

An Assessment of Credit Accessibility of Rural Farmers in Benue State: A Case Study of Bank of Agriculture (BOA)

Victor Ushahemba Ijirshar & Simeon T. Asom

Department of Economics

Benue State University, Makurdi-Nigeria

Email: ijirsharvictor@gmail.com, asomts@gmail.com **Corresponding Author:**

Victor Ushahemba Ijirshar

ABSTRACT

The study assessed credit accessibility of rural farmers in Benue State using Bank of Agriculture (BOA) as a case study. A sample size of 724 respondents was selected through a proportionate random sampling technique. The sample is made up of 362 beneficiaries and non-beneficiaries each. The study used both descriptive and legit regression. Findings from the study showed that the rural farmers (that is, even beneficiaries) have moderate level of accessibility to the BOA loan with high level of inadequacy in terms of the volume of the loan granted to the farmers, while most of the non-beneficiaries have informal financial institutions as their main source of income. The study also showed that gender, age, marital status, household size, main occupation of the respondents, the status of off-farm activity, membership of farmers' group, years of farming experience, crop yield of farmers, land area cultivated, years of education and lending interest rate are the socio-economic factors that have significant influence on the farmers' access to BOA loan in the study area. The study therefore recommends that government should establish more formal credit institutions in the rural areas, generally; and revive the moribund branches of BOA in the state, create more awareness about the existence of formal agricultural credits for agricultural production among the farmers, and enlightenment campaign on how to access these credit facilities especially in the rural areas and ensure enough disbursement of funds through BOA to enhance the level of credit facilities.

Keywords: Accessibility, Bank of Agriculture (BOA) and Credit

INTRODUCTION

Credit for the farmers, especially in agriculture, is assuming increasing importance in many parts of the world as a deliberate response to the needs of numerous entrepreneurs with limited capital base (IFAD, 2001). In Nigeria, the government emphasizes the transformation of smallholder agriculture from subsistence orientation to market orientation and thus

requires the availability of adequate capital. Credit or loanable fund (capital) is regarded as more than just another resource such as land, labor and equipment-because it determines access to all other resources on which farmers depend. The reasoning is that farmers' adoption of new technologies necessarily requires the use of some improved inputs, which must be purchased.

This is because, agricultural development remains very vital to the growth and development of every economy. Therefore, the place of agriculture in an agrarian society cannot be overemphasized given its importance in the life of human beings. It is expected to ensure adequate supply of food to the people, among other roles. Though the world agricultural output has grown by 2.4 percent per annum over the past two decades, it has remained insignificant because more than 780 million people are chronically undernourished (Organization for Economic Cooperation and Development/Food and Agriculture Organization-OECD/FAO, 2012).

The importance of credit to agricultural development cannot be over emphasized. It enables farmers to advantageously use inputs and factors of production, by granting farmers more access to resources through the removal of financial constraints. The traditional argument for the provision of agricultural credit is that additional capital can be temporarily used to enhance the level of household's productive and physical capital (Eswaran, & Kotwal, 1990). The provision of credit will reduce the costs of capital intensive technology and assets relative to family labour. Thus, instead of growing low yielding local crops, for example, access to credit may allow an increased use of improved seeds and fertilizers with best agricultural practices thereby leading to higher crop output per unit of labour and land (Feder, Just, & Zilberman 1985). This may in turn encourage the adoption of labour-saving technologies, such as animal traction in crop production (Zeller, Schrieder & Heidhues, 1997). Carter (1989) also argued that credit could lead to efficient resource allocation, increase farmers' technical efficiency and, by implication, increase farmers' profitability. Qureshi *et al.*, (1996) also observed that an increase in credit to agriculture will lead to increased food production and farmers' income because as the demand for credit increases, farmers output also increases, resulting in improvement in their wellbeing. According to Mudi (2007), it is regarded as a major factor in agricultural development, and lack of it is usually given as an explanation for many of the problems facing the sector in the developing nations. It also

enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale and/or rural farmers

In Nigeria, credit has long been identified as a major input in the development of the agricultural sector (Balogun, 1990). It is a major factor necessary for technological transfer in traditional agriculture (Oyatoye, 1981). According to Atagher and Atagher (2014), apart from physical infrastructure, agricultural credit and availability of cooking fuel are other important factors affecting productivity. Studies indicate that many farmers are poor and trapped in a vicious cycle of poverty because they cultivate small areas of land from which they produce little output, and hence sell only a very small amount, which cannot help in expanding their farms, and acquiring new technologies so the cycle continues. To break out of the vicious cycle of poverty, credit is essential since it determines access to most of the resources the farmers depend on (Adegeye and Dittoh, 1985).

It is generally agreed among researchers and policymakers that lack of access to adequate credit can have significant negative consequences for various aggregate and household level outcomes, including technology adoption, agricultural productivity, food security, nutrition, health, and overall household welfare (Diagne & Zeller, 2001). Availability and accessibility to credit by farmers can alleviate capital constraints on agricultural households.

In view of the above, the Nigerian governments have made efforts to address the problem of lack of access to credit to the rural poor (Global Agricultural Information Network-GAIN Report, 2011). In recognition of the vital role of small scale farmers in wealth creation, the government of Nigeria has experimented with various financing schemes. These are largely subsidized, targeted credit programmes to promote agricultural production and improve the lives of the rural farmers. In the light of improving access and the use of these credits to farmers that will enable them use modern farm inputs that would lead to increased output of higher quality, increased income and improved standard of living, the Nigerian government took several steps over the years in addressing the challenge. These government financial policies were grouped into five categories viz: credit guidelines by the CBN, concessional interest rates, rural banking scheme, agricultural credit guarantee scheme and specialized financial institutions. Policy packages and programmes such as the World Bank-assisted Agricultural

Development Project (ADP), National FADAMA Development Programme, Family Economic Advancement Programme (FEAP), National Poverty Eradication Programme (NAPEP), Refinancing and Rediscounting Facility (RRF), Agricultural Credit Support Scheme (ACSS) and Large Scale Agricultural Credit Scheme (LASACS) were also established. All these did not make any significant improvement in solving the problem of credit accessibility in Nigeria and Benue state in particular. Following the failure of these institutions, schemes and programmes, the Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB), now called Bank of Agriculture (BOA) was formed from the merger of Nigerian Agricultural and Co-operative Bank (NACB), the People's Bank of Nigeria (PBN) and the Family Economic Advancement Programme (FEAP).

It is therefore necessarily important, to assess the level of accessibility of BOA credit by rural farmers in Benue State and the challenges in accessing those credit facilities.

