
**ANALYSIS OF AGRICULTURAL CREDIT TO SMALL SCALE FARMERS IN NIGER
STATE
(A CASE STUDY OF SULEJA LOCAL GOVERNMENT AREA)**

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ABSTRACT: *This study examined the Analysis of agricultural credit to small scale farmers in Suleja, Local Government Area of Niger State. The research design employed for this study was a Descriptive Survey design, in order to achieve an accurate representation of the entire population, which covered the five selected district: Kwamba, Kwankashe, Suleja, Apia, Maje in Suleja LGA of Niger State. The hypothesis was tested using Chi-square test model. Questionnaires were used to source the data used in carrying out this study. Simple random sampling techniques as well as the inferential statistics method of data analysis were used. However, one strong outcome of this study is that the poor state of credit facilities to small scale farmers in Nigeria has drastically affected farming operation, thus, reduction in agricultural output, leading to importation of Agricultural product. Inadequate support in terms of credit facilities from government and financial institution has been identified as also a major problem affecting farming operation particularly that of the small scale farmers in Nigeria. In conclusion, it was clearly revealed that Agricultural credit facilities are significant in the operation of small scale farmers irrespective of the fact that there is less Government support. We therefore recommend that government should re-introduce Agricultural credit scheme so that beneficiaries can use them to run their small scale business and also low interest rate should be charged. Agricultural credit facilities play a crucial role in the operation of small scale farming.*

Keywords; Agricultural Credits and Small Scale Farmers

INTRODUCTION

With an estimated 140 million inhabitants and a population growth rate of 2.5% annually, Nigeria is the most populated country in sub-Saharan Africa and the 10th most populated country in the World (National Population Commission [NPC], 2006). Approximately, 49 percent of the population engages in agriculture as their major occupation. The agricultural sector is the mainstay of the Nigerian economy, with over 70 percent of the active labour force are from the rural areas employed in agriculture and the sector is contributing over 23 percent to the GDP in 2006 (World Bank, 2007).

Agricultural credit plays a critical role in agricultural development (Duong & Izumida, 2002). Farm credit has for long been identified as a major input in the development of the agricultural sector in Nigeria. The decline in the contribution of the sector to the Nigeria

economy has been attributed to the lack of a formal national credit policy and paucity of credit institutions. The provision of credit or loanable fund (capital) is viewed as more than just another resource such as labour, land, equipment and raw materials (Rahji, 2010).

Agricultural practice requires money for the purchase of various factors of production including land. There are two main sources of agricultural financing; formal and informal sources. According to Nchouji (2007), the formal sources are organized and guided by law with effort on the part of the government, examples are Bank of Agriculture (BOA), commercial banks, supervised agricultural credit, cooperative societies and government agencies. Informal sources include friends, relatives, money leaders, saving societies and traditional groups. These sources are meant to facilitate and increase agricultural production. Though farmers may patronize these sources, but the implication involved is the provision of collaterals and other necessary requirement before obtaining those credit facilities. Oladebo (2003), reported that years of farming experience with credit use and level of education were the major factors that positively and significantly influenced the amount of loan obtained by farmers.

Nigeria is endowed with natural resources, large fertile farmland, wide range of crops and rivers amongst others. Despite its abundant natural resources, it is faced with a poor food situation. The poor food situation is traceable to the decline in agricultural sector.

Prior to the discovery of petroleum in Nigeria, agriculture used to be the highest foreign exchange resources earner and its contributions to the Gross Domestic Product (GDP) has been estimated to about 62.63% in 1960, 48.08% in 1970, 20.63% in 1980 so it kept declining till this present day.

Agriculture according to Longman Dictionary of Contemporary English (New Edition) is the science or practice of farming. It is the art or science of cultivating the ground, including the harvesting of crops and the rearing and management of livestock and in varying degrees the preparation and marketing of the resulting product.

Agriculture has a key role to play in the economic development of Nigeria. It is a leading or prominent sector in any meaningful economic development being carried out by any nation such as ours. Agriculture as its output tends to contribute significantly in the areas like employment opportunities, provision of food to the increasing population, contribution to GDP where the country is able to earn foreign exchange, also the provision of raw materials to our local industries particularly the agro-allied industries for further production.

Credit accessibility is important for improvement of quality and quantity of farm products, so that it can increase farmer's income and reduce rural migration. Credit constraints to farm households thus impose high cost on the society such as unemployment, poverty, and distortion of production and liquidation of assets. Governments in both developed and developing countries attempt to overcome these problems by subsidizing credit, setting up Agricultural Credit Guarantee Fund Schemes (e.g. ACGFS in Nigeria, 1977) and specialized Agricultural Credit Bank (e. g NACB, 1973 now BOA, 2010) and stimulating institutional innovations in the financial system (e.g. People's Bank, Community Bank, Rural Banking Schemes, etc) (Rahji, 2010).

The Nigerian agricultural sector is among the most heavily regulated sector of the Nigerian economy. The special interest of government in the agricultural sector is due to its relevance in the provision of raw materials for industries and most importantly the provision of

food for the teeming Nigerian population and also serving as a source of foreign exchange for the economy (Adofu, Abula & Audu, 2010).

