CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Agriculture is the rearing of animals and cultivation of land to produce food, biofuel other products used to sustain life. Agriculture was the key to the development and rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. According to CBN (2019), Nigeria is endowed with huge expanse of fertile land, rivers, streams, lakes, forests and grasslands, as well as a large active population that can sustain highly productive and profitable agricultural sector which can ensure self-sufficiency in food and raw materials for the industrial sector as well as provide gainful employment for the teeming population and generate foreign exchange for the economy. Unfortunately agricultural contribution Economic growth has been declining since the advent of oil. Several factors account for the poor performance of the agricultural sector in Nigeria. These include virtual neglect of the sector, poor access to modern inputs and technology, and lack of optimum credit supply. (Enyim, Ewno & Okoro, 2013). Beside the problem of poor access to modern technology, the major bane of agricultural development in Nigeria is low investment finance. (Salami & Arawomo, 2013).

The traditional role of banks (deposit money banks) is financial intermediation. Banks aim at channeling deposits mobilized from surplus spending units into various sectors of the economy in the form of loans and investments. They act as vital catalysts for Nigeria's economic advancement through the encouragement of savings, provision of capital needed for development, encouragement of trade activities, investment inducement agent, provision of managerial advice to small scale industrialists, help in the development of the much needed capital market and enhance the development of international trade (Ajie, 2015). According to Udih (2014), bank credit is expected to impact positively on the real sectors of the economy through improved agricultural production of goods and services. He opined that sufficient financing of agricultural projects will not only promote food security, but will also enhance the entrepreneurship performance of our young investors. According to Ajie and Ewabore (2013), agriculture is a source of food for consumption by man, food for animals and raw material for the agro-based industries. Agriculture contributes to the growth of the economy, provides employment opportunities for the teaming population and eradicates poverty. An articulated agricultural revolution and increased value addition activities in the downstream agroprocessing sub-sector present a potential platform

for effective wealth generation and consequently, sustainable poverty eradication. Food which is a basic necessity of life cannot be obtained without agricultural practice. It is also a key connector to other productive sectors of the economy through the provision of essential raw materials as inputs.

Approximately 820 million people in the world still suffer from hunger, being the situation most alarming in Africa, where since 2015 the prevalence of undernourished people shows slight but steady increases in almost all sub-regions (FAO, 2019). Low food production is one of the major issues that require urgent attention in Africa, with over 50% of the people depending on subsistence farming coupled with low production as their sole means of survival (Bachewe, Berhane, Minten, and Taffesse, 2018).

According to the FAO (2018), 84% of Nigerians are employed in the agricultural industry, largely in private small businesses and family farms that are not well meshed into value chains. Although the Nigerian agricultural industry has a good chance of using the youth labour surplus, it is beset by a number of issues that have a negative impact on its productivity. The agriculture industry needs to be competitive in order to increase its allure. As the largest industry in Nigeria and one that contributed an average of 24% to GDP between 2013 and 2019, it is impossible to overestimate the importance of the agriculture sector to GDP. Security of food and nutrition is one of the most critical issues on the current international political agenda and concerns governments all over the world. Despite the fact that there is enough food for everyone on the planet, over a billion people still go without enough nutrition. In Undernourishment is common in many countries, yet the prevalence of overweight and obesity are still major public health concerns. One of the key components for achieving sustainable economic activity in every nation is credit finance. By providing farmers with essential resources like fertilizer, land, improved seedlings, machinery, storage facilities to prevent postharvest waste, and irrigation systems for farming during dry seasons, this will increase agricultural output. Access to loans can especially lessen entry barriers and inspire entrants to the sector, enhancing agricultural output generally. Despite this, banks still find the agricultural sector to be more risky and less desirable for a credit facility due to the volatility of commodity prices, unforeseen disease outbreaks, climate change flood and drought, and other factors. Additionally, the majority of Nigeria's smallholder farmers and rural residents, who control the country's agricultural sector, lack adequate collateral facilities to receive credit from reputable financial institutions, impeding potential agricultural performance. The central

government established the Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977 to encourage formal financial institutions to increase and sustain financing to agriculture in order to address this issue and attain food security (Magaji and Bature, 2004; Eyo, Nwaogu and Agenson, 2020). According to Magaji, and Adamu (2011) agricultural sector is the highest employer of labour and one of the least financed sectors by deposit money banks in Nigeria. In developing nations (like Nigeria), rural and small-farm holdings have a low capital base and limited access to financing. Therefore, the issue of low production efficiency has become more problematic as a result of these farmers' inability to acquire sufficient funding. Inadequate loan availability is a significant issue that negatively affects farmers' productivity and efficiency along with other agricultural issues. Obtaining credit requires a lot of administrative work and numerous procedural steps, which raises operation expenses. These institutions favor loans for nonagricultural purposes over loans for agriculture and favor large-scale transactions over small scale transactions. For many years, graduates and technical officers whose main responsibilities included assisting farmers in improving their farming techniques have been created by universities and agricultural colleges. Food production is significant because, shortage in the production of food leads to the deterioration of household's means of livelihood and food security (Magaji and Musa, 2015; Omondi, 2019). Because of this, it is important to research the effects of farmers' lack of access to credit facilities from the financial industry. This informs the focus of this study and, as a result, the topic that is of interest to be investigated. Thus, the goal of this study is to explore how deposit money banks' agricultural loans have affected Nigerian agriculture.

1.2 Statement of Problem

Nigeria, like most other countries in the African continent is not only, endowed with vast agricultural farmland, but also conducive geographical condition that favours agricultural production throughout the year. Despite this great potential, there is not much to show for it in respect of cereals, starchy roots, sugar, edible oil, crops, nuts, fruits, vegetables, wine, cocoa, tea, coffee, livestock and livestock products (Salami & Arawomo, 2013). Several studies in this area including Enyim, Ewno and Okoro (2013), have identified poor credit supply as one of the factors accounting for the poor performance of the agricultural sector in Nigeria. According to Obilor (2013), banks precisely deposit money banks, obviously have no kind interest in agricultural finance. In order to encourage banks, the Central Bank of Nigeria established the Agricultural Credit Guarantee Scheme (ACGS) to provide guarantees against inherent risk in agricultural

lending. This measure could not achieve the intended objectives because agricultural lending being both labour- and capital-intensive venture requires huge capital outlay (Nwankwo, 2013). Consequently, the country with its highly diversified agro-ecological endowment is relying on massive importation of basic food items and raw materials for industrial inputs (Itodo, Apeh and Adeshima, 2013). The resultant effect of the high cost of living coupled with high level of unemployment is beyond reasonable imagination. Obviously, government's effort to fortify the Nigeria agricultural sector has not yielded the desired result (Udensi, Orebiyi, Ohajianya & Eze, 2012). Thus, there is the need for further investigation in this area find out the effect of bank credit on the agricultural sector.

