An Examination of the Determinants of Access to Credit among Rural Agricultural Entrepreneurs in Yobe State, Nigeria

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***Abstract*: The study examines the determinants of access to credit among rural entrepreneurs in Yobe state, Nigeria. Entrepreneurs are faced with numerous challenges with respect to accessing credit to boost their businesses; hence the study attempts to bring out the major determinants of access to credits among rural agricultural entrepreneurs and offers recommendations on what to do to overcome these challenges. To achieve the objectives of this study, we employ Logit regressions and a sample of 270 entrepreneurs was selected from the three geo political zones in the state using random sampling method. Findings from the study show years of entrepreneurial experiences, business plan, financial literacy, number of bank accounts open and membership of cooperative society influence entrepreneurs' ability to access credit positively while collateral security and cost of borrowing has a negative influence on the entrepreneurs' ability to access credit facilities from banking sector. The study recommends the need to reduce the cumbersomeness of the credit process and transaction cost involved to the entrepreneurs. The entrepreneurs can also form cooperative groups to make it easier in accessing credit from the financial sector. The process of opening account should also be simplified to enable more entrepreneurs to open the account.**

***Keywords*: Determinants, Rural entrepreneurs, Access to Credit, Yobe State, Nigeria.**

I. INTRODUCTION

The difficulty in getting financial support to a start-up of entrepreneurial venture or expand business enterprises is a serious problem for many entrepreneurs inspired by entrepreneurial spirit to build a sustainable business ventures particularly in rural areas (Adamu and Kabuga, 2019). The current estimate from Central Bank of Nigeria (CBN, 2017) suggests the growth of about 37 million small-business enterprises is being undermined by several factors. One of them is access to financial services. However, evidence available in the literature has singled out access to finance as a crucial prerequisite to the growth of these enterprises. Due to the challenges of accessing financial services especially in the formal financial institutions, many entrepreneurs in the country had to rely on personal savings, contributions from family and parents, and financial services provided by informal money lenders to establish new business or expand the existing ones (Adamu and Kabuga, 2019).

The availability of financial services, especially at affordable cost from lending financial institutions, is crucial for entrepreneurs. This is because external financing supports innovative practice and encourages entrepreneurs to explore more opportunities in the business environment. In the literature, it has long been established that inadequate finance or capital is a significant hindrance to many growing entrepreneurial activities in developing countries and can seriously affect the ability of entrepreneurs to scale up their operation (Adamu & Kabuga, 2017; Kabuga, Ismail & Adamu. 2015; Kabuga & Adamu, 2015). However, recent evidence in the entrepreneurship literature reveals many entrepreneurs are ready and willing to expand their entrepreneurial activities in developing countries but have been constrained and affected by access to credit (Ismail, 2019; World Bank, 2018). Specifically, the World Bank (2018) report shows that only a small fraction of entrepreneurs has access to credit in Sub-Saharan Africa.

Majority entrepreneurs who are want to access to available credit facilities have their request rejected because of lack of collateral, and the inability to meet the high cost of obtaining loans. However, financial resources from personal savings, and family and friends' contributions may not be adequate to undertake wide ranges of high value investment, undertake risks and respond to new opportunities. Similarly, relying on informal money lenders may not be a wise decision. This is because they have their own challenges. In most cases, they are highly undercapitalized such that they often leave their clients stranded with shortage of credits. For that, they hardly offered credit for long time capital investment.

Given this situation, expanding access to financial credit by entrepreneurs could have large effects on entrepreneurial activities. This is because it could ease external financing constraints that prevent enterprises from expanding. In the rural areas where access to financial services is very limited, removing obstacle to accessing credit for entrepreneurs can boost entrepreneurship which in turn improve livelihoods and economic independence of entrepreneurs (Adamu and Kabuga, 2019). Studies conducted by World Bank (2015) suggests access to credit has positive effects on the household consumption, employment status and level of income generation.

It is against this backdrop, this research study is undertaking to examine the determinants of access to credit among rural agricultural entrepreneurs in Yobe state, Nigeria and intend to achieve the following objectives: describe the socio-economic characteristic of the rural agricultural entrepreneurs and identify the determinants of access to credit among rural agricultural entrepreneurs.