CONCEPTUAL FRAMEWORK

Credit/Institutional Credit/Agricultural Credit

Credit to the agricultural sector is known as Agricultural credit. Agricultural or farm credit therefore, is defined as credit granted to farm and ranch operators to assist in planting and harvesting crops to support the feeding and care of livestock. It is a financial term that refers to loans, such as advances/overdrafts extended for agricultural purposes. In some cases, agricultural credit can be used by farmers to purchase non-farm items, such as housing and infrastructure. Ihimodo (2005) looked at agricultural credit as the process of obtaining control over the use of money, goods and services in the present in exchange for promise to pay at a future date for agricultural use.

Agricultural credit, or farm credit, could be for production or for meeting current, or land capital expenses of the farmers. Production credits are usually of short-term duration and could be applied for purchase of seeds, fertilizers, manures, fodder, pesticides, insecticides and fungicide (Abhiman *et al*, 2009). Farmers require such credit to finance the maintenance, repairs, running and hiring costs of machinery and equipment, payment of wages, taxes, rent, land charges and other current overheads and consumption activities.

According to Adekanye (1986), institutional credit is a credit facility to farmers granted by institutional bodies that are established by law to perform the function of mopping up financial resources and allocating such to investors. In other words, Institutional Agricultural Credit Institutions are established by law to perform the function of mopping up financial resources and allocating such to investors. These include Deposit Money Banks, Insurance Companies, Bank of Agriculture (BOA), Government Agencies, and International Development Agencies.

African Development Report (2001) suggested that credit should be given to peasant farmers in kind rather than in cash, which, according to them, will relieve farmers from diverting loans from the intended project. Akingbade and Eluwa (2003) in support of African development report explained that such credits prompt repayment in the form of deduction from later sales. In a contrary opinion, African Farmers observed that giving credits to farmers in kind will hinder them from using the money for the inputs needed which cannot be supplied by the members of the farm family. That though, credit in kind is considered a safer risk for lenders, it is not always the best for the peasant farmers. Often, a farmer's greatest need is not for seed or pesticide but for a vehicle to transport produce, money to run the business. In such cases, farmers will borrow from local money lenders, despite the high interest rate in order to have the flexibility of a loan in cash.

Adomola and Umar (2001) summarized credit when they wrote that: "credit may serve as a component to other government activity in facilitating investment or a substitute for it". It may be tied to the provision of specific service and supervision or it may simply funnel loanable funds to promote capital formation in the agricultural sector. It may fulfill a simple need of working capital to cover the period between planting and harvesting or it may represent long term capital formation in the provision of building equipments and establishment of tree crops. In all of its varied form and use, credit is essential to the working and growth of an economic sector involving substantial private enterprise and the development of effective institutions for mobilizing and allocating loanable funds as crucial element in promoting economic growth.

Ogunfowora, *et al.*, (1972) attributed most of the short comings of institutional credit in Nigeria to factors such as: ineffective supervision or

monitoring, insufficient funds, political interference, cumbersome and time-consuming loan processing and general absence of financial projection.

SOURCES OF AGRICULTURAL CREDIT

Traditionally, capital for investment in agriculture comes from two potential sources, namely, personal savings of the farmer and farm credit. However, because of low yield and price uncertainty associated with farming in developing economies, farmers are often entangled in the vicious cycle of low output, low income, low savings and low investment, which again result in low output- a concept often referred to as the vicious cycle of poverty (Nwagbo, Ilebani & Erhabor, 1989). Therefore, farm credit either from the formal or informal sources, remains the major means of improving farm capital investment. In response to this need, the Nigerian government established, amongst others, the Nigerian Agricultural and Cooperative Bank (NACB) in 1973 later known as Nigerian Agricultural Cooperative and Rural Development Bank, (NACRDB) now BOA to cater for the credit needs of the agricultural sector.

Credit to the agricultural sector, according to Adekanye (1986), could take the form of an overdraft, short-term, medium-term, or long-term, depending on the purpose and gestation period of the project. Such credits granted to farmers to purchase inputs are paid directly to the suppliers who must furnish the bank with evidence of delivery. This is done to avert diversion of funds.

Apart from the financial resources that are directly provided by the owner or owners of the farm, several organizations exist which serve as sources of fund for the operators of the agricultural sector. They are broadly grouped into two namely; Non-institutional and Institutional. The non-institutional sources include relations, friends, merchants and money lenders. Loans from such sources are usually made directly to the borrower by the lender and are prevalent in areas where individuals are quite familiar with and share confidence in one another. In other words, the lender knows the borrowing farmer and can reasonably vouch-safe for his (borrower's) integrity. The relative ease of obtaining the loans devoid of administrative delays, non-insistence by the lender on security or collateral from the borrower and flexibility built into repayment programmes has made the non-institutional sources, notwithstanding their exorbitant interest charges, extremely popular among the peasant farmers, who incidentally form about 70percent

of the Nigerian farming population. Also, the non-institutional sources are distinguished from the institutional sources because strict rules and conditions are not normally observed before accessing the fund. When this credit facility to farmers is granted by the institutional bodies that are established by law to perform the function of mopping up financial resources and allocating such to investors, then it is called institutional credit. In Nigeria, these institutions include the Deposit Money Banks (DMBs), Insurance Companies, Nigerian Agricultural and Cooperative Bank (now called BOA), Microfinance Banks, Government Agencies, International Development Agencies, and Co-operative Societies.

- (i) **Deposit Money Banks (DMBs):** The major role of these banks is to take in deposits from people who want to save and use these deposits to make loans to people who want to borrow. Examples of deposit money banks in Nigeria include; Diamond Bank, Ecobank Nigeria – acquired Oceanic Bank., Fidelity Bank Nigeria, First Bank of Nigeria, United Bank for Africa PLC, among others
- (ii) **Insurance Companies:** Insurance companies are important source of credit in many countries. They mostly give long-term and intermediate loans for the purchase of equipment or real estate. They obtain financial resources from policy holders and use excess liquidity to provide credit to farmers, however, in Nigeria only a small portion of insurance company loans go to agricultural sector.
- (iii) **Bank of Agriculture (BOA):** The main objective for establishing the agricultural bank is to enhance the availability of credit to farmers at reduced costs. All classes of farmers (large scale, medium scale and small scale farmers) benefit from the credit programmes of these banks. Repayment of loan starts after a period of grace, during which the farmer must have successfully marketed at least the first batch of the farm output.
- (iv) **Microfinance Banks:** Microfinance is about providing financial services to the poor who are traditionally not served by the conventional financial institutions. Three features distinguished microfinance from other formal financial products. These are the smallness of loans advanced, the absence of asset-based collateral, and simplicity of operations. However, observations show that microfinance banks require collaterals from borrowers and also charge higher interest rates. Because of these sharp practices, CBN withdrew the license of many in September, 2010.