The truth remains however that deposit money banks have not fully comply with this policy requirement as there are still rumors of the unwillingness of the banks to grant credit to the sector's operators. Furthermore, where credits are granted, the interest charges are often too high. Other problems associated with the access to deposit money banks' credit by the agricultural sector include: excessive paper work, requirement for collateral securities and the fear of default in the payment of the principal and interest by banks. The aforementioned problems therefore call for an empirical investigation of the role of deposit money banks on the performance of the agricultural sector in Nigeria. Hence, the broad objective of the study is to investigate the extent to which deposit money banks credit had supported agricultural output in Nigeria.

1.3 Research Questions

i. What are the roles of Deposit Money Banks in the growth of the Agricultural Sector in Nigeria?
ii. How do Deposit Money Banks contribute to the development of the Agricultural Sector in Nigeria?
iii. What are the financial services provided by Deposit Money Banks to farmers and agricultural businesses in Nigeria?

1.4 Objective of the Study

i. To examine the roles of Deposit Money Banks in the growth of the Agricultural Sector in Nigeria.
ii. To investigate the contribution of Deposit Money Banks to the development of the Agricultural Sector in Nigeria.
iii. To identify the financial services provided by Deposit Money Banks to farmers and agricultural businesses in Nigeria.

1.5 Research Hypothesis

Ho: Deposit Money Banks do not have a significant impact on the growth of the Agricultural Sector in Nigeria.

H1: Deposit Money Banks have a significant impact on the growth of the Agricultural Sector in Nigeria.

1.6 Significance of the Study

This study is significant because it will examine the roles of Deposit Money Banks in the growth of the Agricultural Sector in Nigeria. The study will provide insights into the ways in which Deposit Money Banks can contribute to the development of the Agricultural Sector in Nigeria. The study will also provide recommendations for policymakers, Deposit Money Banks, and other stakeholders on how to improve the contribution of Deposit Money Banks to the growth of the Agricultural Sector in Nigeria.

1.7 Scope and Limitation of the Study

The study will focus on the roles of Deposit Money Banks in the growth of the Agricultural Sector in Nigeria. The study will use Zenith Bank Plc as a case study. The study will cover the period from 2010 to 2020. The study will examine the financial services provided by Zenith Bank Plc to farmers and agricultural businesses in Nigeria.

The study has several limitations. Firstly, the study will focus on only one Deposit Money Bank, Zenith Bank Plc. Secondly, the study will only cover the period from 2010 to 2020. Thirdly, the study will only examine the financial services provided by Zenith Bank Plc to farmers and agricultural businesses in Nigeria.

1.8 Definition of Terms

Deposit Money Banks: These are banks that accept deposits from the public and provide financial services to individuals and businesses.

Agricultural Sector: This refers to the sector of the economy that is involved in the production of food and other agricultural products.

Financial Services: These are services provided by financial institutions, such as Deposit Money Banks, to individuals and businesses.

Zenith Bank Plc: This is a Deposit Money Bank in Nigeria that provides financial services to individuals and businesses.

1.9 Plan of the Study

This research work is divided into five chapter for easy presentation of the fact gathered.

Chapter One contains the introduction, statement of the problem, research questions, objectives of the study, research hypothesis, significance of the study. scope of the study, definition of the key term and organizational plan of the study.

Chapter Two deals with literature review, conceptual review, theoretical framework and empirical review.

Chapter Three consist of research methodology, research design, population of the study, sample size and sampling techniques, methods of data collection, methods of data analysis and limitations to methodology.

Chapter Four discusses the data presentation, data analysis and interpretation.

Chapter Five throws light on the summary of findings, conclusions, recommendations and references.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

Agricultural Sector

Agriculture is the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool and other products. It is as old as man. It is also an important development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. It is the first occupation of mankind. Agriculture is a major branch of the Nigeria economy, providing employment for about 70% of the labour force. Nigerian agriculture is characterized by considerable regional and crop diversity. In 1990, 82 million hectares out of Nigeria's total land area of about 91 million hectares were found to be arable (Modebe, Ugwuegbe & Ugwuoke 2014). Much of this land was farmed under the bush fallow system, whereby land is left idle for a period of time to allow natural regeneration of soil fertility. 18 million hectares were classified as permanent pasture, but had the potential to support crops. Most of the 20 million hectares covered by forests and woodlands are believed to have agricultural potential.

Agricultural and Co-operative Bank which was established in the year 1973 as part of government efforts to inject oil wealth into the agricultural sector through the provision of credit facilities to support agriculture and agro-allied industries. Also the Rural Credit Scheme was introduced in 1977 by the Central Bank of Nigeria, whereby deposit money banks were required to open rural branches. The Agricultural Credit Scheme was also set up in 1977 with the primary aim of inducing banks to increase and sustain lending to agriculture. There are other policies which were set up by the federal government and linked up with deposit money banks for the purpose of encouraging the farmers to produce more food such as National Food Security Programme, Special Programme on Food Security Programme and Fadama which are introduced to diversify agricultural products into other uses.

2.1.1 Concept of Bank Credit

According to Onyeagocha (2001), in Aremu, Suberu and Oke, (2016), the term 'credit' is used specifically to refer to the faith placed by a creditor (lender) in a debtor (borrower) by extending a loan usually in the form of money, goods or securities to the debtor. In essence, the lender extends

credit to the borrower when a loan is made, and he afterwards accepts the borrower's credit. Credit can therefore be defined as a transaction between two parties in which the creditor or lender supplies money, goods and services or securities in return for promised future payments by the debtor or borrower (Ayuba, Magaji, and Kuna, 2013). Commercial credit includes bank credit including overdrafts, loans, and advances, trade credit from producers, commercial papers (or notes), invoice discounting, bill financing, hire purchase, factoring, commercial papers (or notes), and commercial papers (or notes) (to mention but a few). Consumer credit, often known as trade credit, is a type of authorization given to a person or a household to buy products like a refrigerator, television, car, or electronic sets for which instalment payments are made over time rather than in full. Investment credit allows a business concern such as corporate body, sole proprietorship, or partnership to obtain credit for capital goods for expansion of factory or procurement of machinery (Aremu, Suberu and Oke 2016).

2.1.2 Concept of Agricultural Output

A distinct area of the farm or horticulture business known as the enterprise contains valuations of unsold goods created by the enterprise in its production. The primary indicator of individual crop and livestock output is agricultural output (Farm Survey, 2016). It includes: Crop enterprise output, or the value of all the crops the farm produces (other than losses in the field and in store). It comprises crops consumed in the farmhouse and by farm labour, as well as those utilized for feed and seed by the farming enterprise. With the exception of some horticultural crops, crop enterprise output is calculated on a "harvest year" rather than a "accounting year" basis. This means that it only includes crops that were fully or partially harvested during the accounting year and does not include crops that were carried over from the previous year. The total harvested yield of the crop is therefore valued at market prices and valuation differences (between the previous and current crops) are irrelevant (plus any subsidies). However, any difference between the opening valuation of any stocks of previous crops and their ultimate disposal value (sales, used on farm and any end-year stocks) is included in total farm output (Farm Survey, 2016).