Agricultural credit as a facility to small scale farmers is an important instrument for improving the welfare of the poor directly through consumption smoothing that reduces their vulnerability to short-term income. It also enhances productive capacity of the poor through financing investment in their human and physical capital. The demand for agricultural credit for productive or agricultural investments usually comes from the poor who are less risk-averse and it enables them to overcome liquidity constraints, making it possible to undertake investments that can boost production, employment and income. Financial intermediaries have not been able to accommodate small-scale farmers because it is risky and a different task associated with high transaction costs. It is undisputable that small-scale farmers have always had a problem of access to credit facilities. To improve the access, improvements need to be made in the provision of financial services. In order to improve financial services, leaders need to consider the preferences and socio-economic condition of clients.

The poor performance of Nigerian agriculture and its attendant effect prompted government to seek and reverse the situation which was demonstrated in the policies and practice such as Nigerian Agricultural Cooperative and Rural Development Banks (NACRDB), Agricultural Credit and Guarantee Scheme Fund (ACGSF), The Commercial Agricultural Credit Scheme (CACS), The Nigerian Incentives-Based Risk Sharing System for Agricultural Lending (NIRSAL), Operation Feed the Nation (OFN), Green Revolution Programme (GRP), Accelerated Crops Production Programme Scheme (ACPS) and international organization like the World Bank. This includes some of the steps taken by the Federal Government of Nigeria to assist farmers to boost agricultural production in the country.

According to Anyanwu et al (1997:14) the agricultural sector has been recognized for a long time as an important sector to Nigerian economy and development is one of the crucial requirements for the overall economic growth.

In spite of the remarkable contribution of the agricultural sector to the GDP, findings over the years here shown that government subsidies directed at the agricultural sector have drastically reduced and as such the dwindling fall in agricultural productivities and by extension agricultural development. In Nigeria, as in most developing countries, "lack of credit facilities has been regarded as the major constraint farmers face when they try to improve economic activities and/or living conditions" (Britain, 1986: Biswanger et al, 1993: Agbor, 2004). Even when available, access to credit facilities is difficult to access by farmers in the rural areas despite the fact that it is an essential input in production (FARM, 2006). This could be adduced to lack of information and collateral securities among farmers.

LITERATURE REVIEW

Agriculture is a major contributor to Nigeria's GDP and small-scale farmers play a dominant role in this contribution (Rahji and Fakayode 2009), but their productivity and growth are hindered by limited access to agricultural credit facilities (Odoemenem and Obinne 2010). Credit institutions can be categorized into three:

- a. Formal, such as commercial banks, microfinance banks, the Nigeria Agricultural and Co-operative Rural Development Bank (NACRDB), and state government-owned credit institution.
- b. Semi-formal, such as non-governmental organizations-micro-finance institutions (NGO-MFIs) and co-operative societies, and
- c. Informal, such as money lenders, and rotating savings and credit associations

The role of agricultural credit facilities to small scale farmers has been identified as a major ingredient to agricultural development in the present economics. The small scale farmers are often considered as having greater opportunities of increasing Production and farm income by adopting new technology, this potential can only be realized if farmers can gain access to funds to finance the additional inputs that are invariably required. All too frequently, small scale farmers have insufficient savings to finance the investment in additional inputs. Under the circumstance the obvious solution for farmers is to borrow, unfortunately, the desire is not available. This is largely because institution lenders are reluctant to advance credit to the Agricultural sector. This can be attributed to the dependence of agricultural production on Nature and the high co-variance of risk from adverse weather and incidence of disease in any given location.

Conceptual Framework

Agricultural productivity in Nigeria was defined by Olayide (1991) as the rate of index of value of agricultural produce to the value of input employed in production. The essential inputs are land, labour, capital, water and management of all inputs listed above; land holds a unique place in the developing countries where the economics are still in the infant stages. Capital formation is always low since savings is a function of income. He mentioned further that production technique is characterized by small holder's using manual technology, and inconsistency in the government agricultural policies account for poor production in Nigeria.

Agricultural credit facilities for many developing countries of the world, Nigeria inclusive is not enough and the few facilities are not made available to farmers. This has led to the decline in the Nigerian Economy. The decline has for a long time been blamed on unavailability to access credit by small scale farmers in rural areas. If a small scale farmer is to grow to become a medium and eventually a large scale farmer, he must have among other incentives an assured supply of credit either in medium or long-term.

Overview of Credit Scheme to Farmers in Nigeria

Agricultural development is a process that involves adoption by farmers (particularly small farmers) of new and better practices (Garba, 1987; Orebiyi, 1999). This is due to the fact that most of the new practices have to be purchased but few farmers have the financial resources to finance it.

Before the introduction of credit schemes to farmers in Nigeria, commercial banks were often skeptical to give credit to farmers. This is because small scale farmers lack acceptable collateral security whereas bankers are interested in collateral securities which are highly liquid and which possess "money value" certainty. It was in recognition of this fact that the federal government at various periods put in place credit policies and established credit institutions and schemes that could facilitate the flow of agricultural credit to farmers (Adegeye and Dittoh,

1985). Among them are Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB).

NACRDB formally known as- The Nigerian agricultural and cooperative bank emerged in the year 2000 as a result of a merger between agricultural and cooperative bank (NACB), people's bank of Nigeria and family economics advancement program (FEAP).

Nigerian agricultural and cooperative bank was established as a specialized financial institution in the year 1972 and it started operations fully in 1973 of providing loans to farmers and entrepreneurs in the agro allied industry. Business enterprises involved in the processing, storage and marketing of agricultural product, tractor hiring services, agricultural chemical fertilizers and pesticides stood the chance of benefiting from the scheme. The bank was engaged in financing all forms of agricultural projects at highly subsidized rates. Anyanwu Et al (1977).

