

Chapter One

Introduction

1.1 Background to the Study

Trends in undernourishment in developing world today are quite complicated by the nutrition transition, characterised by a shift from traditional diets toward a more globalised intake pattern that include increased quantities of processed foods, animal products, sugars, fats and alcohol¹. High rates of food insecurity and malnutrition as well as prevalence of overweight and associated non-communicable diseases, are leading to a “double burden”. It is expedient that governments and multilateral agencies boost food production and this is being pursued with different agricultural programmes, including the need to migrate to provide intervention funds in many developing countries.

Since agricultural growth and transformation in Nigeria are dependent on sustained public sector interventions, commercial agriculture involves considerable application of modern techniques, including machinery, and other farm input but the capital equipment significance had grossly reduced the number of labour and capital productivity. Development financing is one of the major and necessary requirements or instruments for rapid and sustainable economic growth and development which supply finance, fund, credit and support to various sectors of the economy in order to achieve welfare improvement, greater productivity and facilitate economic growth. Development finance is the financial initiatives involving the formulation and implementation of policies, innovations, schemes, programmes, and appropriate financial supply/credit to deliver economic services in an effective, efficient and sustainable manner to achieve economic growth and development.

The Central Bank, which serves as Nigeria's main financial regulatory agency, has been providing entrepreneurs, businesses, and other economic sectors with funding, credit, and donations in order to encourage the growth and development of the Nigerian economy². Central Bank of Nigeria is the major designer, initiator, administrator and regulator of development finance policies and schemes in Nigeria. All the internal financial institutions, lending institutions development finance institutions and commercial banks are controlled, guided and operated under the Central Bank of Nigeria's supervision. The Central Bank of Nigeria's development finance initiatives involve the participation of Central Bank Nigeria directly or indirectly in the economy in terms of the formulation and implementation of various policies, schemes, programmes, innovations and directives for the provision of sufficient or adequate finance and credit to the productive sectors of Nigeria with primary objective of facilitating economic growth and development². Thus, fundamental problems such as limited access to financing for real sector investment, lack of export earnings diversification, poor infrastructure, financial marginalization, and unemployment persist³. Strong policies that target certain sectors directly are needed to address these issues since they have significant effects on the development and expansion of the national economy. It's against this backdrop that this study intends to investigate the influence the central bank of Nigeria on intervention facilities for agricultural export commodities development in Nigeria.

Like the majority of African nations, Nigeria is endowed with enormous agricultural lands as well as favorable topographical conditions that encourage agricultural output all year long. Despite this enormous potential, hardly much has been accomplished^{4,5}.

Previous studies in this field have pointed to a lack of finance accessibility as one of the reasons for Nigeria's agriculture sector's subpar performance⁶. It is evident that banks, namely deposit

money institutions, have no keen interest in supporting agriculture⁷. The Agricultural Credit Guarantee Scheme (ACGS), which offers protections against the inherent risk in agricultural financing, was established by the CBN to encourage banks. Because agriculture is a labor- and capital-intensive industry, this measure could not accomplish the goals it was designed for⁸. Consequently, the country with its highly diversified agro-ecological condition is relying on massive importation of basic food items and raw materials for industrial inputs⁹. The combined impact of a high cost of living and a high unemployment rate on the average person is unimaginable. Clearly, efforts by the government to strengthen Nigeria's agriculture sector have not produced the anticipated results¹⁰. Therefore, it is essential to conduct an empirical investigation into the impact of deposit money bank credit on the performance of the agricultural sector in Nigeria given the persistence of these issues in spite of the various policy measures adopted by various governments to strengthen the agricultural sector. Addressing persistent structural problems such as poor real sector investment financing availability, lack of export earnings diversification, inadequate infrastructure, financial marginalization, and unemployment¹¹.

1.2 Statement of the Study

The Nigerian government interventions have been influenced by the need to increase peasant farmers' productivity and enable them to transition to mechanised agricultural practices by giving them access to inputs and other forms of support, while commercial farm holders were supported by the provision of credit facilities, input subsidies, capacity building programmes, and export incentives. Hence, studies have examined how financial support is pivotal for the commercialisation of innovations since it remains the bedrock for mechanization which has been given scant attention. However, in nations where traditional agriculture is the dominant

sector, output is essentially seasonal and entirely dependent on the goodwill of the weather and inadequate farming machinery. This study sheds light on the extent to which the Central Bank of Nigeria's numerous agricultural intervention programmes have improved the agricultural sector in terms of availability of food, export commodities and employment in Nigeria.

Issues revolving around farmers' productivity and capacity call for strong policies that target the specified sectors with significant implications for the development and expansion of the national economy. This study intends to investigate the Central Bank of Nigeria agricultural intervention fund and public infrastructural development in Nigeria. Thus, how much input in form of financial support accruing as a consequence utilized to the agricultural development in Nigeria cannot be said to be ascertain.

1.3 Aim and Objectives of the Study

The aim of this study is to investigate the Central Bank of Nigeria agricultural intervention fund and public infrastructural development in Nigeria. The specific objectives of this study are to:

- i. ascertain the impacts of the Central Bank of Nigeria's intervention funds on Agriculture in Nigeria.
- ii. ascertain how the central bank of Nigeria have incorporated economic reforms and agricultural intervention in Nigeria.
- iii. ascertain the extent to which the Central Bank of Nigeria's financial intervention has improved the productivity of, and access to market by low-income farmers in Nigeria.
- iv. propose mechanisms that can be used to optimise Agricultural intervention in Nigeria.

1.4 Research Questions

- i. What has been the impacts of Central Bank of Nigeria's intervention funds on Agriculture in Nigeria?

- ii. To what extent have farmers been socially integrated into economic reforms and agricultural intervention in Nigeria?
- iii. What is the extent to which the Central Bank of Nigeria's financial intervention improved the productivity of, and access to market by low-income farmers in Nigeria?
- iv. What are the mechanisms that can be used to optimise agricultural intervention in Nigeria?

1.5 Significance of the Study

The purpose of this study is to know the contribution of the intervention framework of the central bank of Nigeria to agricultural sector. The study's findings will contribute to a better understanding of how agricultural assistance might be properly handled in a developing state like Nigeria. The outcome of this study will have substantial policy implications of agricultural intervention of the CBN. This study also provides valuable insights and contributes immensely to the existing literature and therefore add value to the quality of the existing research. The findings of the study will help in enriching and expanding research frontiers. The study will also make recommendations on more flexibilities and proffer solutions, which will make this inquiry essential for policy makers, academicians, local and international NGO's and students. This study is an extension of the existing body of knowledge, for the reason that if completed, will constitute good and researchable literature/findings on the research problem or any other research topic similar or related to it for future or prospective researchers and the general readers.

1.6 Scope of the Study

The time frame for this study captures the analysis of government efforts to improve agricultural output in Nigeria. This study is based on how the Nigerian central bank has performed when it comes to directing funds toward the agricultural sector of the economy in order to support its growth. The work covered a period of ten years, 2010 - 2020.

1.7 Limitation of the Study

The problems encountered during this research has to do with the dearth of information or data from the central Bank of Nigeria. It was difficult to get information on the amount disbursed per year and the beneficiaries of such intervention programmes. In addition, the beneficiaries were difficult to track down to provide some relevant data.

1.8 Operational Definition of Terms

Agriculture: Agriculture is the farming of cultivating plants and livestock. It was the key development in the rise of sedentary human civilization. There are two division of agriculture; subsistence and commercial agriculture. Subsistence corresponds more to the less developed region of world where people obtain the food they need to survive.

Central Bank of Nigeria: It is the apex monetary authority of Nigeria established by the CBN Act of 1958. The major regulatory objectives of CBN include; promotion of monetary stability and sound financial environment, and act as a banker of last resort and financial adviser to the federal government.

Development: The process of developing or being developed. An event constituting a new stage in a changing situation. In economic sense, it's the economic study of the public sector, economy and social development to ascertain the well-being and quality of life of people.

Endnotes

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Chapter Two

Literature Review

2.1 Conceptual Review

2.1.1 Agricultural Finance

The Latin word "Ager," which means "field and culture," is where the word "agriculture" originates. Agriculture in writing refers to field farming. The word is now widely used to refer to training, research, and crop production as well as forestry, livestock, and other related fields. Land cultivation for food production and the raising of animals for human consumption directly fall within the definition of agriculture. The processing, distribution, and marketing of agricultural products are also addressed.

The Nigerian agricultural industry is still reflecting the physical signs of subsistence farming. Small-scale farmers account for the majority of the production; roughly 95% and are the primary source of our food. Although there are a few commercial units here and there, the cattle is in the care of nomadic herders, and the most of the poultry is still produced in backyards. Most fishing is still done by hand, and there are not many motorized canoes or fishing trawlers around¹.

In great portion, the expansion of the agricultural sector stimulates and supports the economies of developing nations. A researcher who emphasized the significance of agriculture generally pointed out that the fight for long-term economic development will be won or lost in the agricultural sector¹.

Every business venture that is necessary for starting and maintaining a business must include finance as a crucial element. Any business depends on it to survive. Working capital as well as capital equipment such as land and buildings, machinery, and other fixed assets must be purchased with funds. It is important to remember that when a business expands, its financial needs also grow, and easier access to capital will help it do so. The agricultural industry, which focuses mostly on food transport, processing, and marketing, is not an exception. By encouraging greater investments and increasing returns on financial resources, which in turn increases productivity, deepening financial intermediation may support economic growth². The purchase and application of capital in agriculture is known as agricultural finance. Essentially, it discusses the demand for and supply of capital in the agricultural sector of the economy.

Agricultural finance is the term used to describe amount spent and invested in the agricultural industry with the intention of advancing societal welfare. It describes where money comes from and how it is made available for use in and manufacturing of agricultural goods. It basically refers to the collection and application of financial resources for agricultural uses³. It consists of both private and public funds and can take the shape of grants, loans, and other financial transactions. Money and capital markets, as well as governmental and non-governmental entities, may be sources of agricultural financing. Public funds are subsidized funds while private funds are unsubsidized notwithstanding their price^{4,5}. Both non-debt (non-leverage) and debt (leverage) financing options are available for agricultural purposes. Debt refers to investments with stringent contractual financial requirements on a nation's resources, whereas non-debt investments do not have such set or mandatory servicing responsibilities. A nation's ability to service its debts must grow faster than its debt burden in order for it to be viable in the long run⁵.

According to development theorists, improving the agricultural sector is essential for the economy's structural restructuring. It is opined that the agricultural sector transmits the surplus of investable resources produced by agriculture to the industrial sector⁶. Consequently, the agricultural sector (implicitly or explicitly) must extract and develop its resources for a sustainable economic expansion and industrial advancement. Therefore, agricultural financing encourages the purchase and use of technology that is required to drive the desired economic growth. The contribution of agriculture to the national product would thus be the proper indicator of agricultural progress.

All forms of farmland financing are included in rural agricultural finance. In this field of work, people work to increase the agricultural sector's access to effective, long-term financial services, including farming and all related businesses⁸. It encompasses all financial services, such as lending, insurance, transfers, and savings, as well as the provision of inputs, processing, wholesale trade, and marketing⁹. The concept of agricultural finance was expanded to include any financial services that target agricultural enterprises and on-farm activities without necessarily focusing on the poor¹⁰. It is impossible to overestimate how important funding is to agriculture. It is crucial to adopt more advanced techniques that can provide larger output since the rising global population is linked to increased pressure on the need for food and agro-products, which are inputs for subsequent production. Agriculture finance is crucial for increased productivity because farmers can only buy and utilize technical input if they have the necessary funds available to them. In Africa, a sizeable section of the population lives in rural areas where agriculture is their primary vocation and there are still many financial restraints in the industry. Small-scale farmers' ability to increase their production is constrained by the pricey and unequally distributed financing that continues to be available for the agriculture

sector. Lack of working capital and low liquidity limit the farmer's ability to purchase productivity enhancing input like seeds, fertilizers and pesticide.

This was supported by some scholars stating that the average production efficiency levels are higher among producers who have access to formal credit^{11,12}. In order to improve output and raise standards of life, agricultural finance helps farmers break the cycle of poverty. There is a wealth of literature on the connection between agricultural financing and production. It was said that developing nations' agricultural output was low¹³. The researcher used Pakistan as a case study and blamed this on a variety of factors, including tiny holdings, outdated agricultural practices, inadequate irrigation systems, a lack of or improper use of modern farm technologies. Small income and minimal or no savings were the result of this. Therefore, it was predicted that having access to financing would encourage agricultural investment, increase the use of contemporary inputs, and increase farm output. Farmers, particularly those in rural areas, struggled to save because they were poor, and the funds they could access through unofficial financial markets were frequently expensive. Meanwhile, commercial banks and other traditional sources of funding view the agricultural industry as risky for lending, so they avoid doing business with it. Additionally, compared to other non-agricultural businesses, agricultural activities are associated with low returns on investment and a lengthy pay-back term, which restrict formal lending. The output of the sector is dependent on the whims of the weather, which is mostly to blame for the perceived high risks and lengthy gestation period.

According to several studies, three primary factors—increased agricultural input utilization, technological advancement, and technical efficiency—contributed to agricultural growth¹⁴. Technical efficiency was the rate at which new technology was adopted and used more judiciously, and it was influenced by the flow of information, better infrastructure, the

availability of funds, and farmers' managerial skills. Technological change was the result of research and development efforts. Funding was also necessary for improved input mix and greater utilization. Farmers may borrow money or use their own savings to pay for these expenses. Agricultural finance proved to be a crucial input alongside contemporary technology for higher output in less developed nations where savings were minimal.

It was noted that land fragmentation, farmers' lack of administrative abilities, which constrained their capacity to adopt better farming practices, and insufficient utilization of contemporary technology and input were further contributing factors to low agricultural output¹⁵. The latter was a result of the farmers', especially the smallholders', insufficient access to financing. Therefore, improving agricultural output was heavily reliant on, among other things, farmers' access to financing.

The adoption of modern technologies also raised the demand for financing, which led to a rise in small farmers' agricultural productivity¹⁶. Credit availability encouraged the adoption of technologies that increase yield. The idea was also backed by the fact that the majority of the investigated third-world nations used loan programmes to increase agricultural productivity¹⁷. Also, it was proposed that of all agricultural reform policy interventions intended to be successful, agricultural/rural finance had been viewed as one of the key elements to the agricultural sector's sustainable development^{17,18}. According to some researchers, timely and convenient finance access enables farmers to buy the equipment and inputs needed to carry out farm operations and boost production^{19,20}. According to certain research, adopting contemporary agricultural technology, such as chemical fertilizers, suggested seeds, tractors, and modern irrigation systems, among others, helped developing countries increase the output

of their agricultural sectors. However, the use of such advanced agricultural methods is costly and calls for more funding²¹.

The availability of finance to farmers was said to have raised the need for inputs to boost crop yield. The elasticity of credit (production credit) and tube wells' effects on agricultural output was found to be greater than that of the number of tractors, irrigation, chemical fertilizer, and pesticide use²². A researcher emphasized the importance of agricultural finance, contending that financial resources are required to modernize agriculture because new technologies must be purchased before they can be applied on farms²³. They underlined the need for financing for farmers' spending and labour throughout the early stages of their businesses. Furthermore, they contended that the modest scale of most farmers' activities limited the amount of savings that could be generated from surplus output, which led to income stagnation. Therefore, any financial intermediation system that would leave a pot of money for farmers to invest in would spur agricultural development and production. Additional research produced empirical proof that institutional agricultural financing significantly increased farm production^{24,25}. Without a doubt, they contended, agriculture might serve as the primary tool for enhancing the socioeconomic circumstances of rural residents. For Pakistan, time series analysis and the use of the error correction model revealed that agricultural loan had a favourable impact on the GDP, with its effect being stronger on the agricultural component²⁶. Both immediately and over time, agricultural finance significantly reduced poverty.

When they stated that agricultural finance was a crucial tool for agricultural development in underdeveloped nations, it further emphasized the significance of credit²⁷. The Malian National Committee of the Partnership to Cut Hunger in Africa used a comprehensive analysis of barriers to agricultural development for Mali, citing a lack of financial resources as one of the

main obstacles to the expansion of its agricultural industry²⁸. The Committee identified strengthening rural investments as one of the key methods for reducing hunger in Mali. This included funding hydro-agricultural developments, creating non-bank financial institutions, bolstering private investments (financing mechanisms, creation of alternative collateral, funding guarantees, and insurance mechanisms), facilitating producer access to credit, strengthening decentralized financial systems, and promoting microfinance.

Affluence and agricultural productivity are positively correlated, according to studies for Nigeria. For instance, it demonstrated how microcredit made it possible for farmers to buy the input they required to boost agricultural productivity. However, the amount of output was not favourably impacted by the credit that the farmers in the study area were able to receive. This was brought on by the injudicious use of secured credits or their diversion to purposes other than the planned farm enterprises.

Other studies have sought to link improvement in agricultural production to poverty reduction²⁹. It was highlighted that agriculture is typically the mainstay of rural livelihoods and that poverty is still mostly a rural problem³⁰. In sub-Saharan Africa, 70% of the workforce works in agriculture, and in South Asia, 67% of the labour is employed in agriculture. Therefore, any increase in rural earnings should have a significant influence on poverty, if only due to the sheer weight of the people.

The evaluations that closely monitored the experiences of agricultural communities over an extended period of time are the most informative in determining how changes in agriculture have affected poverty^{31,32}. These studies demonstrated that increases in agricultural production have increased rural incomes in two ways: first, by directly raising farmer incomes; second, and most significantly for the poorest; third, by raising employment prospects and pay.

