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INFLUENCE OF LOAN REPAYMENT OF FARMER BENEFICIARIES WITH THE BANK OF AGRICULTURE (BOA) IN AKWA IBOM STATE, NIGERIA

Mejeha, R.O., Bassey, A.E. and Obasi, I.O.
Department of Agricultural Economics, Michael Okpara University, Umudike, Abia State
Corresponding Authors' email: akaninyenebassey@gmail.com

ABSTRACT
This study examined factors that influence loan repayment of beneficiary farmers under the Bank of Agriculture (BOA) in Akwa Ibom State of Nigeria. Primary data used for the study were collected with the aid of a well-structured questionnaire. Simple random sampling was used to select the fifty-six respondents. Data collected were analyzed using simple statistical tools such as means and percentages and Ordinary Least Square (OLS) models. Result shows that 64.3% of the total respondents were males who were about 40.5years old. Majority (96.4%) were married with average household size of 5 persons. Average years spent in formal education was 13years while farming experience was 11years. Majority (78.57%) of the farmers were involved in trading as their secondary occupation. The major reasons why famers borrow were to make higher income through expansion of scale of operations. Good repayment arrangement and the lending policies attracted most clients to borrow from this source. Loan performance indices estimated showed that only 64.38% of the total amount granted as loan was repaid by the beneficiaries as at when due. This situation indicated a low level of repayment performance. The result of the multiple regression analysis showed that sex, age, amount of money borrowed and interest amount were the significant factors that influenced loan repayment. Based on the findings, it was recommended that loans should not be granted to farmers who have defaulted in repayment terms and who might put the loan into effective use. The lending source should strategize on how to censor beneficiaries effectively. The amount granted as loans to farmers should be increased to be more productive to augment gross income of the farmer to repay loan.

Keywords: Loan repayment, farmer beneficiary, Bank of Agriculture (BOA)

Introduction

Among the many challenges faced by farmers in agricultural production, the most limiting of all is the availability of farm credit. Many of the rural farmers are faced with the challenge of supplies of finance which impede their ability to produce at optimum (Elum, 2017). Availability of credit has been recognized as one major determinant of economic growth, essential and needed to expand the scale or farm operation and improve productivity (Anigbogu *et al*., 2015). However, the need for increased supply of credit to Nigerian farmers cannot be overemphasized because, farming in Nigeria has widely transformed from being subsistence to a type providing for the market (commercial). Like most competitive or commercial ventures, farmers are not able to adequately finance their operations alone with personal savings and therefore relied much on funds borrowed from different financial markets at some varying degrees of accessibility. Farmers apply for such facility based on the need for it and the utility to be derived (Udoh, 2008). For instance, farmers may borrow to increase their farm size, meet family needs, earn higher income, create jobs, maintain existing farms and increase savings. Farmers borrow in order to close the gap that existed between financial requirements of farms business and the financial assets of the farm. Agricultural credit promotes investment and raises the standard of living among small scale farmers (Mejeha and Ifenkwe, 2007; Dadson, 2012). However, finance is more than just another resource such as labour, land, equipment and raw materials, it is seen and viewed as the most important and most talked about (and still being talked about) problem of agriculture in Nigeria (ANAN, 2017).

However, the need for increased supply of credit to Nigerian farmers cannot be overemphasized because, a sustainable increase in agricultural outputs cannot be feasible without setting in place well focused progrmmes to reduce finance constraints in the sector. Government in a bid to making accessible credit to farmers set up credit schemes to increase the access of farmers to loans in order to increase food and cash

crop production in the country. In Akwa Ibom State, one of the schemes is the Bank of Agriculture (BOA) which was formally called Nigeria Agricultural Cooperative and Rural Development Bank (NACRDB) to cater for farmer's financial requirement (Oladeebo, 2003). It will be recalled that NACRDB came into existence following the successful merging of the former People's bank of Nigeria (PBN), the defunct Nigeria Agricultural and Cooperative Bank (NACB) Ltd. and the Family Economic Advancement Program (FEAP) in October, 2000.

