AN ANALYSIS OF THE IMPACT OF COMMERCIAL BANKS LOAN ON AGRICULTURAL OUTPUT. A CASE STUDY OF ZARIA LOCAL GOVERNMENT

BY

MUHAMMAD IBRAHIM

NOVEMBER, 2019

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, FACULTY OF MANAGEMENT AND SOCIAL SCIENCES, FEDERAL UNIVERSITY GUSAU, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN ECONOMICS (B.SC HONOUR, ECONOMICS)

NOVEMBER, 2019

DECLARATION

I hereby declare that this project titled "An analysis of the impact of commercial banks loan on agricultural output" has been written by me and it is a record of my research work. No part of this work has been presented in any previous application for another degree or diploma at any institution. All borrowed ideas have been fully acknowledged in the text and a list of references was provided.

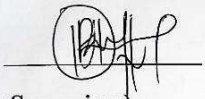
Muhammad Ibrahim

28/11/2019

Date

CERTIFICATION

This research titled **'An analysis of the impact of commercial banks loan on agricultural output'** by Muhammad Ibrahim meets the regulations governing the award of Bachelor of Science in Economics, of Federal University Gusau and is hereby approved for its contribution to knowledge and literary presentation.



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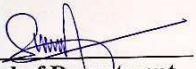

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External Examiner

Date

DEDICATION

This project is dedicated to Almighty Allah for seeing me through this work. I also dedicate it to my parents for their prayers and blessing and my entire family.

ACKNOWLEDGEMENT

I am most grateful to Almighty Allah for seeing me through this work. My profound gratitude goes to my supervisor, Dr. Hussaini Dambo, for his encouragement, patience, and guidance throughout the course of this work. I will indeed remain forever indebted to him for never giving up on me, and making time even when he was too busy, to guide me every step of the way and to all my lecturers who lectured me while I underwent my course of study.

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ABSTRACT

This research work examined An Analysis On The Impact Of Commercial Banks Loan On Agricultural Output using Macroeconomic variables (Commercial Banks Credit and Agricultural Output). The broad objective of the study is to investigate the extent to which commercial bank credit had supported agriculture and agricultural output in Nigeria. The specific objectives are: to analyze the openness of the commercial banks credit to farmers in Zaria to examine the relationship between farmers income and their level output. and to investigate the impact of interest rate on agricultural production in Zaria. The methodology adopted for the study was descriptive statistics(simple percentage), Tabulation method and chi-square. the result shows that firstly: commercial banks credit has a positive significant effect on agriculture and agricultural output. whereas; interest rate have a negative effect on agricultural output, although they are both significant. Despite their individual signs and magnitudes, these variables all conform to economic theories. Finally there is a general agreement that Nigeria agricultural sector is grossly underfunded.

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CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND TO THE STUDY

Agriculture is the most dominant sector and indeed a major source of livelihood for its citizens (Ijaiya & Abdulaheem, 2000). This is because apart from providing food for the teeming population of the economy, it is the only source of raw materials that other sectors look out for before their production could take place. Also, the rearing of animals provides agro-allied products for industrial growth and development, provision of employment opportunities, especially to the rural population; provision of market for the industrial sector; and provision of the needed linkage between the traditional sector and the modern sector; ensuring food security and thus serving as a catalyst for the growth of the entire economy. In line with these, Abayomi stated that the increasing production in agriculture is regarded as the most vital attendant for achieving industrialization.

It accounts for about 70 percent employment for the working population (Abubi, 2000). In Nigeria, it's also the mainstay of the economy before the 1970s. During this period, the structure of the Nigerian economy was largely agrarian in nature with agriculture, solid minerals and other metals forming the bedrock of the economy. Agricultural commodities were also the major export earner for the country. Nigeria was a key exporter of rubber, cotton, groundnut, palm oil, cocoa and palm kernel amounting into three per cent and four per cent in the 50s and 60s respectively of the annual rates of output growth for food and agricultural crops (Osuntogun, 1997). Agriculture also was the largest economic activity, contributing 50.2 per cent of the GDP in 1960. The

dominance of the crude oil as major export revenue causes the agricultural sector to be neglected and its contributions to the GDP dropped drastically. Several factors apart from the emergence of oil have been identified as causal in the decline factors.

Finance is one input required for agricultural development as it represents the power to purchase all other inputs and thus, it is not the single determinant of the level of development in Agriculture.

Several studies have been carried out on commercial banks and the finance of Agriculture in the country. According to Elegham (2012), the availability of credits to local farmers poses a serious problem. This is because of the rate in the increase of defaulting cases among small farmers. Tims (2004) also revealed that commercial banks in Nigeria were willing to grant credits to large-scale farmers but because it has noticed that small farmers default. Mostly in the act of loan repayment, they also have no provision for collateral security required by banks. It is in light of this that the government has always maintained that commercial banks should not neglect agricultural and allied activities since they are the chief agents of mobilization of savings.

Notwithstanding the unsuitability of commercial banks for financing Agriculture in general and small-scale farmers in particular, studies carried out by Akinwole (1985), Osuntogu (1983) and Ijere (1985) pointed out the need for raising the volume of loan resources available to the credit constitutions so as to permit increase in lending to the individual borrowers. However, Ogunfowora (1982) attributed most of the shortcomings and institutional credits in Nigeria to facts such as; ineffective supervision or monitoring, insufficient funds, political interference, cumbersome and

time consuming loan processing and gearing absence of financial projections.

The importance of project supervision or monitoring of facilities is to ensure that all conditions attached to the approval of credits facilities are complied with. Credit Supervision is also aimed at identifying emergent problems before they got out of control. Problems detected earlier through warning signals could be easily solved to avoid total loss of the project.

Agricultural facilities granted are closely monitored. This is occasioned by the nature of the industry, especially the production aspect that is highly risky because of its precarious nature.

Agricultural facilities are also known to be specific-purpose oriented i.e planting, fertilizing, harvesting and transporting etc.). As a result follow up facilities, the indications of possibility of default (usually) referred to as –danger sign of default are easily detected, a current finding in the view on bank credit management.

According to Ameachi (2004) sources of agricultural financing are as follows:

In Nigeria, we have the Nigerian Agricultural and Cooperative Bank (NACB) which was established in 1973 primarily to finance agricultural projects. Its cardinal aims are:

. To stimulate interest in agricultural Production.

To improve agricultural Production technique

To improve storage and marketing of agricultural produce.

To grant loans on fairly easy terms to finance agricultural projects.

State and local governments may serve as intermediaries by receiving the loan from the federal government and the NACB for transmission to the farmers or relevant farmer's

organization.

The federal government, through the Central Bank, is the sole financier of the NACB. Its headquarters are located in Kaduna.

According to Ameachi (2004); Commercial banks can also finance agricultural projects. She further said; -In Nigeria, the federal government directs Commercial banks to allocate a part of their lending's to agriculture at reduced interest rates. Such banks usually set up departments of agriculture and employ agriculturists to manage them. Such loans can be on:

i. Short term where the loans are used to finance annual and biennial crops and quick maturing Livestock Projects such as pigs and poultry.
ii. Medium term where the loan matures in two or three years. Such loans are normally invested on biennial and some perennial crop which mature in about three years such as Cassava, Citrus, Oil palm etc.
iii. Third term where the loan matures in three or more years. They are used to finance long-spanning perennial crops such as Cocoa, Kola, rubber, etc.

According to Aryeetey (1996), this is where a farmer decides to reinvest his savings in another agricultural project or expanding an already existing one. This however, is a slow process since saving money depends on a lot of factors, economic and fiscal factors. It leads to small-scale farming and is only suitable for subsistence farming. Government (Federal, State and local) can give agriculture loan to farmers either directly or indirectly through some agencies like Ministries of Agricultural Banks, the Agricultural Development Programme (ADP) and others.

