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RESEARCH ARTICLE

DETERMINANTS OF AGRICULTURAL CREDIT ACCESSIBILITY AND CHALLENGES FACED BY FARMERS IN ACCESSING CREDIT IN SOUTH WESTERN NIGERIA

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ABSTRACT

Credit is inferred to as an important catalytic in enhancing agricultural production but its access is determined and impeded by many factors. This study consequently examined the determinants of agricultural credit accessibility and challenges faced by farmers in accessing credit in South Western Nigeria. The population of this study comprised farmers in South Western Nigeria. Multi-stages sampling technique was adopted to select 225 farmers who benefitted from agricultural credits. Descriptive statistics was used to investigate the socio-economic characteristics of the farmers. Probit was used to analysed the determinants of credit accessibility. The results revealed that majority (91.1%) of the farmers were male with the average age of 49years. Largest percentage (85.5%) of respondents had formal education. Majority of farmers inherited their land with the average farm size of 5.9 hectares. Micro loan was most (64.4%) mostly available loan. The major problems faced by farmers in accessing credit are; frequent rejection of application, high difficulty in getting guarantor, delay in loan disbursement, high interest rate, high collateral required and administrative bottle-neck. The result of Probit regression indicated that, the marginal effects of years of schooling, main occupation, contact with extension agents, farm size and organization membership showed significant and had positive effects on access to credit. Years of farming experience was significant at 1% level with negative effect on credit accessibility. It was recommended that farmers should endeavour to join one or more farmers' societies/organizations. Managements of Banks/credit bodies should make loan process simple and collateral required should be reduced.

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INTRODUCTION

Credit is one of the components of financial services considered fundamental in all stages of agricultural production (Dicken, 2007). Finance is considered as the basic ingredient for each and every economic activity including agriculture. Agricultural credit is considered as one of the strategic resources for pushing the crop and animal productions to the high horizons consequently raises the living standards of our rural poor farming community. Hence, it plays a pivotal role in development of the economy. Credit plays an important role in increasing agricultural productivity. Timely availability of credit enables farmers to purchase the required inputs and machinery for carrying out farm operations (Saboor *et al.*, 2009). Easy and cheap credit is the quickest way for boosting agricultural production (Abedullah *et al.*, 2009). The role of agricultural credit in the developing countries is closely related to providing needed resources which producers cannot source from their own available capital. In respect to this, the provision of agricultural credit has become one of the most important government activities in the promotion of agricultural development in Nigeria (Olagunju and Adeyemo, 2000).

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Agricultural credit is very important for sustainable agricultural development to be achieved in any country of the world. Rural credit has proven to be a powerful instrument against poverty reduction and development in rural areas. Farmers are particularly in need of such credit, because of the seasonal pattern of their activities and the important uncertainty they are facing (Ololade and Olagunjun, 2013). Agricultural credit enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers. According to Alfred (2005), acquisition and utilization of credit for agricultural purposes promote productivity and consequently improved food security status of a community. Also, Amha and Narayana (2000) and Djoumessi *et al.*, (2018), state that credit plays an essential role in increasing agricultural productivity through building up product assets. Conversely, in the recent years, there has been a significant decline in the productivity of Nigeria's agriculture (Amaza and Maurice, 2005). Many reasons have been advanced for the declining agricultural productivity in Nigeria. One of the factors attributed to the waning productivity of the agricultural sector is farmers' limited access to credit facilities (Nwaru, 2004; Manyong *et al.*, 2005). Nigeria farmers operate mainly within the limits of their highly insufficient resources which tend to constrain their capacity to employ most recommended technologies in their farms (Ohen and Ajah, 2015; and Okereke, 2012). Inadequate credit supply is a central problem upon which other production factors exert negative influence on farmers' output and productivity (Afolabi *et al.*, 2014). Limited access to agricultural credits perpetuates poverty and low quality of

life among farmers. This is because some of the innovation which the farmers wish to adopt may be too expensive to procure if they have restricted access to credit facilities (Bolarinwa and Fakoya, 2011). Despite the fact that the farmers are quite aware of the importance of credit to their productivity as well as farmers' wellbeing, in many developing Countries, Nigeria included, access to credit is still stumpy. According to Sossa, (2011) access to credit in Nigeria is particularly limited with little known on the reasons of this situation. Farmers are making frenetic efforts to access credits for their production but these are often denied. Specified the foregoing, this study was conducted to investigate determinants of agricultural credit accessibility and challenges faced by farmers in accessing credit in South Western Nigeria. Specific objectives are to:

1. Describe the socio-economic characteristics of the farmers.
2. identify the constraints faced by farmers in obtaining agricultural in South-Western Nigeria.
3. analyse the determinants of farmers access to credit facilities.

LITERATURE REVIEW

Musugi (2002) stated that Credit provides the power to unveil abilities, vision, and talents which thereafter act as the mover of economic development. However, credit is not merely a tool for increasing production and raising farm income, it also fulfils a social function of enhancing the lives and welfare of rural people Credit accessibility is the ease or difficulty of acquiring credit by borrowers for purpose such as to enhance business performance. Credit accessibility is important for improvement of quality and quantity of farm products, so that it can increase farmer's income and avoid rural migration. Nosiru (2010) stated that over the last three decades microcredit has gained enormous success in reducing poverty on a global scale. As an efficient financial mechanism, microcredit has the potential to enable various governmental and non-governmental actors to realize the millennium development goals. He empirically examined and analysed the importance of micro-credits in promoting agricultural productivity in the study area. Muhammad *et al.*, (2010) stated that financial requirements of the farming sector have increased tremendously over the last few decades due to the extended use of fertilizers, biocides, improved seeds, mechanization. Siddiqi *et al.*, (2004) reported that flow of credit to farmers had increased demand for inputs to increase crop production. Nwankwo (2013) stated that the role of agricultural credit as a factor of production to facilitate economic growth and development as well as the need to appropriately channel credit to rural areas for economic development of the poor rural farmers cannot be over emphasized. Ayegba and Ikani (2013) discovered that much is yet to be done to boost agriculture by encouraging farmers via adequate agricultural credit without strings. They revealed that the much needed banks in the rural areas are mainly found in the urban areas leaving the rural farmers without formal sources of credit. Imoisi *et al.*, (2012) stated that, over the years, there have been problems of agricultural development in Nigeria. They affirmed that one way in which these problems in the agricultural sector can be resolved is through the provision of credit facilities by financial institutions operating in the country.

Oruonye and Musa (2012) revealed that about 65.7% of the farmers claimed that they have problem accessing micro credit to carry out farming activities at the beginning of farming season. Omonona *et al.*, (2008) found out that majority (80%) of the farmers were constrained and therefore this affected their productivity. They revealed that age, sex, farm size, level of education, marital status, contact with extension agents, land acquisition and income of household head are the determinants of credit constraint conditions. Hussie and Ohlmer (2008). discovered that credit constraint farming households used lower levels of capital intensive inputs due to binding financial constraint. The result also showed that the credit constraint farming households had a lower mean of productive efficiency (Hussie and Ohlmer, 2008).

METHODOLOGY

The Study Area: The research was carried out in the South-Western Nigeria. South West Nigeria has six states; Ekiti, Lagos, Ogun, Ondo, Osun and Oyo. It is known as South West geopolitical or geographical zone of Nigeria. It is majorly a Yoruba speaking area, although there are different dialects even within the same State. The area lies between longitude of 2° 31' and 6° 00' East, and Latitude 6° 21' and 8° 37' North (Agboola, 1979). The population of the area is 28,767,752 (NPC, 2006) with the total 77,818km². South western Nigeria is bounded in the North by Kwara and Kogi States, in the East by Edo and Delta States, in the South by Gulf of Guinea and in the West by Republic of Benin. The climatic condition of Southwest Nigeria is Tropical in Nature and it is characterized by wet and dry seasons. The weather conditions vary between the two distinct seasons in Nigeria; the rainy season (March - November) and the dry season (November - February). The dry season is also the bringer of the Harmattan dust; cold dry winds from the northern deserts blow into the southern regions around this time. The temperature ranges between 21°C and 34°C and annual rainfall ranges between 1,500mm and 3,000mm. Agriculture is the major occupation of people in the zone. They produce food crops such as: rice, yam, cassava, maize and cowpea while the cash crops are: cocoa, oil palm, kolanut, plantain, Banana, cashew, citrus and timber. The animal productions such as fishery, poultry, piggery, goat, sheep and cattle rearing are present. (www.mydestination.com/nigeria/regionalinfo/6182976/south-west-region)