It was explained that increased agricultural productivity decreased poverty through four transmission mechanisms, including: the direct and relatively immediate impact of better agricultural performance on rural incomes; the impact of cheaper food for both urban and rural poor; agriculture's contribution to growth and the generation of economic opportunity in the non-farm sector; and agriculture's central role in fostering and sustaining economic transition, as countries³³. The study stated that how much agricultural output can be boosted where it is most needed will determine the possibility for future poverty reduction through these four transmission mechanisms. In a related study, a researcher organized their findings in terms of the labour market, farm revenue, and food prices as the three main conduits connecting agricultural growth to poverty. Following the presentation of findings from six country case studies, they developed a theoretical framework for examining the quantitative significance of those distinct channels. They came to the conclusion that when both the direct and indirect benefits of agricultural growth were considered, the latter was more effective at reducing poverty.

Despite the priority given to agriculture in Nigeria, the sector will continue to encounter some difficulties. The major problem in financing agriculture in Nigeria is that of the channel used in extending loans. A scholar noted that the basic issue in the financing of agriculture development in Nigeria is not inadequate public saving or lack of funds but one of communication between those who manage the agricultural sector and the rest of the administration³⁵. According to a researcher, the lack of financing is one of the factors preventing Nigerian agriculture from developing. He goes on to emphasize that a farmer's desire to innovate depends on his financial resources, and for any innovation to happen, financial resources through rural credit must be sufficient among other factors. According to

him, the absence of credit facilities is one factor that makes it difficult for farmers to innovate. According to a researcher, underdeveloped economies, particularly those in Nigeria, are dominated by agriculture and have poor levels of productivity in terms of income, saving, and investment. The study believes that by increasing agricultural output and productivity, the agricultural sector may contribute positively to the industrialization process overall. According to the third National Development Plan, the following are the main issues facing Nigerian agriculture: inadequate supply of agricultural inputs, inadequate extension services, a lack of skilled labour in various fields, and deteriorating feeder roads and other transportation infrastructure. The issue of land ownership imposed by the system of land tenure throughout the majority of the country, the issue with illnesses and bugs, labour shortage, particularly during times of high demand like the farming seasons, many food crops do not have the proper technologies.

The 1973 establishment of the Nigerian Agricultural Bank (NAB) held great promise for Nigerian agricultural finance. In contrast to similar institutions in comparable economies, the loan recovery rate at BoA was less than 70%, whereas in the other economies, between 95 and 99 recovery rates were achieved. It appears that the reforms that were characterized by the change of its names from NAB to NACB, NACRDB, and, most recently, to BoA were only cosmetic in nature. In terms of its reach, BoA only covers fewer than 20% of Nigerian farmers, as opposed to similar institutions elsewhere where we were able to reach as high as 99%. The issues identified in the SWOT analysis can be linked to the Nigerian issue, including management incompetence, poor peasant farmer education and banking practises, issues with staff motivation, training, and development, ICT problems, data integrity, and the risky nature of rain-fed seasonal agriculture and its exposure to diseases and pests³².

The particular inherent risks associated with agricultural loans have also prompted the formation of numerous government initiatives and programmes. The Central Bank of Nigeria created the Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977 to ensure that commercial banks will be reimbursed for losses due to default after realizing the security to the tune of 75% of their exposure to agriculture. Due to inadequate implementation and compromised methodology, the strategy did not accomplish its goals³⁶.

To provide agricultural risks insurance coverage to Nigerian farmers, the Nigerian Agricultural Insurance Scheme (NAIS) was founded in November 1987. Because traditional insurers view agricultural risks as too dangerous to be appealing, the Nigerian Agricultural Insurance Corporation NAIC (and its predecessor) was founded with 100% government ownership to operate the scheme. The programme includes performance guarantees, bid guarantees, bespoke bonds, agricultural income, agricultural investments, and performance guarantees. The scheme has not been successful, according to the widespread agreement.

Despite its subsidies, support, and encouragement of the commercial banks and BoA, the Central Bank of Nigeria appears unsatisfied with the amount, tenor, and structure of credit going to agriculture. In order to further its development objectives, it has recently started doing direct lending through its Anchor Borrowers' Programme.

2.1.2 Challenges of Agricultural Financing in Nigeria

1. Changes to the government, the ministry of supervision, and the anticipation of support for changes to the bank: The present "Change Government" is full of promises to reform agribusiness along the lines set by Dr. Akinwumi Adesina's transformational regime in the recent past, when he served as the first ever professional Minister of

Agriculture and Rural Development. The incoming President's and Minister of Agriculture and Rural Development's statements indicate that the reforms in the agricultural sector would continue. The formation of (NIRSAL), the drive to reposition Bank of Agriculture (BoA), and the initiative to de-risk agricultural finance by the Dr. Akinwumi Adesina administration are all obvious directions of policy continuity.

2. Institutional memory: The Bank of Agriculture (BoA) has a long history of financing the agriculture industry throughout Nigeria. Such geo-ecological and demographic archives are a vital resource in Nigeria's typically risky and unreliable agricultural loan environment³⁶.
3. Increasing sub-national government collaboration: Recently, BoA launched a programme of collaboration with sub-national governments as a means of increasing volume and sharing its risks through the creation of commercially viable plantations, viable value-chains, and risk underwriting with the support of the sub-national governments.
4. Possible partnerships with the Nigerian agricultural organization and their affiliated companies: The Nigerian Agribusiness Group, which is made up of experienced investors in large-scale agribusiness as opposed to the high-risk peasant farmers who used to be the bank's primary target market, is another example of the expanding partnership with the Organized Private Sector (OPS). This target marketing realignment is a good formula for achievement³⁶.
5. Financing capacity is poor since BoA has a small funding base. Although it was designed to draw deposits from both the government and private investors, it has historically received handouts due to its virtually sole reliance (more than 90%) on

government support. The avenues for attracting primary deposits from the society and its clients are, at best, largely underdeveloped.

6. Inappropriate focus (mostly farming): The Bank of Agriculture has historically focused primarily on peasant farmers³⁶. Due to their lack of education, this market sector finds it difficult to adapt new farming techniques and technologies. This issue has been made worse by the lack of extension staff. Additionally, this sector lacks the equity capital to draw in outside finance and withstand operational shocks. They also lack the management skills necessary to guarantee success, consistency, and sustainability.
7. Despite the seasonality of rain-fed agriculture, weather conditions still have a significant impact on Nigerian agriculture. Unfortunately, the bank's internal approval and communication channels are old, drawn out, and complicated, which increases the turnaround and response times for credit approvals. As a result, credit often arrives at a time when it is not needed. As a result, there are more misapplied / misdirected loans and bad loans overall, both in rate and volume. On the other hand, savvy and honourable customers would avoid BoA because they are certain the credit will not be delivered on time³⁶.
8. Processes that are laborious and unfriendly to customers: The BoA loan approval procedure is convoluted, onerous, and not customer-friendly.
9. Inadequate access channels: BoA has few number of branches. With 200 million people and 120 locations, the bank recently started branch closures, leaving some states with only one or two branches. Convenient banking is now impossible without a strong electronic banking platform³⁶.

10. ICT issues: The current ICT infrastructure's functionality is questionable, especially in the areas of capacity and data integrity.
11. Bank channels are few and far between, thus farmers would have to leave their farms to conduct financial transactions over considerable distances that were not guaranteed to be convenient.
12. High real relative delivery cost: The sum of the aforementioned factors makes using the Bank of Agriculture for banking transactions more expensive.
13. Staff issues: The bank currently employs a huge number of disgruntled employees. Staff motivation and morale are low. Particularly in the area of technology-enabled banking, little attention has been paid to staff training and development. In addition, a high percentage of subject-matter professionals would have been expected given the bank's specialization and emphasis. Contrarily, just one of the first 20 senior staff members has experience in agricultural economics, which is the scenario. Because the top is politicized and populated with irrelevant professionals, the professionals in the rank and file are not motivated to attain the pinnacle of their careers³⁶.
14. Competition and exclusion: Due to the bank of agriculture's abandonment of its projected duty, competition has crept into what would have been its nearly exclusive commercial domain. Commercial banks have created clever strategies to draw money that has been allocated to agriculture by the government and Central Bank of Nigeria, without necessarily serving the interests of the sector in a proportionate manner. Far worse, BoA is frequently prohibited from participating in the Central Bank of Nigeria's specific lending programmes for agriculture, such as the Commercial Agriculture Credit (CAC) programme³⁶. Recently, the Central Bank of Nigeria, which owns 40% of BoA,

has continued to engage in indirect lending, such as the Anchor Borrowers Scheme, despite not having fully repaid its equity stake in the faltering BoA.

15. Peculiar financing risks: Agribusiness is exceedingly risky compared to other company kinds, especially in its current peasant form, because of issues with seasonality, weather vagaries, pests, diseases, etc., which call for specialized underwriting skills.
16. Bad loan history: The bank has a history of making bad loans, with a loan recovery percentage of under 70%.
17. Common traits of a traditional customer and a false impression of a national cake
Government involvement in the bank has been overly significant up to this point. Customers, unfortunately, have had a pretty negative reaction, viewing loans from that institution as a piece of the national cake that they typically refused to repay. In addition, the majority of them are elderly, uneducated, and find it challenging to adapt new farming techniques and technologies³⁶.

2.1.3 Overview of Agricultural Sector in Nigeria

Despite certain structural changes to the economy over the past few decades, agriculture remains a significant part of the Nigerian economy. In 2014, agriculture contributed around 54% to employment (down from about 70% in the 1960s and 68% in 1981), and it made up about 23% of the gross domestic product (GDP), down from about 70% in the 1960s. The sector has a much higher capacity than it really does, were it not for the militating issues, chief among which is the lack of timely, accessible, and suitable financing. The unique characteristics of agriculture, the manner we conduct it in Nigeria, and the risks and uncertainties related to the two elements all contribute to this. Old peasant farmers still control

most of Nigeria's agriculture, which is still primarily rain-fed. Commercial and technologically assisted agriculture will unlock the latent potentials, although it has not really taken off yet^{16,23}.

In Nigeria, the agricultural industry is significant to the economy. Before the commercial discovery of petroleum in the late 1950s, it served as the foundation of the Nigerian economy. Prior to it, the agricultural sector accounted for more than 70% of employment and the GDP (GDP)³⁸. Nigerians contracted the "Dutch Disease" as is typical, and all other industries were neglected, including agriculture, which up until 1981 produced 68 percent of all employment, ensured food security, and provided raw materials for industry³⁸. After the initial oil boom, the oil economy experiences a period of volatility and declining fortunes. The demand for environmental sustainability and the growing preference for renewable energy over fossil fuels have exacerbated the oil economy's decline.

Consequently, Nigeria's recent economic diversification has focused mostly on value-added agribusiness in order to achieve economic stability and sustainability, food security, and environmental sustainability.

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towards value-added agriculture, in order to achieve economic stability and sustainability as well as food security and environmental sustainability.

Peasant small-holder farmers, who account for about 90% of farm holdings in the nation, dominate agricultural activity. These farmers primarily use conventional techniques and produce primarily for subsistence. The Nigerian economy's fundamental building element is thought to be agriculture. Its importance for export, employment opportunities, reducing poverty, and sustainable development cannot be understated. The agriculture industry encourages the economy's structural change and diversification. It makes it possible for the economy to fully utilise its factor endowment. Additionally, it guarantees that the country leans less on imported agricultural goods²³.

Previously, the majority of Nigeria's economy was based on agriculture, which served as the foundation for growth⁴⁰. Agriculture made a considerable contribution to the Gross Domestic Product soon after Nigeria gained independence (GDP). About 70% of the GDP came from it, and a sizable fraction of the working population was employed. Additionally, it was responsible for 90% of both government and foreign exchange earnings. Nigeria became the world's second-largest producer of cocoa during this time, as well as a net exporter and producer of palm fruit, cotton, groundnuts, hides, and rubber⁴⁰. Following the discovery of oil, this situation started to deteriorate. The ratio of agricultural exports to total exports declined from 43 percent to roughly 7 percent between 1970 and 1974. The rise in oil prices from 1973 to 1974 was substantially to blame for this. However, this led to significant foreign exchange earnings and, as a result, to the neglect of agriculture. Agricultural exports have been consistently falling by 17% yearly from the 1970s to the 1980s⁴¹. The agricultural sector lost its ability to produce enough food for the local population, supply raw materials for industry, and generate foreign

exchange during the 1980s. Several socioeconomic and environmental issues were blamed for this. Since then, Nigeria's domestic food supply has become a significant challenge, and significant foreign exchange revenues have gone toward importing food. Due to a shortage of essential foods, Nigeria had been experiencing severe hunger and poverty. The difficulties facing the agricultural economy can be linked to the rising reliance on oil and the ensuing disregard for agriculture. The agriculture sector's percentage contribution to GDP plummeted with the discovery of oil and varied between 10 and 22 percent from 1980 to 2015⁴². Smallholder farmers immediately perceive the impact of this. The majority of Nigeria's food is produced by smallholder farmers, who mostly cultivate for subsistence. They primarily live in rural areas and produce 85% of all agricultural products^{42,43}. However, insufficient and inaccessible financial facilities limit their

ability to produce and their ability to grow⁴³.

A scholar explain that agriculture is a crucial part of the Nigerian economy and predated the 1970s oil boom when it dominated the country's economy⁴³. He stresses that, as compared to other sectors, the agricultural sector contributes 64.1% of the GDP. Low farm revenue, a limited capacity to meet the nation's needs for food and fibre, and archaic production methods define the Nigerian agricultural sector. Financial limitations are the root of the agricultural sector's issues. In Nigeria's rural economy, where around 90% of small farmers need loans of very small amounts, small farmers' dejection lies at the root of the financial crisis.

A scholar identifies five stages of growth in the transition from agrarian to an industrial economy. Although this idea acknowledges the contribution of agricultural expansion to overall economic growth, it was not concerned with how to identify and accelerate the issue of agriculture. Due to the necessity to develop agriculture, the development of this sector will

examine various agricultural development theories that explain the process of transitioning from traditional to modern agriculture and describe the economic nature of traditional agricultural development.

Additionally, it was noted that import and foreign exchange limitations have a negative impact on the agricultural and small business sectors in less developed nations on two different levels. Due to the high levels of red tape and corruption in these nations, they first pay exorbitant costs for imported consumer items and then struggle to quickly obtain foreign currency and import permits. The government is exactly like Nigeria's in other less developed countries. By introducing agricultural banks and cooperative credit evaluation schemes that are intended to make it easier to finance the expansion of improvements in this traditional sector, this led to an improvement in credit availability in the sector. However, they typically take the form of providing a few heavily favoured villages with subsidized loans through cooperative societies.

In the less developed nations, including Nigeria, there has been a misallocation of resources between the modern and traditional sectors and obstruction to the growth of an integrated domestic capital market. Agriculture production and development are greatly influenced by agricultural finance⁴⁴. Credit distribution has been recognized as a crucial tool for the development of the agriculture industry. However, access to agricultural financing in Nigeria has been severely hindered⁴⁵.

Credit accessibility has been predicted to raise agricultural output, lower unemployment rates, and boost earnings. According to estimates, only 5% of Nigerian farmers and 15% of those in Asia and Latin America had access to formal loans⁴⁵. The Agricultural Credit Guarantee Scheme Fund (ACGSF) was created in 1977 in an effort to remedy this situation. The fund's goal was to persuade banks to extend more loans to the agriculture industry. Therefore, the fund

was intended to offer insurance against unfavourable risks related to agricultural financing. However, the ACGSF only provided loan guarantees totaling N75.5 billion between 1981 and 2015. Between 1981 and 2016, commercial banks provided the agricultural industry with direct credit worth N3.48 trillion. Government recurrent expenditure on agriculture from 1981 to 2016 was valued at N525.11 billion and government capital expenditure on agriculture was assessed at N1.19 trillion, respectively. Therefore, it was crucial to ascertain whether agricultural finance had improved the performance of the agricultural sector in Nigeria⁴⁵.

Government interventions have been influenced by the need to increase peasant farmers' productivity and enable them to transition to mechanized agricultural practices by giving them access to inputs and other forms of support, while commercial farm holders were supported by the provision of credit facilities, input subsidies, capacity-building programmes, and export incentives. Agriculture has continued to be a growth engine in Nigeria even if its rate of expansion has steadily decreased over time. The sector expanded by 15.9% between 2000 and 2005, although this high figure may be explained by the enormous growth seen in 2002 (55.9%), without which it would have expanded by just 6.0%. However, over the years 2006–2010 and 2011–2016, it had a reduction in growth, falling to 6.5 and 4.1 percent, respectively. Similar to other countries, the sector has maintained its dominance in the Nigerian economy in part because of its contribution to GDP's value added and the percentage of the population that works in it, which is estimated to be around 50% of Nigerians. The sector provided 36.3% of all value added to GDP between 2000 and 2005. However, its average contribution continually decreased over time, falling to 31.7% in the years 2006 to 2010, then further to 21.3% in the years 2011 to 2016. Improving national self-sufficiency, lowering the percentage of food imported, and promoting agricultural exports are three goals that are included in the majority of

government agriculture policies or programmes. Nigeria has received some FDI throughout the years and is one of the economies with high demand for goods and services. According to the explanation, Nigeria received US\$2.23 billion in FDI in 2003, which increased to US\$5.31 billion (a 138 percent rise) in 2004, US\$9.92 billion (an 87 percent increase) in 2005, and US\$9.44 billion (a 5% decrease) in 2006⁴⁶. In light of agriculture's importance in economic transformation, the issue that immediately comes to mind is: Do these FDIs genuinely help to agricultural growth in Nigeria in all circumstances and at all times?