Agriculture is the main stay of the economy in Kaduna state with about 80% of the people actively engaged in farming. Cash and food crops are cultivated and the produce include: yam, cotton, groundnut, tobacco, maize, beans, guinea corn, millet, ginger, rice

and cassava. Over 180,000 tonnes of groundnut are produced in the state annually.Another major occupation of the people is animal rearing and poultry farming. The animal reared include cattle, sheep, and goats.

Kaduna state is blessed with minerals which include clay, serpentine, asbestos, amethyst, kyannite, graphite and siltimanite graphite, which is found in Sabon Birnin Gwari, in the Birnin Gwari local government. This is an important raw material used in the manufacture of pencils, crucibles, electrodes, generator brushes and other sundry parts. Kaduna state is a metropolitan as well as a cosmopolitan industrialized state with over 80 commercial and manufacturing industries.Goods ranging from carpets, textiles, reinforced concrete materials, bicycles assembly, toiletries and cigarettes in the state. Consumer goods produced range from problem products to soft drinks, flour and groundnut oil.

Major industries in the state are the Federal Super Phosphate Fertilizer Company PLC (Nasarawa road, kaduna south industrial area), Ideal Flour Mills PLC (plot B1,kudendan industrial layout, kaduna). Peugeot Automobile Nigeria PLC(pan drive kakuri industrial estate, kaduna), United Wire Products Limited(maicibi close, industrial estate, kaduna south), Kaduna Furniture and Carpets Company Limited(Head quater, Ahmadu bello way, kaduna), Electricity Metres Company Nigeria Limited and Rigid Pack Containers Limited, Zaria, and the National Leather Research Institut located in zaria,

The role of commercial banks in the provision of credit to agricultural sector cannot be overemphasized. Credit is considered as a catalyst that activates other factors of production and makes under-used capacities functional for increased production, Ijere

(2013). Thus farm credit plays a crucial role in agricultural and rural development as it enables farmers reap economies of scale, venture into new fields of production, employ new technologies and empower them to provide utilities for a widening market.

Agricultural credit enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers. Adegeye and Ditto (2005) described agricultural credit as the process of obtaining control over the use of money, goods and services in the present in exchange for a promise to repay at a future date.

Ogunfowora (2003) reported that credit is not only needed for farming purposes, but also for family and consumption expenses; especially during the off season period. Credit has also been discovered to be a major constraint on the intensification of both large and small scale farming (Von – Prischike 1991).

Qureshi, Akhtar and Shan (1996), in their contribution argued that Banks credit has the capacity to remove the financial constraints faced by farmers, as it provides incentives to enable farmers to switch quickly to new technologies which can enhance the achievement of rapid productivity and growth. Ijere (1996) viewed banks' credit as a catalyst that can activates the engine of growth enabling it to mobilize its inherent potentials and to advance in the planned or expected direction. In support of the same view, Umoh (2003) maintained that banks' credit constitutes the power or key to unlock latent talents, abilities, visions and opportunities, which in turn act as the mover of economic development. Banks' credit has a significant contribution to economic development by enhancing production and productivity and thus higher income and better quality of

life to the people. (Well, 1970).

Finance was identified as a major factor hindering agriculture production. For this reason various programmes, polices as well as institutions have been established with the aim of providing easy finance to the sector. Commercial Banks were at the forefront for this purpose. One of the major inputs identified over the years in the development of the Nigerian agricultural sector has been the agricultural credit (CBN, 2005). The sources for funding the agricultural sector have been micro and macro sources of finance. The micro source relates the use of the commercial bank financing as capital for agricultural activities while agricultural funding through capital mobilization and allocation by government through such agencies as rural banking development programmes, Nigerian Agricultural Cooperative and Rural development Bank (NACRDB) and the Central Bank of Nigeria (CBN).

However, from available statistics of commercial banks total sectoral credit distribution in Nigeria, the allocation to the agricultural sector, given the importance of the sector, is insignificant. For instance, credit allocation to the sector fluctuated between 6.98% and 10.66% in 1981 to 1985; between 10.66% and 16.15% in 1985 to 1990; between 16.15% and 17.5% in 1990 to 1995. It declined sharply to 8.07% in 2000, 2.46% in 2005, 1.67% in 2010, and fluctuated between 1.67% and 3.44% in 2010 to 2013 (Source: CBN Statistical Bulletin, 2013). According to the National Bureau of Statistics, credit to agricultural sector was 3.26% and 3.36% of total credit to the private sector in 2016 and 2017 respectively. When compared to banking sector credit to other industries, agricultural sector received the lowest credit allocation from banks despite the sector's more contribution to GDP than

other industries. The activities of NIRSAL in de-risking the sector will go a long way in unlocking financial credit for agriculture value-chain in the short to long-run.

1.2 STATEMENT OF THE PROBLEM

The financial sector has grown robustly especially since the economic liberalization In 1986,But the agricultural has not growth correspondently. This seems to have been attributed to lack of access to capital and credit especially in rural areas due to the interest rate rose over the years following the lifting of the partial controls on the interest rate regime of the preceding year. A noticeable feature during the year was the incidence of wide variations in interest rates among the commercial banks as a group. Furthermore, despite the sharp increase in nominal rates, the prevailing average realized rates on both deposits and loans were generally negatives in real terms, in the light of high rate of inflation. This is to say that since deregulation, interest rates have been rising almost uninterruptedly (Usman, 2000). This raise the question of how increase in interest rate has affected farmers' access to commercial banks credit.Thereby widen the gap between owned and required capital for financing most agricultural activities of farmers due to increase in the cost of borrowing (Iroh, 2012). This revealed that, The lack of access to credit causes setbacks to the productivity of farmers as a result of the fact that, these farmers do not have the resources to procure improve seedlings, chemical and hired labour as well as transport and market their produce which would have improved their Productivity. However, rule and regulation of the formal financial institutions created the myth that the poor cannot afford the required collateral(Akinbode, 2013).

In order to design appropriate financial policies that will bring about an efficient financial sector in the country there is need to investigate the effects of the present

interest rate regime in the country especially in the agricultural sector.However, in kaduna state Interest rate also affects the maximum amount farmer can borrow or request for credit, this bring about low Productivity, poor quality produce, undeveloped value chain and hinder access to premium markets. Available studies on the effects of interest rate on farmers access to commercial banks credit in kaduna state do not cover the general effects(increase and decrease) in interest rate. These gaps then raise the questions on the effects of interest rate on farmers access to commercial banks credits in kaduna state. We also know that interest rate variability can determine the level of investment, consumption, production and the growth of output and perpetuate poverty making farming un sustainable in the state. If critical strategies are put in place agriculture will be a vehicle to attain the deserved position of the state as the agricultural hub of the nation, this is because empirical evidence revealed that approximately 80-85% of the state Gross domestic product(GDP) is accounted for by agriculture(kaduna-sector implementation plan(sip) 2016).

1.3 RESEACH QUESTIONS

This study therefore, tends to deal with the following research questions;

i. How often agricultural farmers access credit from commercial banks?

ii. In what ways can agricultural produce improve the income of the farmers in zaria?

iii. What are the major challenges associated with farming activities in zaria?

1.4 OBJECTIVES OF THE STUDY

The broad objective of this study is to analyse the impact of commercial banks credit on agricultural farmers in zaria. While the specific objective are as follow:

i. To analyze the openness of the commercial banks credit to farmers in zaria.

ii. To examine the relationship between farmers income and their level output.

iii. Investigate the impact of interest rate on agricultural production in zaria.