Banks are considered one of the largest and most important types of financial institutions and the most efficient in practicing the role of financial intermediaries by providing the necessary funding for all the sectors of the economy, they are considered the lifeblood of any economy (Banga, 2013; Rabab" ah, 2015). The Bank of Agriculture is the single largest development finance institution in Nigeria and one of Africa's leading agricultural finance institutions. It has branches in the 36 States. Thus it was saddled with the responsibility of providing credit facilities to agriculture both at macro and micro levels. The mandates of BOA according to NACB (1973) are to: provide all classes of agricultural loans for farming: including livestock, poultry and fishery. They also accept savings from individuals and cooperative societies and to make repayment of the savings alongside with suitable interest, encourage cooperatives, encourage saving habit among farmers, encourage expertize through the training of beneficiaries on proper loan utilization, pursue repayment of loans, and formation of strategies for the profitable marketing of products.

Loans that are provided by BOA are with the view of protecting the farmers from the exploiting tendencies of informal credit providers. Provision of these loans to farmers lies theoretically on the belief that the availability of credit increase farm income and famers welfare. When loans are granted, next is the proper utilization of the loan on the intended projects and repayment. Loan repayment is the ability and willingness of the borrower to comply with lending obligations as was specified and agreed on the survival of financial institutions (Ndiege *et al*. 2016). Lending Institutions would grant loans to intending beneficiaries on the expectations of full recovery, but the finite number of potential beneficiaries seeking credit from a credit market has different propensities of either repaying or otherwise regardless of the credit contract. Most often, the expectation of lenders for full repayment of loan fails. In Nigeria, credit administration in many parts of the country has not been impressive including Udoh (2008); Ajah *et al*., (2013); Abu *et al*., (2017) who have attributed the failures of many government credit programs in Nigeria to high rate of non-repayment of agricultural loans. This happens given the weak analysis of borrowers farming operations and repayment potentials. The process of loan acquisition, terms, loan components, disbursement and repayment plans, farming experience, farm size, gross farm income, interest rate, farm output and climate change (Odoemenem *et al*., 2013; Kiboki *et al*., 2014). According to Ojiako *et al*. (2014) and Babalola, (2014), sex, age and occupation also have some bearing on loan repayment.

Empirically, low rate of repayment is widely reported in literature especially among small holder farmers in developing economies. In Nigeria, Eze and Ibekwe (2007) examined the determinants of loan repayment under the indigenous financial system in the Southeast Nigeria. In Akwa Ibom State, loan repayment by the beneficiaries of BOA has been the major problem faced by the bank. Beneficiaries often time fail on their obligation to repay the loan borrowed. The issue of low repayment therefore makes the policy of the government aim of establishing institutional credit markets as prospective credit sources of loanable funds to farmers to be highly impaired. This study therefore attempts to examine the factors that influence loan repayment among beneficiaries under BOA in AKS, the socio-economic variables of the beneficiaries, level of loan repayment performance and factors affecting loan repayment among the beneficiaries with the view of suggesting remedial actions.

Methodology

Study Area

The study was carried out in Akwa Ibom State. It is one of the thirty-six states in Nigeria with Uyo as the state capital. Akwa Ibom State is located in the South-East ecological zone between Latitude 4^0 33^1 and 5^0 35^1 North and Longitudes 7^0 35^1 and 8^0 35^1 East. Its covers a total land area of 8,412 kilometer's square. The State is bounded by Abia State and Imo State in the North, Rivers State in the West, Cross River State in the East and the Atlantic Ocean in the South. It is one of the major crude oil producing states in the Niger Delta region. Akwa Ibom State falls within the humid tropics with two distinctive seasons namely, rainy season (May to October) and dry season (November to April). Annual mean rainfall ranges between 2000mm and 2400mm along the coast. Mean daily maximum temperatures are regular about 26^0C – 33^0C and the relative humidity is between 50% to 60% during the dry season and between 60% and 90% in the rainy season. With the population of about 3,920,208 people (NPC, 2006). Over 70% are

involved in agriculture for both subsistence and income generation. The State is made up of a total of thirty-one (31) Local Government Areas and divided into six (6) Agricultural zones namely; Eket, Uyo, Ikot Ekpene, Oron, Etinan and Abak. The major ethnic groupings in the State are Ibibio, Annang and Oron. Ibibio language is the main language of the people of Akwa Ibom.

Sampling Procedure
A list of loan beneficiaries who collected loan from (2013-2015) was obtained from the accounts department. From the list of loan beneficiaries, a Simple random sampling technique was used to select 56 loan beneficiaries that participated in this study

Data collection
The empirical data used in this study include both primary and secondary data. The secondary data were collected from the official records of the Bank of Agriculture (BOA). The primary data were collected the aid of structured questionnaire, which was administered to selected BOA loan beneficiaries. Simple random sampling technique was used to select 56 loan beneficiaries from the list of BOA loan beneficiaries which was obtained from the accounts department.