According to reports, historically, FDI has predominantly affected highly established economies, and these industrialized nations continue to draw a larger percentage of global FDI than developing nations (to which Nigeria belongs)⁴⁷. However, a survey found that with US\$87 billion in FDI declared in 2014, Africa saw the highest rise in inward investment. For instance, in the former, compared to developed nations, agricultural FDI inflows from 2008 to 2010 represented an average increased contribution of 1.0 percent of gross fixed capital creation. In 1998, developing countries' inward FDI stocks made up 20% of their GDP, compared to only 12% in wealthy nations. According to some estimates, agricultural FDI is thought to be more significant in emerging nations than in developed nations. As a result, it is now practically necessary to experimentally close the information gap by determining the trajectory of FDI and that of agricultural growth in developing nations generally, and Nigeria in particular.

A lack of private and public investment has resulted in reduced productivity growth rates and stagnant production in many emerging nations due to the long-standing neglect of the agricultural sector as a driver of development and the eradication of poverty⁴⁷. However, it was stated that the 2008 food crisis led to a rapid increase in investor interest in agricultural land

and water, a practice now known as "land grabs," which caught the attention of the world community by surprise. Given its natural resource wealth and sizable market (with a population of more than 160 million), Nigeria qualifies to be a significant beneficiary of FDI in Africa. In fact, it is one of the top three African nations that attracted FDI in 2014. However, it was noted that Nigeria's share of FDI inflow to Africa averaged about 20.68 percent between 1976 and 2007, and that the amount of FDI attracted specifically to agriculture is tiny in comparison to the resource base and potential demands⁴⁷. They further asserted that between 1980 and 1984, when it was at its greatest (2.46 percent), the percentage of FDI inflow to Nigeria's agriculture sector was less than 1 percent, and that it is today 0.37 percent. According to an FAO assessment, developing nations' agricultural sectors require receive yearly investments of US\$83 billion (in 2009 US\$) to ensure food security for a predicted global population of 9.1 billion people in 2050⁴⁸.

Nigerian agriculture faces numerous challenges. The industry still has a long way to go in terms of development, and peasant farm holdings and holders still dominate. The main issues are access to land, markets, capital, technology, and infrastructure that is affordable, simple, and assured. A crucial element is having access to timely, reasonable, and suitable (in terms of the tenure, payback cycle, and agricultural credit insurance) financing³⁸.

There is very little financial support for agriculture. In comparison to the 10% proposed in the 2003 Maputo statement, to which Nigeria was a member, government spending on the sector is appallingly low at an average of approximately 2% of the annual national budget. The issue of inadequate public investment in agriculture is made worse by the sector's low credit extension and the Agricultural Credit Guarantee Scheme's subpar implementation (ACGS)³⁸.

Lending to agriculture is severely constrained by risk and unpredictability. Beyond danger, the industry is, nevertheless, dominated by small peasant farmers who have no access to financing or credit, necessitating the use of regulatory initiatives. For instance, the Central Bank of Nigeria mandated banks to lend to agriculture at a specified minimum percentage of their loan portfolio in 1969. The Central Bank of Nigeria then took any deficiency in this ratio and gave it to the BoA's forerunners (when it joined in 1973) to lend to agriculture. With the deregulation that came along with the privatisation and commercialization of the banking sector in the late 1980s, this policy was abandoned.

2.1.4 Central Bank of Nigeria

According to the CBN Act of 1958, the Bank's primary responsibilities include producing paper currency cash, serving as a banker and economic counselor to the Federal Government, functioning as a lender to banks, and keeping foreign reserves. To fulfil its responsibilities efficiently and effectively, the Bank must have confidence even within the country. To that purpose, the Act creates a governance design that contains an independent Board of Directors in responsibility of policymaking and operation.

The Monetary Policy Committee (MPC) meets bi-monthly to examine the economy's progress as well as the state of the cash and global foreign exchange markets. In addition, the committee analyses developments in the financial industry in order to take required regulatory/supervisory action. Because monetary support of government deficits has a destabilizing effect, in regard of Ways and Means Advances, the Act limits the Central Bank of Nigeria's financing to the Federal Government.

The Financial Services Regulation Coordinating Committee (FSRCC) gathers to control the actions of the industry's different governing agencies. The Committee includes the CEOs of the Securities and Exchange Commission, the Healthcare Council, the Corporate Affairs Review board, and the Federal Ministry of Finance. It tries to reduce arbitrage possibilities caused by disparities in regulatory and supervisory standards among agencies.

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2.1.5 Development Financing

In recent times, Inflation and currency rate depreciation have been successfully managed by the Central Bank of Nigeria's (CBN) monetary, credit, international trade, and exchange rate policies. However, fundamental problems, such as limited access to capital for real sector expansion, lack of export earnings diversification, subpar infrastructure, financial exclusion, and unemployment persist.

Strong policies that target specific value chains and industries with significant implications for national economic growth and development are needed to address these difficulties.

The Bank has made considerable strides in several areas throughout the years. The CBN Act No. 7 of 2007 (as amended), specifically Section 31, gives the Bank the authority to carry out the developmental role of fostering the growth of money or capital markets in Nigeria or of fostering financial or economic development. The development function of the CBN aims to minimise financial market failure by taking appropriate steps to build the supply side's capacity for efficient intermediaries and the demand side's capacity for the best possible uptake of financial services. The Bank's development finance policy is used to carry out this developmental purpose.

As instructed by the Federal Government of Nigeria, the CBN started supporting the then-commodity boards in 1964, marking the beginning of development financing. By 2009–2010, the Bank has launched a significant number of development funding activities. The need to stimulate the economy in the wake of the global financial crises of 2007–2008 provided justification for this. An additional noteworthy time frame was from 2015 to 2016, when the Bank implemented a number of actions to strengthen the real sector and lift the economy out of

recession. The fact that these interventions are not exclusive to the CBN is significant. It is typical of central banks in developing economies, even in high income countries. Direct involvement in economic growth is a function of developmental central banks. The best indication of overall economic development is the level of financial institution development⁵⁰. It was argued that financial development is crucial for real development because the financial superstructure, which includes primary and secondary securities, speeds up economic growth and boosts economic performance to the point where it makes it easier for money to be transferred to the most beneficial user⁴⁹. However, Goldsmith determined the value of the development interrelation ratio—the ratio of all financial instruments at a particular period to the value of the country's wealth and development—in his empirical investigation. He discovered that the ratio for developing countries was significantly lower than that for developed countries and came to the conclusion that since financial development is the lowest in developing countries and has the greatest impact on development in developed countries, this has led to backwardness. Development is badly impacted by the financial superstructure's lack of development. Integrated rural development and basic requirements approach, import substitution, export promotion, expansion and diversification of agricultural export commodities, unified financial and economic approach to development (i.e., development financing)⁵⁰. Any method of funding those activities could be viewed as playing a part in development finance. The ability of financial institutions to successfully mobilise financial resources for economic growth and development was also argued to be a component of development finance⁶⁰. This viewpoint acknowledges that the financial system's contribution to the economy depends on the number, quality, and effectiveness of its services. Two segments of development financing were identified by a researcher. The formal sector, on the other hand,

could be clearly distinguished into institutions related to the money and capital markets, such as central banks, commercial banks, the world bank, the IMF, and the African development bank. The informal sector, on the other hand, is more traditional and consists of local money lenders, thrift cooperative societies, and associations⁵¹. Development finance refers to the function of financial intermediation through the banking system or financial institutions that plays a private role in economic development by influencing the allocation of savings, investments, and funds, thereby enhancing productivity, technological advancement, and the rate of economic growth⁵².

Institutions that finance international or domestic development fall into two groups. The Central Bank of Nigeria, commercial banks, and other internal financial institutions that provide credit or financing to the Nigerian economy's productive sectors make up the internal development financial institutions. The World Bank, IMF, Paris and London clubs, African Development Bank, and other international financial donors and creditors are some examples of international development financial institutions that provide finance, loans, or credits for the purpose of solving economic problems like poverty eradication, economic growth, and development.

Without a possible doubt, Nigeria's financial regulatory authority, the Central Bank of Nigeria, has played this development finance function for the country's various economic sectors, including agriculture, business, and industry, in order to assist their expansion and development. It is fundamental that underfunding of productive sectors results in low levels of output, income, saving, investment, employment, exports, foreign exchange, and a developing economy. However, Nigerian productive sectors including agriculture, industry, manufacturing, and other associated economic sectors do not have access to enough and fair finance to boost their inputs and output. In order to increase the inflow of sufficient and just credit, mostly at a single and

set interest rate, to Nigeria's productive sectors, the Central Bank of Nigeria devised and designed credit schemes. In order to provide sufficient or adequate finance and credit to the productive sectors of Nigeria with the primary goal of facilitating economic growth and development, the Central Bank of Nigeria participates directly or indirectly in the economy through the formulation and implementation of various policies, schemes, programmes, innovations, and directives. Through its credit schemes, including the Rural Finance and Banking Support Scheme, the Agricultural Credit Guarantee Scheme, the Commercial Agricultural Credit Scheme, and the Small and Medium Scale Industry Credit Scheme, the Central Bank of Nigeria manages agricultural finance in particular and broadly development financing⁵¹.

The Central Bank of Nigeria's role in fostering economic expansion and an overall sound economy, however, goes beyond the implementation of monetary policy. The main issue that has prevented Nigerian sectors of the economy from obtaining sufficient and efficient inputs to increase output, productivity, income, saving, investment, and employment has generally been a lack of access to appropriate financing and capital. Therefore, it is possible to explain Nigeria's economy's ongoing reduction in productivity, production, exports, foreign trade, foreign direct investment, GDP, and foreign exchange earnings by the insufficient amount of financing and capital required by the productive sectors. Evidently, these issues had been what prevented, undermined, and hampered the growth and development of the productive sectors and had given rise to persistent economic crises in Nigeria, including those characterised by low productivity, low output, low income, extreme poverty, unemployment, inequality, and insecurity. Therefore, the Nigerian economy will be able to attain high productivity and promote economic growth if there is an adequate supply of fair and simple credit available to

the productive sectors including agriculture, industry, manufacturing, and entrepreneurs. If not, Nigeria's economy will remain in a difficult situation.

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2.1.6 Central Bank and Agricultural Development

The Central Bank of Nigeria is putting into place numerous reforms such as credit schemes and financial programmes that have direct impact on the economy of the nation in order to boost the country's economy and facilitate agricultural development and economic progress. These significant reforms are being driven by the Central Bank of Nigeria's development finance department in order to meet microeconomic objectives such as achieving quick and balanced economic growth and reducing poverty, unemployment, and inequality. The neo-liberal and the developmental approaches are the two main schools of thought in central banking. The Bank of International Settlements (BIS) and the International Monetary Fund (IMF) are the two main proponents of the neo-liberal approach, which advocates formal inflation targeting at the expense of nearly all other objectives and the exclusive use of indirect monetary policy tools like short-term interest rates as opposed to more direct ones⁵³.

The development approach promotes the employment of "direct means" of intervention, such as credit allocation, controlled interest rates, and direct financing to priority sectors, by central banks to support economic sectors, a bigger and more visible role that directly effects structural transformation. A central bank's decision to function neo-liberally or developmentally depends on the current economic climate and development needs.

2.1.7 Commercial Banks and Agricultural Development

Commercial banks play the intermediary role in transferring money from lenders to borrowers by acting as a gateway for the funds. The second function is that they reduce financial waste in the economy, assisting in the allocation of all resources to productive activities. In order to preserve deposit money while simultaneously putting it to use, commercial banks lend and

extend credit to individuals who need it. The money they pump into investments is then utilised for the operations of industries like agriculture, manufacturing, and services like telephony and other utilities. In this manner, banks support a country's economic growth. For this reason, banks are often referred to as the engine driving a country's economic development³.

Commercial banks' credit-extension process results in more deposits being created in the economy, which boosts the growth of the nation's gross domestic product. This in turn has a favourable effect on the nation's overall development and economic progress. As a result, banks can be seen as the engines of growth in the society in which they operate⁶. In a developing nation like Nigeria, the banking sector is a crucial institution for fostering economic growth and development. The central bank, which serves as the top regulatory body for the financial sector, helped by creating regulations that it first began publishing in 1976. Two policies were created as a result of the central bank's recommendations, and they served as a catalyst for the commercial banks' contributions to the growth and development of agriculture⁹.

2.1.8 Nature of Government Intervention in Agriculture

Agriculture lost its place as the principal export income earner after independence to crude oil due to the discovery of crude oil and the boom that characterised that era. Several agricultural programmes were launched to promote the sector's performance in order to guarantee food security and increase its importance. The majority of these initiatives are included in the various National Development Plans (1960–1985), the Structural Adjustment Programme (1986–1988), the National Economic Empowerment and Development Strategy (2004–2007), and the Agricultural Transformation Action Plan (ATAP) (2011–2015), in addition to other transformation initiatives that governments have adopted. Within the agricultural value chain, these projects concentrated on four main sectors¹². These include expanding access to land,

increasing production of specific crops, providing input support mechanisms through import waivers and export incentives as part of the government's budgetary policies, and giving farmers loans at low-interest rates.

More prominent attempts were made by several state governments to stimulate private sector participation in commercial agriculture in their states, which is a vital component of improving access to land as a determinant in agricultural production. For the construction of commercial farms, the states of Kwara and Cross River, for instance, began public-private sector collaboration programmes. The effort, which started in 2004, sent Zimbabwean farmers to Kwara State, where they started producing grains, rice, cassava, vegetables, dairy, chicken products, and tobacco. The state government set up amenities like feeder roads, security, telecommunications gear, and irrigation systems to help these farmers. The farmers were to sell to potential bulk buyers such flour and feed mills, etc., according to the marketing plan implemented^{4,7}.

The Cross River state government also made it easier for private farmers to access property for commercial agricultural use by leasing them 22 farms totaling roughly 71,809 hectares. They also made sure that they received their legal title certificates on schedule. It also created an environment that was favourable by giving seeds, fertiliser, technical aid, and financial support to a number of privately owned farm estates. In addition, some state-owned oil palm, rubber, and cocoa estates that had previously been in ruins were revived, privatised, and in the majority of cases leased in smaller chunks to private farmers. Recent government administrations launched a number of presidential initiatives to boost the local production of particular basic and cash crops⁵⁵. The Federal Government adopted a variety of strategies in 2001, including the widespread production and distribution of enhanced seedlings, the acquisition and distribution

of essential inputs, the facilitation of fiscal incentives necessary for profitable production, the efficient coordination of institutional support, and the development of farmers' and processors' capacity.

By increasing rice production, the Presidential Initiative on Increased Rice Production aimed to meet local consumption by 2006, export rice by the end of 2007, and reduce the rising rice import bill, which was N96.012 billion in 2002. 3.0 million hectares of land were supposed to be under cultivation by 2007 in order to produce 9.0 million tonnes of milled rice or 15 million tonnes of paddy. In order to boost domestic production, it was intended to ban rice imports starting in January 2007⁵⁴.

By the end of 2010, it was hoped that the programme on cassava production and export will increase annual production to 150 million MT. The export of 37.6 million tonnes of cassava products, such as starch, chips, medicines, adhesives, and other value-added goods, was also projected to generate US\$5.0 billion in revenue annually for the programme. The Growth Enhancement Scheme was established under the Agricultural Transformation Agenda (ATA) of the Government to register smallholder farmers and offer specialised input subsidies, such as access to fertilisers and seeds. Between 2011 and 2014, nearly 14 million farmers received subsidies⁵⁴.

Similar to this, through the implementation of the Presidential Initiative on Vegetable Oil and Tree Crop Development, the government aimed to achieve self-sufficiency in the production of vegetable oil over a period not exceeding three years. The development of eleven scheduled oil seed crops, including oil palm, groundnut, soya beans, cotton, sunflower, cashew, coconut, and cocoa, was the main focus of this programme. The following production goals were established for each crop under the programme: seed cotton: 1 million tonnes over the plan period,

groundnut: 15 million tonnes annually, soya bean: 670,000 to 1 million tonnes annually, and oil palm: 1 million hectares capable of producing 15 million fresh fruit bunches.

Through a variety of import waivers, export incentives, tax holidays, and exemptions in the industry, fiscal incentives were also used to stimulate agricultural output. For instance, beginning on January 31, 2012, agricultural machines and equipment were exempt from duty. Export Credit Insurance Facility, which was created to safeguard Nigerian exporters from the risks of non-payment for goods and services exported on credit terms, and the Nigerian Export Promotion Council (NEPC), which launched the Export Expansion Grant Scheme for the stimulation of export-oriented activities that leads to significant growth of the non-oil export sector, especially agriculture, administered export incentives³.