1.5 HYPOTHESES OF THE STUDY

Following from the above stated objectives, the following hypothesis are tested in this study;

H_o: Commercial bank credit has no significant impact on agriculture and agricultural output.

H_1: Commercial bank credit has significant impact on agriculture and agricultural output.

H_2:Interest rate on bank credit to Agricultural sector does not have significant impact on agricultural output.

1.6 SIGNIFICANCE OF THE STUDY

In order to design appropriate policies that will bring an efficient and effective accessibility and utilisation of credit facilities for optimum agricultural productivity, there is need to carry out a study on the impact of commercial banks credit on agricultural output in Kaduna state. This will greatly enable policy makers to identify constraints and potential areas for its improvement considering the need to enhance food security. The findings of this study will enable farmers to be aware of how appropriate interest rate effects can influence agricultural practices and assist in the fight against its negative effects. Increased knowledge of farmers' access to banks credit facilities due to the prevailing and existing level of interest rate will enable international expertise trickle down to local levels. It is also expected that this study will help to widen the knowledge of farmers on the available and proper interest rate level that will enable them to achieve

the best level of agricultural practices. It is hoped to help financial institutions to realise and charge interest suitable to meet the credit needs of farmers.

In addition, this study will enable government bodies to identify problems faced by farmers in their bid to access banks credit facilities and be able to come up with proper solutions. Also, this study will be helpful in the sense that the negative effects of interest rate on farmers' access to agro credit will be identified and appropriate recommendations made. Moreover, this study will help in formulating a future strategy for the realization and sustenance of a suitable interest rate that will enhance Nigerian farmers' access to banks credit facilities.

This research is directed at providing information that would assist in knowing these effects of interest rate regime on farmers' access to agro credit in Kaduna State. It is expected that this study will expose the effects of interest rate which will help government/ financial institutions to formulate programmes in favour of a suitable interest rate for farmers' for effective credit acquisition. This study will also serve as a guide to other researchers who wish to embark on related studies.

Finally, it is hoped that the results of the study will be useful to researchers and farmers. Government and policy makers will also benefit from the findings of this study by utilizing information from the study to address the problems of interest rate fluctuations. This will be used as checks and balances by policy makers and academics in designing subsequent ways to make effective and efficient determination of agricultural interest rate.

1.7 ORGANIZATION OF CHAPTERS

This study is divided into five chapters. The first chapter comprising of the

introduction, statement of the problem, research questions, objectives of the study, hypotheses of the study, organization of chapters, significance of the study, scope of the study and limitations of the study. the second chapter dwells on introduction, empirical literature review, conceptual literature review, theoretical literature review and theoretical framework. while research methodology was captured in the third chapter which comprised study area, sources of data, sampling procedure, measurement of accessibility and Analytical techniques. Data analysis and discussion of findings was captured in chapter four and finally, chapter five draws managerial implications

1.8 SCOPE OF THE STUDY

The study covers mainly the area of making agricultural credit available for farmers by commercial banks and other specialized institutions established for the purpose of pursuing this objective. In this study, reference is made to zaria local government beneficiaries farmers In respect of the choice of bank credit for the study, attempt will be made to concentrate only on the commercial Banks of kaduna state operating in Zaria Local Government Area. This choice is borne out of its long standing operation in the area.

1.9 LIMITATIONS OF THE STUDY

The study is limited to agricultural credit and more emphasis was put on small scale farmers in zaria because they contribute about 9 percent to food production in Kaduna state. Few areas were visited since it was not possible to reach every growing village in zaria local government for the research work.

Financial constraint- Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet, questionnaire and interview).

Time constraint- The researcher has simultaneously engaged in this study with other academic work. This consequently cut down on the time devoted for the research work. Effect of time limitations and finance cannot be overemphasized. Therefore, it is the researcher's hope that the constraints do not detract from findings an elicits more interest and further research in the field, to contribute in no small way towards entrenching efficient agricultural credit in commercial banks.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The Agricultural activities all over the globe has been a crucial sector to the economic growth and development by absorbing a large number of people to have their living earnings. It has also serve as the major source of employment opportunities as well as revenue earning for the government. However, Agriculture in kaduna is the most dominant sector and major source of livelihood for the majority of the population. It accounts for about 70% of employment, and in spite of this, Binswanger, Sinha and Radha (2009) opined that it has not been able to achieve the major objectives of agricultural development which the World Bank (2007) identified to include; (I) increase in food production and farm income, (ii) make household food, water and energy secure and (iii) restore and maintain the natural resources. They stated further that the failure of agriculture to meet these objectives is due to limited use of purchased inputs and mechanization. This limitation is tied to undercapitalization or lack of credit (Aku 1995).

The significant role of agriculture in nation building all over the world cannot be overemphasized. Agriculture is a major contributor to Nigeria's Gross Domestic Product 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 credit facilities (Odoemenem and Obinne 2010).

Enhancing Financial Innovations and Access (EFInA (2008) programme notes that 23 percent of the adult population in Nigeria has access to formal financial institutions, 24 percent to informal financial services, while 53 percent are financially

excluded. This inclusion affects rural farmers mostly.

This is because the outcomes of the demand for credit depend on the lending practices of the credit agencies. Commercial banks are concerned with losses from untimely repayment or default, and seek to minimize these by choosing carefully the distribution of credit across farmers (Anderson, 1990). As a result, the lenders are faced with loss-minimizing credit distribution problem.

Agricultural household models (Singh; 1986; Sadonlet and de Janvry, 1995) suggest that farm credit is not only necessitated by the limitation of self- finance, but also by uncertainty pertaining to the level of farm input and output and the time lag between input and output (Duong and Izumida, 2002).

A frequent cause of market failure is limited access to working capital/credit (Duong and Izumida, 2002). According to Swinnen and Gow (1999), access to agricultural credit has been severely constrained in developing countries. This is because of the imperfect and costly information problems encountered in the financial markets. Such problems are known to be sources of setback in agriculture (Stiglitz, 1993).

Abe (1982) asserted that non-institutional creditors accounts for 70 percent of the total credits received by Nigerian farming population. However, with the present situation in Nigeria, these sources could hardly meet the increasing demand for credit by farmers.

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

meet.

According to Ojo (1998), one problem confronting small scale enterprises including that of agriculture is inadequate capital. It's obvious that agriculture is the mainstay of the people of the sub-Saharan Africa. It has been established that about 70 percent of Nigeria population is engaged in agriculture (Obasi and Agu, 2000) while 90 percent of Nigeria total food production comes from small farms and 60 percent of the country's population earn their living from these small farms (Oluwatayo, 2008).

In Nigeria, credit has long been identified as a major input in the development of the agricultural sector (Balogun, 1990). It is a major factor necessary for technological transfer in traditional agriculture (Oyatoye, 1981).

Affordability of credit to peasant farmers is another key area of interest. One of the principal characteristics of informal credit as stated by Okojie (2010), and Anyanwu (2004) is the higher interest rates imposed on loans relative to those by the formal banking sector. But this applies more to the informal credit institutions (Money lenders).

According to Okojie (2010), the lack of bank accounts, collateral, and information regarding the procedure for accessing credits from banks limit peasant farmers and rural women's access to credit from formal institutions.

Adejobi and Atobatele (2008) suggested that loan default could limit access to credit, while Agnet (2004) asserted that the complex mechanism of commercial banking is least understood by the small-scale (peasant) farmers, and thus, limits their access. Rahji and Fakayode (2009) blamed the limitation on imperfect and costly information problems encountered in the financial markets; credit rationing policy; and banks perception of agricultural credit as a highly risky venture; while Philip (2009) stated that high interest

rate and the short term nature of loans with fixed repayment periods do not suit annual cropping, and thus constitute a hindrance to credit access.