Population of the Study: The population of the study were made up of farmers that benefited from BOA credits in the South-Western region of Nigeria.

Sampling Techniques and Sample Size: Multi-stages sampling technique was adopted. In stage one, three States were randomly selected from six States in the South-west, Nigeria (which are Ogun, Osun and Oyo States). In stage two, all the three branches of Bank of Agriculture in each of the state were selected and list of applicants were collected; make total number of nine (9) branches. Branches of bank of agriculture limited in each of the three States are: Ogun State (Abeokuta, Imeko and Abigi Branches) Osun State (Osogbo, Ode-Omu and Ile-Ife Branches). Oyo State (Igbo-ora, Ibadan and Iseyin branches). Stage three involved systematic selected of 25 beneficiaries (successful applicants) from each of the lists that was collected from each of the nine (9) branches; make a total of 225 beneficiaries.

Type of Data and Instrument used for Data Collection: In this research work, primary data were used. The data were collected through the use of well-structured questionnaire. The questionnaire was framed in such a way to attain the objectives of the research. The questionnaire contained some useful information such as socio-economic characteristics of the respondents, access to credit, constraint faced.

Methods of Data Analysis: Data were analyzed using descriptive statistics, t-test, probit regression.

Probit Regression: The study used Probit regression to analyse the factors that determine farmers' access to agricultural credit. The quasi-experiment involved selection of respondents who willingly sort for credit and compared them with those who did not obtain any form of credit for agricultural production who have similar observable biophysical and socio-economic characteristics. Since the dependent variable, credit or no credit was an ordinal in nature, therefore, ordinal probit model was adopted.

$$Y_i = X_i^T \beta + \mu_i \dots\dots\dots 1$$

$$Y_i^* = \beta' X_i + \mu_i \dots\dots\dots 2$$

Where Y_i* is the underlying latent variable that indexes the credit access that a farmer experiences, X_i is a vector of explanatory

variables, β' is a column vector of parameters to be estimated, and μ_i is the stochastic error term. The latent variable exhibits itself in ordinal categories, which was coded as 1 and 0.

Y=1 Access to credit
Y=0 No access to credit

$$P(Y=1) = P(Y^* \leq 1) = P(\beta'x + \epsilon \leq 1) = F(-\beta'x) \text{-----credit access} \dots\dots\dots 3$$

$$P(Y=2) = F(\delta_2 - \beta'x) - F(-\beta'x) \text{-----No credit access} \dots\dots\dots 4$$

Explicitly

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \mu \dots\dots\dots 5$$

Y= Credit access (1 if access, 0 otherwise)
Y= ($\alpha + \beta_1$ age + β_2 gender + β_3 marital status+ β_4 years of schooling + β_5 household size + β_6 main occupation + β_7 farming experience + β_8 contact with extension agent + β_9 farm size + β_{10} membership of organization + μ)
 α = constant, and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}$, the intercept of explained variables in the equation.
 μ = Stochastic error

Socio economic characteristics of farmers like sex, age, marital status, years of schooling, farm size and household size among others were identified, described and discussed.

Sex: Result in table 3 showed that majority (91.1 percent) of the respondents were male while only 8.9 percent were female. This implies that male dominated agricultural production in the study area and that male benefited more from Bank of Agriculture Credit than female. This is in conformity with findings of Omonona *et al.*, (2010) in their study on “determinants of credit constraint conditions and production efficiency among farming households in southwestern Nigeria”, where male respondents were 88.3 percent.