By-products forage and cultivations, which include sales of fodder, changes in the value of fodder and cultivations, and the value of the output of agricultural by-products. It also covers revenue from the letting of bare land or forage on a short-term lease (Farm Survey, 2016). Livestock enterprise output consists of the total sales of livestock and livestock products, including direct livestock subsidies and production grants received, part of the valuation change, produce

consumed in the farmhouse and by labour, and the value of milk and milk products fed on the farm (excluding direct suckling), adjusted for debtors at the beginning and end of the year (except for direct livestock subsidies), as well as transfers between enterprises; However, changes in the value of production grants received, produce consumed in the farmhouse and by labour, and the value of produce consumed Livestock enterprise output is computed using an accounting year, in contrast to crop enterprise output (Farm Survey, 2016). The value of production from those activities that still come within the agricultural cost centre but do not fall under the livestock or crop enterprise output is covered by the term "miscellaneous output." These will consist of wayleave income, agricultural hire income, various woodland sales, contract farming rent, various insurance receipts, and compensation payments. Total Farm Output is total crop enterprise output plus adjustment for output from previous year's crops plus total livestock enterprise output plus output from home grown fodder crops plus output from tillage's and forage plus output from non-agricultural diversified activities plus miscellaneous revenue plus single payment (Farm Survey, 2016).

The Role of Deposit money banks in Agricultural Financing

Pooling of Savings

Deposit money banks perform this very important function to all sector of the economy by making available the facilities for the pooling of savings through the acceptance of deposits from the public and then making these funds available for economically and socially desirable purpose. In many villages deposits are received from farmers through saving account on which the banks pay small interest to the depositors. These depositors are allowed to draw their money upon presentation of their savings account passbooks (Adeyinka, Daniel & Olukotun, 2015). The use of fixed or time deposit accounts by farmers has also improved the saving habit of the farmers likewise the use of cheque books (through the current account) to settle their obligating without necessarily holding cash is made possible. b. Extension of Credit Extension of credit facilities by deposit money banks is very important to the economy, most importantly, the agricultural sector, for it makes possible the financing of the agricultural, commercial and industrial activities of the nation. Indirect or found-about production as against direct production where consumable goods are secured by the direct application of labour to land or natural wealth is made possible through the extension of these credit facilities. Also, bank credits make possible production for inventory (Adeyinka, Daniel & Olukotun , 2015). For instance, in the food industry, if Nigeria cannot consume all the food that

is harvested and processed immediately bank credits to carriers would enable them to purchase, process and store the food which may at a late time be sold to retailers and ultimately to consumers. You discover therefore that the bank credits have made possible the economic handling on the food crop during this interval of time i.e. from producers to carrier, to wholesaler, to retailers and finally to consumer (Agunuwa, Inaya & Proso 2015).

Problems of Deposit Money Banks on Agricultural Financing

Agricultural sector has not been booming because it has not been properly financed by deposit money banks. This arises as a result of the fact that deposit money banks are faced with some problems such as; Inadequate financial resources at the disposal of the deposit money banks and limited resources of branch network and skilled manpower at the disposal of banks to monitor and control lending in the agricultural sector. Even though some banks are ready to grant out loan to agricultural sectors (i.e. farmers) of the economy but the effort of the entrepreneurs were directed to industrialization where there is better attraction of high return on investment and high payback period. Lack of management skills and trained manpower in the sector. This may lead to wrong selection of enterprises. At times, farmers ventures into the area of production in which they have no knowledge and they may refuse to employ the right caliber of staff to manage the venture for them. These are what the bank will consider before giving out loan so that they won't run into the risk of irrecoverable debt.

Risk of diversion of funds for other purposes which results to high bad and doubtful debts. In this case, even though, if bank grant credit or loan, the bank will monitor the end-use of the loan. Risk and uncertainty of agricultural product. Agricultural output cannot be accessed with 100% certainty because some products are seasonal in nature. Also at times, climate and whether imbalances may affect an agricultural product. This make banks to give loans to industries more than agricultural sector.

Inadequate banks in the rural area are another point that affects the financing of agricultural sector. This is because most farmers are rural base and as a result of this, they won't be able think of requesting for loan that can make them to buy equipment and cultivate on large scale. High interest rates of banks make many farmers to run-away for bank loans and advances (Athanasius, 2017).

Subsistence Farming Subsistence farming is a form of production in which nearly all crops or livestock are raised to sustain the farm family, and rarely producing surpluses farming, which

includes shifting cultivation, slash and burn, and pastoral nomadic farming is mainly practiced in marginal areas. In contrast, intensive subsistence agriculture, which is the subject of this paper, is practiced in high potential arable land where land is scarce and the farmers have to maximize food production on relatively small fields. This type of farming exhibits a high degree of diversification (mixed crop-livestock systems). Intercropping and limited use of modern technologies and purchased agricultural inputs. Intensive subsistence agriculture is widespread in many less developed countries where over 80% of their rural population is engaged in this type of farming. Intensive subsistence agriculture contributes substantially to economics of these countries and in alleviating food insecurity (Athanasius, 2017). It has high potential for increased growth if given the necessarily support. Despite this high dependence on subsistence agriculture, the farmers are faced with several challenges which unless addressed will continue to drag behind the economic development of these countries. This paper not only reviews the characteristics and impacts of intensive subsistence agriculture but also the challenges and possible interventions to these challenges (Chinasa & Making, 2013)

Government Expenditure and Agricultural Sector in Nigeria

Government expenditure on agriculture is referred to as outflow of resources from government to agricultural sectors of the economy (Nurudeen & Usman 2010). The contribution of agricultural sector to the economy cannot be overemphasized when considering its roles for sustainable development, in terms of employment potentials, export and financial impacts on the economy. Conceptually, agriculture is the production of food, feed, fiber and other goods by the systematic growing and harvesting of plants and animals. It is the science of making use of the land to raise plants and animals. It is the simplification of nature's food webs and the rechanneling of energy for human planting and animal consumption (Olorunfemi 2008). Until the exploitation of oil reserves began in the 1980s, Nigeria's economy was largely dependent on agriculture. Lawal (2011) attempted to verify the amount of federal government expenditure on agriculture. Significant statistical evidence obtained from the analysis showed that government spending does not follow a regular pattern and that the contribution of the agricultural sector to the GDP is in direct relationship with government funding to the sector.

Agriculture involves the cultivation of land, raising and rearing of animals for the purpose of production of food for man, feed for animals and raw materials for industries. It involves cropping, livestock, and forestry, fishing, processing and marketing of these agricultural products.

Essentially it is composed of crop production, livestock, forestry and fishing (Ebomuche & Ihugba, 2010) The agricultural sector has the potential to be the industrial and economic springboard from which a country's development can take off. Nigeria, which spans an area of 924,000 km, is bordered by the Gulf of Guinea, Cameroon, Republic of Benin, Niger, and Chad. The topography ranges from mangrove swampland along the coast to tropical rain forest and savannah to the north (NPC, 2004). Nigeria is generously endowed with abundant natural resources. With its reserves of human and natural resources, Nigeria has the potential to build a prosperous.

Iganiga and Unemhilin (2011) studied the effect of federal government agricultural expenditure and other determinants of agricultural output on the value of agricultural output in Nigeria. A Cobb Douglas Growth Model was specified that included commercial credits to agriculture, consumer price index, annual average rainfall, population growth rate, food importation and GDP growth rate. The study performed comprehensive analysis of data and estimated the Vector Error Correction model. Their results showed that federal government capital expenditure was found to be positively related to agricultural output.