- (v) **Government Agencies:** The Ministry of Agriculture and related government establishments are established to enhance increased productivity of farmers. In Nigeria, one area of concern of these agencies is the provision of uncollateralized loans to farmers. Farmers also access other non-monetary incentives from the government through these agencies. Examples of these are fertilizer and other farm inputs.
- (vi) **International Development Agencies (IDAs):** IDAs like World Bank, Food and Agricultural and Organization (FAO), United Nation Development Programme (UNDP), International Fund for Agricultural Development (IFAD) also give financial assistance to qualified farmers in Nigeria to boost agriculture to feed the nation. The World Bank has FADAMA programmes which are going into the third phase. It is now referred to as FADAMA II Additional Financing.

The small-scale farmers are often faced with credit problems from both the institutional and non-institutional sources. From the non-institutional front, credit supply is generally scarce and unreliable and, consequently, very expensive. It is believed that interest rates charged by local lenders are excessive and are often over 100 percent a year (Onu, 2003). However, apart from the exorbitant interest rate charged, farmers, in some cases, who pledge their crops, land or houses have lost them due to their inability to pay the high rate of interest (Onu, 2003). Moreover, loans from relatives and friends are generally small and of short duration, and may not even be made available to the farmers at the appropriate time as these relatives too may have their own economic needs. It is believed that local moneylenders appear to be extortionists in behaviour. They nevertheless, perform an important duty to farmers in the rural areas in the absence of any other better alternative sources of credit.

Determinants of Agricultural Credit

The demand for and supply of credit is influenced by several factors such as personal attributes of the individual, area specific attributes, and credit source attributes (Udoh, 2005). These attributes influence individuals differently, irrespective of their gender such that what might determine the demand for credit by a particular farmer might be different from what determines credit demand by another farmer. For instance, in studying informal lenders and formal credit groups in Madagascar, Zeller (1994)

indicated that informal lenders and group members obtain information about the wealth, indebtedness and income potential of loan applicants and hence ration loan demands on in-depth view of total household wealth and leverage of the household. In line with this, Nwaru (2004) examined rural credit markets and resource use in arable crop production in Imo State, Nigeria, using multiple regression analysis by the two-stage least squares. The result revealed that credit demand was significantly influenced by interest rate, educational level of farmer, amount borrowed previously, farm size and gross savings, while gross income of lender, total cost of lending, source of loan (whether formal or informal), worth of loan application and previous loan repayment significantly influenced credit supply.

Different farming households will have different needs for credit but a good sign that indicates some level of credit constraint is the gap between demand and supply of credit. Credit constraints can be defined as a wide gap between demand for credit and supply of credit. Hussein and Ohlmer (2008) defined credit constraint as the situation where the household cannot avail itself of the credit it desires at the prevailing relevant market conditions, thus classifying households into credit constraint and un-constraint household.

Akinade (2002) also stated that apart from the insistence of credit institutions on the provision of collateral and high interest rate, most farmers also encounter difficulty in complying with the banks demand for feasibility report on the project for which credit is required. While peasant farmers have now been exempted from fulfilling this obligation, as far as loans under agricultural credit guarantee scheme is concerned, there is nothing to indicate that banks do not demand such a report from the peasant farmers for loans outside the guarantee scheme. What bothers the farmers, according to Asogwa *et al.*, (2014), is the huge cost of procuring the feasibility report and the attendant delay involved in its presentation.

One common problem faced by farmers that have access to credit is that they are often given far lower loan size than what they apply for. This according to Caire (2004), is because, while farmers compute their credit needs based on private information about markets and their own entrepreneurial ability, banks opined differently and therefore allocate relatively small size of loan that could be economically and socially efficient. Lending institutions are cautious of the high risk associated with agricultural projects and therefore

approve small loan size to farmers (Ochi & Nnanna, 2007). According to Asogwa, Abu and Ochoche (2014), natural hazards serve as a natural risk factor that affects the allocation of loans to farmers. Apart from the natural hazards and other technical risk factors, the socio-demographic characteristics of the prospective borrower may also constitute a set of determinant variables in the allocation of loan size.

According to Swinnen and Gow (1999), access to agricultural credit has been severely constrained in developing countries. This is because of the imperfect and costly information problems encountered in the financial markets. Such problems are known to be sources of setback in agriculture (Stiglitz, 1993). Abe (1982) asserted that non-institutional creditors account for 70 percent of the total credits received by Nigerian farming population. However, with the present situation in Nigeria, these sources could hardly meet the increasing demand for credit by farmers.

On the other hand, Ojo (2005) observed that the institutional lending system has failed to meet the objective for which they were set up. In his words, only 15 percent of the trading bank credit to agriculture has been covered. The major shortcomings of their transactions, he observed, are due to the inaccessibility of these funds to rural farmers as a result of the bureaucratic procedures and high service cost, which are very difficult for the farmers to meet.

Enhancing Financial Innovations and Access (EFInA) programme in 2008 notes that 23 percent of the adult population in Nigeria has access to formal financial institutions, 24 percent to informal financial services, while 53 percent are financially excluded. According to Okojie, Monye, Eghafona, Osaghae, & Ehiakhamen, (2010), the lack of bank accounts, collateral, and information regarding the procedure for accessing credits from banks limit peasant farmers access to credit from formal institutions. Adejobi and Atobatele (2008) suggested that loan default could limit access to credit, while Agnet (2004) asserted that the complex mechanism of commercial banking is least understood by the small-scale (peasant) farmers, and thus, limits their access. Rahji and Fakayode (2009) blamed the limitation on imperfect and costly information problems encountered in the financial markets; credit rationing policy; and banks perception of agricultural credit as a highly risky venture; while Philip et al (2009) stated that high interest rate and the short term nature of loans with fixed repayment periods do not

suit annual cropping, and thus constitute a hindrance to credit access. Ihimodo (2005) enumerated some factors which hinder the small farmers from enjoying credit from financial institutions, to include the following:

- a) small farmers have small and fragmented land holdings without clear ownership title,
- b) illiteracy and ignorance, which hinder the small farmers from getting information on credit sources,
- c) lack of suitable collaterals and guarantors; and
- d) the fact that financial institutions consider small farmers as non-enterprising and conservative, and that the small farmer's credit needs are mainly for consumption and other unproductive activities.

Awoyemi (2008) stated that despite the establishment of BOA by the government, less than 10 percent of the farmers' needs is reaching them. Ogunfowora *et al.*, (1972) attributed most of the bottleneck of institutional credit in Nigeria to factors such as insufficient funds, political processing procedure, ineffective supervision and complete absence of financial forecasting and planning. There are other several factors are militating against the efficient procurement and utilization of credit from the formal credit sources. Such factors include: lack of well-planned and clear debt repayment schedules, the inability of the farmers to meet the necessary collateral requirement of the lending institutions, delay in the disbursement of credit to match with the different farming operation.