Age: Table 3 revealed that 8 percent of beneficiaries have age below 30 years while large number (36.9%) of the farmers was between 41-50 years of age. Only 8 percent beneficiaries and non-beneficiaries were above 60 years respectively. The mean age was 48.5 years. This implies that farmers were in their active ages. This is in agreement with findings of Nosiru (2010) in his work “Microcredits and agricultural productivity in Ogun State, Nigeria”, where the average age for credit beneficiaries was 45.48 years.

Marital status: In table 3, about 86 percent of respondents were married. Percentage of single farmers was 4.9 percent while 9.3 percent of farmers were either divorced, widowed or separated.

Table 1. Description of explanatory variables for credit access

Variables	Description/Definition	A priori expectation
Gender	Gender of the respondents (Male=1, Female=0)	+
Age	Age of Household head (years)	+/-
Marital status	Marital status of the respondent (married=1, otherwise=0)	+/-
Education status	Total number of years spent in school by respondent (years)	+
Household size	Total number of people that are depended on respondent (Number)	-
Main occupation	primary occupation of the respondent (Farming=1, Otherwise=0)	+
Farming experience	Years of farming experience of the respondent (years)	+/-
Extension agent	Contact with extension agents (Contacted =1, No contact =0)	+
Farm Size	Total size of farm cultivated (Hectare)	+
Organization	Membership of any Organization (Member =1, Non-member=0)	+

Table 2. Summary of Objectives and analytical techniques

S/N	Objectives	Description	Analytical Technique
1	describe the socio-economic characteristics of the respondents	Age, gender, marital status, household size, level of education, Farm size, years of farming experience e.t.c.	descriptive statistics e.g., frequency, percentages and means
2	identify the constraints faced by farmers in obtaining agricultural credit in South-Western Nigeria	This describes the processing bottle-neck in obtaining the credit. The variables to be considered include, interest rate, frequency in accessing credit, collateral, guarantor, processing length e.tc	descriptive statistics e.g., frequency, percentages and means
3	analyse the determinants of farmers access to credit	Different ways in which farmers accessing financial. The factors to be considered are, age, gender, household size, farm size, year of farming experience, years of schooling e.t.c	Probit Regression Model (PRM)

Description of the Variables: From the review of relevant literature it was identified that a set of variables which might be important in determining the impact of agricultural credit on agricultural productivity, include socio-economic factors, institutional factors, and production factors.

Socio-economic variables: The socio-economic characteristics are part of the one key variables needed to determine for this study. The socio-economic variables will be needed are: Age of respondent, years of farming experience, gender, marital status, household size, primary occupation and many other important socio-economics factors.

Institutional variables: Institutional factors include all social mechanisms of interaction, which are used in the process of procure credit. These mechanisms include: rules, regulations enforcement, type of collateral, use of guarantor, interest rate, time lag in processing loan, moratorium period, repayment method and other variables which determine access to credit.

RESULT AND DISCUSSION

Socio-economic characteristics of the respondents: Socio economic characteristics of the respondents were described in this section.

This implies that married respondents had access to credit more than others. This result was in agreement with findings of Olagunju (2010) in her study “Impact of credit on poultry productivity in Southwestern Nigeria”, where 78.30 percent of the respondents were married.

Religion: It was also showed that 47.1 percent of respondents were Christians. Respondents that were Muslims were 44.9 percent while traditional worshippers were 8 percent. This implies that all the three major religions were practiced by farmers in the study area and that the religion was not a barrier to credit accessibility.

Education qualification: Result in Table 3 also showed that 14.2 percent of respondents had non-formal education while 85.8 percent of the respondents had formal education. The percentage of respondents that had education up to tertiary level was 15.6 percent. This result contradicted the finding of Tilahun (2015) in his study “Access to credit and the impact of credit constraints on agricultural productivity in Ethiopia: Evidence from Selected Zones of Rural Amhara”, where majority (53.6 percent) of credit unconstrained and (56.2 percent) credit constrained had no formal education.