Peoples bank of Nigeria, a micro credit institution was established to provide credit for petty traders, vulcanizers, carpenters, and other self-employed artisans or craft persons who usually patronize non-institutional credit facilities. Family Economic Advancement Program (FEAP) was set up with the aim of reducing poverty by loans to cooperative society in the country to enable them establish small and micro industrial enterprises.

The role of Nigerian agricultural cooperative and rural development bank therefore comprises of those roles and duties of the Nigeria agricultural cooperative bank (NACB), people's bank of Nigeria and family economic advancement program (FEAP) and are outlined in reference to the need for the merger. The need for the merger stemmed from:

1. The need for more finance to meet adequately the demand of customers.
2. Encourage customers by alleviating the procedures for loan application approval and procurement.
3. Reduce the stress of time wasting and bureaucracy.
4. Enable it pull resources and function together to aim at a specified role.
5. Reduce the dependence of federal government and central bank for the supply of share capital thus making it profitable.

NACRDB operates retail outlets in six zonal offices, sixty eight branch offices and over two hundred representative offices in all the state of the federation and the federal capital territory. The Agricultural Credit Guarantee Scheme Fund (ACGSF) The agricultural credit guarantee scheme fund was established in 1977, but began proper operation on 3rd of April, 1978 under the management of CBN, while a board of directors was constituted for policy making. It was amended on 13th June, 1988. The scheme was designed to encourage banks to increase lending to the agricultural sector by providing some form of guarantee against risk inherent in agricultural lending.

In the case of default, the lending banks are expected to exhaust all legal means of loan recovery, including realization of any security pledged for loan, before the ACGSF pays 75% of guaranteed loans in default. Also the scheme was designed to boost Agricultural production and income of small-scale farmers, improve farmer's welfare and standard of living and primarily to create access to bank credit to farmers.

The decree provided for a fund of ₦100 million subscribed to by the Federal Ministry (60%) and Central Bank of Nigeria (40%) respectively. As at December 1982, ₦85.5 million was paid up as maximum liability of the fund 75% subject to ₦50,000 and ₦1 million for a loan to

individual and co-operative society respectively. The loan under the decree includes advances, overdraft and facilities to the agricultural sector and should be taken as such whenever it uses those guidelines and other circulars. The interest rate chargeable was fixed from time to time as prescribed by the commissioner for finance.

The fund was enhanced to ₦1 billion on the 8th of December, 1999 and later to the present level of ₦4 billion as at early 2006 (CBN, 2007). All these are aimed at solving the problem of inadequate funding of farm operate by banks and to cushion these financial institutions against the effects of high risks associated with investments in farm enterprises as well as to raise the productivity and earnings from farm investments so that the incidence of loan repayment default among the farmers will be minimized (CBN, 1977; Ogwuma, 1985; Eyo, 1985; Oguoma, 2002).

The Function of the Scheme (ACGSF) Various studies have shown that credit plays an important role in enhancing agricultural productivity of the farmer (Okorji and Majeha, 1993; Nneze, 1991; Mafimisebi Et al, 2008). The general purpose of the Nigerian Agricultural Credit Guarantee Scheme fund is to encourage banks to lend to those engaged in agricultural production and agro-processing activities. Thus, the specific objectives of the Scheme is the stimulation of total agricultural production for both domestic consumption and export, and the encouragement of financial Institutions to participate in increasing the productive capacity of agriculture through a capital lending programme. The scheme is expected to provide guarantee on loans granted by financial institutions to farmers for agricultural production and agro-allied processing.

Importance of Agricultural Credit Facilities in Agriculture

The food and agricultural organization points out that Agricultural credit is not simply a banking business. There is more to it than making loans available to farmers especially when the amount required by each borrower may be small and yet in aggregate represents considerable risks. Lord H (1966) credit alone is of no avail to small farmers, if it is not accompanied by complementary services, which will help the borrowers to use the money productively and hence avoid unnecessary debt.

Oluwansanmi and Alao share the view that credit can serve as a catalyst in carrying out various agricultural projects. Akinwolemi stressed the importance of credit facilities to farmers, arguing that agricultural credit to farmers is a necessity for carrying out new techniques of production and agricultural intensification.

On the other hand there are views that suggest that the importance of credit is not the solution to improve agriculture production. Agricultural credit generally include all loans and advance to borrowers to finance and service production activities relating to agricultural, fisheries, animal rearing etc, and also for the processing, marketing, storage and the distribution of production resulting from these activities.

The roles of credit are necessary for the development of agricultural in terms of:

1. Boosting technical change in peasant agriculture.
2. Helps prospective farmers secure farm machinery and equipment.
3. Aids in production intensification.
4. Strengthening the farmers' position in the disposal of their farm produce rather than having the timing be determined by urgent need for cash.

5. Helping farmers particularly small scale farmers produce at subsistence level and surpluses are small thus savings for future investments are nearly impossible.

Constraints of the Nigerian Agricultural Sector

Aside credit facilities to the agricultural sectors there are other factors that limit agricultural production in Nigeria include:-

- **Government:** The depreciating value of the Naira and increase interest rate has caused agricultural lending problems and general rise in productions cost, the erosion of farmer's income through inflation cripples the economy. Also, policies like export promotion policy create hardship for the people due to the liberalization.
- **Topography:** This factor is linked with climate to adversely affect agriculture and is defined as the natural features of an area, which includes landforms, landforms like low lands, plain etc. influence rainfall and sun and its effect on vegetable and livestock.
- **Climate:** Nigeria has humid tropical and dry tropical zones. Climate fluctuations like rainfall and sun in excess affects the land used for food production and the growth of animal's etc.
- **Social Factors:** This includes conservation of the farmers, which is their unwillingness to change their old farming habits and try new ones.