Adegbite (2009), citing Ezike (1984), Nweke and Onyia (2001), and Kodieche (2002), stated that financial lending institutions in Nigeria often shy away from giving loans to farmers because of the high cost of administering such loans and the perceived high default rates among farmers.

In spite of the importance of loan in agricultural production, its acquisition is fraught with a number of problems such as relying on money lenders, friends, relatives and contributions. The last hope for the small scale farmers then lies with the cooperative societies (Ijere, 1981). The cooperative has been identified to be a better channel of credit delivery to rural farmers than the NGOs in terms of its ability to sustain the loan delivery function (Alufohai, 2006).

Asogwa (2011) observed that high level of cost inefficiency is highly attributed to the low profitability that results from inadequate organization of farmers into collective farmers' institutions that can provide opportunities for risk sharing and improved bargaining power.

Hence, since the availability of adequate credit is central to improvement in agricultural productivity in an economy, this chapter theoretical and empirical review of renowned opinions on the impacts of credits on Agricultural outputs especially in Nigeria.

2.2 EMPIRICAL LITERATURE REVIEW

Udih (2014) investigates on the banks credit and agricultural development using both primary and secondary sources of information that were extracted from five (5) banks and ten (10) agricultural enterprises in kaduna State.

A simple random sampling technique through the lottery method was adopted to select the samples. The data were analysed using both measures of central tendency and dispersion. The study find out that: that banks' credits and advances to agricultural entrepreneurs promotes agricultural development and productivity, and that regulated banks' credits to the agricultural entrepreneurs has no or little impact on the entrepreneurship performance, and thus, suggested that, adequate bank credits should be granted to small scale agricultural farmers to increase productivity: and their farms land should be used as collateral instead the of usual banks loan security to promote entrepreneurship performance. Kareem, Bakare, Raheem, Olagumela, Alawode and Ademoyewa (2013), examined the factors influencing Agricultural output in Nigeria: Macro-economic perspectives. The study seeks to determine the factors influencing agricultural production in Nigeria, and also determine the causality between Agricultural outputs and economic variables. The study adopts regression analysis, descriptive statistics and the Granger causality tests on macroeconomic variables (i.e. Food import value, Interest rate, Commercial bank loans on Agriculture, GDP growth rate and Foreign direct investment) to find the significant relationship between the different variables chosen. The result shows fluctuations in the trend of variables considered (i.e. Interest rate, Commercial bank loans to Agriculture, GDP growth rate and foreign direct investment) in relation to the period under review. The result further shows that foreign direct investment: commercial bank loan, interest rate

and food import value have positive relationship with Agricultural output. Obilor (2013) examined the impact of Agricultural Credit Scheme Fund, agricultural product prices, government fund allocation and commercial banks' credit to agricultural sector on agricultural productivity. The result revealed that Agricultural Credit Guarantee Scheme Fund and Government fund allocation to agriculture produced a significant positive effect on agricultural productivity, while the other variables produced a significant negative effect. Nwankwo (2013) examined agricultural financing in Nigeria and its implication on the growth of Nigerian economy using ordinary least square method and quantitative research design. The study revealed that there is significant relationship between agricultural financing and the growth of Nigerian economy and that the level of loan repayment rate over the years has indeed negatively impacted significantly on the growth of Nigerian economy. Ogbanje, Yahaya and Kolawole (2012) examined the effect of commercial banks loan on the agricultural sector in Nigeria from 1981 to 2007. Growth in agricultural sector was expressed in terms of agricultural Gross Domestic Product (GDP). Secondary data for the study were obtained from the Central Bank of Nigeria. Findings revealed that commercial banks loan to the agricultural sector increased substantially from N590.6m in 1981 to N4.221.4m in 1990, a 614.76 percent increase. From 1991, the loan stock rose from N5,012.7m to N146,504.5m in 2000, representing an increase of 2822.67 percent. There was, however, a sharp decline in loan stock from N200,856.2m in 2001 to N149,578.9m in

2007. Over the period of study, gricultural GDP showed declining growth rate. Nevertheless, agricultural GDP grew from N84,428.5m in 1981 to N267,051.7m in 2007. The ordinary least square method, with lagged dependent variable, revealed that commercial banks' loan positively affected agricultural GDP at 0.01 level of probability. Hence, commercial banks' loan has contributed significantly to agricultural development in Nigeria. Enyim, Ewno and Okoro (2013) examined banking sector credit and performance of the Agricultural sector in Nigeria. The study applied econometric tests such as unit root, cointegration and its implied error correction model and Grange causality test, in which changes in AGDP was regressed on commercial bank credit to agriculture. The result of the analysis shows that the total money stated as Government Expenditure on agriculture is not statistically significant and not theoretically in line. However, the result shows that commercial banks' credit to the agricultural sector has a positive relationship with agricultural productivity. The available literatures provide a comprehensive view of different scholars about the relationship between government expenditure on agriculture and agricultural output. However, most of the research findings are not in consensus.

2.2.1 THE IMPACT OF INTEREST RATE ON AGRICULTURAL OUTPUT IN NIGERIA

Emmanuel (2008) carried out a study on the impact of macroeconomics environment on agricultural sector growth in Nigeria. The macroeconomic policies included in the model are:- credits to the agricultural sector, nominal interest rates on the loan, exchange

rate, world prices of agricultural produce, foreign private invest-government expenditure and inflation rate.

Using multiple regression analytical technique (ordinary least square), he discovered that nominal interest rate is positively related to the index of agricultural production. This implies that at higher nominal interest rate, more credit facilities are made available to the operators of the Nigerian agricultural sector, but at lower nominal interest rate, credit facilities are no more widely available. The index of agricultural sector and output is also positively related to world prices of Nigeria major agricultural commodities.

2.2.2 THE IMPACT OF EXCHANGE RATE ON AGRICULTURAL OUTPUT

According to Emmanuel (2008) in his analysis, the index of agricultural production was positively related to government expenditure on agriculture. Moreover, it was discovered that the index of agricultural production is negatively related to the level of inflation, implying that as inflation becomes high, the index of agricultural production declines. He thus recommends that macroeconomic policies that enhance favorable exchange rates, make agricultural credit widely available at low interest rate, reduce the rate of inflation, increase foreign private investment in agriculture, would not fortify government investment in the sector but would be invaluable in supporting agriculture and agricultural output growth in Nigeria.

2.2.3 THE IMPACT OF INFLATION RATE ON AGRICULTURAL OUTPUT

Inflation has been apparent in Nigeria from the outset of her national life as it was propelled in the 1960s through the -cheap money policy‖adopted by the government to stimulate development after independence.

Nigeria has experienced all manners of inflationary episodes; from creeping to moderate and from high to galloping. Inflationary pressure in Nigeria was largely contained in 2010 and 2011, though the rate remained above the national and the West African Monetary Zone (WAMZ) single-digit inflation rate target (CBN, 2011). However, the 12-month moving average headline inflation rate was 10.8 percent in 2011, compared with 13.7 percent at end-December 2010.

The agricultural sector is strategic to national economic development and contributes 42.1% of the current GDP. It remains a major source of food and raw material for agro-industrial processing and has strong links to employment, national income, market opportunities for industrial production and strong potentials for poverty reduction and health improvement. However, Nigerian agriculture faces tremendous challenges which include the rising food prices amongst others.