Summarily, access to agricultural credit has been positively linked to agricultural productivity in several studies in Nigeria (Rahaman & Marcus, 2004, Abu, *et al.*, 2011, Ugbajah, 2011). Despite this positive correlation, some empirical studies have revealed cases of credit insufficiency among rural farmers in Nigeria (Deaton 1997; Udry 1990; Zeller 1994; Idachaba 2006; Adebayo, 2010; Ololade & Olagunju, 2013). Similarly, several studies have identified reasons for poor credit access among rural farmers in Nigeria. Ololade and Olagunju, (2013) discovered a significant relationship between farmer's sex, marital status, lack of guarantor, high interest rate and access to credit in Oyo State, Nigeria. A study by Ajagbe (2012) showed that farmer's age, membership to social group, value of asset, education and the nature of the credit market are the major determinants of access to credit and demand among rural farmers in Nigeria. In addition, Akpan *et al.*, (2013) reported that farmers' age, gender, farm size, membership of social organization, extension agent visits, distance from the borrower's (farmer) residence to lending source, years of formal education and household size are important

determinants of access to credit among poultry farmers in Southern Nigeria. Lawal *et al.*, (2009) showed that a direct relationship exists between social capital, contribution in the associations' by the farming households and access to credit.

THEORETICAL FRAMEWORK

The neo-classical theory of production states that by varying the amounts of labour and capital in the production function, an equilibrium state can be accomplished. When a new technology becomes available, the labour and capital need to be adjusted to maintain growth equilibrium. The theory also outlines how a steady economic growth rate will be accomplished with the proper amount of the three driving forces: Labour, Capital and Technology. Hence, the mission of increasing agricultural productivity to sustain food requirement can be facilitated through efficient management of productive resources. According to the theory, credit has the potential to enhance efficient resource allocation, permit application of new technology, reduce post-harvest waste and stabilize farm prices, farm income and enhance efficient marketing of agricultural product. As important as credit is to an economy, in a situation of high optimism and expectation, over use of credit may be induced if adequate supervision and prudential guidelines for credit control are not put in place. If overuse of credit is induced, speculation, inflation, and economic instability will be the result. Under normal conditions, changes in credit will influence agricultural output in the short run provided there is no idle resource. Expansion in credit would stimulate aggregate output to increase without unduly undermining price stability if there are no constraints (technological limitation and productivity shortfall). If such constraint exists, expansion of credit tends to cause prices of output to increase. This is because the use of credit with such constraints will not be able to absorb the credit expansion and translated into agricultural output growth.

EMPIRICAL REVIEW

Jeiyol, Akpan and Teel (2013) examined various issues related to access to credit by both male and female crop farmers in Benue State. Sixty male and sixty female crop farmers were randomly sampled and used for data collection. Structured questionnaire was used to collect data needed for analysis and the study used both descriptive statistics and logit regression model. The study revealed similar findings with that of Ijirshar, Ker and Terlumun (2015). The study also found that farmers' household expenditure,

cost of fertilizers, cost of hired labour, farm size and farm income are significant determinants of access to credit among male and female farmers in the study area and recommended that farm inputs should be further subsidized in the region.

Byaruhanga (2013) empirically examined the relationship between credit terms, credit accessibility and the performance of agricultural cooperatives in Rwanda. The findings revealed a positive and significant relationship between credit terms, credit accessibility and the performance of agricultural cooperatives. The study reveals that credit accessibility is the most significant determinant of the performance of agricultural cooperatives. To attain a higher performance level of agricultural cooperatives, better mechanism for accessing credit must be put in place and credit terms and lending policies must be simplified or revised.

Etonihu, Rahman & Usman (2013) investigated the determinants of access to agricultural credit among crop farmers in a farming community of Nasarawa State Nigeria. The study focused on smallholder farmers in Doma Local Government Area (LGA) of Nasarawa State. Descriptive statistics and stepwise linear regression model were employed. Findings from the study revealed that education, distance to source of credit and types of credit source were significant factors affecting farmers' accessibility to agricultural credit in the study area. Hence, recommended that government policies which intend to improve farmers' accessibility to agricultural credit facilities should create enabling environment to ease farmers' access to education and credit facilities.

RESEARCH METHODOLOGY

The study used descriptive statistics and logistic regression in assessing the accessibility of rural farmers in Benue state using a case study of Bank of Agriculture (BOA). The target population of the study comprises of farmers in Benue State. A multi-stage random sampling procedure was used in this study. It was chosen because it allows for effective and equal representation of all the units within the study area. The study used Yamane (1967) formula in determining the sample size. Hence, the data for this study was basically primary data.

Model Specification

Following Maddala (1983), Logistic regression model was used to determine factors that influence farmers' access to BOA credit. This model is similar to a linear regression model but it is suited to models where the dependent

variable is dichotomous. If Y_i is the random variable (dichotomous), it can then be assumed that Y_i takes on the values 0 or 1, where 0 denotes the non-occurrence of the event (failure to access credit in our case) and 1 denotes the occurrence (having frequent access to credit). If X_1, \dots, X_n are characteristics to be related to occurrence of this outcome, then the logistic model specifies that the conditional probability of event (i.e., that $Y = 1$) given the values of X_1, \dots, X_n is as follows:

$$P(Y) = 1/[1 + \exp - (\alpha - \sum \beta_i X_i)] \text{-----} (1)$$

In order to linearize the right hand side, a logit transformation was applied by taking logarithm of both sides. Therefore we have:

$$\text{Logit } P(Y) = \alpha + \sum \beta_i X_i \text{-----} (2)$$

Where,

$Y = 1$ if frequent access (respondent has access to credit twice or more)

$Y = 0$ if less access (respondent has access to credit at most once)

α = Constant term

X_i = independent variables

β_i = logistic coefficient for independent variables

The independent variables specified as determinants of access to credit are:

X_1 = Gender (1 = male, 0 if otherwise), X_2 = Age (years), X_3 = Marital status (1 = married, 0 if otherwise), X_4 = Household size (number), X_5 = Main occupation (1 = farming, 0 if otherwise) X_6 = off-farm activities (1 = yes, 0 if otherwise), X_7 = Membership of farmers' group (1 = yes, 0 if otherwise), X_8 = Years of farming experience (years), X_9 = Crop yield (tonnes/ ha), X_{10} = Land area cultivated, X_{11} = Years of education, X_{12} = Interest rate.