Theoretical Framework

There are many problems militating against the development of agriculture in Nigeria. The most serious of these problems is the inadequacy of credit facilities. This has caused a lot of setback to development of this sector of Nigerian economy. Several banks have been encouraged by federal government to give out loans to the needy farmers to boost agricultural production in the country.

Poor agricultural production or productivity in the country has led to starvation, poverty, unemployment, poor economic growth, over dependence on other countries and many more.

According to Uchegwu (1995:10), "in trying to solve this problem and encourage bank to meet the prescribed credit target, the federal government established by decree no. 20 of 1977, the agricultural credit guarantee scheme fund (ACGSF) managed by the central bank of Nigeria". This scheme guarantees the repayment of loans granted to agricultural investor. But it has not significantly reduced the increased pressure of high demand for agricultural credit. The continued inability of farmers to meet the collateral requirement of the deposit money banks further led to central bank of Nigeria's small-scale farmers lending guideline introduced at the beginning of 1987.

The dilemma of the under development of the agricultural sector is clearly seen in observing the malnutrition suffered physically by the populace and that experienced in the dwindling economy. The need for credit (cash and kind) for agricultural development is something that cannot be overlooked. This explains why accessibility of credit facilities has been one of the most popular types of state intervention in the agricultural sector. Ideas about rural credit in developing countries are predicted on various theories about rural household behaviors and the working of market in economics.

The theoretical framework for this study is based on the theories of demand and supply, interest rate and credit rationing. Various authors have put forward theories as regards the behaviour of interest rates in a deregulated economy. The government is regarded as monetary authority and she uses two approaches, direct and indirect approaches as transmission mechanism in the economy. The direct approach is fitted for a financial under-developed economy such as Nigeria. It involves the use of direct instruments such as directly regulating interest rates, credit ceilings, special directives, special deposits and moral suasion. The indirect or the market-based approach relies on the relationship between the monetary base and the ability of central monetary authorities to induce appropriate changes in the money base (Kure, 1997). Three channels are identified in literature as the transmission mechanism through which economic activities are influenced. It includes liquidity i.e. interest rate, credit and exchange rate (Uchendu, 1996).

The classical theory of interest rate is associated with David Ricardo Marshall, Pigou, Cassels, Walras, Tausing and Knight. According to the classical theory, rate of interest is determined by the demand and supply of capital or to be more precise by the intersection of the investment demand schedule and the supply/saving schedule. Interest rate is determined by the equality of saving and investment under conditions of perfect competition. According to this theory, there is an inverse relationship between the rate of interest and the demand for capital. As the rate of interest rises investment falls and vice versa. While the relationship between the interest rate and saving is positive. This explains two of the variables that determines industrial performance saving and interest rate on loanable fund.

The neoclassical theory of interest rate or loanable fund theory of interest was first propounded by the Swedish economist Wicksell and later developed and supported by several leading American and Swedish economist including Professor Robertson, Bertil Ohlin, Lindhal and Myrdal. However, the theory in its present form is associated with Professor Robertson. According to this theory the rate of interest is determined by the rate of demand and supply of loanable funds, (Ohlin, 1991). In this market there are those who supply loanable funds and those who borrow them. The rate of interest would be such as shall bring about equilibrium between the demand and supply of loanable funds.

The loanable fund theory is a distinct improvement on the old classical theory of interest because the term "supply of loanable funds" is wider in scope and includes not only savings out of current income but also bank credit, dishoarding and disinvestment. Actually, bank loans represent important funds which are available on payment of interest by the borrower, (Mundell, 1961). Likewise, loaned wealth can also become available for purpose of investment. Disinvested wealth is another source of funds available to the borrowers. Since loanable fund theory is more comprehensive it is often referred to as well as monetary theory of interest. This theory is just the two general approaches that have been followed in developing the modern monetary theory of the rate of interest.

According to the theory of credit rationing, deficit spending units lack access to financial services due to credit risks associated with information asymmetry, adverse selection and moral hazard. Based on this theory, credit institutions place available credit facilities through a high interest rate by adding risk premium component on the interest rate to cover the risk element but in a more competitive business environment, credit institutions cannot reduce risk by raising interest, because that will lead to more risk taking by borrowers (moral hazard)

(Guiso, Jappelli & Terlizzese, 1996). According to Zeller (1994), a market condition is the function of credit rationing which has an effect on the demand function of borrowers. Stiglitz and Weiss (1981) concluded in their study that lenders may choose not to use collateral requirements as rationing device because increase in interest rate potentially leads to lenders expected return on loan.

Group lending guarantees joint liability and has substituted collateral requirement for accessing micro-credit (Bhatt, 1997). In this view, the theory of credit rationing by Stiglitz and Weiss (1981) is criticized in post Keynesian theories of credit rationing for ignoring uncertainty, time and expectation (Wolfson, 1996). The post Keynesian theory of credit rationing suggests that many traditional rural community lenders have great information about relevant characteristics of borrowers such as farm size, quality of holdings, crop patterns and risk attitudes due to proximity between lenders and borrowers.

According to Smith and Thompson (1991), credit may do a private good in the sense that, it is excludable and sub tractable, but these attributes are not necessarily sufficient to make it attractive to private suppliers. This is because; the credit market combines the problems of imperfect information and risk.