At the individual level, inflation exists a heavy fall on those with fixed income, inflation relatively favours debtors at the expense of creditors, at the firm level, the effect of inflation is called the -menu costll Rotemberg (1982, 1983) Naisk (1986), Dmaziger (1988), Benab and Koricezry (1994), Yab (1996) Valdonizoz (2003) and Guerreso (2004) because it affects output when firms have to incur costs as they adjust to the new price level (eg changing their price list for customers).

However, much less agreement exists about the precise relationship between inflation and economic performance, and the mechanism by which inflation affects economic activity at the macroeconomic level. This has generated a significant debate both theoretically and empirically. A series of studies found no conclusive empirical evidence for either a positive or a negative association between inflation and economic growth,

notable among these studies are Wai, 1959, Bhatia, 1960, Doirance, 1963, 1966, Johansen (1967).

CONCEPTUAL FRAMEWORK

2.3 COMMERCIAL BANK CREDIT AND AGRICULTURAL OUTPUT

Essang and Olajide (1974) defined a commercial bank as a monetary institution owned by either government or private businessmen for the purpose of profit. In pursuit of the profit, the bank undertakes a number of functions. One of these functions is the acceptance of deposits from the public, these deposit are in turn given as credit to trade industry, agriculture etc. which lead to more production and employment (see Stephen and Osagie, 1985; Ekezie, 1997; Ijaiya and Abudulraheem, 2000).

To Aryeety (1996) credit is the amount extended out with a future date of payment. The NDIC prudential guide lines of 1990 however, provides a wider definition of credit, and this includes aggregate of all loans, advances, overdrafts, commercial papers, Bankers acceptance, bills discounted. Leases and guarantee (NDIC, 1990).

Muftau (2003), on the other hand, defines agricultural credit as credit granted to farm and ranch operators to assist in planting and harvesting crops to support the feeding and care of livestock. Credit to agricultural sector could take the form of an overdraft, short-term, medium-term or long-term depending on the purpose and gestation period of the project. Such credits granted to farmers to purchase inputs are paid directly to the suppliers who must furnish the bank with evidence of delivery. This is done to avert diversion of fund, which is common with Nigeria Farmers (SeeAdekanye, 1986: Nzotta, 1999).

Discussing the importance of credit to agricultural sector, Nzotta (2012) posited that it

reactivates, expands or modernizes all types of agricultural enterprise which are considered economically feasible and desirable to the achievement of stated economic goals of self-sufficiency in agricultural production. While Qureshi, (2006) reported that such credit removes financial constraints faced by farmer, as it provides incentives to adopt new technologies that would otherwise be more slowly accepted. Thus, the availability of credit enables farmers to switch quickly to new technologies which enable the achievement of a rapid productivity and growth.

According to Ijere(1996) -Credit can be considered from its ability to energize or motivate other factors of production". For example, it can make the latent, potential or under-used capacities functional. He further said that credit act as a catalyst that activates the engine of growth enabling it to mobilize its inherent potentials and to advance in the planned or expected direction. It follows, therefore, that the greater the influx of capital, the more the propensity of the economy to move in its given path. As summarized by Fosu (1992) Amin (1996), Umoh (2003) -Credit thus constitutes the power or key to unlock latent talents, abilities, vision and opportunities, which in turn act as the mover of economic development".

Contributing to the argument about Commercial bank Credit and agricultural output, Wells (1970) confirms that commercial bank credit contributes to economic development by enhancing production and productivity and thus higher income and better quality life for people.

Agricultural credit in Nigeria dates back to the 1930s but organized credit to farmers did not start until 1972 when the Nigeria Agricultural and Cooperative Bank (NACB) were established (Ajakaiye. 1984). He further said that agriculture is the largest sector of

Nigerian economy, though its contribution to the Gross Domestic Product (GDP) has declined from 67% in 1950 to 18% in 1980.

According to the Federal Ministry of agriculture publication(1980), 58% of farming- related borrowings was obtained from family and friends; 24% from professional private money lenders, 15% from merchant and only 3% from commercial banks and other institutional sources. As Garba (2000) noted, they are grossly, inadequate and unsatisfactory for the credit needs of the farmers. Thus, there is the need for larger credit sources.

2.4 THEORETICAL LITERATURE REVIEW

THE CLASSICAL THEORY OF INTEREST RATE

The interest rate is determined by the intersection of the investment demand schedule and saving schedule; that is schedule disclosing the reaction of investment and savings to the rate of interest. However, no solution is possible because of the position of the saving-schedule will vary with the level of real income; hence the Keynesians attacked this theory to say it is indeterminate (it can't be solved).

As income rises, the saving-schedule will shift to the right, hence we cannot know what the rate of interest will mean the larger volume of investment and so via the multipliers a high level of real income. So the classical theory fails to provide a solution.

2.5 KEYNES'S LIQUIDITY PREFERENCE THEORY OF INTEREST

Keynes defines the rate of interest as the reward of not hoarding but the reward for parting with liquidity for the specified period. It _is not the _price' which brings into equilibrium the demand for resources to invest with the readiness to abstain from consumption. It is the _price' which equilibrates the desire to hold wealth in the form of

cash with the available quantity of cash. In other words, the rate of interest, in the Keynesian sense, is determined by the demand for and the supply of money. This theory is, therefore, characterized as the monetary theory of interest, as distinct from the real theory of classical.

2.6 THE FISHER'S THEORY OF RATE OF INTEREST

Fisher's real rate of interest framework is essential for the inflation-targeting framework. It provides a rationale for the idea that monetary policy should be concerned mainly (if not only) with managing inflation expectations in order to keep real interest rates at a stable level that promotes saving and investment. Some post-Keynesians, like Smith in (2003) or Cottrell (1994), have also promoted the use of this concept, even if the former claimed that it only represents a definition and does not have anything to do with Fisher. Many authors have challenged the notion of real rate at the empirical level but only a few have done it at the theoretical level. Among those exceptions are authors like Keynes, Hahn, Harrod, Davidson, and Kregel. The present article continues such critique and argues that the notion of real rate is not theoretically relevant for the study of micro- or macroeconomic problems—it does not protect against potential losses of purchasing power and the underlying arbitrage is impossible to do at the macroeconomic level. The paper also contributes to the large empirical literature on the subject by providing an interpretation of the break that occurred in the mid 1960s in the correlation between interest rates and inflation. In the end, we conclude that economic agents are far more concerned with nominal matters (i.e., financial power, or liquidity and solvency) than real problems (purchasing power). Not that the latter is ignored or unimportant, but it included into the broader considerations of the former. Fisher

assumes that r* is given by technology and tastes. r* is a physical rate of return. However, in his analysis, Fisher recognizes that r* is actually calculated in money terms and that price expectations matter for the decision—the rate of return over cost is the monetary expression of r* and is the essential variable for investment (Fisher 1930).

2.7 LOANABLE FUNDS THEORY OF INTEREST RATE

According to the loanable funds theory by Dennis Robinson, it says the rate of interest is determined by the intersection of the demand schedule for loanable funds with the supply schedule.

The supply schedule is compounded or composed savings, that is voluntary savings plus net addition to the loanable funds from new money(ΔMs) and the hoarding of idle balance and the dis-hoarding of idle balance. However, since the savings portion of the schedule varies with the level of disposal income, that is(yesterday's income), it follows that the total supply schedule of loanable funds also varies with income. Therefore this theory is also in-determinate.

2. 8 NEO-CLASSICAL THEORY OF INTEREST

Here, interest rate is determined by the intersection of the demand schedule for money with the supply schedule of savings. Hence the relevant supply schedule is conceived in terms of savings out of current income, that is, the excess of total income received over income received for consumption thus income consumption and savings all supply to the same period.