The explicit form of the model is expressed as;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \varepsilon \text{-----} (3)$$

Where

β_0 = intercept of the model

$\beta_1 - \beta_{12}$ = parameters

ε = a random disturbance term

RESULTS AND INTERPRETATION

Socio-economic Characteristics of the Respondents

It was unveiled from the study that majority of the BOA beneficiaries were male (74percent). This explains the view of Ajayi (1995) who asserted that farming is predominantly a male activity in Nigeria and indeed, most of African societies, and conforms to the cultural inclination of the people in the study area that men represent the interest of their families. The study

found that majority of the sampled beneficiaries of BOA loan were married (60.2percent). This implies that much labour force may be supplied and commitment is expected of the married families as security for future generation. This is evidenced by the maturity level of the sampled respondents from whom majority (52.2percent) of them were aged between 36 years to 45 years. The study further revealed that majority (58.6percent) of the sampled respondents obtained basic education which comprises of primary and junior secondary education. This however, contributes to loan awareness, processing and utilization of the loan. The study also revealed that 81.2 percent of the beneficiaries were holding farming as their main occupation with more than 15 years of farming experience.

Socio-Economic Determinants of Credit Accessibility

Several factors necessitate the accessibility of farmers to credit facilities. This study seeks to examine the socio-economic determinants of credit accessibility (that is, the significant factors that contribute either positively or negatively to credit accessibility) among BOA loan beneficiaries in the study area. The variables that are captured are: gender, age, marital status, household size, main occupation of the respondents, the status of off-farm activity, membership of farmers group, years of farming experience, crop yield of farmers, land area cultivated, years of education and lending interest rate. The results are presented in Table 1. The results reveal that holding all other variables constant, the respondents would be influenced significantly to having access to credit facilities. The results also indicate that gender, age, marital status, occupation, number of household members, off-farm activities, membership of farmer's group, farming experience, crop yield, land area cultivated and level of education determines significantly the access of the rural farmers to credit facilities. On the other hand, interest rate has negatively influenced credit accessibility to the farmers significantly. This implies that the higher the interest rate charged on loanable funds lowers the probability of the sampled respondents having access to credit facilities.

Before a model is relied upon to draw conclusions or predict future outcomes, we need to check, whether the model assumed is correctly specified. That is, that the data do not conflict with assumptions made by the model. The results of Andrews and Hosmer-Lemeshow test of predicted risk for goodness of fit in evaluating binary specification using Andrews and Hosmer-Lemeshow tests indicate 26.144 and 49.8399 for H-L statistic and

Andrews's statistic respectively. These have fully explained the goodness of fit for the logit or binary specification of the estimated model. Thus, it can be deduced that socio-economic factors have significant influence on the farmers' access to BOA credit in the study area. Among them are gender, age, marital status, household size, main occupation of the respondents, the status of off-farm activity, membership of farmers' group, years of farming experience, crop yield of farmers, land area cultivated, years of education and lending interest rate.

Accessibility of Farmers to Institutional Credit

The level of accessibility of institutional credit or specifically BOA loan is examined among beneficiaries in terms of the number of times the loan is granted out of the total number of times the farmers have applied for the loan, the adequacy of the loan to the farmers and the challenges facing the accessibility of the BOA loan in the state.

Main Source of Finance by Rural Farmers

Finance is the elixir that assists in the formation of a new business, enterprise or activity, or assists in its continuity, and allows it to take advantage of opportunities to grow, employ local workers and in turn support other businesses or enterprises and local, state and federal government through the remittance of income taxes. Data on the main source of finance by the sampled rural farmers in the study area are presented in Table 2. The results reveals that majority of the sampled respondents obtained their finance majorly from credit. This implies that there exist a gap between personal savings and the funds required for the production.

Main Source of Credit Facilities by Rural Farmers

Data on the main source of credit facilities from to the sampled farmers are presented in Table 3. The results show that most of the beneficiaries source their credit facilities from Bank of Agriculture while majority of the non-beneficiaries mostly sourced theirs from informal financial institutions. This means that Bank of Agriculture is seen as the main source of credit facilities to the rural farmers (beneficiaries) but informal financial institutions to the non-beneficiaries.

Data on the sources of credit facilities for the rural beneficiaries of BOA loan using 5 point Likert scale are in Table 4. The results show averages of 4.2,

4.1, 3.3 and 2.8 for Bank of Agriculture, Informal Financial Institutions, Microfinance Banks and Deposit Money Banks respectively with their low standard deviations. This indicates that the Bank of Agriculture is the main source of credit finance to the beneficiaries who were sampled in this study. This result therefore implies that BOA is the main source of credit facility to the beneficiaries while informal financial institutions remained the main source to the non-beneficiaries of BOA loan.

Level of Accessibility and Adequacy of the BOA Credit Facilities

Credit is one among the important financial resources that supports business initiatives. Data on the level of accessibility of the BOA credit facilities by the rural farmers in the study area are depicted on Figure 1.

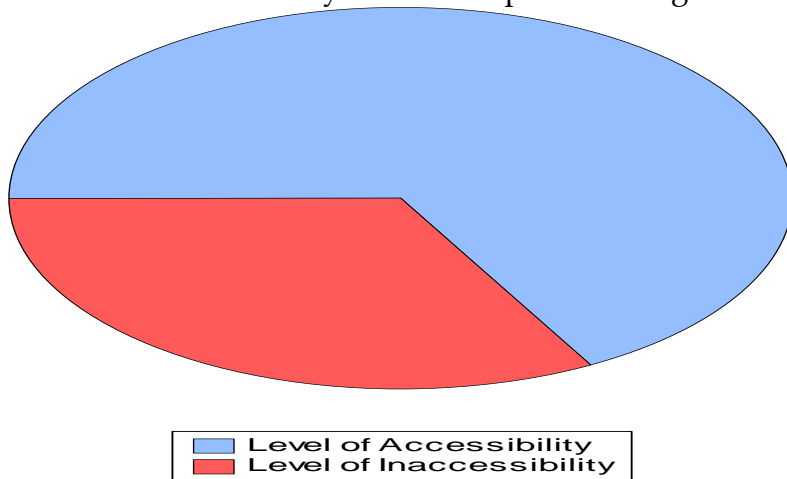


Figure 1: Pie Chart Distribution of Respondents by Their Level of Credit Accessibility

The results shows that about 66percent of the sampled respondents, who applied for BOA loan were granted. Only 33.14percent of the sampled respondents could not have access to the BOA loan after filling the loan application form representing one third of the sampled respondents. This implies that loan applications to BOA in the state are often granted. This means that credit facilities derived by BOA is accessible but not to all farmers who applied. The 33.14percent of financially excluded rural farmers from BOA loan is consistent with the findings of EFINA Access to financial services in Nigeria (2010) that reported a high profile of 52.5percent that were financially excluded in Nigeria and even higher. The finding is same because of the percentage of non-beneficiaries who have not been given the financial incentives of BOA at all. This is synonymous and relatively higher with the situation in Rwanda, Tanzania, Malawi and Namibia where

52percent, 56percent, 55percent and 52percent were financially excluded, respectively (FinMarkTrust, 2010).