EMPIRICAL REVIEW

Financing Agriculture is one of the major ways of improving agricultural Production that is necessary for growth and development of the country. This is possible if there is access to credit facilities which can be harnessed through savings and by extension capital which when formed can then be invested in Agriculture.

Formation of capital on Agriculture in Nigeria has been available in one form or the other for many centuries, particularly from the money lenders who are still the chief source of credit to small scale farmers. The reason behind this is that agricultural development is now looked at as one of the major keys to economic development, in the area of improving the welfare of rural farmers, improving their standard of living which has been neglected in terms of effective and efficient system of funding, financing and providing adequate basic infrastructure such as roads, pipe-borne water, only in the farmers interest and benefits. Argument in favour of agricultural finances is that it tends to improve the country's economic development. Gilbert (1994) contended that at a certain stage in agricultural development, agricultural credit becomes a strong force for future improvement in agricultural production. This can be seen when a man with energy, initiative lacks the resources for more and efficient production.

Credit plays a major role in the transformation of traditional agriculture into a modern large-scale commercial type which enhances agricultural development. It is necessary for purchasing inputs needed for effective adoption of modern agricultural techniques. Many economists have identified the lack of credit facilities major constraint to agricultural development (Abayomi and Salami, 2008).

Oluwasanmi and Alao (2011) clearly stated the need for credit or the purchase of farm inputs such as improved seed varieties breeds of livestock, fertilizers, insecticides, pesticides, modern implement, among others. They also stressed the suitability of terms of credit as a necessary condition for fostering agricultural development.

Oyatoye (2013) averred that credit is a major factor necessary for technological transfer in traditional agriculture. According to her, given the availability of inputs needed to improve technology, how rapidly farmers would adopt improved technology depend on additional factors. She further identified efficient source of production credit as one of these additional factors. Oni (2010) opined that the peasant farmers do not possess enough resources to purchase these farm investments. He further stressed that it is necessary to supplement the farmer's personal earnings to facilitate agricultural transformation. Hence the need for credit is universal. While it is needed by the less developed countries to increase productivity per farm worker and per hectare, the developed nations also need it to foster development (Jekayinfa, 2009; Abalu et al, 2009).

Cole (2008) integrated theories of political budget cycles with theories of tactical electoral redistribution to test for political capture in a novel way. Studying banks in India, he found that government-owned bank lending tracks the electoral cycle, with agricultural credit increasing by 5-10 percentage points in an election year. There is significant cross-sectional targeting, with large increases in districts in which the election is particularly close. This targeting does not occur in non-election years, or in private bank lending. He showed that capture is costly: elections affect loan repayment, and election year credit booms do not measurably affect agricultural output.

Gonzalez-Vega and Graham (1995) examined the potential role of state-owned agricultural development banks as a source of micro-financial services. It first discusses elements of a new consensus on microfinance, including the importance of formal and informal finance for the poor, the consequences of credit rationing, and progress in micro-financial technologies. While key lessons are identified from past experiences of government intervention in financial markets and from new experiments in microfinance, no dominant organizational model emerges among examples of best practice. They provided a conceptual framework to interpret the failure of state-owned agricultural development banks, their lack of success in reaching the poor, and their lack of viability. Key defining dimensions deserve special attention:

- a. Their specialization in agricultural credit, with the accompanying instances of market failure and high monitoring costs as well as the negative impact of policies that penalize agriculture;
- b. Their development orientation and lack of profit motive;
- c. Their possession of a bank charter which authorizes deposit mobilization;
- d. State ownership, with the resulting inadequate level of internal control and incentive problems.

Swinnen and Gow (1999) assessed the problems of financing Central and Eastern European agriculture during the present transitional period and the role of government in this process. Initially the paper looks at why credit markets work imperfectly, even in well-developed market economies, focusing on problems related to asymmetric information, adverse selection, moral hazard, credit rationing, optimal debt instrument choice and initial wealth. It shows why these and related problems may cause transaction costs to be so high that credit rationing and high interest rates are rational and efficient responses by lenders to the imperfect information problems of the agricultural sector. A series of specific, transition-related issues are then discussed which have worsened these problems within the Central and Eastern European agricultural sector.

The potential roles of governments in solving these issues and actual observed interventions by Central and Eastern Europe governments through credit subsidies, loan guarantees and specialized agricultural lending institutions are analyzed. Finally, they discussed how financial market innovations have solved some of the credit market problems and derived the implications for government policies.

Rahji and Adeoti (2010-11) identified the determinants influencing Commercial banks decision to ration agricultural credit in South-Western, Nigeria. Data for the analysis were sourced from the agricultural credit transactions of the banks. Evidence, from the estimated logit model indicated that farm size of the farmers; previous year's income, enterprises type, household net worth and level of household agricultural commercialization are significant but negative factors influencing the bank's decision to ration credit. Higher values of these factors decrease the probability that the borrowers will be credited rationed. The number of dependents in the household has a positive significant impact on the probability of being credit constrained by the banks.

Hence higher values of this variable increase the likelihood of being credit rationed. The results also indicate that the larger the magnitude of the coefficient estimated, the bigger is its impacts on the odds of being credit-ration per unit change in its variable. On the other hand, the larger the parameter, the lower the percentage changes in the odds per unit change in the variable. Based on the results obtained farmland redistribution, farm income improvement, gender specific and credit allocation policies to the crop sub-sector were recommended.