However, whether or not current income is fed in past from the injection of new

money or from the stand point of the pigourian in neo-classical definition that is to say income whether of springs from the spending of funds borrowed from the banks, credit plays a role in the process of income creation. Hence in the neo-classical or pigourian theory, savings in quote is in effect is the same thing as loanable funds.

2.9 TWO SECTOR OR DUALISTIC MODEL

One of the most dominant theory by which we can conceptualize the development process is termed a two-sector or dualistic model. Its analytical framework is always based on distinguishing the traditional sector (Agricultural) from the modern sector (Manufacturing). The early model of Lewis (1954) began with the assumption of the existence of an Unlimited (or totally elastic) supply of labour originating from the traditional sector. It was assumed that the traditional sector was not rational in the sense of profit maximizing and that the emigration of reduction of its output because of zero marginal product of its labour.

The modern sector, according to Lewis (1954), which consists of manufacturing and some agricultural production, uses modern technology. The sector is capital intensive and is rational in the sense of seeking to maximize profit by hiring labour up to the point where the marginal product of the last unit of labour transferred to the modern sector is equal to the wage. Savings were assumed to be made only out of profit. As these profits were reinvested, the demand for labour would increase. This would continue until labour in the traditional sector is no longer unlimited. At the point when labour becomes scarce in the traditional sector, it began to be commercialized and subsequently, labor would be hired up to the point where the marginal product is equal to the wage.

An alternative on Lewis's unlimited labor supply theory was made by Rains and Fei

(2013), where the marginal product of labor was drawn out of the sector, terms of trade would turn against the modern sector and the wage rate must be raised, as the traditional sector produces, foods were assumed to be consumed by the modern sector. Consequently, profits in the modern sector tended to go down, and investment would also slow down. It is also likely, therefore, that growth will stop prior to the commercialization of the traditional sector.

2.10 THE PRE-REQUISITE THESIS VERSUS THE CONCURRENCE THESIS

In this regard, there are two schools of thought: the pre-requisite thesis and the concurrence thesis. The former thesis argues that an agricultural revolution and the subsequent rise in agricultural productivity are pre-requisite for the initial spur of development, whereas the latter thesis denies the condition for pre-requisite and asserts instead that rapid growth in agricultural productivity could occur simultaneously with industrialization.

Marx, in one of the early growth- stage theorists, presented his (stages) classification on changes in production technology and associated changes in the system of property rights and ideology? Rostow also presented his classification of stages in the transition from a primitive to a modern economy and offered basically an equivalent reason of regarding the agricultural development as the pre-condition to lake-offl (Hayami and Ruthan, 2001).

As mentioned earlier, one reason for supporting the pre- requisite thesis is in fact that it is the outputs of the primary sector, rather than of others that could be increased without costing much of the critically scarce resources of financial capital and foreign exchange. Thus, it is only when agriculture is already growing rapidly that it could and

should be squeezed on behalf of the more dynamic sectors of the economy. If, on the other hand, the agricultural sector is operating at the -immaturel stage i.e the quasi-subsistence level, squeezing agriculture would create economic stagnation and not growth.

In contrast, the concurrence thesis argues that the agricultural development and the industrial development could proceed simultaneously. In addition to the effect of agriculture on industrialization put forward by the pre- requisite thesis, the industrial development, for its part, tends to offer a widening market for rural surpluses. It may also contribute to fuller exploitation of the agricultural Sector by facilitating improvements in transport, credit and production techniques.

Further, the credit and productivity in the primary sector, may create a growing market for manufacturing products especially as incomes rise beyond the level which afford the minimum essentials.

Thus, the pre-requisite argued that efforts to increase food supply should receive top priority because of the high demand and great need for additional food or because the highest marginal productivity of capital lies in agriculture. Coals and Hoover (2011) concluded that a very substantial progress in the requisite model to successful development of the economy as a whole limits the growth of the other sectors. It is more likely to be a case of agricultural growth limiting non-agricultural and vice versa.

Also, the concurrence group, while recognizing the need for arising agricultural productivity, concludes that it can be accomplished only by giving big pushes to economic development programme as top priority. Higgins (1980) stated his position most plainly by arguing that the only means to a cumulative improvement in agricultural

productivity is a public policy designed to move to large-scale agricultural and encouraging a rapid rate of industrialization. Elsewhere, he recognized that such a policy requires heavy investment in both the industrial and agriculture sectors. Despite this premise about the agricultural sector, the logic of Higgins group necessitated emphasis on agricultural productivity since without it land consideration and farm mechanization could hardly increase the scarcity of labour.

2.11 THEORITICAL FRAMEWORK

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.

CHAPTER THREE
METHODOLOGY

3.0 STUDY AREA

This research was conducted in zaria local government area in Kaduna State. Zaria local government area is situated in the northern part of Kaduna State. Agriculture is the predominant occupation of the people in the area. People of this area engaged in both pre-harvest and post-harvest activities. Again, people in this area are known to be actively involved in farming activities.

3.1 SOURCES OF DATA

The data for this study was primarily sourced. The primary data was collected through administration of structured questionnaire and interviewing method. A focus group discussion was also conducted in regard to the study.

3.2 SAMPLING PROCEDURE

The sampling frame for the study consists of only male farmers who engaged different types of agricultural activities. According to 2006 census result, Zaria was estimated to have 408,198 people. It is home to the Zazzau Emirate .out of this total, about 80% were actively involved in farming. Therefore, to select the sample for this study, zaria local government were divided into districts. These districts were made up of villages. Zaria were made up of 6 districts and 35 villages. Therefore, multi stage random sampling technique was applied. Four(4) districts where selected from zaria local government. The next selection is one village from each district.

One village was targeted due to the fact that some districts were made up of two villages. Again, ten (10) farming households were selected from each village by simple random sampling method. This gave a total of eighty (80) sample size when administering the questionnaire.

3.3 MEASUREMENT OF ACCESSIBILITY

Accessibility to credit was ranked by the degree to which their sources were easily reached and the problems encountered in accessing credit. This accessibility was ranked using 3 scale of Very accessible (VA), Moderately accessible (MA), Rarely accessible (RA) and Not accessible (NA) VA = Availability of credit institution, no much emphasis on collateral, adequate Amount and low interest rate. MA = Availability of credit institution, emphasis on collateral, adequate amount, and low interest rate. RA = Availability of credit institution, emphasis on collateral, insufficient amount, and high interest rate. NA = No credit institution.

3.4 ANALYTICAL TECHNIQUES.

The data of this study was analysed using both descriptive statistics (simple percentage), tabulation methods and chi-square methods.

The formular is given below:

$$X^2 = \frac{\sum(O_{ij} - E_{ij})^2}{E}$$

Where:

X^2 = Chi-Square calculated.

$\sum$ = is summation notation

O_{ij} = Observed frequency.

E_{ij} = Expected frequency.

CHAPTER FOUR

4.0 INTRODUCTION

This chapter is devoted to the presentation, analysis and interpretation of the data gathered. The data are based on the number of copies of the questionnaire completed and returned by the respondents.

The data are presented in a tabular form and the analysis is done using the simple percentage method and chi-square test.

4.1 DATA PRESENTATION AND ANALYSIS

BIO DATA OF RESPONDENTS

Cross tab 1. Sex of respondents.

	Frequency	Percent	Cumulative percent
Male	49	100	100
Female	0	0	0
Total	100	100	100

Sources: field survey 2019.

Crosstab 1 above shows the gender distribution of the respondents used for this study. 49 respondents which represent 100 percent of the population are male while O respondents which represent O percent of the population are female. This implies that almost all the farmers in Zaria city were benefited from the loan (bank) were male.