Oji-Okoro (2011), states that agricultural sector is the largest sector in the Nigerian economy with its dominant share of the GDP, employment of more than 70% of the active labour force and the generation of about 88% of non-oil foreign exchange earnings.

Adofu (2012) in his work; effects of government budgetary allocation to agricultural output in Nigeria (1995-2009) show that the percentage, degree or amount of budgetary allocation to agricultural sector has a positive relationship with the total agricultural production in the country. This implies that the more the public spending on agricultural sector, the more the improvements in the performance of the agricultural sector. Also, a large degree of change in agricultural output is accounted for by change in budgetary allocation to agricultural sector. Thus, budgetary allocation to agriculture has a large impact on agricultural output.

Agricultural Credit Guarantee Scheme

The Nigerian ACGSF (henceforth ''the Scheme'' or ''the Fund'') was set up by the Federal Government Act N0. 20 of 1977. Its purpose was to serve as an inducement to banks (commercial and merchant) to increase and sustain lending to agriculture. Under the Scheme, bank loans to farmers are guaranteed 75% against default. Thus, the Scheme is a partial credit guarantee type. When a default occurs, the CBN; the Managing Agent for the Scheme's day to- day administration, remits to the participating lending banks, (PLBs), 75% of the amount in default, net of any amount

realized by the bank from the security pledged (where applicable) by the farmer (Chinasa & Making 2013). This is done after careful verification and approval by the Board of Directors responsible for managing the Scheme. Verified defaults are settled by the CBN from a fund set up by the FGN and CBN for the purpose. At the commencement of operations by the Scheme on April 3rd, 1978, the authorized capital of the Fund was N 100 million; subscribed to in the proportion of 60% and 40% by the FGN and CBN respectively. The proportion of the authorized capital paid up as at the time operations commenced was N 85.5 million (Chinasa & Making, 2013).

Agricultural Credit Guarantee Scheme Fund (ACGSF)

The Agricultural Credit Guarantee Scheme Fund (ACGSF) was established by Decree No. 20 0f 1977, and started operations in April 1978. Its original share capital and paid up capital were One Hundred Million naira (N100 million) and N85.6 million, respectively. The Federal Government holds 60 percent and the Central Bank of Nigeria, 40 percent of the shares. The capital base of the scheme was increased to N3 billion in March, 2001. The fund guarantees credit facilities extended to farmers by banks up to 75 percent of the amount in default net of any security realized. The fund is managed by the Central Bank of Nigeria, which handles the day to day operations of the scheme. The guidelines stipulate the eligible enterprises which guarantees could be issued under the scheme. Between 1978 and 1989 when the government stipulated lending quotas for banks under the scheme, there was consistent increase in the lending portfolios of banks to agriculture, but after the deregulation of the financial system, banks started shying away by reducing their loans to the sector due to the perceived risk. In order to reverse the declining trend several innovations and products were introduced under the scheme such as:

i. The Self-Help Group Linkage Banking

ii. Trust Fund Model and

iii. Interest Draw Back

Agricultural Credit Support Scheme (ACSS)

The Agricultural Credit Support Scheme (ACSS) is an initiative of the Federal Government and the Central Bank of Nigeria with the active support and participation of the bankers committee. The scheme has a prescribed fund of Fifty billion naira (N50 billion) and ACSS was introduced to enable farmers exploit the untapped potentials of Nigeria’s agricultural sector, reduce inflation, lower the cost of agricultural production (i.e food items), generate surplus for export, increase

Nigerians foreign earnings as well as diversify its revenue base (Athanasius 2017). At the national level, the scheme operates through a Central Implementation committee (CIC) while at the Federal Capital Territory (FCT) and state levels, the scheme operates through state Implementation Committees (SICs) instituted to ensure that the objectives of the scheme is realized without hindrance. To access loans under the Agricultural Credit Support Scheme (ACSS), applicants (practicing farmers and agro-allied entrepreneur with means) are encouraged to approach their banks for loan through the respective state chapters of farmers associations and state Implementation Committees. However, large scale farmers are allowed under the scheme to apply directly to the banks in accordance with the guidelines (Agunuwa, Inaya & Proso, 2015). ACSS funds are disbursed to peasant farmers and agro-allied entrepreneurs at a single digit interest rate of 8.0 percent. At the commencement of the project support, banks will grant loans to qualified applicants at 14.0 percent interest rate. Applicants who pay back their facilities on scheduled are to enjoy a rebate of 6.0 percent, thus reducing the effective rate of interest to be paid by farmers to 8.0 percent (Agunuwa, Inaya & Proso, 2015).

Commercial Agriculture credit Scheme (CACS)

As part of its developmental role the Central Bank of Nigeria (CBN) in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA & WR) established the Commercial Agriculture Credit Scheme (CACS) in 2009 to provide finance for the country's agricultural value chain (production, processing, storage and marketing). Increased production arising from the intervention would moderate inflationary pressures and assist the bank to achieve its goal of price stability in the country. The primary objectives of the scheme are to: i. Fast-Track the development of the agricultural sector of the Nigerian economy by providing credit facilities to large scale commercial farmers at a single digit interest rate. ii. Enhance national food security by increasing food supply and effecting lower agricultural produce and products prices, thereby promoting low food inflation. iii. Reduce the cost of credit in agricultural production to enable farmers exploit the untapped potentials of the sector; and iv. Increase output, generate employment, diversify Nigeria's revenue base, raise the level of foreign exchange earnings and provide input for manufacturing and processing on a sustainable basis. The scheme which is a sub – component of the Federal Government of Nigeria's Commercial Agriculture Development Programme (CADP) is financed through a two hundred-billion-naira (N200 billion) bond raised by the Debt Management Office (DMO). Loans to eligible entities under the scheme are disbursed at a

maximum interest of 9 percent. The subsidy arising from this stipulated rate and the market rate on all loans granted, and the administrative expenses of the Scheme are bored by the Central Bank of Nigeria (CBN). The Central Bank of Nigeria and the Federal Ministry of Agriculture and Water Resources jointly ensure that the scheme is implemented successfully. This is achieved through the Project Steering Committee (PSC) comprising the Honourable (Chairman), the Governor of the Central Bank of Nigeria, Representatives of the Federal Ministry of Finance and Commercial Farmers, respectively and the programme coordinator of the Commercial Agriculture Development Programme.