Accessibility in itself is not adequacy. Adequacy of capital or credit facilities would help in expanding agricultural production and adopting the use of advanced techniques in production that would foster greater productivity. Data on the level of adequacy of the credit facilities by the sampled respondents in the state are depicted on Figure 2.

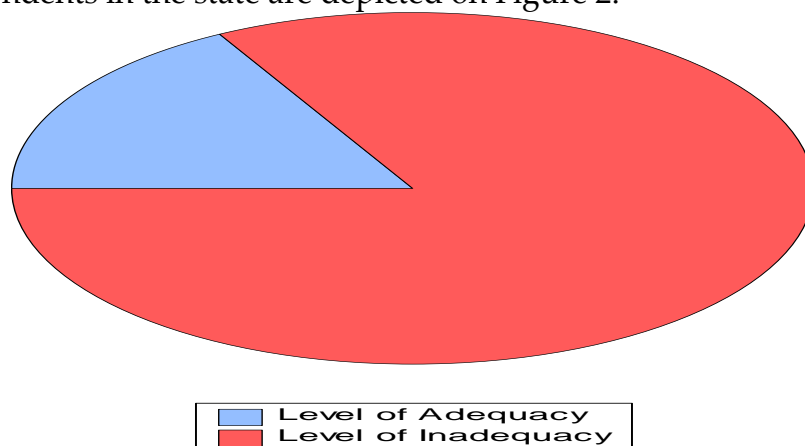


Figure 2: Pie Chart Distribution of Respondents by their Credit Adequacy

The results reveal that ₦120,413,400 was applied for by the 362 beneficiaries who were sampled giving rise to an average credit request of ₦332633.70. However, only ₦24,660,000 was received by the sampled respondents in the study area averaging ₦68 121.55. The study revealed gross inadequate level of BOA credit to the sampled rural farmers as only 20.48percent of their credit request was granted. This, no doubt would affect their production capacity and thus the aggregate agricultural output of the state.

Data on the perception of the sampled respondents about the level of adequacy of the BOA facilities are presented in Table 5. The results show that about 96percent of the sampled respondents had inadequate funds obtained from BOA. Only a negligible percentage of 4.42percent could obtain the amount applied for. The inadequacy of credit facilities by the sampled beneficiaries of the BOA loan is an indication of gross inadequacy of capital by the rural farmers in carrying out their farming activities. From the above analysis, it can be deduced that the rural farmers have moderate accessibility level to the BOA loan by the beneficiaries. However, the loans disbursed to the beneficiaries were not adequate.

There are some problems or challenges in accessing these loans by the sampled respondents in the state. Data on the major challenges faced by the farmers in accessing BOA loan are presented in Table 6. The result reveals five (5) major challenges hindering the assessment of BOA loan by the sampled respondents in a hierarchical order. The last column shows the proportion of the respondents who have mentioned the challenges. The result implies that, lack of awareness was the major challenge in obtaining BOA loan due to lack of proper publicity. Other challenges revealed were the procedure or requirements by BOA loan in obtaining the loan; attitudes of BOA personnel in disbursing the credit facility, among others.

CONCLUSION/RECOMMENDATION

The study found that the rural farmers have moderate level of accessibility to the BOA loan by the beneficiaries while most of the non-beneficiaries have informal financial institutions as their main source of income. However, the loans disbursed to the beneficiaries by the BOA were grossly inadequate. The study therefore suggests the following recommendations to enhance the level of accessibility to institutional credit facilities:

- i. Government should encourage the establishment of more formal credit institutions in the rural areas, generally; and revive the moribund branches of BOA in the State
- ii. Government/BOA should create more awareness about the existence of formal agricultural credits for agricultural production among the farmers especially in the rural areas and should put in place deliberate policy to ensure that rural farmers have access to adequate credit facilities.
- iii. Enough funds should be disbursed by the government through BOA to enhance the level of credit facilities that could boost agricultural production of the rural farmers.
- iv. Government should employ and deploy more extension agents to the rural areas so that more rural farmers can be reached by extension workers. This is important since it will ensure that many rural farmers are offered extension services in their critical areas of need.

REFERENCES

- Abe, S. T. (1982). *Nigerian farmers and their Finance Problems*. Bullon Magazine, 7(4).

- Abhiman D, Manjusha S, Joice J. (2009). "Impact of Agricultural Credit on Agriculture Production: An Empirical Analysis in India." *Reserve Bank of India Occasional Papers*.30(2), Monsoon 2009.
- Abu, G. A, I. U. Odoemenem and A. Ocholi.(2011).Determining optimum farm credit need of small scale farmers in Benue State.*Journal of Economics and International Finance Vol. 3 (10), pp. 564–570.*
- Adebayo A.A. (2010). Food Security Status in Nigeria: Prea and Post Economic Deregulation Review. *International Journal of Economics Development Research and Investment*.1(1).
- Adegeye, A.J., and Ditto, J.S. (1985).Essentials of Agricultural Economics.*Impact Publishers Nigeria Limited, Ibadan.*
- Adejobi, O. and Atobatele, J.T. (2008): An Analysis of Loan Delinquency Among Small-Scale Farmers I South Western Nigeria: *Application of Logit and Loan Performance Indices. East African Agricultural and Forestry Journal.*
- Adekanye, F (1986). Frauds in Banking Transactions.The Nigerian Banker, 6.
- Adomola, C.E. and Umar, O.S (2001) "Capital Resource and Allocation of Food Crops Entreprise: Journal of Agricultural Development.
- African Development Report (2001). *Fostering Good Governance in Africa.* Oxford University and Assessment Press.New York; 2001.
- Aagnet (2004). Making Farm Credit Work for the Small Scale farmers Retrieved from www.aagnet.org/library
- Ajagbe F. A., (2012). Analysis of Access to and Demand for Credit by Small Scale Entrepreneurs.Evidence from Oyo State, Nigeria.*Journal of Emerging Trends in Economics and Management Sciences*.3(3):180-183.
- Ajayi, A.O., (1995). *Identification of training needs of women farmers in oyo state.* M.Sc. Thesis, Agric. Extension and Rural Sociology, O.A.U., Ile-Ife.