Main Occupation: In table 2, about 74 percent of the respondents engaged in farming as their main occupation. The other respondents

were primarily either students, traders, artisans or civil servants. This implies that respondents engaged more in agriculture as full-time/main occupation than other occupations. The result affirmed the findings of Ekunwe *et al.*, (2015) on micro-credit access and profitability on crop production in Orhionmwon local government area of Edo State, Nigeria, where 81.5 percent of respondents engaged in farming as full-time farmers.

Farm size: Table 3 revealed that majority of respondents (72.0 percent) had less or 5 hectares of land. Respondents that had above 10 hectares of farm land were 12.9 percent. The average farm size owned by was approximately 6 hectares. This result contradicted the findings of Joyce *et al.*, (2015) in their study on Evaluation of Factors Influencing Access to Credit Financial Services: Evidence from Smallholder Farmers in Eastern Region of Kenya where the average farm size of farmers that accessed credit was 2.6 hectares and those that did not access credit was 2.9 hectares.

Years of Farming Experience: Table 3, revealed that 32.5 percent of the respondents had less or 10 years of experience. Respondents that had above 30 years of experience were 9.3. The mean years of farming experience was approximately 19 years. This shows that farmers were not new in the farming business in the study area. This result echoed the findings of Awotide *et al.*, (2015), in their work “metafrontier analysis of access to credit and technical efficiency among smallholder cocoa farmers in southwest Nigeria”, where average years of farming experience was 29.9 years.

Source of Land: Table 3 showed that 48.5 percent of the respondents inherited their land. Respondents that got their land as gift were 18.2 percent. The rest of the respondents got their land either by purchasing or rent/lease. This implies that majority of farmers inherited their land. This result was in agreement with the findings of Moloi (2008) on a comparison of socioeconomic characteristics that determine the farm income of emerging livestock and horticultural farmers in South Africa, where majority (54.5 percent) of the farmers owned their land through inheritance.

Contact with extension agents: Table 3 revealed that 59.1 percent of the respondents had contact with extension agents. Respondents that did not have contact with extension agents were 40.9. The result contradicted the findings of Joyce *et al.*, (2015) where only 21.5 percent of beneficiaries had contact to extension agents.

Class of loan: According to table 3, 64.4 percent of beneficiaries affirmed that they received micro-loan, 27.6 percent affirmed that they received medium loan while only 8 percent claimed that they received macro-loan. This implies that majority of the beneficiaries of Bank of Agriculture loan received micro loan. The result affirmed the findings of Ugbajah (2014) in his work on provision of credit and loan facilities by Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) to farmers, where 74.3 percent of farmers that benefitted from BOA loan received micro-credit.

Collateral required: Table 3 showed the distribution of the beneficiaries by collateral required. Percentage of beneficiaries that affirmed that they used land/building as collateral were 18.7, 53.3 percent affirmed that they used only guarantor as their collateral, 20 percent claimed they used farmers cooperative as collateral while 0.9 percent claimed they used Nigerian Agricultural Insurance Corporation (NAIC) as collateral and only 7.1 percent claimed that they used no collateral. This implied that guarantors were mostly used as collateral security. The result negated the findings of Okpukpara (2009) in his study on strategies for effective loan delivery to small-scale enterprises in rural Nigeria, where about 65 percent of farmers that received credit from formal source used land/building as collateral while only 3 percent used guarantors.

Challenges Faced by the respondents in accessing credit

Administrative bottle-neck: Result in Table 4 showed that 37.0 percent of the respondents strongly agreed that administrative bottle-

neck was a serious challenge facing the farmers in accessing loan, 28.0 percent also agreed with this assertion. Also 0.4 percent of the respondents strongly disagreed, 1.3 percent were disagreed that administrative bottle-neck is a serious challenge while 33.3 percent were not sure. The mean value of total response was 4.0 which means that on the average the respondents generally agreed that administrative bottle-neck was a serious challenge. The result echoed the findings of Ayoola (2013) in his study “contribution of agricultural credit policy to yam production among small scale farmers in selected areas of Kogi State, Nigeria, where lack of understanding of procedure (with the mean value of 4.1) was a very serious challenge in accessing agricultural credit.