Anjourn (2014) analysed the impact of credit by Agricultural bank of Pakistan. He assessed that Agricultural bank of Pakistan had not met the credit requirements of agriculture sector in Peshawar Tehsil. He found that 72% borrowers obtained credit as package of mix inputs. However the recovery position was found satisfactory. The author suggested an effective supervised credit system in order to meet the requirements of agriculture in the project area.

Khan (2013) found several measures to improve the flow of formal credit to agricultural sector, the situation was still unfavourable. The study was specifically on formal credit institutions to agricultural sector, without looking at other credit institutions. The study reported that various problems are associated with formal credit system and recommended large number of measures for system improvement but still the situation is out of the control.

Evaluation of Literature Reviewed

Most of the studies did not focus on the analyzing credit facilities to small scale farmers by looking at or considering the several measures to improve the formal, semi-formal and informal credit institutions to farmers (small scale farmers). Most of the researches were based on secondary data method of analysis. Hence, this study deems it fit to carry out the research on The Analysis of credit facility to Small scale farmers by using primary data, which will be analyzed using Simple design descriptive statistics as well as Inferential statistics, specifically in Suleja local Government area of Niger State.

METHODOLOGY

The research design is the plan that outlines the procedure adopted and engaged in the research study. It discloses what tool the researcher used in achieving stated objectives process of data collection, and analysis of data. It provides specifically, the method to be used in

gathering and analyzing data. The research design indicates how the research objectives were accomplished and how challenges encountered in the research was tackled.

Small scale farmers most especially those in the rural areas have limited education, as a result simple and precise questions which can easily be comprehended were asked to determine the impact of agricultural credit facilities on their farming operation.

The research design used in this study is descriptive survey design using structural interview. Descriptive survey design is one in which a group of people or items is studied by collecting and analyzing data from only few people considered to be the representatives of the entire population.

Sources of Data

The source of data is through the administration of questionnaire in the selected district of Suleja LGA of Niger state, also through face to face conversation, oral interview for some respondent who could not read and write.

Method of Data Collection

In the course of this study, the researcher randomly administered the questionnaire to avoid being biased. Questionnaire serves as an instrument for data collection as well as interview with the farmers. The questionnaires are made of structured and unstructured questions. The structured questions are based on 'YES', 'NO' or 'Not sure' opinions, the unstructured questions are based on open ended questions that are answered based on the respondents view.

The questionnaire are designed and administered to 120 farmers at random from 5 selected districts which are: Kwamba, Kwankashe, Suleja, Apia, Maje, each of these districts had 24 questionnaires administered to the farmers which are done at random to avoid been biased. The questionnaires were retrieved after two weeks of administration by the researcher.

Method of Data Analysis

This part of the study is aimed at enlightening the perspective used in the research on how the data was collected and classified into various responses, analyzed and finally interpreted. For the sake of simplicity only quantitative method of data analysis are employed by the researcher. In analyzing the data, the study used the simple design descriptive statistics as well as the inferential statistics. The descriptive statistics considered the use of tables, frequencies and percentage while the inferential statistics on the other hand considered the use of chi-square (X^2) test of independence and homogeneity to test the hypothesis.

The simple percentage formula is:

$$\frac{\text{Frequency of option}}{\text{Percentage of question}} \times \frac{100}{1}$$

The chi-square formula is given as

$$X^2 = \sum (O-E)^2/E$$

Where: \sum = summation of total values.

O = observed frequency.

E = Expected frequency.

$$\text{To obtain E} = \frac{\text{Row total} \times \text{Column total}}{\text{Ground total (N)}}$$

Computation of Chi-Square/ Decision Rule

The decision rule guiding this study is based on the conventional setting that if the Chi-square computed or calculated value is greater than Chi-square tabulated or table value that is ($X^2_c > X^2_t$), reject the null hypothesis which is the hypothesis of testing (H_0) at 5% level of significances.

On the other hand, if the Chi-square tabulated or table value is greater than Chi-square computed or calculated value that is ($X^2_t > X^2_c$), accept the null hypothesis (H_0) at 5% level of significances

DATA PRESENTATION AND ANALYSIS

Table 1: Distribution of Respondents by Sex

Sex	Frequency	Percentage
Male	69	57.5
Female	51	42.2
Total	120	100

Source: field survey 2019

Table 1 above showed that majority (57.5%) of the respondents were males while 42.5% of them were females. The implication is that men dominate the production of crops and animals in the area. This is an added advantage to the area, since men have more opportunity to obtain credit than females' counterparts due to issue of collateral required by most of the financial institutions.

Table 2: Distribution of Respondents by Age

Age	Frequency	Percentage
≤ 20 years	6	5
21-30 years	23	19.2
31-40 years	46	38.3
41-50 years	40	33.3
50 and above	5	4.2
Total	120	100

Source: field survey 2019

Table 2 showed that (38.3%) of the farmers were between the ages of 31 and 40 years. About 4.2% were 51 years and above, while those within 21-30 years and 41-50 years constituted 19.2% and 33.3% of the farmers respectively. This means that majority of the farmers were middle aged. These categories of farmers could be considered to be the economically active population, as the age of the farmers dictates and affects the amount of credit he or she will source at a particular interest rate. This finding agrees with Olarinde, Ajao & Ajetombi, (2005) who found that old people tend to be risk averse than young people.