Interest Rate

Interest rate is the rate at which interest is paid by a borrower (debtor) for the use of money that they borrow from a lender (creditor). High interest rate crowds out private investment leading to reduced economic growth. On the contrary, it may attract foreign capital inflows which may result into increased debts (Babalola, Danladi, Akomolafe & Ajiboye (2015). Interest rate policy in Nigeria is a major instrument of monetary policy with regards to the role it play in the mobilization of financial resources aimed at promoting economic growth and development. Interest rate is the price paid for the use of money. It is the opportunity cost of borrowing money from a lender. It can also be seen as the return being paid to the provider of financial resources. It is an important economic price. This is because whether seen from the point of view of cost of capital or from the perspective of opportunity cost of funds, interest rate has fundamental implications for the economy either impacting on the cost of capital or influencing the availability of credit, by increasing savings (Davis & Emerenini, 2015). Interest rate is an economic variable that depicts the cost of acquiring credit for investment in an economy. It is negatively related to investment; this means that high interest rate discourages investment while low interest rate encourages investment. It often changes as a result of inflation, productivity of capital and Federal Reserve policies and also affects both the future cash flow of firms and discount rate. According to Babajide, Lawal and Somoye (2016), a rise in interest rate decreases corporate profitability and likewise leads to an increase in the discount rate applied to equity investors; both of which affects the stock prices adversely. Consequently, a rise in interest rate is expected to impact negatively on the performance of the organization and thus on stock market prices.

Liquidity Ratio

This is the monetary policy instrument that oblique's banks to hold a specified proportion of their deposit liabilities as cash deposit with the Central Bank. The higher the percentage of bank reserves that is stipulated as legal cash reserve requirement, the lower the proportion of the banks fund that is available as backing for credit expansion. Thus, reducing the capacity to create money, on the other hand, a reduction in the reserve requirement increases the capacity of the banks to create credit. The use of credit contraction by financial institution in Europe and United States of America led to serious liquidity and credit crunches in almost all the financial industry across the globe. Liquidity and credit crunches manifest strongly among the investment banks that act as intermediaries to companies and investors in London and other parts of the world (Komolafe, 2008). This is utilized as an indicator of the size of the banking system, taking as the size of the financial intermediaries relative to the size of the economy. It is otherwise known as measure of financial deepening. The ratio measures the degree of monetization in the economy as well as the depth of the banking sector while it as so shows an expansion of payments and saving functions. This measure provides an indication of the banking system ability to increase lending. The liquid liabilities ratio is calculated as M2 – which is broad money supplied (currency plus demand and interest-bearing liabilities of banks and non-bank financial intermediaries) divided by GDP. Higher liquid liabilities ratio indicates larger banking sector where the size of the banking system is positively related to the provision of financial services and thus to growth (World Bank, 2014).

2.2 Theoretical Framework

Boserupian Theory of Agricultural Development

The Boserupian theory states that the increase in the growth and development of Agriculture is determined by the size of the population (labour Force) involved in agricultural practice. This opposes this Malthusian theory which stipulates that the size and growth of the population depends on the food supply and agricultural methods. In times when food is not sufficient for everyone, the excess population will die. Boserup argued that in those times of pressure, people will find ways to increase the production of food by increasing workforce, machinery, fertilizers.

The Demand-Following Theory

The idea holds that as the economy expands, there is a corresponding increase in demand for financial services, "which leads to a supply response in the growth of the financial system" (Patrick 1966). According to the hypothesis, financial and economic progress follow one another. Investors and savers are driven by high economic growth to want modern financial institutions' services, assets, liabilities, and arrangements. In this instance, the widespread and comprehensive process of economic development is continuing to have an impact on how the financial system is evolving. The increase in real output, commercialization, and monetization of agriculture, as well as other traditional substance sectors, determines the amount of demand for financial services (Patrick 1966). Real national income grows more quickly, which encourages businesses to seek out external financing more frequently since it becomes more challenging for them to fund expansion plans with internally generated income.

The financial system will also have a bigger responsibility to carry out the role of financial intermediation by diverting savings from slow-growing industries and businesses to fast- growing industries and companies as the disparities in growth rates across the various economic sectors increase. The system will be able to support and maintain the leading industries as they experience expansion in this way. The demand-following financial hypothesis makes the assumption that, to the extent that the number and variety of financial institution types sufficiently increase and are diverse, there is a high elasticity in the supply of entrepreneurship in the financial services relative to growing opportunities for profit from provision of financial services. Additionally, it is believed that a favorable legal, institutional, and economic environment exists.

Commercial Loan Theory

The theory upon which this study is built is the commercial loan theory. The commercial loan Theory also referred to as the Real Bills Doctrine states that a commercial bank should advance only short term self-liquidating productive loans to business firms, self-liquidating loans are those loans which are meant to finance the production and movement of goods though the successive stages of production; storage, transportation and distributions. When such goods are ultimately sold, the loans are considered to liquidate themselves automatically, (Jhingan, 2009).

Under this theory, the ideal assets of deposit money banks should consist of short-term business loans made to business firms for the management of their working capital. When a bank finances the working capital of a firm, it expects funds for repayment to come from the management of working capital itself (Mbat,2001).

The theory posits believe that when deposit money banks make only short-term liquidating productive loans, the central bank, in turn, should lend to the banks only on the security of such short-term loans. This principle would ensure the proper degree of liquidity for each bank and the proper money supply for the whole economy. The Central Bank is expected to increase or diminish bank reserves by re discounting approved loans when business expand and the need to trade increase, banks are able to acquire additional reserve by re discounting bills with the Central Bank when business fall and the need for trade declines, the volume of Rediscounting of bills would fall, the supply of bank reserves and the amount of bank credit and Money would also contract. Considering this theory as it relates to the agricultural sector, Deposit money banks are expected to grant short term self-liquidating loans to farmers for financing their working capital needs. There loans are expected to be used basically for farming activities and the loan repayment should come from the farm proceed.

2.3 Empirical Review

In their article Udoka, Mbat and Duke (2016) discuss how loan from deposit money banks affects Nigerian agriculture. The primary focus of the study is how loans from deposit money banks affect Nigeria's agricultural output. The mentioned equation was estimated using the ordinary least squares regression method. The conclusion reached based on the results collected is that the agricultural loan guarantee plan fund and agricultural productivity in Nigeria have a positive and significant association.

Oyelade (2019) investigates the impact of commercial bank credits on agricultural output in Nigeria over the period 1980 to 2015 by setting three specific objectives which are to examine the trend of commercial bank credit and agricultural output in Nigeria; to investigate the effect of commercial bank credit on agricultural output in Nigeria and to investigate the effect of commercial bank credit on subsector of agriculture in Nigeria. This work is distinctive and distinct from other research in this field due to the trend analysis and the effect of commercial bank credit on the subsector of agriculture in Nigeria. The first goal was accomplished using trend analysis,

while the second and third goals were accomplished using fully modified ordinary least square (OLS). Methodology. The Fully Modified Ordinary Least Squares (FMOLS) technique was used in the investigation. The results showed that interest rates on agricultural loans from deposit money banks and the assets of deposit money institutions are statistically significant in determining agricultural output in Nigeria throughout the studied period. Additionally, commercial bank loans for agriculture and deposit money bank assets, commercial bank loans for agriculture and interest rates on deposit money banks' credit to agriculture, commercial bank loans for agriculture and interest rates on deposit money banks' credit to agriculture, as well as commercial bank loans for agriculture and interbank lending, determine the output of crop production in Nigeria.