Cross tab 2 age grade of respondents

	Frequency	Percent	cumulative percent
15-20 Year	6	12.24%	12.24
21-30 years	13	26.53%	38.77
31-40 years	13	26.53%	65.3
41-50- years	10	20.41	85.71

51-above years	7	14.29	100.0
Total	49	100	

Sources: field survey 2019.

Crosstab2 above shows the age grade of the respondents used for this study. 6 respondents which represent 12.24 percent of the population are 15-20 years, 13 respondents which represent 26.53 percent of the population are between 21-30 years 13 respondents which represents 26.53 percent of the population are between 31-4-, 10 respondents which represents 20.41 percent of the population are between 41-50 years, while the remaining 7 respondents which represent 14.29 percent of the are between 51 and above years.

Crosstab 3 Marital status of respondents

	Frequency	**Percent**	**cumulative percent**
Married	27	55.10	55.10
Single	20	40.82	95.92
Divorce	2	4.08	100.0
Total	**49**	**100**	

Source: field survey, 2019

Crosstab 3 above shows the marital status of the respondents used for this study. Out of the total number of 49 respondents 27 respondents which represent 55.10 percent of the population are married 20 respondents which represent 40.82 percent of the population are single, while the remaining 2 respondent which represent 4.08 percent of the population is divorced.

Cross tab 4 Educational Qualification of respondent

	Frequency	Percent	Cumulative percent
SSCE/ONE	16	32.66	32.65
HND/BSC	24	48.98	81.63
PGD/MSC	7	14.29	95.92
PHE/OTHER	2	4.08	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Crosstab 4 above shows the educational background of the respondents used for this study. Out of the total number of 49 respondents. 16 respondents which represent 32.65 percent of the population are ssce/ Ond holders, 24 respondents, which represent 48.98 percent of the population are HND/Bsc holders 7 respondents which represent 14.2 percent of the population are PGD/Msc holders while the remaining 2 respondents which represent 4.08 percent of the population are PHD and other holders.

divorced.

Cross tab 5 period been in Agricultural activities

	Frequency	Percent	cumulative percent
0-2 Years	7	14.29	1429
3-5 years	14	28.57	42.86
6-11	22	44.80	87.76
11-above years	6	12.24	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Cross tab 5 above shows the period spend by respondent on agricultural activities in this study. Out of the 49 respondents, 7 which represent 14.29 percent of the population spend 0-2 years in agriculture 14 which represent 28.57 percent of the

population, spend 3-5 years in Agriculture 22 which represent 44.90 percent of the population, spend 6-11 years in Agriculture while the remaining 6 which represent 12.24 percent of the population spend 11 and above years in Agriculture.

Cross tab 6 place living by the respondents

	Frequency	**Percent**	**cumulative percent**
Zaria	44	89.80	89.80
Outside Zaria	5	10.20	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Cross 6 above shows the place live by the respondents used for this study. Out of the 49 respondents, 44 which represent 89.80 of the population are living in Zaria while the remaining 5 which represent 10.20 percent of the population are living outside Zaria.

Cross tab 7 land by the respondents

	Frequency	**Percent**	**cumulative percent**
Zaria	21	42.86	42.86
Outside Zaria	28	57.14	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Cross tab 7 above shows the land area used by the respondents for this study. Out of the 49 respondents, 21 which represent 42.86 percent of the population farm within Zaria local government while the remaining 28 which represent 57.14 percent of the population farm outside Zaria local government.

4.2 TABULATION FORM BASED RESEARCH QUESTION

Cross 8

Agriculture reduced the rate of unemployment

	Frequency	Percent	cumulative percent
Agreed	30	61.22	61.22
Strongly agreed	12	24.49	85.71
Disagreed	3	6.12	91.83
Strongly disagreed	1	2.04	93.87
Undecided	3	6.12	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Cross tab 8 shows that responses of respondents that agriculture reduced the rate of unemployment in Kaduna state, 3 respondent which represent 61.22 percent of the population agreed that agriculture reduced the rate of unemployment 12 respondent which represent 24.49 percent of the population strongly agreed that agriculture reduced the rate of unemployment 3 respondents which represent 6.12 percent of the population disagreed that agriculture reduced the rate of unemployment , 1 respondent which represent 2.04 percent of the population strongly disagreed that agriculture reduced the rate of unemployment. While the remaining 3 which represent 6.12 percent of the population are undecided.

4. 3 ANALYSIS OF THE IMPACT OF COMMERCIAL BANK CREDIT ON AGRICULTURE OUTPUT

This section aimed at achieving objectives which is to know the impact of commercial bank credit on agriculture output

Cross tab 9: challenges associated with farming activities in Zaria

	Frequency	Percent	cumulative percent
Agreed	26	53.06	53.06
Strongly agreed	14	28.57	81.63
Disagreed	6	12.24	93.87
Strongly disagreed	3	6.12	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Many factor affect agriculture production inadequate credit facility is one of the factors influencing agricultural production. Credit facilitate the purchase of farm inputs and even encourage mechanized agriculture. This further improves output.

Cross tab 9 shows that 26 respondent of the population which represent 53.06 percent agreed that there is problems facing agricultural production. 14 respondent of the population which represent 28.57 percent strongly agreed that there is problems facing agricultural while the remaining 3 respondents of the population which represent 6.12 percent strongly disagreed that there is no problems facing agriculture production.

If you analyzed almost 100 percent of the respondent experienced difficulty in getting formal loans. This was due to the fact that credit institute ion were inaccessible and there are those who lacked collateral security for bank loans. The least problem encountered is insufficient amount this means that, the farmers accessed sufficient amount of credit from the formal source (banks).

There is also a problems faced by the respondents in accessing credit from informal sources which induces personal savings, fronds relatives and non- govern mental organization (NGO).majority of the farmers in the study area obtained their

agriculture finace from the informal sources. The personal savings types of credit is done through rotator take out (adashi). This discrepancy is due to the fact that informal sources are the most readily available sources for these farmer this is in the sense that, formal credit involved long protocol, absent of banking services in some areas(Huppi 2009 and Okunade 2017).

The farmers experience difficulty of interest rate when accessing informal sources of credit and the dalliance in getting a guarantor and insufficient amount respectively. This means that informal sources of credit did not provide enough finance for these farmers.

Crosstab 10 commercial banks give credit loan to farmers

	Frequency	**Percent**	**cumulative percent**
Yes	37	75.51	75.51
No	12	24.49	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Cross tab10 above shows that 37 of the respondents which represent 75.5 percent of the population are aware that commercial banks give credit loan to farmers while the remaining 12 of the respondent which represent 24.49 percent are not aware

Cross tab 11 have you apply for commercial bank credit?

	Frequency	**Percent**	**cumulative percent**
Yes	28	57.14	57.14
No	21	42.86	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Crosstab 11 above shows that 28 of the respondents which represent 57.14 percent of the population apply for commercial banks credit while remaining 21 of the respondents which represent 42.86 percent of the population did not apply for commercial bank credit.

Cross tab 12: Impact of commercial banks credit on agriculture output

	Frequency	**Percent**	**cumulative percent**
Very open	23	46.94	46.94
Fairly open	12	24.49	71.43
Poorly open	4	8.16	79.59
not open	5	10.20	89.79
Do not know	**5**	**10.20**	100.0
Total	**49**	**100**	

Sources: field survey 2019.

Crosstab 12 above shows the responses of respondent that commercial banks credit impact positively to agricultural output. 23 respondent which represent 46.94 percent of the population are on the view that impact of commercial banks loan to agricultural output is fairly open, 4 respondent which represent 8/6 percent of the population are on the view that impact of commercial bank loan to agriculture output is poorly open 5 respondent which represent 10.20 percent of the population are on the view that impact of commercial banks loan to agriculture output is not open while the remaining 5 respondent which represent 10.20 percent of the population do not know.