- Akinade J. O. (2002). *Agricultural Credit Management in Union Bank of Nigeria Abeokuta Branch*. M. Sc. Thesis, Department of Agricultural Economics, University of Ibadan.
- Akingbade, Y.O &Eluwa, C.E. (2003) The Role of Financial Institute in National Development. *Bulletin Central Bank of Nigeria*.
- Akpan, S. B., Inimfon V. P., Samuel J. U., Edem A. O., and Uwemedimo E. O. (2013). Determinants of Credit Access and Demand among Poultry Farmers in Akwalbom State, Nigeria. *American Journal of Experimental Agriculture*, 3(2): 293-307.
- Asogwa, B.C., Abu, O. &Ochoche (2014).Analysis of Peasant Farmer's Access to Agricultural Credit in Benue State, Nigeria.*British Journal of Economics, Management and Trade*. 4(10); 1525-1543.
- Atagher, M.M &Atagher, D. M. (2014).Assessment of the Availability of Rural Infrastructure, Agricultural Credit and Cooking Fuel among Project and Non-Project Women Farmers in Benue State, Nigeria.*IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*.7(11): 17-22.
- Awoyemi, T. T. (2008). Gender Analysis for Sustainable Agriculture: The case of Nigeria. In: Y. L. Fabiyi and E. O. Idowu (eds). *Poverty Alleviation and Food Security in Nigeria*.NAAE Ibadan.
- Balogun, E.D. (1990). Banking and Credit Facilities for integrated Rural Development; Paper presented at the National Seminar on Rural development Policy in Nigeria, Sheraton Hotel, Abuja.
- BOA Report, 2016).*Annual Report*. Makurdi
- Byaruhanga I. (2013). Credit terms, Credit Accessibility and Performance of Agricultural Cooperatives in Rwanda. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)* An Online International Monthly Journal. 1(6).
- Caire, D., (2004). *Building credit scorecards for small business lending in developing markets*. Bannock Consulting: London.

- Carter, M.R. (1989) The Impact of Credit on Peasant Productivity and Differentiation in Nicaragua. *Journal of Development Economics*.
- Deaton (1997). *The Analysis of Household Surveys: A Micro – econometric Approach to Development Policy*. Baltimore: John Hopkins University Press. P. 85.
- Diagne, A. & M. Zeller, (2001). Access to credit and its impact on welfare in Malawi. Research Report 116, *International Food Policy Research Institute*, Washington, D.C.
- EFInA (2010). Overview of the Housing Finance Sector in Nigeria. Retrieved from www.efina.org.ng/assets/Documents/EFInAOverview-of-the-Housing-Finance-Sector-in-NigeriaAug2010.pdf?phpMyAdmin=%2CWvBxPNpx0z2BcKe8h2UcHJI%2CXb on 3rd August, 2017.
- EFInA (Enhancing Financial Innovations and Access). (2008). Access to financial services in Nigeria: Key findings. Retrieved from [>](http://www.efina.org.ng/Key_Findings.pdf)
- Eswaran, M. & Kotwal, A. (1990). Implications of Credit Constraints for Risk Behaviors in Less Developed Economies. *Oxford Economic Papers*, 42: 473-482.
- Etonihu 1, K. I; Rahman 1, S.A. & Usman, S. (2013). Determinants of access to agricultural Credit among crop farmers in a farming community of Nasarawa State, Nigeria. *Journal of Development and Agricultural Economics*. 5(5), 192-196, doi: 10.5897/JDAE11.126 ISSN2006-9774.
- Feder, G., Just, R.E. and Zilberman, D. (1985). Adoption of Agricultural Innovations in Developing Countries: A Survey. *Economic Development and Cultural Change*, 33, 255-298. Retrieved from <http://dx.doi.org/10.1086/451461>
- Global Agricultural Information Network-GAIN Report, 2011).

- Hussein H. K, & Ohlmer B. O. (2008). *Influence of Credit Constraints on Production Efficiency: The Case of Farm Households in Southern Ethiopia*. Swedish University of Agricultural Sciences, Sweden.
- Idachaba, F.S (2006). Rural Development in Nigeria: Foundations of Sustainable economic Development. *Ife Journal of Agriculture*. 8; 111-118.
- IFAD (2001). *Rural Poverty Report 2001: The Challenge of Ending Rural Poverty*. Oxford University Press.
- Ihimodo R. S. (2005). The Roles of Group and Credit Cooperatives in Rural Lending. *World Bank Research Observer* (4).
- Ijirshar V. U, Ker G. & Terlumun Y. C. (2015) "Socio-economic effects of farmers-Fulani herdsmen's conflict on farmers output in Benue, Nigeria" In Bakpo F S and F E Ugbeda (2015) Eds. *Proceeding of An International Academic Conference of the International Multidisciplinary Research and Academic Society*, Obudu, Cross River State: Nigeria.
- Jeiyol, E.N, Akpan, S.B & Tee, T.N. (2013) Gender Analysis of Access to Credit by Rural Small Scale Farmers in Benue State Nigeria. *American International Journal of Social Science* 2(6) 70-78.
- Lawal J . O, Omonona B. T, Ajani O. I, & Oni A. O., (2009). Effects of Social Capital on credit Access among Cocoa Farming Households in Osun State, Nigeria. *Agric. Journal*; 4:184–191.
- Maddala (1983). Models with Self Selectivity. Chapter 9. Retrieved from http://public.econ.duke.edu/~vjh3/e262p_07S/readings/Maddala_Models_of_Self-Selectivity.pdf on 3rd August, 2017
- Mudi J. A. (2007). *Credit Acquisition and Utilization by Small – Scale Farmers*. Unpublished HND project submitted to the Department of Agricultural Extension and Management, College of Agriculture, Yandev, Benue State.
- Nwagbo, E.C., Ilebani, D. & Erhabor, P.O. (1989). The role of credit in agricultural development: A case study of small-scale food

- production in Ondo State, Nigeria. *Samaru Journal of Agricultural Education*. 3(1 & 2): 29–35.
- Nwaru J C (2004). *Rural Credit Market and Resource Use in Arable Crop Production in Imo state of Nigeria*. PhD Dissertation Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.
- Nwaru JC, Onyenweaku C E, Nwosu AC (2006). Relative Technical Efficiency of credit and Non-credit User Crop Farmers. *African Crop Science Journal*. 14(3):241-251.
- Ochi, J. E. and O. J. Nnanna, (2007). Evaluation of selected macro-economic factors in allocation of guaranteed agricultural credit in Nigeria. *Proceedings of the 9th Annual Conference of the Nigerian Association of Agricultural Economists* held at AbubakarTafawaBalewa University, Bauchi, Nigeria, 5th-8th November, 49-59.
- OECD (2012). *Environmental Outlook to 2050: The consequences of inaction*, Paris. Retrieved from http://www.oecd.org/document/31/0,3746,en_2649_37465_497420_47_1_1_1_37465,00.html
- OECD/FAO. (2010). *Agricultural Outlook, 2010-2019*. OECD, Paris.
- Ogunfowora, O.; and S.M. Essang, and S.O. Olayide (1972). *Capital and Credit in Nigeria Agricultural Development*. Nigerian Rural Development Study Paper No. 6, University of Ibadan, Ibadan, Nigeria.
- Ogunfowora, O; and S. M. Essang, and S. O. Olayide (1972). *Capital and Credit in Nigerian Agricultural Development*. Nigerian Rural Development Study paper No. 6, University of Ibadan, Ibadan, Nigeria.
- Ojo, J. A. T (2005). Central Banking and Financial Sector Management in Nigeria; An Outsider view. In: Fakiyesi, O. O. and S. O. Akano (Eds), *Issues in Money, Finance and Economic Management in Nigeria* (Essays in Honour of Professor ObasanmiOlakankpo), pp.35 – 98.