Table 3. Frequency distribution of beneficiaries by class of loan (N = 225)

Variables	Frequency	Percentage	Mean
Sex			
Male	205	91.1	
Female	20	8.9	
Age (years)			
≤ 30	18	8.0	
31-40	36	16.0	
41-50	83	36.9	48.5
51-60	70	31.1	
Above 60	18	8.0	
Marital Status			
Married	193	85.9	
Single	11	4.9	
Divorced	11	4.9	
Widow/Widower	5	2.2	
Separated	5	2.2	
Religion			
Christianity	106	47.1	
Islam	101	44.9	
Traditional	18	8.0	
Education Qualification			
Non-formal	32	14.2	
Primary	85	37.8	
Secondary	73	32.4	
Tertiary	35	15.6	
Main Occupation			
Farming	166	73.3	
Civil Service	28	12.5	
Trading/Business	7	3.1	
Artisan	23	10.5	
Student	1	0.4	
Farm size (Ha)			
≤ 5	162	72.0	
6-10	34	15.1	5.9
Above 10	29	12.9	
Years of Farming Experience			
≤10 years	73	32.5	
11-20 years	64	28.4	18.7
21-30 years	67	29.8	
Above 30 years	21	9.3	
Source of Land			
Inheritance	109	48.5	
Gift	41	18.2	
Rent/Lease	30	13.3	
Purchase	45	20.0	
Contact with Extension agents			
Yes	133	59.1	
No	92	40.9	
Class of loan			
Micro	145	64.4	
Medium	62	27.6	
Macro	18	8.0	
Collateral Required			
Land/Building	42	18.7	
Guarantors	120	53.3	
Farmers' cooperative	45	20.0	
NAIC	2	0.9	
No collateral	16	7.1	

Field Survey, 2024

High collateral required: It was also revealed that 13.8 percent of the respondents strongly agreed that high collateral required was a serious challenge faced in accessing loan, 40.9 percent also agreed that it was a serious problem, Percentage of the respondents that were not decided was 36.9 while 8.0 percent disagreed, only 0.4 percent were strongly disagreed that high collateral required was a serious challenge. The mean value of total response was 3.6 which means that on the average the respondents generally agreed that high collateral required was a serious problem.

that high difficulty in getting guarantor was a serious challenge. This result was parallel with findings of Ayegba and Ikani (2013) in their work "An impact assessment of agricultural credit on rural farmers in Nigeria", where few respondents (6.7 percent) affirmed that difficulty in getting guarantors was a challenge.

Frequent rejection of application: The table revealed that 23.6 percent of the respondents strongly agreed that frequent rejection of loan application by bank of Agriculture was a serious challenge faced

Table 4. Distribution of the respondents by challenges facing in accessing credit

Challenges	strongly disagreed		disagreed		undecided		Agreed		strongly agreed		Mean	Decision
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Administrative bottle-neck	1	0.4	3	1.3	75	33.3	63	28.0	83	37.0	4.0	Agree
High Collateral Required	1	0.4	18	8.0	83	36.9	92	40.9	31	13.8	3.6	Agree
High Interest Rate	0	0.0	25	11.1	83	36.9	73	32.4	44	19.6	3.6	Agree
Delay in loan disbursement	2	0.9	5	2.2	80	35.6	99	44.0	39	17.3	3.8	Agree
High difficulty in getting guarantor	5	2.2	22	9.8	86	38.2	74	32.9	38	16.9	3.5	Agree
Frequent rejection of application	7	3.1	11	4.9	107	47.5	47	20.9	53	23.6	3.6	Agree
Non-disbursement	32	14.2	107	47.6	17	7.5	55	24.4	14	6.3	2.3	Disagree

Source: Field Survey, 2024

Note: if mean value ranges between
 1.0 – 1.4 → Strongly disagree
 1.5 – 2.4 → Disagree
 2.5 – 3.4 → Undecided
 3.5 – 4.4 → Agree
 4.5 – 5.0 → Strongly Agree

The result was in agreement with the findings of Asogwa, Abu, and Ochoche (2014) in the study "Analysis of peasant Farmers' access to Agricultural credit in Benue State, Nigeria" where majority (52.3 percent) affirmed that lack of collateral required was a major challenge.