Output of some recipient did not increased significantly compare to other with higher amount. Those who received higher amount experience 100 percent increase in output this means credit is important in agriculture production it boosts

agriculture production.

4.4 RESEARCH HYPOTHESIS

Ho: commercial bank credit has no significant impact on agricultural output.

H1: commercial bank credit has significant impact on agriculture output Now we construct contingency table:

	Fo	Fe	Fo-Fe	(Fo-Fe)2	(Fo-Fe)2/Fe
Very open	23	9.8	13.2	174.24	17.80
Fairly open	12	9.8	2.2	4.84	o.49
Poorly open	4	9.8	-5.8	33.64	3.43
Not open	5	9.8	-4.8	23.04	2.35
Total	**49**		**39**		**26.42**

Therefore: $X^2 = \frac{\sum(Fo - Fe)^2}{Fe} = 26.42$

Find critical X^2 value at 5% level of significance

Chi-square degree of freedom, that is $(X^2_{df(r-1)(c-1)\ a=0.05)}$

$= (X^2_{df(1-1)(5-1)\ a.=0.05} = (X^2_{df(0)(4),\ a=0.05}$

$= (X^2_{df\ 4,9=0.05)} = 9.488$(one tail) 11.668 (two tail)

since X2 value calculate i.e 26.42 is greater than the critical X2 i.e 9.488(one fail) or 11.668 (two tail), we r eject the null hypothesis which states that commercial banks credit has no significant impact on agriculture output and accept the alternative hypothesis which state s that commercial banks credit has significant impact on agriculture output.

The chi-square result with value o 26.42 is statistically significant this again prove the impact of commercial banks loan on agriculture output the more one is able to access credit the more output an individual would make and vice verse

The managerial action or implication of these finding to that commercial banks loan has significant impact on agriculture output, therefore, government should encourage commercial banks loan to farmers.

CHAPTER FIVE
SUMMARY, RECOMMENDATION AND CONCLUSION

5.1 SUMMARY

This research was carried out to examine if there exist any relationship between commercial banks loan on agricultural output. The study was subdivided into five chapters with chapter one giving us a background information of the study, introducing the problem under study and also objectives, hypothesis, significance of the study and finally the scope and limitation of the study.

The available related literatures were reviewed, linking the subject matter to the existing theories in the second chapter. This establishes the need and justification for the study by reflection on the views of renowned economists and scholars and most importantly, the concept of Commercial bank credit. Discussions on interest rates, especially to the agricultural sector is found in this research work, while keeping in view the data used for the research analysis.

It was discovered in the course of this research that commercial banks' credits, interest rate are significant and they both affect the growth of the agricultural sector or output positively and negatively. That is, an increase in commercial banks' credit will also lead to an increase in agricultural output.

5.2 CONCLUSION

From this presentation, a careful reader would observe that any government that runs a mono-economy is announcing her economic obituary. Therefore, the only thing that will save Nigeria from her economic crunch now or in future is the encouragement of commercial banks loan to farmers. Equally, government must have the political will

to do the needful and develop a heterogeneous economy. The clarion call for encouragement of commercial banks loan should not only be government's responsibility. Other stake holders must cooperate and collaborate with the government to make this dream come true. Lastly, if Nigeria encourage banks loan, I postulate that it will increase her GDP (Gross domestic product) for sustainable development.

5.3 RECOMMENDATIONS

Having seen the gross problem caused by the neglects of agriculture which have engendered the dwindling of the Nigerian economy, it becomes therefore, necessary to offer some recommendations that will be pivotal to the change of the status quo.

1. Nigerian government, at all levels, should urgently create an enabling environment that will favour agriculture and that will de-emphasize mono-economic system and pay more attention to heterogeneous economy.
2. There is an urgent need to establish a working and functional bank of agriculture or any micro finance bank that will be exclusively for farmers for easy access of soft loans. Government should create a special grant solely for genuine farmers.
3. To make agriculture attractive, government should, as a matter of concern, put in place policies that will favour subsidy for agriculture. The implication is that government should incentivize farmers and subsidize their produce.
4. Many farmers in Nigeria are still making use of crude and un-mechanized methods that favour low productivity. Therefore, there is an urgent need to introduce at all levels mechanized system of agriculture to increase productivity and to reduce strenuous human labour.
5. Federal government should revive all the agricultural research institutes, school of

agriculture, and reintroduce farm settlements and other river basin authorities to encourage massive production of agricultural produce.

6. Government should endeavour to give scholarships to all those who are interested in studying agriculture to enhance human capital.
7. Government should discourage politicizing implementation of agricultural projects, especially where some politicians hijack the system against the genuine farmers by creating unnecessary bureaucratic bottlenecks.
8. Government should partner with media houses to promote agricultural programmes that will inculcate in the Nigerian youths the value and importance of agriculture.
9. Government should introduce agricultural science as an obligatory subject in secondary schools and could offer first class students scholarship to universities to boost interest in agriculture.
10. Government should endeavour to provide intermittently courses, capacity building, training and retraining in agriculture for professional development.
11. Government should package programmes in agriculture to be attractive and have the political will to pay attractive salaries to workers.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

Nigeria is endowed with huge expanse of fertile Agriculture land, rivers, streams, lakes, forest and grassland, as well as a large active population that can sustain a high productive and profitable agricultural sector. This enormous resource base if well managed could support a vibrant agricultural sector capable of ensuring self- sufficiency in food and raw materials for the industrial sector as well as, providing gainful employment for the teeming population and generating foreign exchange through

exports. However, information about a subject matter cannot be completely used up. The researcher suggests that further studies can be carried out on the impact of commercial bank credit to agriculture and agricultural output in Nigeria so as to make further concrete policy recommendations that can help stimulate the agriculture sector in Nigeria.

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DEPARTMENT OF ECONOMICS
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Dear, Respondent!

I am undergraduate student of Federal University Gusau, Zamfara State conducting research on the Impact of commercial banks loan on agricultural output.

It will be most appreciated if you kindly respond to the attached questionnaire. The information provided will be strictly for academic purpose and will be handled with outmost confidentially. Please tick as appropriate.

Section A

(1) Gender of respondent

a) Male{ } b) Female{ }

(2) Age distribution of respondents

a) 15-20 { } b) 21-30 { } c) 31-40 d) { } 41-50. e) { } 51 and. f) above { }

(3) Marital status of respondents?

a) Married [ ]. b) Single [ ] c) Divorce [ ]

(4) Educational qualification of respondents

a) SSCE/OND { }. b) HND/BSC { }. c) PGD/MSC { } d) PHD { } e) Others { }

(5) How long have you been in Agricultural activities?

a) 0-2 years { }. b) 3-5 years { } c) 6-11 years { }. d) 11 years and e) above { }

(6) Where are you from?

a) Zaria( ) b) Outside Zaria ( )

(7) Where do you do your farming activities?

a) Zaria( ) b) Outside Zaria ( )

SECTION B

(8) Is Agriculture reduced the rate of unemployment in kaduna state?

a) Agrees { } b) Strongly agreed { } c) Disagreed { } d) Strongly disagreed { }

(9) Is There any problems facing agricultural production in your area?

Agreed { } Strongly agreed { } Disagreed { } Strongly disagreed { }

(10) Are you aware that commercial banks give credit loan to farmers?

a) Yes ( ) b) No ( )

(11) Have you ever apply for bank credit to finance your farming activities?

a) Yes ( ) b) No ( )

(12) How open you think bank credit is to farmers

a) Very open ( )

b) Fairly open ( )

c) Poorly open ( )

d) Not open ( )

e) Do not know ( )