In Nigeria, Ebere, Oresanwo, Omogboye, and Timothy (2021) investigate the viability of agricultural output through agricultural credit. Between 1981 and 2019, secondary data from the Statistical Bulletin of the Central Bank of Nigeria were used. The study's goal was examined using cointegration, DOLS, and Granger Causality. Furthermore, the study's findings revealed that Nigeria's agricultural productivity is significantly enhanced by credit provided to the sector. The direct relationship between agricultural spending and agricultural output in Nigeria, however, is minimal. Additionally, there is a unidirectional causal relationship linking agricultural credit and agricultural expenditure. The relationship between agricultural output and agricultural spending in Nigeria also has a one-way feedback effect. The study is the first empirical investigation that evaluates the viability of agricultural credit in Nigeria. Because the agricultural sector has the potential to sustain agricultural output, food security and the eradication of hunger in the nation would be assured, policymakers in the nation are recommended to be devoted to financing it. Additionally, the national budget's allotment to Nigeria's agricultural sector needs to be increased.

Onuegbu, Ikeora and Ogini (2022) examine the effect of commercial bank credit on agricultural output in Nigeria. The data were examined using econometric methods, including the Ordinary Least Squares and Augmented Dickey Fuller Tests for Unit Roots (OLS). The analysis shows that whereas bank loans, government investment, and the Agricultural Credit Guarantee Scheme Fund all have positive and large effects on agricultural output, interest rates have a negative and tiny impact. As a result, the study concludes that deposit money bank credit has a positive effect on agricultural output in Nigeria and has raised agricultural production in Nigeria throughout the study. According to the analysis, strengthening the agricultural loan guarantee program through genuine financial support will dramatically increase its capital base. To make agricultural finance

appealing to deposit money banks, the Agricultural Credit Guarantee Scheme (ACGS) should enhance its credit guarantee requirements. A portion of the losses made by deposit money banks due to their exposure to the agriculture sector should be covered by the Central Bank of Nigeria.

Adewale, Lawal, Aberu and Toriola (2022) examine the effect of farmers credit on agricultural productivity from 1981 to 2016 using data from World Bank Development Index (WDI). Agricultural bank loans significantly increase agricultural output, according to the results of the Ordinary Least Squares (OLS) estimation (=0.667173, t=5.961095 and P0.05). The bank lending rate (=1.094792, t=1.295874 and P>0.05) and the foreign exchange rate (=0.124297, t=0.437929 and P>0.05) have no discernible effects on agricultural output. It was argued that bank loans significantly increase Nigeria's agricultural productivity. It was suggested that the government encourage savings and bank credit to farmers.

A thorough analysis of the various theoretical and empirical literatures demonstrates that banks' lending to the agricultural sector is essential for increased production performance, which boosts economic growth in Nigeria.

2.4 Research Gap

Despite the importance of Deposit Money Banks in providing financial services to the Agricultural Sector in Nigeria, there is a lack of empirical research on the specific roles of Deposit Money Banks in promoting agricultural development in Nigeria. Previous studies have focused on the general role of financial institutions in agricultural development, but there is a need for more specific research on the roles of Deposit Money Banks in this area.

Furthermore, there is a lack of research on the specific financial services provided by Deposit Money Banks to farmers and agricultural businesses in Nigeria, and how these services impact on the growth of the Agricultural Sector. Additionally, there is a need for research on the challenges facing Deposit Money Banks in providing financial services to farmers and agricultural businesses in Nigeria, and how these challenges can be addressed.

This study aims to fill this research gap by examining the specific roles of Deposit Money Banks in promoting agricultural development in Nigeria, with a focus on the financial services provided by Zenith Bank Plc to farmers and agricultural businesses in Nigeria.

CHAPTER THREE

3.0 Research Methodology

3.1 Introduction

The survey study employs questionnaire as instrument of data collection. The questionnaires were administered among of all the Agric desk officers of deposit money banks in Abuja and agricultural loan applicants using both purposive and convenient sampling techniques. The study was conducted in Federal capital Territory Abuja, Nigerian. In view of the foregoing, the sample size for the study is 195 respondents comprising 3 Agricultural desk officer of the deposit money banks in FCT Abuja and 200 agricultural loan applicants. The participants were selected using through Multistage Cluster Sampling technique. Zenith Bank is used as as the case study for deposit money banks.

3.2 Research Design

Ex-post facto research design is adopted for the study. This is because the data are secondary data that already exist in the financial publications of the Central Bank of Nigeria and that of other financial institutions which are verifiable and authoritative

Model Specification

The model used for the study was adopted from the work of Agunuwa, Inaya, and Proso, (2015),

who examined the impact of deposit money banks credit on agricultural productivity in Nigeria (1980 - 2013). The model is stated thus:

AGO = f (CAS, CPS, LE)

Where:

AGO = Agricultural Output

CAS = Credit to Agricultural Sector

GSA = Government Spending on Agricultural Sector

$\beta 0$ = Constant

The Model was modified as follows.

AGO = f (CAS, GSA, ACGS, INTR)

Where:

AGO = Agricultural output

CAS = Credit to Agricultural Sector

GSA = Government Spending on Agricultural Sector

ACGS= Agricultural Credit Guarantee Scheme Fund on Agricultural Sector

INTR = Interest Rate

AGO= β0 + β1 CAS + β2GSA+ β3 ACGS+ β4 INTR μ --- -- -- -- -- -- -- -- -- - -- -1

β0 and μ are the constant and error term respectively while β1, β2 and β3 are the coefficient of,

agricultural output, credit to agricultural sector, government spending on agricultural sector,

agricultural credit guarantee scheme fund on agricultural sector and interest rate on agricultural output

Method of Analyses

The data was analyzed with econometric techniques involving descriptive statistics, Augmented

Dicker Fuller and Philip Perron tests for unit roots, Johansson technique for cointegration test for long run relationship, Granger Causality Test and the ordinary least square.

The design that will be used for this study is the ex < post facto research design. This design has been adjudged appropriate as the events under study have already taken place. The researchers have no control over the variables under study simply because they have already been manipulated before they were applied in this study. Unlike the experimental design, statistical techniques will be applied in the treatment of the events under study.

Response and Discussion of Results

Table 1: Mean Response on Impact of Agricultural Loan on agricultural Output

S/N	Items	Mean	Standard Deviation
1	Agric loan has increase my productivity	0.88	0.33
2	Timely disbursement of loan has increased my output	0.72	0.45
3	Volume of loan has increased my output	0.94	0.22
4	Low interest rate on Agric loan has increase my output	0.88	0.33
5	Loan duration has positively impacted my output	0.74	0.44
	Total Mean	0.83	

Table 1 Shows that respondents agreed with all the items with the mean values ranging from 0.72 to 0.94. While, the total mean is 0.83 indicated that the respondent agreed that the agricultural loan by deposit money banks has positive impacts on agricultural output in Nigeria.

3.3 Population of the Study

The population of this study comprises of the Agricultural desk officer of Zenith Bank Plc, which Emphasis was placed on staff knowledge and information concerning the subject of the study.

3.4 Sample Size and Sampling Techniques

The sample size for the study is 195 respondents comprising 3 Agricultural desk officer of the deposit money banks in FCT Abuja and 200 agricultural loan applicants. The participants were selected using through Multistage Cluster Sampling technique. Zenith Bank is used as as the case study for deposit money banks.