A five-year tax holiday for agricultural products' processing companies granted pioneer status, tax exemptions on interest earned by financial institutions on loans granted for agricultural trade or businesses, an increased capital allowance of up to 50% for agro-allied plant and equipment, and exemptions from Value Added Tax (VAT) on machinery and equipment purchased for agricultural purposes are just a few of the tax incentives that were provided to help increase agricultural production. Numerous organisations, including NEXIM, CBN, Bank of Industry (BoI), Bank of Agriculture (BoA), etc., have been active in offering single-digit interest rates on credit to agriculturalists. These interventions, especially those of the CBN, are carried out through a number of different programmes, which are listed below:

2.1.8.1 Bank of Agriculture (BoA)

Despite certain structural changes to the economy over the past few decades, agriculture remains a significant part of the Nigerian economy. Nearly 54 percent of jobs are supported by

agriculture, down from roughly 70 percent in the 1960s and 68 percent in 1981, and the sector accounts for over 23 percent of the GDP, down from about 70 percent in the 1960s³⁸. The sector has a much higher capacity than it really does, were it not for the militating issues, foremost among which is the lack of timely, accessible, and suitable financing. The unique characteristics of agriculture, the manner we conduct it in Nigeria, and the risks and uncertainties related to the two elements all contribute to this. Old-fashioned peasant farmers continue to dominate Nigeria's agriculture, which is still mostly rain-fed. Commercial agriculture will use technology to help it reach its potential, but it has not really taken off yet³⁸.

The Bank of Agriculture (BoA) and its predecessors were established to fill this financing gap because most traditional commercial banks are reluctant to lend to agriculture, despite the sector's vital role in creating jobs, providing raw materials for industry, ensuring food security, and exporting. The Federal Ministry of Finance Incorporated owns 60% of the Bank of Agriculture, the Central Bank of Nigeria owns 40%, and the Federal Government of Nigeria owns the Bank of Agriculture in its entirety (CBN). With a negative shareholders' fund of around N65 billion and a paid-up capital of N34 billion as of 2019, the Bank has gone insolvent. Incorporated in 1973 as the Nigerian Agricultural Bank (NAB), the institution changed its name to the Nigerian Agricultural and Cooperative Bank in 1978, ostensibly to reflect the importance cooperatives would later play in the growth of the agricultural industry and to reflect the bank's refocused mission. It was combined with Peoples' Bank of Nigeria in 2000. (PBN). It also took on the risk assets of the government's Family Economic Advancement Programme (FEAP) as part of the consolidation process to become Nigerian Agricultural Cooperatives and Rural Development Bank (NACRDB). Thereafter, it was renamed Bank of Agriculture (BoA) in 2010 and given a revised mandate to provide accessible credit facilities to

Nigerian society segments that have minimal access to traditional banks' services, while still accepting client savings deposits and promoting basic banking practices.

The government's intention to improve financial inclusion and all-inclusive economic development in the process makes the renewed mandate commendable given the enormous population of the people in its target market - the agriculture and agribusiness value chain - and their demography. Unfortunately, it is clear that the bank has fallen short in this area. The bank has great potential despite its current underperformance. If properly reformed, recapitalized, and revitalised, it can revolutionise agricultural finance in Nigeria and serve as a model for institutions of a similar nature throughout Africa and the rest of the world.

2.1.8.2 Agricultural Credit Guarantee Scheme Fund (ACGSF)

The Federal Military Government developed this programme in accordance with the Agricultural Credit Guarantee Scheme Fund Decree of 1977 (Decree No. 20), as revised on June 13, 1988. So, in 1978, the Agricultural Credit Guarantee Scheme Fund officially began operations. The Central Bank of Nigeria and the ACGSF management board jointly oversee the Fund. The Fund's goal is to increase bank credit to the agricultural sector by providing guarantee for loans made by any bank for agricultural purposes, such as the establishment or management of plantations for the production of cash crops, the cultivation or production of a variety of crops, animal husbandry, the processing of agricultural products, as well as the rental of farm equipment and services. By offering loans to Nigeria's small and medium-sized rural farmers, this credit programme aims to revitalise and enhance the country's agricultural economy as a whole. The major goals of this financing programme are to increase food security and productivity. Lack of access to adequate and fair credit is another significant issue that our rural farmers who grow food crops must contend with. According to the study, this loan plan

has increased the amount of credit available to Nigerian farmers. Almost all of Nigeria's geopolitical regions had benefited from this programme. It has enhanced the recipient farmers' purchases and adoption of new, higher-quality seeds, fertiliser, pesticides, and machinery. This enhances the farmers' ability to utilise their available hectares, expand their farms, produce more, earn more money, create jobs, and improve their level of living. The level of food production, the food supply, domestic trade between the affected rural areas and states, per capita output and income of the states, and import substitution on locally produced food like rice, wheat, and other items were all improved by the expansion of farmers' output and income earnings. As a result, the Nigerian economy's per capita income, GDP, food security, agricultural exports, foreign exchange profits, and international commerce all improved. These accelerated Nigeria's economic development and growth.

Advances, overdrafts, and any other credit facility are all considered loans under the programme. According to a CBN internal survey conducted in April 2012, a total of 3,561 loans worth N502.68 million were supported by six DMBs and a few microfinance institutions. As a result, there were 6,108 loans guaranteed for a total value of N1.34 billion during the year. Since its founding in 1978, 760 636 loans totaling N53.68 billion have been made. According to the breakdown of loans guaranteed by purpose, 3,384 loans, or 95.0% of all loans, were for food crops. Livestock and cash crops came in second and third, with 123 loans (3.5%) and 24 loans (0.7%), respectively. Loans were recorded for 15, 1, and 14 in the fishing industry, respectively.

2.1.8.3 Agricultural Credit Support Scheme (ACSS)

With the assistance and involvement of the Bankers Committee, the Federal Government and the Central Bank of Nigeria established the Agricultural Credit Support Scheme to finance expensive agricultural projects with an interest rebate of 6.0% upon prompt return of the facility. The establishment or maintenance of plantations, the growing or production of crops, the raising of livestock (such as poultry, fish, and other animals), and the use of farm equipment and hire services are all covered by the ACSS.

By offering farmers financial facilities with single-digit interest rates, the ACSS aims to improve the agricultural sector of Nigeria's economy. This will help farmers take advantage of the industry's unrealized potential in an effort to lower production costs and sustainably boost output. The anticipated result is a decrease in the cost of agricultural products, particularly food products, which will lower the inflation rate, provide surpluses for export, diversify the source of income, and improve the country's foreign exchange revenues. At the end of April 2012, there was no rebate. However, 43 projects totaling N872.45 million made up the entire rebate paid from the beginning to the end of April 2012.

2.1.8.4 The Commercial Agricultural Credit Scheme

The Federal Ministry of Agriculture and Rural Development and the CBN worked together to create the CACS as part of the CBN's developmental responsibility. It was financed by the sale of N200 billion worth of FGN bonds. The main goal of the plan was to support Nigerian commercial agricultural firms. The funds were sent to the Bank of Industry, who then made it possible for DMBs to lend it to farmers or state governments at a low-interest rate. If the initiatives or interventions were in line with the predetermined goals, state governments might borrow up to N1.0 billion for re-lending to farmers' cooperative organisations and other agricultural development projects. Through the provision of financing facilities at single digit

interest rates to large scale commercial farmers, this programme aims to accelerate the development of the agricultural value sector of the economy. The strategy has also expanded commercial and large-scale agricultural production, agricultural export goods, foreign exchange revenues, foreign trade, and investment. It elevates Nigeria's level of commercialization, modernization, mechanisation, large-scale agricultural output, agricultural export commodities, foreign exchange revenues, and commercial agriculture oriented sector. This benefits Nigeria's economy, international trade, trade balance, and development.

Twenty-nine (29) states have so far taken part in the programme. With the disbursement of N2.938 billion to three banks for three projects in April 2012, the total amount disbursed to banks for 227 projects totaled N178.269 billion (198 private promoters and 29 State Governments). According to the value chain, 47% of the private projects were for production activities, and 38% were for processing activities. 9% and 6%, respectively, were devoted to marketing and storage. Processing accounted for 51% of the state-sponsored projects, followed by manufacturing with a 33% share. The remaining 16% went to other activities.

2.1.8.5 Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

The Central Bank of Nigeria approved N75 billion for the commencement of Nigeria's Incentive-Based Risk Sharing in Agricultural Lending, according to data that was available (NIRSAL). As part of coordinated efforts to modernise the agricultural sector, it has also guaranteed 75.0 percent of loans made by DMBs to farmers throughout the 36 states of the Federation and the Federal Capital Territory. Through commercial banks and other financial institutions, the NIRSAL would provide the guarantee to farmers in the states and the FCT.

Credit guarantees were used by the initiative (NIRSAL) to mobilise funding for Nigerian agricultural businesses in order to reduce the risk of default. Its goal was to persuade financial institutions to be more open to working with agricultural enterprises. Input producers, farmers, agrodealers, agroprocessors, and industrial manufacturers were integrated with agricultural financing value chains for loan product development, credit distribution, loan origination, managing and pricing for risk, and loan disbursement in an effort to increase access to finance. The NIRSAL's 5 pillars, in particular the Risk Sharing and Technical Assistance pillars (Risk Sharing Facility, N45 billion; Insurance Facility, N4.5 billion; Technical Assistance Facility, N9 billion; Agricultural Bank Rating, N1.5 billion; and Bank Incentive Mechanism, N15 billion), served as the driving force behind the integration.

2.1.8.6 Interest Drawback (IDP)

In accordance with the CBN's IDP, farmers may borrow money from lending institutions at rates set by the market; additionally, the programme offers farmers who repay their loans on time an interest rebate of 40%.

2.1.8.7 Anchor Borrowers' Programme

Out of the N220 billion Micro, Small and Medium Enterprises Development Fund (MSMEDF), the CBN set aside N40 billion as part of the programme to be distributed to farmers at an interest rate of no more than 9% per year.

2.1.8.8 Cassava Bread Development Fund

The government created this organisation in 2008 to finance the entire cassava value chain, from processors to bakers, including equipping master bakers. Farmers received N3.44 billion

at 5% interest per year as part of a funding scheme that included 50% term loans and 50% grants.

Do Not Copy, Lead City University, Nigeria

2.1.8.9 National Programme for Food Security Fund

It was established in 2009 to benefit registered members of Apex Farmers' Associations (AFA), registered co-operative groups and SMEs, in the structure of 40 per cent grant and the balance divided into 80 per cent loan and 20 per cent equity contribution by the beneficiaries.

2.1.8.10 Small and Medium Enterprises Equity Investment Scheme

The nature of small and medium scale businesses makes them highly vulnerable to premature death, largely due to financial constraints which affect their sustainability and growth. Some scholars identify poor access to loan facilities, financial indiscipline, poor management practices, low entrepreneurship skill and harsh operating environment among other things as the main problems why many micro businesses in developing economies remain subjected to business entropy.

Poor investors have little or no access to loan facilities from the banking system because they cannot put up acceptable collaterals, coupled with high costs of bank loans and the difficulties in monitoring the activities of the micro firms in the developing countries in general and Nigeria in particular. It was argued that access to financial services enables small and medium businesses to move from everyday struggle for survival to planning future growth and development. It was identified that microfinance as one of the prime strategies to achieve the Millennium Development Goals (MDGs) in developing economy.

This programme aimed to increase business ownership in Nigeria by giving loans and financing to small and medium-sized businesses. The system has also enhanced the availability of credit to Nigerian businesses, which improves their ability to invest, operate as sole proprietorships, produce independently, and create jobs. This promotes the development of indigenous

technology, creates jobs, encourages entrepreneurship investment and productivity, and, of course, stimulates economic growth in Nigeria. A financing programme like this should be maintained and adequately supported in order to boost local small and medium-sized business investment and enhance the number of jobs. Nigeria needs to examine itself in order to make use of the resources and opportunities that are available. Because the level of domestic investment always determines the level of domestic output, per capita income, GDP, and economic growth and development. The primary focus of microfinancial institutions has been on providing funding for the establishment of microenterprises through joint liability group lending or cooperative societies in order to increase the participation of the underprivileged and improve repayment rates, which may improve the sustainability of microfinance programmes.

The Bank of industry in Nigeria is one of such microfinance institution whose activities worth empirical review. Its activities involves the disbursement of loans, savings and other basic financial services to small and medium businesses as well, managing loan repayments to keep the banks running and effective. Looking down the memory lane, it was identified that the formal and informal financial institutions involvement in the provision of micro credits for the development of small and medium businesses in Nigeria.

Loan repayment is a necessary ingredient for sustaining the microfinance programmes. However, evidences from available literature reveal existence of gap between loan disbursements and repayments level in Nigeria seen from demographic perspective. Ironically, aged (experienced) and married micro investors are more likely, merit the requirements for loan disbursement and also were found most vulnerable defaulters in loan repayment index. Further empirical review uncovers sufficient facts on factors that influence loan repayment problems in Nigeria from the purview of available literature. It specifically filters factor like 'inventory

finance on level of business input' as cardinal factor for loan repayment in Nigeria. More so, the studies of another scholar fetched ten influential factors of loan repayment problems in Nigeria which include amount of loan collected, cost of running business, interest rate, contact with bank, disbursement lag (lengths of period between loan application and disbursement), level of investment, socio-cultural bonds (membership of cooperative society), access to business information, poverty indicator and years of business experience. Elsewhere in Africa, similar trend exists as retrieved from available literature. For instance, the study of another scholar points out five factors like sales volume, size of firm, degree of diversification, income earnings stream and the quality of information as the significant determinants of credit repayment in Malawi. Imports from these empirical documentations provide the necessary fulcrum and literal foundation upon which this study leans.

2.1.8.11 Small and Medium Scale Industry Credit Scheme

SMEs are defined as any business with a maximum asset base of N200 million (excluding land and working capital), a labour size of between 10 and 200 employees, and a focus on providing simple goods and services. To produce a significant and forward-thinking outcome, small and medium-sized organisations (SMEs) combine a variety of business difficulties. Who qualifies as a small business owner? Is a small business owner different from other people, or can anyone become one given enough resources? Is it possible for everyone to start a firm, or are there particular requirements? These are some of the issues that scholars and theorists have been debating for a while; in fact, theories on small and medium-sized businesses extend back to the early stages of the industrial revolution. Due to the connection between small and medium scale firms and the concept of entrepreneurship, it is crucial to review the history of

entrepreneurship in order to grasp the concept of small and medium enterprises. Entrepreneurs started the majority of the small and medium sized businesses that exist today.

It is impossible to overstate how important it is for an economy to strengthen its manufacturing and industrial sectors. These two industries together influence the amount of technical sophistication, manufacturing capacity, industrialisation, modernization, and modernization of the country. This programme aims to hasten the availability and supply of loans and financing to Nigerian manufacturing sectors. The initiative also enhanced the flow of credit to Nigeria's small and medium-sized businesses. These increased industrialization levels, manufacturing activity, machine and technology advancements, production levels, and exports. These enhanced Nigeria's degree of development and economic growth. Any kind of substantial economic growth and development depends on industrialization. However, in order to compete with large corporations and overseas businesses, our small and medium-sized industries require enough funding. We have observed how these lending programmes successfully and gradually added to the expansion and development of the Nigerian economy. As a result, it is anticipated that the country's growth and development of development financing will increase and accelerate productivity, exports, foreign exchange profits, the balance of payments, and the reduction of poverty, destitution, economic inequality, and unemployment. In order to enable the productive sector of the economy to adopt new technologies and adequate inputs, as well as to increase productivity, output, income, saving, investment, and general activities, the Central Bank of Nigeria's development finance intervention aims to facilitate easy, just, and sufficient capital inflow in the form of credit.

There is little doubt that development financing has an impact on the development, stagnation, or even decline of Nigeria's economy. Lack of access to sufficient capital in the form of credit

plays a role in the stagnation and decline of the Nigerian economy. Therefore, in order to promote economic growth and enable economic development in Nigeria, sufficient and effective financing and credit should be made available to our productive sectors of the economy. In summary, financial institutions played a crucial role in economic growth and development by influencing the allocation of adequate financial resources, investment, capital formation, and saving in order to improve productivity, output, technological change, Gross domestic product, Gross national product, national income, per capita income, and an array of other factors. As such, the role of financial intermediation at the core and heartbeat of the Nigerian economy cannot be quantified or even underemphasized. Nigeria and other third-world countries should take development finance seriously and use it as a means of promoting economic expansion and development.

Due to issues with efficiency and ancillary activities, small and medium-sized businesses' inability to acquire financing has limited their ability to contribute to economic growth and development. Most often, it has been observed that the lack of access to credit facilities is to blame for SMEs' inability to meet the demands of the government in terms of increasing employment, raising production of goods and services, facilitating technology transfer, expanding opportunities for entrepreneurs, and raising everyone's standard of living. However, other significant causes have been pointed out as being to blame for the financing issue SMEs in Nigeria are currently facing.

Lack of cash for SMEs, particularly their inability to get external funding since they are seen as high-risk borrowers by creditors and investors due to insufficient assets and low capitalization, vulnerability to market volatility, and high mortality rates. It is challenging for creditors and investors to evaluate the credit worthiness of a possible MSMEs proposal due to the

information irregularity caused by SMEs' lack of accounting records, inadequate financial statements, or business plans. High transactional and administrative costs when lending or investing a little sum. They came to the conclusion that the sum of these consequences renders the business of funding SMEs unprofitable. Additionally, it may be claimed that a sizable portion of SMEs lack access to formal sector funding, i.e. money from financial institutions, which impedes their ability to expand and survive. Due to their informal character, inability to create bankable business plans, lack of security required for traditional collateral-based bank lending, and discriminatory cultural practices that obstruct transparency, SMEs have historically been seen by banks as lending opportunities with high risk. Large infrastructure gaps, a lack of favourable financial and credit conditions, a sizable workforce that lacks skills, and a lack of investment to scale up pilot projects are just a few of the significant issues that SMEs in Nigeria must deal with.