Data Analysis
Loan repayment performance of the beneficiaries was achieved by evaluation of two indices. These include loan repayment index and borrower repayment rate.
Loan Repayment Index: This is evaluated as follows:
$LRI = [BVR_f/VB + W_2(BVRp/VB)]*100$ --------- (1).
This model had been used by Udoh (2008); Etukumoh and Akpaeti (2015) to measure loan repayment performance. Where LRI is loan repayment index, which shows the level of repayment made by a beneficiary; W_2 = NRCp/TNLOp; BVR_f = value of loan paid by those who made full repayment; VB = total value of loans outstanding in a particular period; BVRp = value of loans paid by those who made partial repayment; NRCp = number of borrowers who made partial repayment; TNLOp = total number of borrowers who have outstanding loan to repay.
Loan default index is thus measured as follows:
LDI = 100 – LRI---------- (2)
Where:
LDI= Loan Default Index
LRI= Loan Repayment Index

Borrower Repayment Rate
This is given as:

$$BRR = [BNF_f/NB + W_1(BNRp/NB)]*100 \quad (3)$$

Where BRR is the borrowers' repayment rate, which is defined as the rate at which the borrowers repay or fulfill their loan obligation:

W_1 = VRCp/TVLOp; BNF_f = number of borrowers who made full repayment.

NB = total numbers of beneficiaries in a particular period; BNRp= numbers of borrowers who made partial repayment; VRCp = value of repayment collected from those who made partial repayment; TVLOp = total value of loans outstanding for those who made partial repayment.

Borrowers' default index is then measured as follows:

$$BDR = 100 - BRR \quad (4)$$

Where BDR is Borrowers' Default Ratio and BRR is Borrower Repayment Rate

Determinants of loan Repayment: this was achieved using multiple regression analysis.
The multiple regression model is implicitly stated as;

$$Y = f(X_1, X_2, X_3, X_3, X_4\text{-------}X_9) \quad (5)$$

Where:
Y = Amount of loan repaid (in naira)
X_1 =Age of farmer (in years)
X_2 =Sex (male = 1; female = 0)
X_3 =Level of education (in years)
X_4 =Farming experience (in years)
X_5 =enterprise type (crop=1; livestock =0)
X_6 =Total income of the farmer (farm and non-farm in Naira)
X_7 =Amount of loan obtained (in Naira)
X_8=loan from other sources (in naira)
X_9 = Interest amount (in naira)

Results and Discussion
The result of socio-economic characteristics of the beneficiaries is presented in Table 2. The results show that majority (64.3%) of the respondents were males. This indicates that more males benefitted from loan from BOA than their female counterparts. This suggests that men met the required conditions for loan more than women. The average age of beneficiaries was about 40.5 years. This implies that, most of the beneficiaries were youthful in age. This suggests that, as the elderly farmers refuse to opt for debt capital, there were younger farmers who were interested in the loan. Majority (96.4%) of the respondents were married. Consideration given to marital status of the respondents in the study may be based on the fact that agribusiness is still a family enterprise in most part of Nigeria. An average formal education attainment of 13

years was recorded among the beneficiaries. This means that, majority of respondents were literate. This is helpful in positive reactions to government lending programmes. The most important secondary occupation among the respondents was trading. This informs that, it is possible for individual farmer to have more than a single occupation which is often motivated by need for income diversification. This experience of multiple occupations is however, suited for farmers in developing economies such as Nigeria. A mean household size of five persons was recorded among the beneficiaries. Moderate household size may have some economic values such as provision of cheap and available labour force. The average farming experience was approximately 11 years. Farming experience can give a clue on the farmer's managerial skills knowledge and competence.

Factors that Affect Farmers Repayment Performance

Results in Table 3 show that the most important factor that affected beneficiary's repayment performance was delayed loan approval; this had been accounted for by 80.34% of BOA loan beneficiaries. This is because; loan can only be approved and disbursed after all the loan processes have been duly completed, sometimes this take longer time than expected and often out of control of the beneficiaries. However, this situation can conflict with correct timing of investment, hence a low return. Other factors affecting loan repayment include poor monitoring of loan (75%), production losses (79.43%), low product price (50.00%) and borrowers lack of willingness to repay (53.57%).

Loan Repayment by Farmers under different enterprises

Result in Table 4 shows that differences exist among enterprises in the level of repayment made on loans granted to them.