3.5 Methods of Data Collection

The instrument for data collection is Agricultural Loan Administration Questionnaire (Appendix II) Agricultural Loan Administration Questionnaire consist of 21 choices of answers of Yes or No to determine the probability of the respondents. The questionnaires were administered by the researcher to the Agricultural loan applicant through the Agricultural desk officers of the selected deposit money bank. This was done to make sure that the respondents are actually the respondent’s banks customers. The research questionnaire on the effect of deposit money banks' loans on agricultural output in Nigeria was addressed to the applicants for agricultural loans.

CHAPTER FOUR

4.0 Data Presentation, Analysis and Interpretation

4.1 Data Presentation

The result on revealed that at level, under the "intercept only", agricultural output, credit to agricultural sector, government spending on agricultural sector, agricultural credit guarantee scheme fund on agricultural sector and interest rate were stationary at 5% level [1(0)] From the analyses of stationarity of the variables, it was seen that the variables have stationarity of level. The Ordinary Least Squire Method which is capable of handling stationary at level I(0) is the most suitable tool of analyses

Table 1: Summary of the Unit Root Result

Variables	At Level 1(0)	At First Difference 1(1)	At Second Difference	Order of Integration	Probability
AGO	-4.526315			1(0)	0.0039
CAS	-3.839292			1(0)	0.0112
GSA	-4.595801			1(0)	0.0016
ACGS	-5.814004			1(0)	0.0022
INTR	-4.340303			1(0)	0.0048

Source: E-View 9.0

The Ordinary Least Square Regressions

In this section, we provide the benchmark test of the significance of the independent variables in explaining the effect of commercial bank credit on agricultural sector in Nigeria

Dependent Variable: AGO

Method: Least Squares

Date: 02/24/22 Time: 12:07

Sample: 1988 2021

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.73210	5.435635	2.543973	0.0031
CAS	3.668951	0.991508	2.683245	0.0012
GSA	1.342700	0.099069	2.339468	0.0521
ACGS	2.145270	0.695746	2.208798	0.0312
INTR	-0.537317	-0.785673	-1.274907	0.64235
R-squared		0.749033	Mean dependent var	6.897917
Adjusted R-squared		0.7108550	S.D. dependent var	1.094669
S.E. of regression		0.601022	Akaike info criterion	2.096940
Sum squared resid		4.334733	Schwarz criterion	2.444891
Log likelihood		-12.92093	F-statistic	7.951898
Durbin-Watson stat		1.668708	Prob(F-statistic)	0.001265

Source: E-View Software 9.0

4.2 Data Analysis

Unit Root

The variables were tested for stationarity. The test aimed to understand the state at which the variables can be held stable for regression analyses. This test becomes pertinent because time series variables are often prone to non-stationarity which is capable of distorting the reliability of regression results. The variables used in the analysis were subjected to Augmented Dickey Fuller (ADF) Tests for Unit Root, to determine whether they are stationary series or non-stationary series. The variables were tested for stationarity at "intercept only" and at "intercept and trend". The null hypothesis that is tested in both Unit Root Tests is the presence of Unit Root.

4.3 Data Interpretation

From the above regression coefficients, we can express the model as follows:

AGO = 15.73210, CAS= 3.668951, GSA= 1.342700, ACGS= 2.14547, INTR - 0.537317I + u
From the results of the OLS, it is obvious that the constant parameter (Bo) is positive at +15.73210. This means that if all the independent variables are held constant, AGO as a dependent variable will grow by 15.73210 units in annual-wide basis.

Credit to Agricultural Sector: For credit to agricultural sector, the coefficient of (CAS) is +3.668951 with t-Statistic of 2.683245and prob. Value of 0.0012 which means that t credit to agricultural sector has positive and significant effect on Agricultural output, a unit increase in

credit to agricultural sector (CAS) will cause Agricultural output (AGO) to increase by 3.668951 units.

Government Spending on Agricultural Sector: For Government Spending on Agricultural Sector, the coefficient of (GSA) is +1.342700 with t-Statistic of 2.339468 and prob. Value of 0.0521 which means that government spending on agricultural sector has positive and significant effect on Agricultural output, a unit increase in Government Spending on Agricultural Sector (GSA) will cause Agricultural output (AGO) to increase by 1.342700 units.

Agricultural Credit Guarantee Scheme Fund: For Agricultural Credit Guarantee Scheme Fund, the coefficient of (ACGS) is + 2.145270 with t-Statistic of 2.208798 and prob. Value of 0.0312 which means that t Agricultural Credit Guarantee Scheme Fund has positive and significant effect on Agricultural output, a unit increase in Agricultural Credit Guarantee Scheme Fund (GSA) will cause Agricultural output (AGO) to increase by 2.145270 units.

Interest Rate: For interest rate, the coefficient of (INTR) is -0.537317 with t-Statistic of -1.274907 and prob. Value of 0.64235 which means that interest rate has negative and insignificant effect on Agricultural output, a unit increase in interest rate (INTR) will cause Agricultural output (AGO) to decrease by -0.537317 units

Finally, the Adjusted R-squared is 0.7108550. This means that 71% of total variation in Agricultural output, (AGO) can be explained by changes in the values of the independent variables while the remaining 29% is due to other stochastic variables outside the model.

CHAPTER FIVE

5.0 Summary, Conclusion and Recommendation

5.1 Summary

There are growing literature on the effort of the Apex Bank of Nigeria over the years in promoting the agricultural sector on deliberate policies including provision of agricultural credits to small, medium scale famers. However, there is perceived shortage of food and other agricultural produce which has led to unstable price in the domestic market and has adversely caused hardship in Nigerian economy. The study was motivated to assess the impact of agricultural credits in cash crops, food crop and livestock on the Nigeria economic growth. This motivates the desire to examine the impact of agricultural loan applicant access to credit from deposit money banks on agricultural output in FCT Abuja, Nigeria. Primary data were collected with the aid of questionnaires that were administered in FCT-Abuja. The study employed descriptive and logit regression to empirically determine the impact of agricultural loan applicant access to credit on agricultural output in Nigeria. The result of findings that a positive significant correlation exists between agricultural loan applicant access to credit and agricultural output in Nigeria. Thus, in light of the result analysis the study has been able to established based on the research question and objective of the study that agricultural loan applicant access to credit have significant impact on agricultural output in Nigeria. Thus, in contribution to knowledge in line with the demand-following theory, the study has been able to establish that the growth of the economy driven by the growth of the various sector such as the agricultural sector generates additional and new demand for financial services, which further drives economic growth. Thus, it is suggested that rapid economic growth (farm output) generates a need for contemporary financial institutions' services, assets, liabilities, and arrangements to support the expansion of a variety of economic sectors.