High interest rate: It was showed that 19.6 percent of the respondents strongly agreed that high interest rate was a serious challenge faced the farmers in accessing loan, 32.4 percent also agreed with this assertion, 36.9 percent were undecided while only 11.1 percent disagreed and none of the respondent strongly disagreed that high interest rate posed a serious challenge to the farmers in accessing credit. The mean value of total response was 3.6 which means that on the average the respondents generally agreed that high interest rate was a serious problem. The result contradicted the findings of Asogwa *et al.*, (2014) where only few respondents (20.8 percent) claimed that high interest rate was a serious challenge.

Delay in loan disbursement: Table 4 showed that 17.3 percent of the respondents strongly agreed that delay in loan disbursement was a serious challenge facing the farmers in accessing loan, 44.0 percent of the respondents also agreed with this assertion. Percentage of respondents that were undecided was 35.6 percent, 2.2 percent were disagreed while only 0.9 percent were strongly disagreed that delay in loan disbursement was a serious challenge. The mean value was 3.8 which means that on the average the respondents generally agreed that the delay in loan disbursement was a serious challenge. This result was in agreement with findings of Ayegba and Ikani (2013) in their work "An impact assessment of agricultural credit on rural farmers in Nigeria", where majority (43.3 percent) of the respondents claimed that late approval of loan was the major challenge faced in accessing agricultural credit from formal sources.

High difficulty in getting guarantor: It was revealed that 16.9 percent of the respondents strongly agreed that high difficulty in getting guarantor was a serious challenge faced the farmers in accessing loan, 32.9 percent agreed to this assertion, Respondent that were not decided (not sure) were 38.2 percent, 9.8 percent disagreed while only 2.2 percent strongly disagreed that high difficulty in getting guarantor was a serious challenge. The mean value was 3.5 which means that on the average the respondents generally agreed

by the farmers in the study area in accessing credit, 20.9 percent of the respondents also agreed to this assertion. Percentage of the respondents that were not sure whether frequent rejection of application was a serious challenge was 47.5 percent, 4.9 percent of the respondents disagreed while only 3.1 percent strongly disagreed that frequent rejection of application was a challenge. The mean value was 3.6 which means that on the average the respondents generally agreed that frequent rejection of loan application was a serious challenge.

Non-disbursement of loan: Table 3 showed that 6.3 percent of the respondents strongly agreed that non-disbursement was a serious problem, 24.4 percent also agreed to this assertion. Undecided respondents that 7.5 percent, 47.6 percent were disagreed while 14.2 percent strongly disagreed that non-disbursement of loan was a challenge. The mean value of the total response was 2.3 which means that, on the average the respondents were disagreed that non-disbursement was a serious problem.

Factors that determined access to credit: Table 5 presented the result of Probit regression of factors that affect access to credit by farmers. The result indicated that, the marginal effects of years of schooling, main occupation, contact with extension agents, farm size and organization membership showed significant and had positive effects on access to credit. Years of farming experience was significant at 1% level with negative effect on credit accessibility. The variable marital status was not significant but had negative influence on access to credit. On the other hand, age and sex were not significant but had positive influence on access to credit by the farming households in the study area. The result further indicated that, education level in term of number years spent in of school was statistically significant at 5% level of significance with positive effects on access to agricultural credit in the study area. This implies that an increase in the number of years spent in school, increases the probability of accessing credit from Bank of Agriculture. The result echoed the findings of Hussein (2007) in his study on farm household economic behaviour in imperfect financial markets where he found out that, higher level of education was associated with the ability to access and comprehend information on credit terms and conditions, and ability to complete loan application forms correctly. The result also indicated that those farmers with main occupation being farming rather than other

occupations (civil service, business or artisan) was significant at 1% level of significance with positive marginal effects on the farmers access to credit in the study area. This implies that having farming as main occupation rather than other occupations in the study area will lead to an increase in the probability of accessing credit. This finding contradicted the findings of Joyce *et al.*, (2015), where having other occupation rather than farming as main occupation lead to increase in probability of access to credit. The farming years of experience of the farmers was significant at 1% level of significance with negative marginal influence on farmers access to credit. This implies that an increase in the year of experience decreases the probability of accessing credit by farmers in the study area. This finding was in agreement with findings of Ololade and Olagunju (2013) where years of farming experience has negative influence on credit accessibility but not significant.