- Okojie C, Monye-Emina A, Eghafona K, Osaghae G, Ehiakhamen JO (2010). *Institutional environment and access to microfinance by self-employed women in the rural areas of Edo State*. NSSP Brief No. 14. Washington, D.C.: Int. Food Policy Res. Inst.
- Okuneye, P. A. (2001). Poverty and Sustainable Development in Africa. Paper presented at the Capacity Building Course at the United Nations Institute for Development and Economic Planning (IDEP) Dakar, Senegal.
- Ololade, R. A., & Olagunju, F. I. (2013). Determinants of Access to Credit among Rural Farmers in Oyo State, Nigeria. *Global Journal of Science Frontier Research*, 13(2).
- Onu, S.M. (2003) Credit Acquisition and Utilization by Small Scale Farmers in Benue State. Benue Agricultural Thesis, unpublished, University of Agriculture, Makurdi.
- Oyatoye, E.T.O. (1981) Financing Small Scale Farmers: A Change of Strategy, In: Edordu (Ed), *Agricultural Credit and Finance in Nigeria, problems and Prospects*. Proceedings of a Seminar Organized by the Central Bank of Nigeria, April 27-30.
- Qureshi, S., Nabi, I. and Faaruquee, R. (1996): Rural Finance for Growth and Poverty Alleviation. *World Bank Policy Research Working Paper.No. 1593, Washington D.C., World Bank*.
- Rahaman, J & Marcus, N. D., (2004). Gender Differentials in Labour Contribution and Productivity in Farm Production in Kaduna State of Nigeria. *The Journal of Family Development*.1(2).
- Rahji M.A.Y, & Fakayode S.B (2009). A Multinational Logit Analysis of agricultural Credit Rationing by Commercial Banks in Nigeria. *International Research Journal of Finance and Economics* ISSN 1350-2887 Issue 24.
- Stiglitz, J. (1993). Incentives Organisational Structures and Contractual Choice in the Reform of Socialist Agriculture" in Beaverman, A;

Brooks K, Csaki. C. (Eds). *The Agricultural Transition in Central and Eastern Europe and former USSR*. World Bank, Washington, D. C.

Swinnen, J. F. M; and Gow, H. R. (1999). Agricultural Credit Problems and Policies during the Transition to a Market Economy in Central and Eastern Europe. *Food Policy*, 24 pp 21 – 47.

Udoh, E.J. (2005) Demand and Control of Credit from Informal Sources by Rice Producing Females of Akwalbom State, Nigeria. *Journal of Agricultural and Food Science*. 1(2): 152 – 155

Udry C (1990). Credit markets in Nigeria: Credit as insurance in a rural economy. *World Bank Economic Review*. 4(3): 21.

Ugbajah, M. O., (2011) Gender Analysis of the Structure and Effects of Access to Financial Services among Rural Farmers in Anambra State, Nigeria. *Journal of Agricultural Science*, 2(2): 107-111.

Yamane T (1967) “*Elementary Sampling Theory*” 1st Edition

Zeller, M. (1994) *Determinants of Credit Rationing: A Study of Informal Lenders and Formal Credit Groups in Madagascar*. Food Consumption and Nutrition Division, International Food Policy Research Institute, Washhinton, D.C. USA.

Zeller, M., G. Schrieder, V. & Heidhues, F. (1997). Rural finance for food security for the poor: Implications for research and policy. *Food Policy Review*, NO. 4., International Food Policy Research Institute, Washington, D.C.

Table 1: Socio-Economic Determinants of Credit Accessibility among Beneficiaries

Dependent Variable: Y				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
X1	0.592040	0.267211	2.215632	0.0340
X2	37.23333	3.875238	9.608012	0.0000
X3	74.03696	7.735287	9.571327	0.0000
X4	0.002998	0.001671	1.794381	0.0736
X5	0.034534	0.011752	2.938679	0.0035
X6	0.004275	0.005285	0.808870	0.4191

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X7	0.019035	0.008729	2.180721	0.0299
X8	0.301494	0.039542	7.624596	0.0000
X9	0.252304	0.039560	6.377692	0.0000
X10	0.024191	0.024493	0.987666	0.3240
X11	0.542191	0.116830	4.640874	0.0000
X12	-32.26642	4.314239	-7.479053	0.0000
C	0.633845	0.172518	3.674084	0.0011
McFadden R-squared		0.572733		

Source: E-views Output

Table 2: Distribution of the Respondents by their Main Source of Finance

Source of Finance	Frequency	Percentage (percent)
Credit	204	56.4
Personal Savings	147	40.6
Aids/Grants	11	3.0
Total	362	100

Source: Field Survey

Table 3: Distribution of the Respondents by Main Sources of Credit

Credit Sources	Beneficiaries		Non-Beneficiaries	
	Frequency	Percentage (percent)	Frequency	Percentage (percent)
Bank of Agriculture	105	29.0	0	0.0
Deposit Money Banks	76	21.0	28	7.7
Micro-Finance Banks	84	23.2	69	19.1
Informal Financial Institutions	97	26.8	265	73.2
Total	362	100	362	100

Source: Field Survey

Table 4: Distribution of the Weighted Averages of the Sources of Credit by the Sampled Respondents

Credit Sources	Means	Standard Deviation
Bank of Agriculture	4.2	0.03
Deposit Money Banks	2.8	0.01
Micro-Finance Banks	3.3	0.04
Informal Financial Institutions	4.1	0.02

Source: Authors Computation

Table 5: Opinion of Sampled Respondents about Adequacy of BOA Credit Facilities

Adequacy of Credit Given	Frequency	Percentage (percent)
Adequate	16	4.42percent

Not Adequate	346	95.58percent
Total	362	

Source: Field Survey

Table 6: Major Challenges in Accessing BOA Loan by the Rural Farmers

Challenges	Number of Respondents	Percentage (%)
1. Lack of Awareness	342	94.48
2. Procedure/Requirements	303	83.7
3. Attitudes of BOA Personnel	294	81.21
4. Level of Interest Rate	202	55.8
5. Short Repayment Period	194	53.59

Source: Field Survey