5.2 Conclusion

The study shows that bank credit on agricultural output, government spending on agricultural sector and Agricultural Credit Guarantee Scheme Fund has positive and significant effect on agricultural output while interest rate has negative and insignificant effect on agricultural output

The study therefore, concludes that commercial bank credit have positive effect on agricultural output in Nigeria and has achieved agricultural production in Nigeria within the period under review

5.3 Recommendation

In the light of the above findings the study made the following recommendations

- Government should strengthen the Agricultural Credit Guarantee Scheme by meaningful budgetary allocation in order to enhance its capital base significantly.
- The Agricultural Credit Guarantee Scheme (ACGS) should improve on their conditions for credit guarantee in order to make agricultural financing attractive to deposit money banks.
- Government should subsidize loan to the agricultural sector
- Government should formulate policies that will encourage the banks to give loans to farmers at a concessionary interest rate.
- Agricultural extension services should be provided to farmers so as to keep abreast of modern techniques in farming (proper use of pesticides, fertilizers, genetically improved seedlings, amongst others). These extension services should be provided by private firms contracted by the government and they should be paid based on services rendered

References

Ademola, A. E. 2019. Impact of Agricultural Financing on Nigeria Economy Article in Asian Journal of Agricultural Extension Economics and Sociology.

Adewale, A. T, Lawal O. A, Aberu, F., Toriola A. K. 2022. Effect of Credit to Farmers and Agricultural Productivity in Nigeria. East Asian Journal of Multidisciplinary Research, 1(3), 377–388. https://doi.org/10.55927/eajmr.v1i3.99

Adewole, J. A., Adekanmi A. D., & Gabriel A. O., (2015). An assessment of the contributions of commercial banks to agricultural financing in the Nigerian economy: International Journal of Advanced Academic Research - Social Sciences and Education(1),2,7

Adeyinka, .A.J., Daniel , A.A., & Olukotun , G.A. (2015). An assessment of the contribution of commercial banks to agriculture financing in the Nigerian economy: International Journal of Advanced Academic Research–Social Science and Education .1(2),

Athanasius N. N., (2017). An analysis of banks' credit and agricultural output in Nigeria: 1980-2014:International Journal of Innovative Finance and Economics Research 5(1):54-66,

Aremu, O. S., Suberu, O. J., Oke, J. A. 2016. Effective credit processing and administration as a panacea for non-performing assets in the Nigerian banking system. The Journal of Economics, 1(1), 53-56.

Ayuba, B., Magaji, S., Kuna, M. B. 2003. Banking Services and Customer Switching Habit: A Case Study of Selected Banks in Abuja. The Abuja Management Review 1 (2), 216–227.

Bachewe, F., Berhane G., Minten B., Taffesse A. S. 2018. Agricultural transformation in Africa? Assessing the Evidence in Ethiopia. World Development 105: 286-298.

Chisasa, S. (2015). An econometric analysis of bank lending and agricultural output in South Africa: A survey approach. The Journal of Applied Business Research, 31(1), 163-174

Cornelius, M. O. Arikpo, O. F. Anthony, O. (2015). The role of deposit money banks on the growth of SMEs in Scheme Fund (ACGSF) for food security in Nigeria (1978<2006). Journal of Economics. 3(1): 39<48.

Ebere, C. E., Oresanwo, A. M., Omogboye, M. A., Timothy, A. A. 2021. Would Agricultural Credit Sustain Agricultural Output in Nigeria? An Empirical Perspective. Journal of Accounting and Management. ISSN: 2284–9459 JAM, 11(.3).

Eyo, E. O., Nwaogu, M. A., Agenson, M. E. 2020. Agricultural credit guarantee in Nigeria and the uncertainties of the macroeconomic environment. International Journal of Economics and Financial Issues, 10(20), 20–29.

FAO 2018. Nigerian Agriculture at a Glance. Food and Agriculture Organisation. Viale Delle Terme Di Caracalla Rome, Italie, Rome, Italy.

FAO, 2019. The state of food insecurity in the world 2019. Safe guarding against economic slowdowns and downturn. Rome, FAO.

Farm Survey 2016. Definition used by the farm business survey; www.fbs-definations - 4oct16.pdf

Jonathan E. O., & Cynthia A. N., (2017). The impact of deposit money bank's agricultural credit on agricultural productivity in Nigeria: Evidence from an Error Correction Model: International Journal of Economics and Financial Issues, 2017, 7(2), 513-517.

Magaji, S., Adamu, A. M. 2011. Youth employment in Nigeria since Independence. In Barkindo, B. (ed) Nigeria at fifty: Issues and challenges in governance. University of Abuja.

Magaji, S., Bature, N. 2004. The influence of Agricultural Credit Guaranteed Scheme on farmers' output in Nigeria. Abuja Management Review 2 (1), 110–121.

Magaji, S., Musa, I. 2015. Impact of Household income on child labour in Abuja, Lapai International Journal of Management and Social Science. 8(1), 32-56.

Nnamocha, P. N. & Charles N. E. (2015). Bank credit and agricultural output in Nigeria (1970 – 2013): An Error Correction Model (ECM) Approach: British Journal of Economics, Management & Trade 10(2), 1

Obilor, S.I. (2014). The impact of commercial banks,, credit to agriculture on agricultural development in Nigeria: An Econometric Analysis. International Journal of Business, Humanities and Technology, (3),1, 85-94.

Ogar, A., Nkamare, S.E & Charles .E.(2014). Commercial bank credit and its contribution on manufacturing sector in Nigeria. Research Journal of Finance and Accountancy 3(2) 48-66

Ogbuabor, J. E., Nwosu, C. A. 2017. The Impact of Deposit Money Bank's Agricultural Credit on Agricultural Productivity in Nigeria: Evidence from an Error Correction Model. International Journal of Economics and Financial Issues, 7(2), 513-517.

Onuegbu, A. N., Ikeora, J. J. E., Ogini, P. 2022. Deposit Money Bank Credit and Agricultural Output in Nigeria. International Journal of Innovative Finance and Economics Research 10(1):49-67.

Omondi, S. O. 2019. Small-scale poultry enterprises in Kenyan medium-sized cities. Journal of Agribusiness in Developing and Emerging Economies, Vol. 9 No. 3, 237-254.

Onyeagocha, S. U. O. 2001. Problems and challenges of Nigeria financial institution in credit operations. Nigeria Banker.

Oyelade A. O. 2019. Impact of Commercial Bank Credit on Agricultural Output in Nigeria. Review of Innovation and Competitiveness: A Journal of Economic and Social Research, 5(1), 2019.

Rahji. M .A.Y and Adeoti A.I (2010). Determinants of Agricultural Credit Rationing by Commercial Banks in South-Western Nigeria'', International Research Journal of Finance and Economics, Issue 37

Sogules,I. W & Nkoro,E. (2016). The impact of bank credits to agricultural and manufacturing sectors on economic Growth in Nigeria. International Journal of Economics and Financial Research, 2 (4):,.74-78

Udoka, C. O., Mbat, D. O., Duke, S. B. 2016. The effect of commercial banks' credit on agricultural production in Nigeria. Journal of Finance and Accounting, 4(1), 1-10.

Yakurr Local Government Area, Cross River State, Nigeria. Journal of Social Science Research. 6 (2).Kehinde, A. A. (2012). Agricultural financing in Nigeria: an assessment of the Agricultural Credit Guarantee