ICT (100%), perception of farmers on loan as a share of national cake (100%), risk and uncertainty (100%), dishonesty and fraud among loan beneficiaries (77.78%) and granting loans to portfolio farmers (88.89%). However, the analysis further indicated that minority of the respondents reported inadequate fund for loan disbursement (11.11%) as a minor problem. Other minor problems were unsteady government policies (22.22%) and uneven distribution of agricultural loans (44.44%), identifying genuine clients (44.44%) and low profit from farm enterprises (11.11%) (Kuye, 2015).

3.5 Test of Hypothesis

The null hypothesis H_{01} which stated that there was no significant difference between loan repayment and default rate among the three banks was tested at 5% level of significance with Z-test. The result obtained is contained in Table 6.

Table 6: Z-test result showing difference between loan repayment and default rate between BOA and UB

Variable	N	Mean	S.D	Z cal	Z critical	Level of significance
Repayment	9	39.24	11.2			
Default	9	27.2	6.92	10.2	1.96	5%

Source: Field data analysis, 2014

The results in Table 6 showed that the calculated Z-value was 10.22, while the tabulated value of Z-statistics at 5% level of significance was 1.92. Since the Z-cal was greater than the Z-tab, the null hypothesis was rejected while its alternative was accepted. This result showed that there was significant difference between loan repayment in relation to default rate between BOA and UB in the study area.

4. Conclusion/Recommendations

The study had shown that loan repayment was high among the CFLB. Therefore, the farmers should be encouraged to obtain more loans to support cassava-based production because large loan size will enhance the beneficiary farmers' access to basic inputs and improved farm management opportunities which could enhance cassava production in South-south Nigeria.

Based on the findings of this study, the following recommendations were made:

- i) The various state governments should compliment the FGN efforts in the subsidization of agricultural inputs especially agrochemicals in the South-south Nigeria.
- ii) There should be more awareness among cassava farmers in the South-south about joining the Nigerian Cassava Growers Association (NCGA) so that they can benefit from the Cassava Bread Initiative Programme (CBIP) of the Federal Government.
- iii) The procedures and cost of becoming member of the NCGA should be less cumbersome and cheap.
- iv) Adequate monitoring should be ensured too minimise loan default among the beneficiaries.
- v) Timely disbursement of approved loans during the farming season is very crucial to prevent loan diversion by cassava farmers.

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