2.1.8.12 Rural Banking and Finance Scheme

This was launched in 1977 along with other measures the central bank employed as a catalyst to move the commercial banks in the direction of economic expansion and development. The government's efforts to promote economic development at the expected rate to catch up with the rest of the world were greatly hampered by the "built in structure reluctance" of banks in Nigeria to go to the less populous and economically inactive locations (i.e. rural areas). As a result, the government must place a strong emphasis on the development of the rural areas of the nation.

At a Nigerian Economic Society conference on rural development in 1972, it was emphasised that effective measures should be used to promote overall development in any country.

Using the authority granted to it by Section 4 of the 1969 Banking Decree, the Nigerian central bank forced commercial banks to open rural branches. As a result of the plan, capital formation has increased in the economy since rural residents' savings are now more easily mobilised and constructively directed to the underdeveloped sectors of the economy, which employ 75% of the labour force. The programme has aided in the creation of loans for farmers and small-scale businesses, considerably promoting the growth of agricultural and agro-based enterprises.

The program's goal is to improve rural residents' access to credit and financial services that will support the financing of small-scale rural industrial and agricultural enterprises. For a long time, rural areas of Nigeria were economically backward and impoverished, with high rates of poverty, unemployment, income disparity, and rural-to-urban migration. The downfall of the rural, wholly agrarian economy of Nigeria was significantly impacted by the lack of enough capital and financing for rural industry and agriculture. The life, economy, and growth of the affected rural Nigerian communities have all improved because to this lending programme. The credit scheme increased the inflow of credit to rural farmers, small and medium-sized businesses, and rural companies, which improved their level of productivity, output, asset, income earnings, employment generation, location of small scale industries, agricultural and industrial development in the affected rural areas, and subsequently reduced the rate of poverty, unemployment, income inequality, and rural to urban migration. Additionally, it enhances the quality of rural life and economic prosperity for those residing in the affected rural areas. These boosted the pace of the afflicted areas' integrated rural development and the rate of economic growth and development in Nigeria.

2.1.8.13 Credit Rationing

Credit is required to purchase improved technology which is vital for increased output and overall expansion of the farm. The issue with credit is not just that it is insufficient, but also that it is mobilised in an ineffective manner and, more crucially, that it is available at an efficient and reasonable cost. In this way, the importance of commercial banks as a significant and distinctive financial intermediary for this study becomes clear. Lack of agricultural credit, according to a researcher, is a key hindrance to agricultural production⁵⁶. He claims that typically, agricultural financing comes from non-institutional, unorganised financial sources such as savings from individuals or families and from moneylenders.

When borrowers request a certain amount from lenders, they may only receive a portion of it or none at all, even though they are ready to pay the market rates for borrowing costs. This is known as credit rationing (interest rates). Information asymmetry is the cause of this phenomenon. As a result, rationing is done rather than allocating credit via a non-price mechanism because the equilibrium price (interest rate) does not guarantee an efficient allocation of credit. Using information-based models, some researchers' experiments showed that the difficulties in obtaining credit may endure even in equilibrium markets^{56,57}. They argue that because there are information asymmetries, interest rates cannot serve as an allocation of credit and that credit rationing may continue even in the face of interest rate liberalisation.

Similar to this, other models were built on flawed credit markets with information asymmetry, making it prohibitively expensive for banks to collect and maintain correct data on borrowers. They determined that credit rationing is a phenomena that occurs when agency issues like knowledge asymmetry and moral hazard affect the supply of credit and capital. The model posits that there are too many banks, all of which aim to maximise profits by selecting the best

rates of interest and collateral, and that a large number of potential borrowers also aim to maximise profits by selecting the best projects.

The underlying idea is that due to knowledge asymmetry, the enterprises know the likelihood of success of the projects but the bank does not. In other words, credit rationing is said to happen when some loan applicants who seem to be identical receive credit but others do not, or when a particular set of people cannot acquire credit or can only do so at a significantly higher cost. The visible characteristics of borrowers, those of the enterprises, and the characteristics of the loans may affect the bank's rationing of credit. The value of the collateral put up by a company also affects how the bank limits lending⁵⁸.

The informational imbalance between small and medium-sized businesses and the financial institution is lessened via collateral. The size of a company's internal funding sources has an impact on the banks' credit rationing practises. This has been supported by a researcher who contends that systemic and borrower-specific factors can both affect the availability of financing for new small and medium-sized businesses⁵⁹. Additionally, it was noted that the borrower's pacific factor contains elements that a company can mainly influence, such as managerial skills, the calibre of business information, the accessibility of collateral, and networking⁶⁰. Collateral, according to a researcher, aids in reducing moral hazard issues and informational asymmetries between banks and business owners⁶¹.

Since microfinance institutions can be distinguished by their lending policies, mission drift, organisational form, institutional development, as well as by their disclosure and transparency, access to credit and credit rationing are two distinct concerns depending on the type of institution^{62,63}. It is obvious that small and micro agricultural businesses have a hard time getting financing, but the scope and gravity of this issue are still unknown. Therefore, it is

necessary to conduct an empirical estimation to ascertain the degree to which institutional factors affect credit rationing and access, as well as the degree to which loan, company, and borrower characteristics dictate it. Numerous studies have come to the conclusion that the majority of emerging nations practise credit rationing. Based on the traits of the borrower, the lender, and the relationship between them, the terms and conditions under which credit is transacted vary significantly. In other words, the conditions of a loan contract are determined by borrower-lender factors⁶⁴.

Empirically, a Probit model with a binary variable that indicated whether a household was credit constrained or not was used by several researchers⁶⁵. The study focuses on people who experienced price and quantity rationing. Household size, income, age, gender, education, assets, the percentage of borrowing households within a 1-kilometer radius, and the distance to the closest bank within the award are among the explanatory factors in the model. Despite the fact that all of the study's households were low-income, the data demonstrate that having access to credit is less likely when income is higher. In contrast to a researcher who discovered an inverted U-shape effect for general households rather than for the impoverished in Bosnia and Herzegovina, income also has an U-shaped effect on the likelihood of credit limitations. Other studies have attempted to investigate the relationship between agricultural productivity and credit availability^{66,67}.

What is evident from all of these studies, however, is that they all have a tendency to pursue similar goals. These targets range from determining the causes of agriculture credit rationing to examining the structure, pattern, and trends of credit rationing to determining the impact of deposit money banks' credit rationing on the level of agricultural output productivity

Numerous empirical studies on the restriction of agricultural credit in Nigeria have been done by deposit money institutions there and in other nations. For instance, a researcher employed a probity model based on a purposive sample of 150 farmers to examine small-scale farmers' access to formal sources of credit in the Ogbomosho zone of Oyo state. According to the studies, farmers are more likely to acquire formal loans if they have higher levels of education, participation in a cooperative, contact with an extension agent, and collateral security, whereas farmers with less agricultural experience are less likely to do so. In a different study, researchers attempted to think about credit rationing in addition to the issue of access^{68,69}. In Nigeria's Cross River State, the study examined factors that promote credit restrictions as well as the market access of rural households. The study included households that had borrowed from semiformal (MFIs) and informal sources. However, the only feature of rationing taken into account in the research is that borrowers may only be eligible for a portion of the loan requested or nothing at all.

It is important to emphasize that the works that have been assessed so far have some clear flaws, which is why this effort is necessary. For instance, the causation test was not conducted in a research of a scholar. Due to this inefficiency, the conclusion that there was no proof of conceived foreign capital, which would have included agricultural finance, interest rates, and export revenues, was reached⁷⁰. He came to the conclusion that credit rationing by deposit money banks had no bearing on the level of agricultural production productivity in Nigeria using Chenery and Stout's two-gap model. Studies conducted by a different researcher used the Ordinary Least Square (OLS) method without doing unit root or error correction model (ECM) tests⁷¹. The consequence is that endogeneity issues may have plagued such investigations. In order to assess endogeneity and identify the relationship between credit rationing and

agricultural output productivity level, both single and simultaneous equation systems were used. The study discovered a bidirectional relationship between credit rationing and agricultural productivity, but it did not provide explicit and comprehensive explanations for why endogeneity exists. Over 70% of the research carried out to date were able to establish a positive association between credit rationing and agricultural output, whereas less than 30% were able to do the same for a negative relationship. Since no study has been able to use Nigeria's agricultural credit scheme as a stand-in for credit rationing, it is clear from the literature search and to the best of our knowledge that no studies have been able to examine the sectoral influence of credit restriction on agricultural output. As a result, the study aims to find the gap that over time caused researchers' results to differ, and it also aims to remedy the majority of the detected deficiencies by making sure that all relevant econometrics tests are run.

2.1.9 Small Holders Participation in Formal Markets

With increasing formality, markets change their nature. Structured and based on a methodical analysis of risks and constraints, policy initiatives in support of smallholder integration are required. It is important to comprehend how risks and restrictions, which tend to grow more pronounced as markets formalise, affect the patterns of market integration that have been seen. An examination at the firm and farm level is necessary to interpret reported contractual patterns and welfare gains related to involvement in various market channels.

The method for analyzing firm behaviour used in this report is based on a paper by Christopher Barrett that was commissioned by FAO. It is especially helpful for highlighting many of the inferential difficulties that empirical researchers face when trying to estimate the factors that influence market channel participation and its effects on smallholder welfare.

The importance of geographic placement and farmer selection effects, the heterogeneity of contract forms and terms, the efficacy of farmer groups and cooperatives, and the highly variable but generally positive returns to farmers from value chain participation conditional on being offered a contract are key features that recur in empirical studies of smallholder participation in evolving agricultural value chains.

The absence of market research and analysis is a common problem that has a significant impact on lost commercial endeavours. For instance, stakeholders, including smallholders themselves, frequently misunderstand how scaling up will affect particular markets.

Smallholders often decide to enter a market based on what others have done in the past and do so in response to observed profits made by early entrants and historical prices. However, by the time new manufacturing capacity is introduced, initial investments have already begun to pay off. Market saturation may undermine the contract terms farmers face or increase the risk of contract breach by buyers.

These buyers may be themselves late comers with shaky relationships with retail customers, or they may find it difficult to secure storage or the capacity needed to move food in a timely manner in order to maintain product quality. Farmers and businesses frequently fail to adhere to all the requirements of contracts, which is largely due to agricultural price and yield volatility. Exogenous shocks have the potential to prevent one or both parties from completing the transaction as planned. Owing to the likelihood of shocks, neither farmers nor businesses can determine whether a contract counterparty merely reneged on the deal or was forced to break it due to exceptional circumstances. Farmers assert that they shoulder the majority of risks in every country, including the risk of not being paid because a product does not fulfil agreed-upon (but frequently fluctuating) criteria or the risk of crop loss during shipping. However,

businesses also frequently claim that farmers fail to produce products as promised and side-sell to more lucrative markets. Written agreements can help to alleviate some of these issues since they provide transparent proof that either party can use to try to compel performance or compensation in the event of non-performance.

However, there is still insufficient data to determine whether or not formal, written contracts have any impact on either performance or ex-post enforcement. Overall, the picture across commodities and nations shows a high rate of turnover from one year to the next and a significant contracting risk faced by both sides. Although the subject certainly warrants research, we currently know very little about the sustainability of smallholder participation in the modern value chain.

A scholar opined that a trader or a firm (retail or wholesale) contracts with smallholders for the provision of agricultural products. Since all agents learn from their past actions, contracting involves several decisions that are played out over time and simultaneously across multiple places and with multiple smallholders in each site. Barrett suggests the following four steps:

1st Stage: Geographic sourcing decision; evaluation of the candidate pool. The initial geographic "placement" decision (where to purchase from) is based on a number of variables, including the region's agronomic appropriateness to offer the crop in issue in the requisite volumes and quality, or its proximity to important markets. The participation of smallholders is greatly influenced by these spatial placement effects. Not all farmers have easy access to contemporary value chains that service faraway markets and may be lucrative. Contracts are least likely to be offered to those that are farther away from ports and cities, have less dependable communications and transportation infrastructure, and are located in less promising agronomic zones. Given that producers in more favored places often have preferential access to

higher-value marketing opportunities, which reinforces their original advantage, this has significant potential consequences for patterns of spatial inequality. Understanding this option makes it possible to identify measures that could potentially increase buyers' catchment areas, enabling more smallholder market participation. Second stage: decision on farmer contracts. This option entails the selection by businesses of particular farmers or groups of farmers within predetermined geographic areas to whom specific contract terms are given. For horticultural products, having access to irrigation is often essential to ensuring proper water management. Other inexpensive, simple-to-observe indications that assist the company in finding the best potential suppliers include membership in a farmer group or involvement in an NGO extension programme. Empirical rectification would be quite simple if farmers were only chosen based on their visible characteristics. The identification of determinants of firm contract choice is, however, made substantially more difficult by the fact that a major portion of selection is almost probably reliant on unobservables, such as farmer skill, reliability, contract status with neighbours, etc.

The third stage is when smallholders are given a contract and must decide whether or not to accept it. In this phase, the smallholder decides whether to accept the contract's terms (ex-ante of the product delivery). This decision produces a selection effect that makes it difficult to estimate precisely how value chain membership will affect behaviour or wellbeing. Why would farmers decide to accept a contract that is being offered? First, it might correct market inefficiencies brought on by flawed markets. Second, the firm's logistical capabilities may enable producers to profit from economies of size or scope. Third, if the contract lessens the farmer's exposure to market risk, it may promote increased output and/or investment in inputs that stabilize yields, such as irrigation, both of which benefit the farmer. Fourth, businesses can

validate adherence to criteria for which far-off customers are prepared to pay a premium. Another hypothesis is that farmers purposefully reject favourable contracts when they are offered them, preferring to wait and see how others fare under the agreement in order to dispel any remaining doubts about its advantages. The farmer and firm decide to honour the deal in the fourth stage. When it is time to deliver and pay for the commodities as agreed, both sides have the chance to break the contract they have already agreed to. If one party breaches the agreement, the other party must determine whether to invest time and money in seeking to enforce it. In this regard, farmer organizations and NGO mediation on behalf of smallholders may produce genuine benefits because the group's ability to legally or politically confront the company is almost certainly larger than that of individual, especially small-scale suppliers.

2.1.10 Risk Management in Market Integration of Small Holders Farmer

Large-scale, commercially minded, and well-equipped farmers can better handle price and weather-related risks in industrialized countries by using market-based instruments like futures markets or weather-based insurance. Smaller farmers might not have access to the skills, resources, technologies, market tools, and governance structures needed to manage their risks effectively. Smallholders in developing nations frequently lack the resources and market access necessary to adequately defend themselves from the various dangers that are inherent in less developed agricultural sectors⁷².

Risk management by smallholders faces many difficulties in developing and emerging countries. The geographical spread of smallholders might result in high operational costs for risk management programmes because to their restricted access to markets and knowledge. Financial and insurance markets that are accessible to smallholders are either absent or underdeveloped. Women smallholders frequently fare worse than other smallholders because

they typically have even less access to assets, financing, extensions, and other risk management or coping mechanisms. The risk that farmers are exposed to can be decreased by taking a variety of steps, such as the introduction of disease-resistant varieties, irrigation, and drainage systems. Market-based insurance mechanisms offer another option to transfer risk and let farmers decide how much to produce⁷².

Innovations like weather index-based crop insurance, which aims to overcome the difficulties of insuring smallholders, are the result of extensive work and research. The basic idea is that farmers receive payments whenever temperatures, rainfall, or frost levels exceed certain criteria and are anticipated to result in a major decrease in crop production. These phenomena are measured using information from weather stations or even satellite technologies. The benefit of this strategy is that insurers do not have to administer through informal credit agreements and field level assessments. It is obvious that the most of these tactics are worthless if the risk pooling unit (village or area) is susceptible to the same aggregate risk, such as a price decline or drought, and are only effective for shocks that do not strike all members at once.

2.1.11 Foreign Direct Investment in Agriculture in Nigeria

It was noted that historically, FDI was a phenomena that largely affected highly established economies, and that these developed countries continue to draw a bigger percentage of global FDI than developing countries (to which Nigeria belongs). Another researcher, however, demonstrated that with US\$87 billion in FDI declared in 2014, Africa saw the greatest rise in inward investment²⁰. For instance, in the former, compared to developed nations, agricultural FDI inflows from 2008 to 2010 represented an average increased contribution of 1.0 percent of gross fixed capital creation. In 1998, developing countries' inward FDI stocks made up 20% of their GDP, compared to only 12% in wealthy nations. According to some estimates,

agricultural FDI is thought to be more significant in emerging nations than in affluent nations. As a result, it is now practically necessary to experimentally close the information gap by determining the trajectory of FDI and that of agricultural growth in developing nations generally, and Nigeria in particular.

A lack of private and public investment has resulted in reduced productivity growth rates and stagnant production in many emerging nations due to the long-standing neglect of the agricultural sector as a driver of development and the eradication of poverty⁷³. However, it was stated that the 2008 food crisis led to a rapid increase in investor interest in agricultural land and water, a practise now known as "land grabs," which caught the attention of the world community by surprise. Given its natural resource wealth and sizable market (with a population of more than 160 million), Nigeria qualifies to be a significant beneficiary of FDI in Africa. In fact, it is one of the top three African nations that received FDI in 2014⁷⁴. However, it was noted that Nigeria's share of FDI inflow to Africa averaged about 20.68 percent between 1976 and 2007, and that the amount of FDI attracted specifically to agriculture is tiny in comparison to the resource base and potential demands⁷⁵. They further posited that the percentage of FDI inflow to the agricultural sector in Nigeria during the same period is less than 1% and that between 1980 and 1984, it was 2.46% which was the highest and now currently stood at 0.37%. The Food and Agriculture Organization recommended investing US\$83 billion (in 2009 US\$) yearly in developing nations' agricultural sectors to ensure food security for a predicted global population of 9.1 billion people in 2050⁷⁶. Additionally, it was stated that the majority of the investment is anticipated to come from the public sector, which will fund infrastructure, institutions, and research development. Public investment has been found to be the most

effective in ensuring food security and reducing poverty in agriculture, but it may not be able to meet these investment needs⁷⁷.