Table 3: Distribution of Respondents by Marital Status

Marital status	Frequency	Percentage
Married	70	58.3
Single	19	15.8

Widowed	20	16.7
Divorced	11	9.2
Total	120	100

Source field survey 2019

Table 3. Showed that most (58.3%) of the farmers in the area were married, 15.83% were single and 16.7% were widowed while only 9.2% of them were divorced. This shows that the contribution of the farmers in the study area towards agricultural development should be favourable as a reasonable number of them were married and were expected to be able to attract support from their children. This result was supported by the findings of Ojo and Jibowo (2008) who reported that married people are responsible individuals whose views are highly respected within rural communities in Africa.

Table 4: Distribution of Respondents by Religion

Religious status	Frequency	Percentage
Christianity	80	66.7
Islam	30	25
Others	10	8.3
Total	120	100

Source field survey 2019

Table 4 above showed that 66.7% of the respondents' samples were Christians, 25% were Muslims while 8.3% of them indicated others. This implies that majority of the respondents were Christians.

Table 5: Distribution of Respondent by Educational Qualification

Educational level	Frequency	Percentage
No formal	50	41.2
Primary education	41	34.2
Secondary education	20	16.7
Tertiary education	09	7.5
Total	120	100

Source field survey 2019

Table 5 showed the Farmer's educational attainments, which revealed that (41.2%) of the farmers had no formal education; while about 34.2% of them attended primary education. Also, 16.7% attended secondary education while only 7.5% of them attended tertiary institutions. The above result evidently indicated that most of the respondents lack formal education, by implication it would be difficult for them to obtain credit from financial institutions as this requires formalities such as filling forms as well as being rational enough to select the financial institution that offers the best interest rate at a given time.

Presentation of Selected Variable Based On Descriptive Statistics

Table 6 Respondent Cost on Farm Operation per Year

Cost categories	No of responses (frequency)	Percentage
≤ 50,000	15	12.5
51,000-100,000	50	41.7
101,000-150,000	28	23.3
151,000-200,000	17	14.2
201,000-250,000	8	6.7
251,000 and above	2	1.7
Total	120	100

Source: field survey 2019

Table 6 shows the distribution cost on farm operation per year. 41.7% of the respondents cost on farm operation per year is between ₦51,000-₦100,000 and 23.3% cost between ₦101,000-₦150,000 and 1.7% cost between ₦251,000 and above

Table 7: Respondent Income Received Externally To Finance Farm Operation Yearly

Received income in ₦	No of responses	Percentage
0	69	57.5
1,000-10,000	20	16.7
10,000-20,000	10	8.3
20,000-30,000	08	6.7
30,000-40,000	05	4.2
40,000-50,000	08	6.7
Total	120	100

Source: field survey 2019

Table 7 shows that 57.5% of the respondents do not receive any external income, 16.7% receive income between 1,000-10,000 naira while 6.7% of the respondents receive income between 40,000 and 50,000 naira.

Table 8: Respondent Duration To Access Credit Facilities Needed To Finance Farm Operation.

Duration in years categories	No of responses	Percentage
Less than one year	4	3.3
1-2	19	15.8
3-4	78	65
5-6	13	10.8
7 and above	6	5
Total	120	100

Source: Field survey 2019

Table 8 describes that 3.3% of the respondent were able to access credit within a year, 15.8% falls between 1-2 years while 65% falls between 3-4 years. 5% indicated 7 and above years.

Table 9: Respondent Assessment of the State Of Credit Facilities of Small Scale Farmers

Assessment categories	No of respondents	Percentage
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Very good	5	4.2
Good	12	10
Fair	23	19.2
Poor	80	66.7
Total	120	100

Source: field survey 2019

Table 9 showed that 4.2% responded that the access to credit is very good, 10% indicates good, while 66.7% which the highest response signified poor.

Table 10 Respondent Percentage of Interest Rate Favourable To Them

Interest rate categories	No of respondents	Percentage
Less than 10%	94	78.3
11%-15%	14	11.7
16%-20%	8	6.7
21% and above	4	3.3
Total	120	100

Source: Field survey 2019

Table 10 shows that 78.3% respondents sample indicated less than 10% interest rate as favourable to them, 11.7% indicated 11%-15% while 3.3% indicated 21% and above.

Testing of Hypothesis

The hypothesis raised in the chapter one of this study was tested through the use of Chi-square statistical method of analysis. The Hypothesis shall be tested based on the following questions in the questionnaire: Q11, Q14, Q20, Q26, Q28, and Q30.

The hypothesis are tested at 5% or 0.05 significant level and the formula for Chi-square is as follows

$$\chi^2 = \sum (O-E)^2/E$$

Where:

χ^2 = chi-square calculated

O = observed frequency

E= expected frequency

Recall: Hypothesis

H₀: Credit facilities are not significant in the operation of small scale farming in Nigeria.

H₁: Credit facilities are significant in the operation of small scale farming in Nigeria.

Research question: is there any impact of credit facilities to small scale farmers.

Table 11 Response on selected research questions

Response	Q11	Q14	Q20	Q26	Q28	Q30	Total
Yes	90	30	40	95	28	98	381
No	30	90	80	25	92	22	339