Table 5. Probit regression analysis

Credit Accessibility	Coefficient	Standard Error	Z-Value	Probability
Age	0.010	0.008	1.22	0.223
Sex	0.022	0.174	0.13	0.899
Marital Status	-0.026	0.163	-0.16	0.875
Years of Schooling	0.024	0.011	2.18	0.030**
Household Size	0.015	0.017	0.88	0.380
Main Occupation	0.656	0.119	5.53	0.000***
Farming Experience	-0.022	0.008	-2.92	0.003***
Extension Agents Contact	0.558	0.103	5.42	0.000***
Farm Size	0.028	0.009	3.15	0.002***
Member of Organization	0.409	0.110	3.73	0.000***
Constants	-1.905	0.344	-5.54	0.000
LR Chi ² (10)	= 124.12			
Prob > chi ²	= 0.000			
Pseudo R ²	= 0.126			
Number of observation	= 225			
Log likelihood	= -430.703			

Source: Data Analysis, 2024.

Note: *** and **represent 1% and 5% level of significance

The result of probit regression also indicated that contact with extension agents was significant at 1% level of significance with positive effect on the access to BOA credit by farmers in the study area. This implies that having contact with extension agents increases the probability of accessing credit and the more contact the farmers have the better the chance of getting agricultural credit. This result echoed the findings of Assifaw and Adebaba (2016) in their study on analysis of factors affecting smallholder farmers' access to formal credit in Jibat district, west shoa zone, Ethiopia where participation in extension package programme had positive influence on credit accessibility and was significant at 5% level of significance. Farm size also showed a positive and significant (1% level of significance) effect on farmers access to agricultural credit in the study area. This implies that an increase in the farm size of the farmers in the study area increases the probability of accessing credit by 0.028. This result affirmed the findings of Samuel *et al.*, (2015) in their study on the determinants of access to agricultural credit for small and marginal farmers' in Dharwad district, Karnataka, India where size of landholding has positive effect on credit accessibility by farmers for agricultural purpose. Furthermore, being a member of organization was significant at 1% level of significance with positive marginal effects on access to credit financial services in the study areas. This implies that being a member of an organization increases the probability of getting agricultural credit by 0.409. This result concurred with the findings of Joyce *et al.*, (2015) who noted that improvement of togetherness and collective action in by farmers will lead to a positive contribution towards accessing credit financial.

CONCLUSION AND POLICY RECOMMENDATIONS

The following conclusions were drawn based on the findings of this research: Male dominated agricultural production in the study area and there in their active ages. Majority of them are married. Religion was not a prerequisite/barrier to credit accessibility. Largest percentage of respondents had formal education. Beneficiaries

engaged more in agriculture as full-time/main occupation than non-beneficiaries. Majority of farmers inherited their land and they were not new in the farming business. Majority of the beneficiaries received micro loan and that major collateral required was guarantor. It was also concluded that; administrative bottle-neck, high collateral, high interest rate, delay in loan disbursement, high difficulty in getting guarantor and frequent rejection of application were serious problems. Determinants of access to agricultural credit were years of schooling, main occupation, years of farming experience, contact with extension agents, farm size and organization membership. Based on the findings of this research work, recommendations were made as follow: Farmers should endeavour to join one or more farmers' societies/organizations, since being a member of organization increases the probability of credit accessibility. Managements of Banks/credit bodes should make loan process simple and reduce bottle-neck in paper work of loan processing. Also, collateral required should be reduced.

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