II. LITERATURE REVIEW

2.1 Concept of Credit

The word ‘credit has been given several and varying number of meanings, some people refer to it as ‘loan’ while others used the term ‘borrow’ to qualify credit. Credit is debt financing in a form of loan from lending institutions and give their promise to repay back at a given period of time (Osano & Languitone, 2016)

AIM Institute of Economics (2020) stated that credit is created when one party (a person, a firm) lends money to another party, the borrower. In general credit means the finance provided to others at a certain (mostly fixed) rate of interest. The process of lending and borrowing creates both credit and debt.

Baker and Hopkins (1979), however, made a clear distinction between credit and loan. He referred to credit as an assets or a financial reserve which the farmers can call upon when needed provided he has not used his credit ‘asset’ by exchanging it for a loan. When a farmer makes the exchange of his credit for a loan, then he starts incurring an interest charge, also he uses up part of his capacity and hence part of his ability to acquire additional liquidity in the future by borrowing.

Olajide (1981), defined credit as ‘monetary’ or financial aspect of capital resources: capital resources being broadly defined as goods employed but necessarily used up to the course of production. They went further to indicate that, it can take the form of: Money in cash or bank over drafts. In kind as in forms of biological and physical capital purchase and supplied producers. Adegeye and Dittoh (1985), defined credit as the process of obtaining control over the use of money, goods and services in exchange for a promise to repay at a future date

2.2 Concept of Agricultural Entrepreneur

It is often very difficult to define who is agricultural entrepreneur because in real sense there is very good distinction between agricultural entrepreneurs and pure agricultural farmers. Ordinarily, pure agricultural farmers are more concerned about the productivity and efficiency of their agricultural activities and often do not stimulate diversification and innovative entrepreneurship. In most cases, they behave like entrepreneurs but lack the courage to take risks. As Vesala et al (2007) rightly pointed out agricultural farmers were mostly trained to be craftsmen, producing food and fibres with no courage to diversify to higher value products.

Thus, one hardly finds any evident to show development of entrepreneurial identity, skills and behaviours across pure agricultural farmers.

The concept of Agricultural entrepreneur is an evolving concept that sees anyone with agricultural entrepreneurship idea as entrepreneur. Agricultural entrepreneurship can also be conceptualized as innovative practice that is related to marketing and producing of various agricultural products as well as agricultural inputs (Global Forum for Rural Advisory Services, (GFRAS, 2012). The collection of agricultural entrepreneurs is complex and dynamic depending on the environment one operates.

Kahan (2012) categorize them to include farmers, traders, transporters, processors and many others. They all played a major role in producing agricultural products, moving them through to the market in a kind of value chain which make it very attractive and marketable.

Empirical Literature

A number of empirical studies have been conducted on the factors influencing access to credit among agricultural farmers but in the literature none of such study was conducted in Yobe state.

Siyanbola et al. (2012) examine the factors that influence the entrepreneurial inclination of students across Nigerian Universities. The results show major factors that significantly explain entrepreneurial interest are students' educational qualifications, entrepreneurial family history, family characteristics, students' entrepreneurial experience, and students' socio-demographics backgrounds.

Ololade and Olagunju (2013), studied the determinants of credit access by rural farmers in Oyo state Nigeria. Specifically the study revealed the socio-economic characteristics of the rural farmers, examined the factors affecting access to credit by the rural farmers, identified constraints faced by rural farmers in credit acquisition. Data were collected with the aid of structured questionnaires, administered on 210 respondents using multistage sampling procedure. The data were analyzed with the use of descriptive statistics and logit model. The sigma values of the binomial ($\sigma2= 90.32$) logit model that measured the significance of model showed that the data fit the model reasonably well. The binomial logit model revealed that significant relationships existed between sex (-2.0187), marital status (-1.9786), lack of guarantor (2.1517), high interest rate (6.8263) and access to credit. The variables were significant at 10%

Ijioma and Osondu (2015) evaluate sources of agricultural credit and its major determinants among farmers in Idemili, Anambra State, Nigeria. The result reveals age, household size, membership of cooperative societies, marital status, education level, farm size and amount of loan are significant determinants of amount of agricultural credit being demanded by farmers.