According to, FDI to agriculture has historically been sparse globally (less than 1% of all inflows between 2005 and 2007), but higher FDI in agriculture could help close the investment gap⁷⁸. Therefore, public actors could effectively encourage private investment in the sector while also lowering risks and securing the benefits of the investment. For example, they could make sure that FDI supports the nation's development strategy and has spillover effects to smallholder production systems⁷⁹. However, FDI in Nigeria is mostly driven by natural resources, thus the government may play a significant role in promoting and developing its natural resources to attract more investments to the country. According to research results, FDI has good effects on the agriculture sector⁸⁰. In order to maintain high levels of income and employment, the country is said to need to contrast foreign investment with domestic investment. If foreign investment is focused on enhancing and growing managerial and labour capabilities, it can be successful. To put it another way, FDI into Nigeria alone would not result in sustainable agricultural expansion unless it is accompanied with the appropriate structures and infrastructures that could support positive outcomes⁸¹. Some academics have found evidence to support the idea that very little foreign direct investment (FDI) enters Nigeria's agricultural sector, suggesting that this inflow has little impact on the sector's output but has a positive impact on labour creation. They have also suggested that this inflow does not have a long-term relationship that is complementary to the sector's output⁸². They further said that a combination of two reasons may be to blame for the non-significant link between FDI inflows into the agricultural sector and sector output. First, due to the low level of FDI in the agricultural sector, and second, because the type of FDI that flows into the sector is not

technology-oriented; rather, the type of FDI that the sector receives focuses more on improving its capacity and capability to provide jobs for the unemployed (regardless of how simple or meagre these jobs may be), and less on providing the necessary level of technology required to improve output in the sector.

In the past few decades, according to a UNCTAD report, transnational corporations (TNCs) and foreign direct investments (FDIs) have been particularly active in the upstream and downstream of the global agri-food value chain of agriculture in developing countries, sometimes through non-equity participation like contract farming. They also pointed out that rising food prices have drawn "new investors" to the sector, who are pursuing large-scale land purchases in developing nations. These developments, they said, have sparked discussions about the various FDI models and alternative business models for the agriculture of developing nations, their potentials and difficulties, as well as the economic, social, institutional, and policy requirements necessary for those nations to benefit from FDI.

Most of the earlier studies examined only the importance of FDI on growth and the channels through which it may be benefiting the economy^{83,84}. Furthermore, the conclusions of research done on the relationship between FDI and economic growth in Nigeria are not all agreed upon. A closer look at these earlier studies reveals that no conscious effort was made to account for the fact that more than 60% of foreign direct investment (FDI) inflows into Nigeria are made into the extractive (oil and gas) industry⁸⁵. The petroleum (oil and gas) industry, where the majority of these investments have been going, is also the focus of many studies on FDI and the Nigerian economy. Given that agriculture plays a role in economic growth and development, those studies really modelled the influence of FDI in the extraction of natural resources on Nigeria's economic growth without giving it any special preference. The low level of FDI in the

agricultural sector may be a major factor in the lack of research on how it affects Nigeria's agricultural sector, but regardless of how little FDI there is in agriculture, it is crucial to understand how it affects agricultural growth in order to decide whether to promote or obstruct the ongoing inflow of FDI into Nigerian agriculture in order to address the country's unique aspect of the FDI-growth paradox. However, in recent years, the increase in agricultural FDI flows to developing countries (including Nigeria) has proven to be higher than the increase in agricultural FDI flows to developed countries, according to statistics gathered from UNCTAD's 2012 report. Agricultural FDI is defined as combined FDI in agriculture, forestry, and fishery, as well as food and beverages. This includes Nigeria. Additionally, there is a growing opposition to further economic liberalisation, which reduces the options open to the government for obtaining funding for agricultural development and makes the decision to seek FDI for the sector even more crucial. Furthermore, despite multiple studies that looked at the impact of FDI on Nigeria's economic growth with conflicting results, the empirical relationship between FDI and agricultural growth in Nigeria is still unclear⁸⁶.

2.1.12 Agricultural and Economic Development

Crop plant cultivation and livestock production are referred to as "agriculture." It is a fairly inclusive term that covers all facets of farming, forestry, animal farming, and fisheries⁸⁷. The systematic rearing of valuable plants and livestock under human management is referred to as agriculture. Therefore, it is human activity that involves producing food, fibre, fuel, etc. by making the best use of terrestrial resources, such as land and water⁸⁸. Agriculture has been defined as the practice of raising both plants and animals for human use. The deliberate transformation of a segment of the Earth's surface via the cultivation of crops and the keeping of livestock for the purpose of economic or sustainability gain is known as agriculture⁸⁹.

economic progress It has been emphasized by academics how agriculture may effectively contribute to national growth and modernisation⁹⁰. It was said that improving the agricultural sector and revitalizing rural areas through the construction of effective infrastructure is the only way to achieve national development and sustainability⁹¹.

Agriculture is connected with farming and is said to be the best indicator of the health and progress of a country's economy. Additionally, it is a process that uses all the production variables (including land, labour, capital, and man) to create crops, livestock, solar energy, and forest resources for human use as well as to supply the agrarian products needed by other industries⁹².

Livestock production, forestry, fishing, and agricultural production all fall under the category of agriculture in Nigeria. Since almost 70% of the population works in agriculture, economic progress in Nigeria may be challenging to attain without developing the sector. Agriculture contributes significantly to a nation's economic growth. This comprises the generation of a wider market for both raw materials and industrial output, the generation of employment possibilities, the development of rural areas, and the contribution to national income. By reducing inequality, it reduces political and social unrest in a country.

2.1.13 Challenges of Agricultural Financing in Nigeria

Nigerian agriculture faces numerous challenges. Peasant agricultural holdings and holders characterise the industry, which is still mostly underdeveloped. The main issues are access to land, markets, capital, technology, and infrastructure that is affordable, simple, and assured. A crucial element is having access to timely, reasonable, and suitable financing (in terms of tenor, payback cycle, and agricultural credit insurance).

There is very little financial support for agriculture. In comparison to the 10% proposed in the 2003 Maputo statement, to which Nigeria was a member, government spending on the sector is appallingly low at an average of approximately 2% of the annual national budget. The issue of inadequate public investment in agriculture is made worse by the sector's low credit extension and the Agricultural Credit Guarantee Scheme's subpar implementation (ACGS)⁹³.

Lending to agriculture is severely constrained by risk and unpredictability. Beyond risk, it was noted that small peasant farmers dominated the sector and lacked access to finance and credit, prompting the need for state initiatives. For instance, the Central Bank of Nigeria mandated banks to lend to agriculture at a specified minimum percentage of their loan portfolio in 1969. The Central Bank of Nigeria then took any deficiency in this ratio and gave it to the BoA's forerunners (when it joined in 1973) to lend to agriculture. With the deregulation that came along with the privatization and commercialization of the banking sector in the late 1980s, this policy was abandoned.

The 1973 founding of the Nigerian Agricultural Bank (NAB) held great promise for Nigerian agricultural finance. It appears that the reforms, as seen by the name changes from NAB to NACB, NACRDB, and most recently, BoA, were merely cosmetic because they had little impact on the bank's internal efficiency or its effectiveness. The loan recovery rate at BoA was less than 70% compared to similar institutions in comparable economies, while in the other economies, recovery rates ranged from 95 to 99. In terms of its reach, BoA only covers fewer than 20% of Nigerian farmers, as opposed to similar institutions elsewhere where we were able to reach as high as 99%. The issues with management, poor education and poor banking practices among peasant farmers, staff issues (motivation, training, and development), ICT issues, and issues with data integrity, as well as the risky nature of rain-fed seasonal agriculture

and its exposure to diseases and pests, can all be linked to the problem in Nigeria. The particular inherent hazards associated with agricultural loans have also prompted the formation of numerous government initiatives and programmes. The Central Bank of Nigeria created the Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977 to ensure that commercial banks will be reimbursed for losses due to default after realising the security to the tune of 75% of their exposure to agriculture. Due to inadequate implementation and compromised methodology, the strategy failed to accomplish its goals.

To provide agricultural risks insurance coverage to Nigerian farmers, the Nigerian Agricultural Insurance Scheme (NAIS) was founded in November 1987. Because traditional insurers view agricultural risks as too dangerous to be appealing, the Nigerian Agricultural Insurance Corporation NAIC (and its predecessor) was founded with 100% government ownership to operate the scheme. The programme includes agricultural investments, agricultural revenue, and performance, bid, and custom bonds guarantees (NAIC, 2021). The scheme has not been successful, according to the widespread agreement.

Despite its subsidies, support, and encouragement of the commercial banks and BoA, the Central Bank of Nigeria appears unsatisfied with the amount, tenor, and structure of credit going to agriculture. In order to further its development objectives, it has recently introduced agricultural sector lending through its Anchor Borrowers' Programme.

2.1.14 Poverty Rate in Nigeria

Given that poverty has an impact on so many facets of human life, there is seldom a single universal definition of it. Others favour political, economic, or statistical formulations, while some scholars define the notion from cultural views. The World Bank defines poverty as any

income of less than US\$1.25 per day for the poorest nations and US\$2 per day for poor developing countries. This is a classic example of a statistical definition. This thesis adheres to the widely accepted definition of poverty, which states that it is a state in which people do not have enough money to meet their fundamental needs and live below a predetermined minimum income level. The first of the Sustainable Development Goals established by the United Nations in 2015 is the eradication of severe poverty for all people everywhere by 2030. In order to do this internationally, 90 people needed to escape poverty every minute; in Africa, 57 people needed to do this every minute; and in Nigeria, 12 people needed to do this every minute. Unfortunately, on average, 9 individuals in Africa experience extreme poverty every minute, with Nigeria and the Democratic Republic of the Congo each contributing 7 of those. According to estimates, 100 million Nigerians—or 62.6 percent of the population—live below the international poverty level (PPP US\$1.25 per day). Additionally, the unemployment rate doubled from 6.4 percent in 2014 to 14.2 percent in 2017. Inequality was prevalent (GINI Coefficient of 43%) not only in terms of income but also in terms of access to essential social services and employment opportunities. The recent gasoline, food, and financial crises have made the poor's already difficult situation worse. Governments set up a number of programmes to address the issue of poverty. These include the 1962–1985 First, Second, Third, and Fourth National Development Plans; the 1990–1992 Three Year Rolling Plans; the 1996–1996 Vision 2010; the 2003–2007 National Economic Empowerment and Development Strategy; and the 2001–2015 National Poverty Eradication Programme (NAPEP). Huge quantities of money were invested in the programme in each of these. However, no discernible decline in the poverty rate has been noted; rather, the trend is upward. The reasons of poverty have been the subject of numerous research. According to research, unemployment, low economic growth

and social development, resource underutilization, a lack of economic diversification, inadequate investment, and bad governance are the main causes of poverty in Nigeria.

The average annual GDP growth rate for Nigeria between 2010 and 2018 was 1.07 percent, which is significantly lower than the generally regarded healthy growth rate of 2-3 percent for emerging nations. Since these two sectors are essential to reducing poverty, the public has expressed worry about the social sector's poor performance, particularly in the areas of health and education. Less than 30% of the budget mix is dedicated to capital spending, which has historically been biased toward recurrent expenses. Low levels of industrialization and infrastructure development are the result. The agriculture sector and solid mineral resources have been revived by governments in recent years as part of their efforts to diversify the Nigerian economy. Nigeria's economy is still monocultural, nevertheless. According to the Nigerian National Bureau of Statistics (NBS), the oil and gas sector contributed more than 90% of the country's export revenues and almost 70% of government revenue in 2017. Major security challenges for Nigeria include the Boko Haram insurgency in the north east, herdsmen attacks in the north central and other regions, as well as frequent abduction. Through the removal of people from their homes and livelihoods, these have made poverty worse. Another factor contributing to poverty in the nation is the high unemployment rate. The unemployment rates for 2011, 2012, 2013, 2014, and 2015, respectively, were 6.0, 10.0, 10.0, 6.4, and 10.4 percent. These numbers do not accurately reflect the reality because a significant portion of those who are supposedly employed are actually significantly underemployed.

2.1.15 Social Investment

Several scholars have differing views on what social investment means. As a framework for social policy change, the Organization for Economic Cooperation and Development (OECD)

first used the term "social investment" in 1997. The goal was to increase the return on social investment through increased social cohesiveness and active involvement in both society and the labour market. According to its own definition, the European Commission views social investments as a collection of laws and other measures that support the development of human capital and increase people's capacity to fully engage in political, social, and economic life as well as the labour market. A researcher offers two broad definitions of social investment from a different angle. From a different perspective, he describes social investment as the encouragement of a "social investment state," with the directive that, if possible, investment in human capital should take precedence over the direct supply of economic upkeep. The provision of funding (such as loans) or other social benefits is highlighted in the second definition. Despite the writers' differing definitions, investing in human capital and improving people's capacities, particularly those of vulnerable groups in society, is the shared goal. Therefore, improving people's participation in social and economic life serves as the motivation behind social investment. In the literature on social investment, themes of assisting the most vulnerable and disadvantaged through policies and programmes frequently appear.

2.1.16 Overview of Global Social Investment

The implementation of social investments in countries appears to have been spearheaded by the European Union. In February 2013, the European Commission unveiled its "social investment package," or SIP, for member states to accept. SIP is a comprehensive welfare programme that includes help for housing, healthcare, early education, active labour market strategies, retraining, and lifelong learning. When the Commission's report was published in 2013, 39 of the EU's member countries had already started putting social investment into practice. A researcher highlights the social investment programmes in Japan, Canada, Australia, and South

Korea in his research. In terms of their areas of focus, he contrasts the social investment policy reforms implemented since the 1990s by the two Anglo-Saxon liberal welfare regimes of Canada and Australia with those implemented by the two East Asian welfare regimes of Japan and South Korea. According to the study, the two groups of countries had comparable policy concepts but had different target audiences and policy instruments. While Japan and South Korea handled their social investment programmes from a broader viewpoint, embracing children, women, and the elderly, Canada and Australia had concentrated their policies on children. The Poverty Reduction Project was a significant social investment made by the Ghanaian government (PCR). The project's overarching objective is to lessen poverty in Ghana's rural and urban communities. The project's primary source of funding was a significant portion of the Social Investment Fund (SIF), which went into operation in 1998. The underprivileged were given easier access to fundamental social and economic infrastructure thanks to this financing. Additionally, it improved the poor's access to financial services and empowered local governments, non-governmental organisations (NGOs), and community-based organisations (CBOs) in their efforts to reduce poverty overall. Another expert praised PCR for helping many Ghanaians escape poverty and succeeding in its primary mandate areas in a brief evaluation of the SIF.

It was suggested in a visual presentation on Latin America and the Caribbean that in order to make progress toward the eradication of poverty, programmes to combat it must be viewed as a component of an integrated social security policy. In light of this, the Economic Commission for Latin America and the Caribbean identified a number of critical policy issues. These include integrating efforts to combat poverty with efforts to ensure that everyone has access to high-quality health and education services. On the basis of the idea of aggressively looking for

individuals who qualify and addressing the entire poor population, it also underlined the need to expand coverage. The development of care policies to support children, the elderly, and people with disabilities was also seen as being highly important, as was the promotion of gender mainstreaming in all policies and programmes. Additionally, there is a need to upgrade both urban and rural infrastructure. One may argue that the presentation of ECLAC serves as a roadmap for inclusive and sustainable social investment policy. Literature also claims that social investment is made with the intention of reaching the Sustainable Development Goals in several Asian nations, including Singapore, Japan, China, South Korea, Philippines, and India, among others (SDGs). This is predicated on the idea that incorporating SDGs into policies will help them have the greatest impact in the areas where they are most needed. This is because SDGs offer a comprehensive, far-reaching, and right-based set of global goals and targets that collectively shape a sustainable, equitable, and resilient future for all countries, regardless of their developmental stages.

2.1.17 Social Investment Programmes in Nigeria

On what social investment means, experts have differing views. The term "social investment" was first used by the Organization for Economic Cooperation and Development (OECD) as a framework for social policy reform as early as 1997. This was done to ensure that social spending would yield the greatest possible return in the form of social cohesiveness and active involvement in both society and the labour market. From its own perspective, the European Commission defines social investments as the collection of laws and other measures that encourage the development of human capital and improve people's capacity to fully engage in social, economic, and labour market participation. Social investment is the advocacy of a "social investment state," with the principle that, if possible, financial resources should be

invested in people rather than being used directly to support the economy. The provision of funding (such as loans) or other social benefits is highlighted in the second definition. Despite the writers' differing definitions, investing in human capital and enhancing peoples' capacities, particularly those of vulnerable groups in society, is the shared goal. Therefore, improving people's participation in social and economic life serves as the motivation behind social investment. In the literature on social investment, themes of assisting the most vulnerable and disadvantaged through policies and programmes frequently appear.