Total 120 120 120 120 120 120 720

Source: Researcher's computation 2019

The analysis of the table above is presented on a tabular form below. But, the expected frequencies are;

$$\text{Expected (Yes)} = \frac{\sum c \times \sum r}{GT}$$

Where; $\sum c$ = Sum of Column

$\sum r$ = Sum of Row

 GT = Grand Total

Therefore:

$$\text{Expected}_1 (\text{Yes}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5$$

$$\text{Expected}_2 (\text{No}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5$$

$$\text{Expected}_3 (\text{Yes}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5$$

$$\text{Expected}_4 (\text{No}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5$$

$$\text{Expected}_5 (\text{Yes}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5 = 64$$

$$\text{Expected}_6 (\text{No}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5 = 57$$

$$\text{Expected}_7 (\text{Yes}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5 = 64$$

$$\text{Expected}_8 (\text{No}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5 = 57$$

$$\text{Expected}_9 (\text{Yes}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5 = 64$$

$$\text{Expected}_{10} (\text{No}) = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5 = 57$$

$$\text{Expected (Yes)}_{11} = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 381}{720} = \frac{45,720}{720} = 63.5 = 64$$

$$\text{Expected (No)}_{12} = \frac{\sum c \times \sum r}{GT} = \frac{120 \times 339}{720} = \frac{40,680}{720} = 56.5 = 57$$

Table 12 Chi-Square Table

O	E	o-e	(o-e) ²	(o-e) ² /e
90	63.5	26.5	702.25	11.06
30	56.5	-26.5	702.25	12.43
30	63.5	-33.5	1122.25	17.67
90	56.5	33.5	1122.25	19.86
40	63.5	-23.5	552.25	8.70
80	56.5	23.5	552.25	9.77
95	63.5	31.5	992.25	15.63
25	56.5	-31.15	992.25	17.56
28	63.5	-35.5	1260.25	19.85
92	56.5	35.5	1260.25	22.31
98	63.5	34.5	1190.25	18.74
22	56.5	-34.5	1190.25	21.07
Total of Chi-square calculated				194.65

Source: Researcher's computation 2019

$$\text{Chi-square Computed} = \frac{\sum(O-e)^2}{e}$$

$$\text{Chi-square computed} = 194.65$$

$$\text{Degree of freedom (Df)} = (C-1) (r-1)$$

$$(Df) = (6-1) (2-1)$$

$$Df = 5$$

Decision Rule

Significance level = 0.05 or 5%

Checking D.f (5) under significant level (0.05 or 5%), the table value (X^2 tab) = 11.1. since X^2 Cal 194.65 > X^2 Tab 11.1, we reject the Null Hypothesis (H_0), this simply means that we accepting the Alternative Hypothesis at 0.05 level of significance that Agricultural credit facilities has a significant impact on the operation of small scale farmers in Nigeria.

Summary

This study analyzed the impact of Agricultural credit facility to small scale farmers in Nigeria using Suleja Local Government Area of Niger State as a major area of study. The study shows explicitly how Agricultural credit facilities are crucial in the operation of small scale farmers. In addition to financial operation, incentive award to small scale farmers by Deposit Money Banks or agricultural institutes as well as Non- financial institutions acting within the confines of stipulated authority, the government in its own capacity too has succeeded in introducing agricultural schemes to boost agricultural productivity and assist farmers. Agricultural Programmes such as: NACRDB, ACGSF, NIRSAL, CACS, GRP. etc .

Also, this study revealed the credence of credit facilities as essential in the operation of small scale farmers in conformity with well researched journals, articles and texts. Study has shown that most of these agricultural schemes have not been poorly articulated and managed, leading to further decline in farming operation of farmers.

Conclusion

Agricultural credit facilities play a crucial role in the operation of small scale farmers; this ensures that the derived output will sustains the growth and development of the economy. The agricultural development policies will therefore be more ensured, if the investment on research and human development are given a proper attention in form of improved educational standard of the people to be able to design an appropriate research and in return formulate a sustainable policy programme.

Increase in farming operations particularly that of small scale farmers is a related venture of the government, the various financial institutions, private enterprise and group of individuals.

Recommendations

Therefore, from the findings of this study, the following recommendations are proposed to improve the operational standard of small scale farming in Nigeria:

1. Small scale farmers need to have feasible and accessible Agricultural credit facilities.

This will help them out of capital inadequacy that is militating against their farming

operation. To make credit more available to farmers, the monetary and banking policies formulated by the Central Bank of Nigeria must be suitable for agricultural development. The agricultural credit fund of the Bank should be more operational and banks should be encouraged to drop the perception of agricultural credit as a highly risky venture.

2. Government and Private individuals need to work together in order to improve the quality of labour of small scale farmers by channeling resources to Research and Development (R & D) as it is done in many advanced countries like China, Israel, and America where a farmer can feed about 108 people. There is need for further research into the determinants of access to or exclusion from financial services in Nigeria, as well as the efficiency of policy instrument such as Agricultural Credit Support Scheme (ACSS), Commercial Agricultural Credit Scheme (CACs) and the National Agricultural Research Project (NARP) in improving farmers' access to credit.
3. Assessing the potential ability of traditional institutions to provide Agricultural credit in the absence of collateral could help improve access to credit by small scale farmers, this is because an interview with the ACGs fund desk of the SME unit of CBN suggested that small-scale farmers low access to credit institutions is due to the requirement for collateral and the perceived high risk and uncertainty of agricultural production.
4. Supporting facilitation of the transfer of credit from formal institutions through MFIs to small-scale farmers could help improve access and repayment rates. Developing awareness of agricultural insurance institutions to carry out their mandates will lower the risk fixed by financial institutions in lending to small-size farmers.
5. Subsidies and subventions are highly needed by the local farmers because of persistent rise in the local farm produce price due to frequent increase in the price of factor inputs like fertilizer, chemicals, plants and machinery are so expensive that the local farmers in unable to acquire them for effective operation.
6. Monetary policy which deals with increase in money supply (Expansionary Monetary policy) that has an inverse relationship with interest rate should be pursued. Lending rates and interest rates should be reduced because 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.

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