Kofarmata et al (2016) investigate the factors influencing microfinance banks credit supply to farmers across microfinance banks in Kano State, Nigeria. The authors reveal that employing more marketing staff in the microfinance bank can increase the rate of credit supply to farmers. They also show that having a bank account and being a farmer with off-farming business increased the chances of farmers accessing credit with the micro banks. However, they also found inverse relationship between increased distance from a bank and chances of a farmer accessing credit with the micro banks.

Edet and Etim (2017) assess access to agricultural credit by poor farmers in Akwa Ibom state, Nigeria. Using logistic regression, the authors shows that the educational level, membership of social organization, and household size were directly related to farmers access to credit financial services whereas household income was inversely related to farmers access to credit. The findings suggest also that there is need to step-up the training of rural farmers through regular seminars, workshops, symposia, and participation of farmers in social organizations as a means of improving farmers access to credit.

Olufemi, O. S. (2019) conducted a study on the determinants of access to credit by farming households in rural and peri-urban of Akinyele local government area, Oyo state. The study used both descriptive and inferential statistics. In the study area, most respondents were literates especially those in the peri-urban parts of the Local Government Area. This set had access to different forms of credit although nongovernmental, as against their rural counterparts where a lot did not have access. Different collateral items used involved certificates, building and vehicle particulars including their salaries. Creditors closely monitored debtors to ensure recovery of funds. Inferential analysis shows that sex, experience, labour and contact with monitoring and extension officials were the main factors affecting access to credit in the study area.

III. METHODOLOGY

Study Area

Yobe state was created on the 27th, August 1991 by the military administration of President Ibrahim Badamasi Babangida. It was carved from old Borno State (Yobe Geographic Information Service, 2021).

The research will be conducted in Yobe state, which will involve the selection of three local governments from three senatorial zones i.e zone A, B, and C making it nine local governments.

For the purpose of this study, the researcher will select a sample of nine Local Governments, three from each senatorial Zones of Yobe state. In order to reach the target population of the study, multi-stage sampling technique is employed. Thus, in order to attain the objectives of the research and answer the research questions, both quantitative and qualitative data will be used. Structured questionnaire was used to collect information on various determinants of access to credit among rural agricultural entrepreneurs.

Model Specification

The study employs logistic regression model to investigate the factors that influence access to credit among rural entrepreneurs in Yobe state. This econometric model enables us to predict the possibilities of the different possible outcomes of a categorically distributed dependent variable given a set of explanatory variables.

Following Kabuga and Usman (2019) and Olufemi (2019), the model is specified in implicit form as

$$\log Y = \left(\frac{p}{1-p}\right) \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$\log\left(\frac{p}{1-p}\right) = \beta_o + \beta_{1x1} + \beta_{2x2} + \beta_{3x3} + \beta_{4x4} + \beta_{5x5} + \beta_{6x6} + \beta_{7x7} + \varepsilon_i \ldots\ldots\ldots (2)$$

Where:

Y = $access\ and\ non\ access\ to\ credit$ ($dummy\ variable$, $access\ to\ credit$ = 1, 0 if otherwise)

$P = Probability\ of\ access\ to\ credit$

$1 - p = Probability\ of\ non - access\ to\ credit$

$\beta 0 = constant$

$\beta 1 - \ \beta o = logistic\ regression\ coefficients$

$X1$= Years of Entrepreneurs' Experience

$X2$= Business Plan

$X3$= Financial literacy

$X4$= Ownership of bank account

$X5$= Membership of cooperative

$X6$= Collateral

$X7$= Cost of Borrowing

IV. RESULT AND DISCUSSIONS

Table 1: Logit Regression Results

Variables	Coefficient	Standard Error	P-Values
Years of Entrepreneurs' Experience (X1)	0.085	0.040	0.041**
Business Plan (X2)	0.056	0.026	0.031**
Financial Literacy (X3)	0.063	0.042	0.026**
Ownership of Bank Account (X4)	0.447	0.074	0.042**
Membership of Cooperative (X5)	0.061	0.004	0.031**
Collateral Security (X6)	-0.502	0.241	0.001***
Cost of Borrowing (X7)	-0.334	0.164	0.004***
Constant	1.227** (.426)		
No of Obs = 270 LR ch2 (7) = 58.40 Prob>chi2 = 0.0000 Pseudo R^2 = .3312			

Source: Author's computation, field survey data (2022) using STATA version 16.