The implementation of social investments in countries appears to have been spearheaded by the European Union. In February 2013, the European Commission unveiled its "social investment package," or SIP, for member states to accept. SIP is a comprehensive welfare programme that addresses a wide range of issues, including early childhood education, active labour market policies, retraining and lifelong learning, healthcare, and housing support, among other things. When the Commission's report was published in 2013, 39 of the EU's member countries had already started putting social investment into practise. He was studying. While Japan and South Korea handled their social investment programmes from a broader viewpoint, embracing children, women, and the elderly, Canada and Australia had focused their social investment policies on children. The Poverty Reduction Project was a significant social investment made by the Ghanaian government (PCR). The project's overarching objective is to lessen poverty in Ghana's rural and urban communities. The project's primary source of funding was a significant portion of the Social Investment Fund (SIF), which went into operation in 1998. The underprivileged were given easier access to fundamental social and economic infrastructure thanks to this financing. Additionally, it improved the poor's access to financial services and empowered local governments, non-governmental organisations (NGOs), and community-

based organisations (CBOs) in their efforts to reduce poverty overall. In a brief evaluation of the SIF, Woodling commended PCR for achieving achievement in its primary mandate areas and rescuing many Ghanaians from poverty³².

Cecchini makes the case that in order to proceed toward the eradication of poverty, programmes for reducing it must be viewed as a component of an integrated social protection strategy in a visual presentation on Latin America and the Caribbean. Against this backdrop, the Economic Commission for Latin America and the Caribbean identified a number of critical policy issues (ECLAC). These include integrating efforts to combat poverty with efforts to ensure that everyone has access to high-quality health and education services. On the basis of the idea of aggressively looking for individuals who qualify and addressing the entire poor population, it also underlined the need to expand coverage. The development of care policies to support children, the elderly, and people with disabilities was also seen as being highly important, as was the promotion of gender mainstreaming in all policies and programmes. Additionally, there is a need to upgrade both urban and rural infrastructure. One may argue that the presentation of ECLAC serves as a roadmap for inclusive and sustainable social investment policy. Literature also claims that social investment is made with the intention of reaching the Sustainable Development Goals in several Asian nations, including Singapore, Japan, China, South Korea, Philippines, and India, among others (SDGs). This is predicated on the idea that incorporating SDGs into policies will help them have the greatest impact in the areas where they are most needed. This is because SDGs offer a comprehensive, far-reaching, and right-based set of global goals and targets that collectively shape a sustainable, equitable, and resilient future for all countries, regardless of their developmental stages.

In the past, the Nigerian government has purposefully created a number of social investment programmes, mostly with the goal of resolving the ongoing issues of inequality, poverty, and unemployment. It is categorically directed at certain points in time toward lowering the rate of young unrest in unstable regions and states of the federation. There were a number of prominent youth programmes during the time of Nigeria's independence in 1960 intended to encourage social investments, particularly for the youth population. As an illustration, it was stated that "the periods between 1962 -1968, 1970 - 1974 (National Accelerated Food Production Programme-NAFPP), 1975 - 1980, and 1981- 1985 were designed by various governments to provide basic infrastructure, diversify the economy, reduce the level of unemployment, achieve dynamic self-sustaining growth, and raise the living standard of people." Other researchers also emphasised that, following 1985 up to 1999, social investment programmes were focused on small and medium-sized businesses, scale trading, reducing poverty, especially among young people, as well as sectoral interactions in the operationalization of the state economy.

Operation Feed the Nation (OFN), Free and Compulsory Primary Education (FCPE), the Green Revolution (GR), and other initiatives aimed at reducing poverty in Nigeria were implemented in the 1970s. On the one hand, GR and OFN programmes were created and put into place to enhance agricultural output and make it easier for sub-sectors in the agricultural sector to perform their tasks effectively. On the other side, FCPE was founded to lower the high degree of illiteracy in Nigerian localities. Notably, these programmes achieved many praiseworthy successes by enhancing the social and educational abilities of several residents of rural areas. The Nigerian central bank, however, attributed the program's inability to continue to the lack of

political will, societal unrest, and public support. The discussion that follows includes a summary of a few of the programmes in respect to their results and production in Nigeria.

2.1.18 Structural Adjustment Programme

Nigeria approved the International Monetary Fund's (IMF) Structural Adjustment Program (SAP) in 1986. (IMF). In order to institutionalize the necessity for reliance on the private sector rather than the government set-up for tackling the core problems of the nation-state economy, this was done with a view to enhancing a swift shift from the previous reform programme. It was confirmed that the World Bank contributed roughly US\$450 million to the programme in order to foster globalization and international trade⁹⁴. The SAP also sought to reduce the state's significant reliance on the oil industry as a mono-economy, diversify the economy of the state, restructure government forms and functions, promote non-inflationary economic growth, and put in place workable mechanisms for balancing and fiscal trade payments.

However, it was contended that the SAP promoted inflation and had a glaringly negative impact on income redistribution. Additionally, it influences the state's clients' personal happiness to decline and the oligarchy's personal insecurity to rise. Furthermore, the SAP exacerbated intergroup, institutional, and cross-sectoral tensions. At the economic level, it slightly discourages consumer spending and local investments for the goal of domestic industrialization. Other SAP flaws were discovered, including but not limited to: a shortfall in payment positions, a decline in foreign reserves, the transfer of managerial skills from managing production to extracurricular activities, preserving organisational effectiveness, and a lack of technological innovation.

2.1.19 Better Life Programme (BLP)

The late Dr. (Mrs.) Maryam Babangida, the military head of state's wife at the time, founded the Better Life Programme (BLP). She was the creator of the Better Life Program, which intended to empower local women. The goal of this programme was to help the local women's quality of life and social standing. However, it sought to raise awareness of the social and economic problems facing rural areas. The program's intended outcome was to help rural women reach their full economic potential and realize their ability to support themselves in their local communities. The initiative was well accepted, which had an effect on rural residents' lives in several ways, particularly for women.

For national growth plans and strategies, the programme was seen as the standard. It offered a tenable element for Nigeria's governmental system at all levels of government. In reality, the initiative was recognized as the foundation for the National Commission for Women's formation. Later, the commission became the Ministry of Women Affairs. More impressively, the initiative aimed to address the ongoing rural-urban movement as well as the classification of residents who are primarily required for commercial and agricultural operations in rural areas. A significant obstacle to the program's implementation, particularly for elitist women and those in positions of power, was over-dominance. The focus on the partisan women in rural communities changed as a result of this.

2.1.20 People's Bank of Nigeria (PBN)

The PBN was established in the early 1990s with the intention of promoting savings and offering credit options to the poor in rural areas who had limited or no access to traditional banks. This bank was established primarily to serve rural residents who required access to loans for agricultural economic growth. In keeping with the same pattern, the PBN's architecture was further decentralized to create Community Bank (CB). It was further expanded to make it easier

for rural residents to receive financial services, consequently promoting small and medium-sized businesses in the neighbourhood. It is noteworthy that the two banking schemes experienced varying degrees of success. PBN "issued around N1.7 billion as 'in-house' loans from monies drawn from the Federal Government coffer and N0.9 billion as loans from funds given by the Family Economic Advancement Programme (FEAP)," it was observed. However, while they were in operation, the banking schemes also ran into some problems. According to reports, poor management and corruption played a significant role in the over 80% loss that was revealed by external auditors' report. According to the argument made, the audit results showed that some of the liquidated institutions within.

2.1.21 Family Support Programme (FSP) & Family Economic Advancement Programme (FEAP)

The two family-centered programmes were started by the military regime of the late General Sani Abacha. They were carefully thought-out family productivity initiatives. The "FEAP" and the "FSP" were both introduced by the late General Sani Abacha, as was he. The former was established to provide rural families residing in rural areas with access to health care, women's fertility, child care, youth participation, and a balanced food diet. In a similar vein, the Family Economic Advancement Programme (FEAP) was established with legal obligations to create a platform for accessing credit loans for the production, use, and processing of agricultural products; and upgrading the small and medium enterprises through the formation of local co-operative societies at the community level. Therefore, the substance of the programmes was

intended to open doors for employment at all levels of the local communities. Additionally, it encouraged the creation and establishment of manufacturing businesses, facilities, tools, and equipment at the local level, creating employment opportunities for children from nearby villages. Although the two (2) programmes, FSP and FEAP, were implemented to improve the quality of life for rural residents⁹⁵. However, the supporting local and international agencies as well as community banks presented the programmes with non-inspectorial supervision and weak project and loan monitoring. Additionally, there were allegedly instances of recipients paying more for necessary equipment than was necessary, and village-based adolescents receiving training on subpar equipment, undermining the goals and objectives of the two (2) programmes at the local level.

2.1.22 National Agricultural Land Development Authority (NALDA)

With the intention of providing strategic, tactical, and operational support for the development of land and its resources, the NALDA was founded in 1993. The goal of this development authority was to encourage and support the best possible use of the land and its resources in rural areas. It further promotes the establishment of small rural communities. There are important initiatives associated with this development authority, including the strategic Gains Reserves Programs and Agricultural Development Programs (ADP) (SGRP). The agrarian sector was significantly impacted by these supportive programmes, which had the intended consequence of reducing poverty. It was noticed that these programmes had a substantial impact on the country's ability to acquire adequate land for agricultural growth in a number of

regions. It was noticed that the acquired lands were technically allotted with reference to the management of land conservations and degradations, and that they were economically the proper size. The programmes did, however, run into certain snags, including, but not limited to, overstressing the legislation and overburdening the advantages and substance of the programme, making some of them useless.

2.1.23 Poverty Alleviation Programme (PAP)

PAP was first created in 2000 with the urgent goal of providing unemployed youngsters with work in the wake of youth unrest. The goal of this programme was to get the throngs of unemployed adolescents involved in and boost the growth of human capital and fast-moving economic activity. Direct labour participation in pothole repair, grass control along highways, building maintenance, and environmental cleaning was a frequent engagement activity of the programme. However, it was agreed that a key obstacle to the program's effectiveness was insufficient money. Poor programme design, insufficient coordination, and subpar monitoring and assessment were further issues mentioned by some academics. The PAP's execution sparked a public outcry since it was accused of corruption and shoddy behaviour. In order to assess the PAP's content, the federal government established a commission under the direction of Prof. Ango Abdullahi. However, other issues with the programme were also recognised, such as excessive politization, administrative centralization, imbalanced payment, uncomfortable management, and high-profile levels of corruption. The committee then used this information to create the National Poverty Eradication Programme's establishment plan (NAPEP).

2.1.24 National Poverty Eradication Programme (NAPEP)

In response to the foregoing, NAPEP was founded in 2001. By including all significant players in Nigeria's administration and efforts to eradicate poverty, this programme used a comprehensive approach. The Federal, State, and Local Governments, Civil Society Organizations (CSOs), the organised commercial sector, research institutes, women's groups, and concerned people made up both official and semi-formal institutions in this. In general, the NAPEP gave great importance on eliminating poverty, whether it was light or extreme. This goal was expressly stated in the program's policy framework along with other crucial justifications for its implementation and coordination, including actions fighting poverty. This specific goal gave NAPEP ample intention during its development, design, and implementation and helped it stand out from earlier exercises⁹⁵.

Effective evaluation and monitoring of its operational aspects are ensured by NAPEP. To check the project's location, its implementation, service delivery, livelihood impact, even distribution, and beneficial influence on the poverty status across communities in Nigeria, for instance, it closely monitors complementary activities at regular intervals. Additionally, the evaluation of these indices is dependent on a wide range of performance indicators, including the project's goals, the calibre of the tools used to carry them out, the target audiences that can be used to gauge success, the timeline for completion, and the associated costs and expenses. The Nigerian government views the programme as an enhanced or modernised version of the earlier PAP type. Analysis showed that the programme successfully engaged more than 216 000 people and trained over 130 000 kids. It was noted, however, that weak caution and forethought seem problematic to the recipients throughout towns and localities. In conclusion, the programme received low ratings due to the lack of attention paid to its contents, a shoddy budgetary system, corruption, and bad implementation, among other factors. One of the

difficulties facing NAPEP is project substitution. Other difficulties include embezzlement of project money, resource diversion, and the conversion of public monies for private purposes. The active participation of the program's beneficiaries in determining the nature, structure, and method of project implementation is, above all, what makes NAPEP commendable. More shocking is the fact that while having increased capacity and active participation, the beneficiaries still do not have enough empowerment to sustain themselves in the program's future livelihood-related engagements.

2.1.25 Small and Medium Enterprises Development Agency of Nigeria (SMEDAN)

The SMEDAN Act of 2003, an act of parliament, served as the vehicle for the promulgation of SMEDAN. To advance the growth of the Micro, Small, and Medium Enterprises segment of the Nigerian economy, this agency was created. According to a survey, MSMEs make up more than 75% of all business categories in Nigeria. The simplicity of building up the human and financial resources required for the establishment of MSME is recognized as the reason for this. The agency's planned outcomes include lowering the high degree of poverty, eliminating the inability of densely populated areas to create a living, and facilitating the country's favourable opportunity capacity. The roles are intended to be fulfilled by creating job opportunities, fostering open business competition, encouraging entrepreneurship, and mobilizing local resources. Additionally, this organisation is charged with developing initial policy proposals for the expansion and improvement of MSMEs. It promotes the development of agro-allied production programmes and the provision of technical equipment and operational support services in an effort to hasten the expansion, modernization, and growth of MSME activities throughout the nation⁹⁶.

The challenges that SMEDAN, an organisation dedicated to reducing poverty, is encountering come in a variety of forms. These include, but are not limited to, urban sensitivity, a weak information/communication network, limited access to credit, a deficient technological infrastructure, a lack of entrepreneurial capacity, strict collateral requirements for loans, corruption, and a lack of coordination between the three levels of government, among other factors affecting the beneficiaries' attitudes, knowledge, and skills.

However, it is crucial to emphasize that the difficulties SMEDAN faces in Nigeria appear to be no different from the obstacles hindering other government agencies from carrying out their duties towards poverty reduction. This is simply due to the fact that many of these organizations have yet to actively integrate into the framework for the social uplift and economic revolution of people and groups from the base of the poverty pyramid.

2.1.26 National Economic Empowerment and Development Strategy

At the three major levels of governmental administration, the Federal Government under President Olusegun Obasanjo adopted an economic empowerment and development policy in 2004. NEEDS merely serve as the federal government's strategic framework for coordinating and carrying out empowerment initiatives. In a similar line, SEEDS is the federation-wide framework at the state level for implementing the economic empowerment and development agenda. The local government agenda for carrying out the rural economic and development strategy is known as LEEDS. The framework of the programme in series has a propensity to rise to lofty heights in order to pay off the external debt and spur GDP development.

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2.1.27 Subsidy Re-investment and Empowerment Programme (SURE-P)

It might be stated that President Goodluck Jonathan's administration's decision to end the subsidy regime was the catalyst for the creation of SURE-P. The initiative accelerated SURE-P functionality with regard to public works, youth and woman empowerment, and It is influenced by the high percentage of unemployment among Nigeria's thronging youth. Therefore, the primary goal of SURE-P was to establish the Graduate Internship Scheme (GIS) in order to decrease unemployment among graduates, particularly those from higher educational institutions. Additionally, the creation of the programme was intended to promote economic development and open up new chances for realizing Vision 2020. Operationally, the programme tries to place unemployed graduates for a year with businesses, organisations, and professions that are connected to their choice. The acquisition of necessary skills, gaining adequate experience, and raising their level of employability are all typical objectives of this engagement. As it encourages the engaged graduates to meet the requirements of future employers in Nigeria's fiercely competitive labour market, the expectation becomes goal-oriented.

The lifespan of this scheme was somehow short due to the change in government in 2015. To this end, it might be inconsequential to have subjected the scheme for programme assessment.

However, the programme has mostly targeted individuals who are educated, leaving behind many who would otherwise be unable to afford university education. It was noticed that the plan somewhat discards the poor people who must have knowledge and skills to sustain economic support and livelihood, not those who have formal education and training for socioeconomic prosperity. As a result, the programme is aimed towards the nation's elite young people, leaving out the rural poor in Nigeria who genuinely need to be freed from poverty circles.

2.1.28 National Social Investment Programme (NSIP)

The NSIP was introduced by President Muhammad Buhari as a platform for the empowerment of young graduates, semi-skilled workers, semi-literates, and unskilled labourers with little to no level of education. The programme content was divided into three categories for this NSIP's actualization, and within each category, several sub-categories were added. One of the major parts of NSIP was the N-Power Teachers Corps, which has subsidiaries in N-Power Agro, N-Power Health, N-Power Teach, and N-Power Community Health. The pack of N-Power Knowledge is another noteworthy dimensional component of NSIP; it is intended for individuals with the necessary degree of knowledge, which is at least secondary school, rather than necessarily for graduates from tertiary schools. N-Power Creative, N-Power Tech Hardware, and N-Power Tech Software are some of its subsidiaries. N-Power Build, the third element of the NSIP, is another option. It has civil divisions for automotive, aluminium, gas, building services, construction, environmental services, and utilities. The initiative aimed to combat hunger, reduce poverty, and improve human development indicators. With a national coordinator, it was coordinated by the Social Investment Office under the Vice President of

Nigeria's office. To ensure credible targeting of the poor and vulnerable, a National Social Register had been established.

NSIP had four suite programmes designed and implemented at the national level. They were:

1. National Home Grown School feeding Programme (NHGSFP)

The objectives of the NHGSFP are to:

1. Increase the number of kids enrolled in primary education in Nigeria and lower the estimated 30% dropout rate that exists today. Additionally, it aims to address the poor health and nutrition of many children brought on by poverty, which has impacted their ability to learn.
2. Through the school feeding programme, stimulate local agricultural output and increase farmers' incomes by providing a viable and ready market. Along the value chain, it strives to generate employment and have a multiplier effect on economic development.