The enterprise that made the highest repayment of loan among BOA enterprises was poultry as its level of repayment performance stood at 83.75%. Other enterprises that followed in that order were fishery and piggery. The performance measures computed show that 64.38% of the total amount of loan borrowed was repaid during the period. However, 35.62% of loan granted to BOA beneficiaries was not repaid when due and the defaulted amount were held by 33.51% of the loan beneficiaries. Results in this study indicate low repayment performance among beneficiaries of BOA following the conclusion of Ojiako and Ogbukwa (2012), that repayment performance of 71.2% was low.

Determinants of Loan Repayment

The result of the regression estimates of determinants of loan repayment is presented in Table 5. The linear function was chosen as the lead equation because it had the best fit. The regression line gave a coefficient of multiple determinations (R^2) of 54.11% or goodness of fit to the true line. This implies that, the explanatory variables explained 54.11% of the variation in the independent variable.

Sex of the beneficiaries was found to be directly related to the amount of loan repaid and significant at 10% level of confidence. The direct relationship with the amount of loan repaid implies that male farmers had increased tendency to repay borrowed money more than their female counterparts. These higher tendencies for male to repay could be explained by the fact that, male farmers have greater access to family resources such as land as it is typical of the study area, a situation which the male farmers utilized to increase income when they put such resource into production. This eventually increases total income and enhances their ability to repay their loan positively. This result is contrary to the findings of Udoh (2008); Abu *et al* (2016); Abu *et al* (2017) who found out that male beneficiaries of loan had higher tendencies to default than female farmers.

Age of the farmer borrowers was found to be directly related to the amount of loan repaid and significant at 10% level of confidence. The direct relationship with the amount of loan repaid implies that as the farmer's age increases, the tendency to repay borrowed money also increases. This might have resulted from the fact that older people have become more established economically, and gotten more experience and more sense of responsibility. Therefore, in administering loans, most lenders are thought to consider age as a serious factor, therefore, they based their facts on the reason that, apart from farming being a strenuous business, that requirs energy, it is not at the same time for very young minds that will not put into effective use the loanable funds. Therefore, lending to older people as implied by the result will lead to better repayment. This result agrees with the findings of Okorji and Mejeha (1993) but contrary to the findings of Nwosu, *et al*. (2014).

The amount of money borrowed contributed positively to loan repayment and significant at 5% level. The direct relationship in amount of money borrowed to loan repayment conforms to the expected sign. This indicates that, as the amount of loan granted to farmers increased, the loan amount repaid also increased. This could be explained by the fact that, with the volume of loan given to a farmer, the more likely that he will make adequate amount available for

the farm business which will lead to higher income. This to say that, the higher income could be possible with increased loan volume because of the advantages associated with economies of scale which come about through expansion of purchases and production (Okorji and Mejeha, 1993). This result is in tandem with the findings of Nwosu *et al*. (2014); Ajah *et al*. (2013) ; Ajah *et al*,(2014) ; Afolabi (2010) ; Iqal, Ahmad and Abbas (2003); Adegbite (2005); Dayanandan and Weldeselassie (2009); Dadson (2012) who established that loan volume disbursed was a significant determinant of loan repayment among farmers.

Interest on the amount of money borrowed contributed negatively to loan repayment and significant at 10% level of confidence. This is in support of the *apriori* expectation. The sign of the coefficient being negative shows that, as the interest increases, loan repaid reduces. This could be explained by the fact that increased interest amount adds to production cost, hence reduces income and eventually repayment ability. Thus, the higher the interest rate, the higher the problem the farmer faces in repaying the loan. Therefore, lenders of fund must consider this fact in order to encourage loan repayment.

Conclusion

Based on the findings from this study, loan repayment performance was low. Loan performance indices estimated show that only 64.38% of loan collected by farmers were repaid in the period under review. The most important factor that affected beneficiary's repayment performance was delayed loan approval. Result also showed that sex, age, amount of money borrowed positively influenced loan repayment performance of the beneficiaries while interest amount negatively influenced loan repayment. From the result of the study, the following recommendations are made. More enlightenment to farmers through formal education and other related avenues on the necessity to repay borrowed funds should be heightened and appropriate policy options to increase lenders willingness to collect from wilful defaulters rather than borrower's willingness to repay should be enforced. Disbursement of loan to beneficiaries should be timely. The significant variables that influenced loan repayment should be taken into consideration in policy issues because they are fundamental in sustaining the Scheme for the development of the agricultural sector.

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