The asterisk *** and ** are P-values at 1% and 5% significance levels .

Table 1 reveals the output of the logit regression determinants of access to credit among rural agricultural entrepreneurs in Yobe Sate, Nigeria. All the variables are found to be significant in determining access to credit by rural agricultural entrepreneurs.

Years of entrepreneurial experience, business plan, financial literacy, ownership of bank account and membership of cooperative society are major significant factors increasing the ability of agricultural entrepreneurs to access credit from the banking sector. On the other, collateral security and cost of borrowing significantly decrease the ability of rural agricultural entrepreneurs to access credit from the banking sector in the study area.

The study found a significant relationship between years of entrepreneurial experience and access to credit among agricultural entrepreneurs in the rural areas. The finding indicates that as years of entrepreneurial experience rise there is likelihood that agricultural entrepreneurs in the rural areas will have access to credit in the banking sector. The coefficient suggests if one year is added to entrepreneurial activities by agricultural entrepreneurs, the probability of accessing credit from banking sector increase by at least 0.085% while for financial literacy coefficient reveals that as agricultural entrepreneurs spent more time to acquire knowledge on financial literacy, the probability of accessing credit rises by 0.06% and statically significant at 5%. Further, the study found a significant and positive relationship between business plan and the ability of rural agricultural entrepreneur access to credit. Good business plan or proposal increases the probability of an entrepreneur accessing credit from financial institutions by 0.056%. Also, membership of cooperative significantly influences the ability of an entrepreneur to access credit in the banking sector. The coefficient reveals that as membership of cooperative society increases by one additional entrepreneur, the probability of accessing credit by rural agricultural entrepreneur rises by 0.06%, thus, the implication of this result is that the more entrepreneurs join cooperative membership, the more the chances for them to access credit.

Ownership of bank account has a significant influence on the ability of rural agricultural entrepreneurs to access credit in the financial institutions. The coefficient shows that as entrepreneurs open at least an additional bank account, the probability of entrepreneurs having access to credit rises by 0.45% approximately and statistically significant at 5% significance level.

The study found an inverse and significant relationship between requirement for collateral security and ability of agricultural entrepreneurs to access credit in the banking sector. This implies as requirement for collateral decreases, probability of accessing credit from banking sector increases among agricultural entrepreneurs by 0.50% and statistically significant at 1% significance level. The cost of borrowing is found to be negatively related with the probability of entrepreneurs having access to credit. This suggests that as the cost of borrowing increases, there is likelihood that the ability of the entrepreneurs to access credit reduces by 0.33%. The implication of this result is that, high cost of borrowing affects the entrepreneurs' ability to access credit negatively. Hence, the cost of borrowing should be as moderately as possible especially for rural agricultural farmers, this will increase their accessibility to credit.

V. CONCLUSION AND RECOMMENDATIONS

The study attempts to examine the determinants of access to credit among rural agricultural entrepreneurs in Yobe state, Nigeria. Logit regression was employed to achieve the objective of the study and to also identify the various factors that influence the entrepreneurs' ability to access credit in the banking sector.

The findings of the study reveals that years of entrepreneurs' experience, business plans/proposals, financial literacy, ownership of bank account and membership of cooperative society positively influence the entrepreneurs ability to access credit while collateral security requirements and cost of borrowing have an inverse relationship with the probability of entrepreneurs access to credit.

The study recommends that the cost of borrowing especially for rural agricultural entrepreneurs should be reduced to allow them have access to credit facilities. Also, the collateral requirements should be relaxed to what the entrepreneurs in the rural areas can afford or offer. More entrepreneurs should be encouraged to open bank account and the process should be made easy and simple, this will enable them to access credit more easily.

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