2. N-Power Programme

The objective of this initiative is to provide young Nigerians the skills they need to participate actively in both home and international markets. Graduates, skilled, unskilled, and out-of-school teenagers between the ages of 18 and 35 are the target demographic. Each beneficiary receives a monthly payment of N30,000. N-Power graduates and N-Power non-graduates are the two classifications under the N-Power initiative. The graduate of N-Power Alternatively referred to as N-Power volunteers. The volunteers are required to offer guidance, education, and teaching in four crucial areas (npower.gov.ng)

- i. N-power Agro: Farmers all throughout the nation will receive advice from volunteers. They are tasked with helping the federal Ministry of Agriculture and Rural Development spread information about extension services.
- ii. N-Power Health: Pregnant women, kids, and other vulnerable people in society are the focus of this. Therefore, volunteers should aid in spreading awareness of preventive healthcare among these target groups in their local areas.
- iii. N-Power Teach: Volunteers are used as teaching assistants in Nigerian primary schools in this area. This will assist in enhancing the nation's provision of basic education.
- iv. N-Tax: Volunteers are expected to collaborate with the state's tax authorities in their home states as community tax liaison officers under this category. They are to help spread knowledge about tax compliance, respond to online inquiries, etc.

N-Power Non-Graduate programme provides training and certifications in two key areas, namely:

- i. N-Power Knowledge which provides incubation and acceleration of the technology and creative industries. It is primarily aimed at ensuring that participants can get engaged in market place in an outsourcing capacity, as freelancers and as entrepreneurs.
- ii. N-Power Build engages and trains young unemployed Nigerians so as to build a new crop of skilled and highly competent workforce of technicians, artisans and service professionals.

3. Conditional Cash Transfer

The CCT programme aims to provide five million disadvantaged people with direct cash transfers with the ultimate goal of enabling them to escape poverty. In the first year, 30% of the beneficiaries are anticipated to graduate from the lowest quintile of poverty; in the second year, 50%; and in the third year, the remaining 20%. A monthly sum of N5,000 is given to each beneficiary. The help is contingent on the recipients meeting certain obligations that would enable them to raise their standard of living.

4. Government Enterprise and Empowerment Programme (GEEP)

This initiative aims to give entrepreneurs, market women, women cooperatives, craftsmen, small and medium companies (MSMEs), as well as farmers and agricultural workers, access to financial services (loans). The goal of GEEP is to provide loans between N10,000 and N100,000 without interest or the requirement of collateral in order to achieve productive employment and decent job for all women and men, including young people and those with disabilities. Three strategies—Market moni, Farmer moni, and Trader moni—are used to distribute loans.

2.1.29 Impact of Social Investment Programmes in Nigeria

The Nigerian economy has a number of difficulties, the most significant of which is the ambiguity in the design and implementation of policy ideas and its useful countermeasures. Effective policy measures are largely absent in this situation, which would allow unemployment and poverty to be drastically reduced from their current levels. Despite this, it is clear that no nation-state would neglect to examine episodes of the social investment programme without resolving their anomalies given the appalling conditions of the programme in the dependent sector. As a result, there were coordinated efforts to lower unemployment in

all African economies, particularly in Nigeria, which has been dubbed the continent's economic powerhouse. However, the following topics are the social investment programmes' in Nigeria's prospective exploratory influence.

Notably, Nigeria's productive youth have a high proportion of unemployment. Instead, creating jobs serves as a means of dispute settlement for the majority of social investment programmes in Nigeria. The system of social investment programme was designed to foster the growth of entrepreneurial talents, making it easier to establish projects and skills aimed at improving the employability of graduates, particularly among other groups of unemployed youth. The majority of young people have benefited from and been empowered by social investment programmes thanks to the development of entrepreneurial abilities and projects.

In terms of human capital development, Nigeria is deemed to be in a low performing stage. However, because of its limited supply, its utilization becomes minimal. This comment was made even more offensive by how inadequate the educational system was. Social investment programmes are strongly committed to revamping the formal education system in order to facilitate the generation of human resources as a response to this. Additionally, the majority of Nigerian youth gave greater importance to vocational skills as a solid foundation for the generation's self-employment.

Notably, Nigeria's inadequate infrastructure development has frequently sparked a zeal for the ongoing growth of social investment programmes. This is done in an effort to address Nigeria's ongoing challenges with economic development and progress and to involve young Nigerians in all aspects of socioeconomic life. Additionally, the environment for small and medium-sized organisations and enterprises has remained unfriendly. Therefore, social investment programmes could be said to have played complementary roles in the development of the

socioeconomic and physical infrastructure, as well as helping the economy's private sector reach its full potential. Compared to the direct involvement of the government in the operationalization of economic activity, this promoted economic growth and private investment far more effectively. This claim was further supported by the fact that private investment had a substantial impact on the expansion of important economic sectors.

Nigeria is also well-equipped to serve as a global hub for agro economic activity. Despite Nigeria's potential in the agriculture sector, the high rate of unemployment problems the economy is facing continues to surprise. This has made the despair surrounding job exports even worse. It is evident that the majority of Nigerians choose to look for work abroad, particularly in America and Europe. The domestic economy of Nigeria will suffer as a result. This preference for adventure among Nigeria's youth population hinders the development of local businesses and industries, which have the potential to create job possibilities. Social investment programmes were later created in Nigeria for the purpose of addressing the anomalies of employment export^{14,3}.

The social investment program's effort to improve Nigeria's economic growth prospects is another effect. It is a given that accelerating the capacity growth of Nigeria's young people is a fantastic way to try and lower the rate of unemployment there. The Nigerian economy had underperformed over time, particularly in the areas of resource underutilization, untapped agricultural potential, and bilateral trade. As a result, it was important to maintain the expansion of all economic sectors in Nigeria with unwavering support, political will, and commitment. Therefore, the necessity to actually diversify the economy exists.

2.1.30 Challenges of Social Investment Programmes in Nigeria

One could observe that the government of Nigeria's programmes for youth empowerment are entangled with issues of policy inconsistency and their ungainly breadth. The lack of commitment was also emphasized as a role that social partners and other stakeholders played that slowed things down. Surprisingly, inadequate policy and programme design, formulation, and execution continue to be a major roadblock for Nigeria's social investment programmes. Similar to this, it was made worse by subpar indicators of human capital development and inadequate funding for the programmes.

In contrast to these policy failures, other public sector organisations have emphasised that Nigeria's high unemployment rate is merely the multiplier impact of the mismatch between the demand for and supply of human capabilities. Lack of human resources hinders youth growth in terms of potential, economic gains, and sustainable means of subsistence; in turn, this lowers the level of youth development and its political and economic implications for the nation³.

Nigeria's population is largely made up of young people between the ages of 20 and 40. A national survey that looked into the factors that affect labour market demands found that "about 44 percent of the 20 organisations rated Nigerian science graduates as average in competence, 56 percent rated them as average in innovation, 50 percent rated them as average in rational judgement, 63 percent as average in leadership skills, and 44 percent as average in creativity. Additionally, 60% of respondents ranked them as bad in terms of essential abilities like literacy, oral communication, information technology, entrepreneurship, analytical, problem-solving, and decision-making¹¹.

Respectively, the above statistics gave an indication to the poor competence of graduates from Nigerian Universities. This buttresses the unemployability nature of most Nigerian graduates by various scouting companies in the labour markets. berated the non-inclusive nature of development plans in Nigeria for creation of jobs. He maintained that the unemployment rate tended to suffer an increase consequent upon lack of job provisioning. It was a growing concern that youths were most often interested in acquiring University education, not minding the course of study. This is because some courses offered at the Nigerian universities are becoming dysfunctional and irrelevant⁵⁷.

2.2 Theoretical Framework

2.2.1 Classical Theory of Political Economy and Development

This study adopts classical theory of political economy and development in evaluation of the contribution of the central bank of Nigeria to agricultural development in Nigeria and the relationship between development finance and economic growth and development in the country. The theory is concerned with economic development and the socioeconomic, political, and financial elements that either restrict or promote it. However, it is the examination of the economy, as well as the creation, transfer, and consumption of products and services in relation to a particular political and social environment. This theory's main claim in relation to the subject is that adequate access to and inflow of finance and capital to productive sectors would increase their capital formation, productivity, and investment, whereas inadequate access to the finance and capital required by them would cause a decline in their productivity.

The famous scholars in this theory comprised of Adam Smith, David Ricardo, Thomas Malthus and others. Smith believes that the banking sector plays important role in channeling finance,

capital, credit and investment to productive agents like agriculture, industry, entrepreneur and processing agents within the economy and therefore act as a catalyst of economic growth and development. This theory's fundamental assumption is that openness, competition, and simplicity in the banking sector and credit schemes will encourage economic growth and development by increasing productivity and investment. According to the theory, adequate financial and credit resources boost productivity and investment, which in turn speed up economic growth and development. The inverse is also accurate. According to Smith, high productivity derives from capital formation, which itself comes from capital formation. The building up of capital, which takes the shape of funding for producers, producers, and businesspeople, is crucial to economic growth and expansion. Additionally, the drivers of economic prosperity include farmers, producers, and entrepreneurs.

A nation's productive sectors can obtain enough modern inputs, more labour, modern technology, and reinvestment with the help of sufficient financing and access to credit. These factors increase productivity and stimulate economic activity in a country. Credit intake thus influences capital formation, productivity, and investment of the economy's sectors, which in turn spurs growth. In any economic system, the availability of financing can lead to economic growth and development, stagnation, or even decline. The best indication of overall economic development is the level of financial institution development⁹⁷. It was argued that financial development is crucial for real development because the financial superstructure, which includes primary and secondary securities, speeds up economic growth and boosts economic performance to the point where it makes it easier for money to be transferred to the most beneficial user⁹⁸. In his empirical study, however, Goldsmith calculated the value of the development interrelation ratio, the ratio of all financial instruments at a given time, to the

value of the national wealth and development. He found that the ratio for developing countries was far lower than those of developed countries and concluded that because the development of financial institutions affects development in developed countries and financial development even lower in developing countries which led to backwardness⁹⁹. Development is badly impacted by the financial superstructure's lack of development. Integrated rural development and basic requirements approach, import substitution, export promotion, expansion and diversification of agricultural export commodities, unified financial and economic approach to development (i.e., development financing)²³.

Any method of funding those activities could be viewed as playing a part in development finance. Also argues that the ability of financial institutions to successfully mobilise financial resources for economic growth and development is included in development finance, as is the rise in stock assets¹⁰⁰. This point of view acknowledges that the financial system's contribution to the economy depends on the number, quality, and effectiveness of its services. Two industries were identified for development finance. The formal sector, on the other hand, could be clearly distinguished into institutions related to the money and capital markets, such as central banks, commercial banks, the world bank, the IMF, the African development bank, etc. The informal sector, which is characterized by: it has no formalized institutional framework, no formal structures, no guided written rules and regulations, and they are more traditional, consists of local money lenders, thrift cooperative societies, and associations¹⁰¹. Development finance is the process of financial intermediation through the banking system or other financial institutions that plays a private role in economic development by influencing the allocation of savings, investments, and funds, thereby enhancing productivity, technological advancement, and the rate of economic growth.

2.2.2 Multiple Lending Theory

This theory proposes that in the presence of strong equity markets and following a precise consolidation, banks should be less eager to share lending (loans syndication). Banks' lending capacities are raised by outside stock, mergers, and acquisitions, which lessens the requirement for broader diversity and oversight through share lending¹⁰². In view of the industry's recent 2005 consolidation effort, this theory has increased implications for Nigerian banks. According to this school of philosophy, the traditional system sees the interest rate, exchange rate, deposit rate, and financial ratio of banks as powerful, unwavering variables that influence the amount of loans and advances given to private citizens and corporate entities. The real theory of interest rates is what this is known as. This is so because these variables are not at all dependent on the state of the economy. The supply of capital is equal to saving under the classical system.

2.2.3 Commercial Loan Theory of Liquidity

Commercial loan theory of liquidity also known as the real bills doctrine was developed by Adam Smith in 1776. The most liquid loans a bank can make are short-term loans advanced to finance the transportation of salable items from producer to consumer, according to Adam Smith's theory of bank liquidity. These loans are self-liquidating because the products they are financing will be sold soon. The borrower receives the money to repay the bank from the transaction that the loan finances. These loans are liquid, according to Adam Smith, because both their aim and their collateral were movable. The products are promptly moved from the producers through the wholesalers to the retail store, where the final cash-paying consumer purchases them..

The "Real Bills Doctrine" is another name for this theory. It mandates that commercial banks only make short-term loans to profitable business groups and make sure the loans are self-liquidating. If a loan finances a transaction and the transaction generates the money to pay back the loan, the loan is self-liquidating. A simple example of the Real Bills Doctrine is a transaction between a bank and a company that generates new money for the economy. For instance, a seed supplier gives a farmer 100,000 Naira (N100,000) worth of corn seeds. A bill is issued with a 90-day payment term. After planting, harvesting, processing, and selling during the 90-day term, the farmer undertakes to pay back the credit. In essence, the supplier has produced commercial paper with a value of 100,000 Naira (a "real bill" that is not secured but reflects physical items in process) (N100,000). The provider can sell the paper to a bank at its current discounted value of, say, 98 000 Naira rather than having to wait to get paid (N98,000). The bank monetizes the paper, and the entire value of the bill is collected.

The theory further asserts that loans made to businesses for their working capital should make up the majority of commercial banks' assets¹⁰³. According to this theory, the central bank should limit its advances to banks on the security of those short-term loans if commercial banks confine their advances to profitable, self-liquidating loans with short terms. This rule would guarantee the commercial banks' liquidity and a sufficient amount of money for the economy.

When business grows or shrinks and the volume of trade increases or decreases, the Central Bank adjusts bank reserves by rediscounting approved loans. Commercial banks fund the agriculture industry by lending to farmers to cover their working capital requirements.

It is anticipated that the production, distribution, and sale of their farm products will be used to pay off the loans. However, the idea has drawn criticism from some economists. The quantity-theory proponents argued that in order to increase market liquidity and stabilize currencies,

central banks should concentrate on stabilizing the amount of money, favouring active open-market programmes like the purchase of public debt. The economists who advocate free banking were the most outspoken opponents of the ideology. They advocated against involving the government in the regulation of the money supply. They believed that the best way to stabilize the creation of money is through open commercial competition.

2.2.4 Theory of Agricultural Investment

The theory of investment is a body of knowledge that is applied during a decision making process that involve making the right choice among investment options¹⁰⁴. This decision-making process is more expedient when money starts to become a constraining issue. It integrates the efficient market hypothesis, portfolio theory, arbitrage pricing theory, and rational pricing in addition to the capital asset pricing model¹⁰⁵.

Using quarterly data on investment expenditures for the whole durable and non-durable manufacturing sector, investment theory was evaluated¹⁰⁶. They argued that the investment behaviour model adequately explains actual investment expenditures and is based on the neoclassical theory of optimal capital accumulation. Thus, their findings imply that the tax code and other tools that have an impact on capital costs are important policy instruments that play a crucial role in determining investment expenditures.

Despite market dynamics, policy changes are what motivate investments in the agricultural and industrial sectors. To put it more plainly, as part of their national food security plans, the governments of a number of food-importing countries have supported investments in overseas agriculture¹⁰⁷. Along with political factors, economic pressures encourage more production engagement by agribusiness¹⁰⁸. While industrial investment is significant in high income

countries, agricultural investment has recently increased in low and middle income countries¹⁰⁹. This is due to certain structural factors, such as population growth, an increase in urbanization rates (which examine the contribution of the global population that depends on purchasing food), and dietary changes (such as an increase in the demand for fast food and meat in major industrialized nations)¹¹⁰. Additionally, agriculture becomes a more appealing investment option as global demand for agricultural products and energy rises concurrently with increased technological and industrial capability for higher-quality outputs and profits¹¹¹.

There are various decision rules that may be used to determine whether or not an investment should be made while taking a high degree of profit into account. These regulations frequently take into account the company's capital costs, investment costs, and anticipated future cash flows from investments¹¹². Further studies concluded that there are four investment goals, including growing market share, boosting exciting capacity output, modernizing, and reducing shareholdings. Additionally, it was mandated that an investment business' performance depends on the investment practises of other enterprises. Investment behaviour was characterized by a scholar as the way that investors approach, anticipate, review, and analyze the decision-making processes. This includes the psychology of investing, information gathering, comprehension and definition, research, and analysis. Free access to information is crucial for determining if an investment idea will be profitable, a scholar also underlines. Research and empirical investigations are used to gather this knowledge.

2.2.5 Financial Growth Theory

A financial growth theory for SMEs is put forth by Berger and Udell (1998). According to this theory, as a company expands, gains expertise, and becomes less opaque from an information standpoint, its financial demands and financing alternatives change. They also propose that

enterprises are distributed along a continuum of size, age, and information, with smaller, younger, and more opaque firms being near the left end of the continuum and necessitating the use of trade credit and initial insider financing. According to the financial growth theory model, when a company expands, it will be able to access venture capital (VC) as a source of intermediate debt, mid-term loans, and intermediate equity. As the company ages, gains experience, and becomes more transparent with information, it will probably be able to obtain long-term finance or public equity (PE) during the last stage of the growth paradigm.

2.3 Review of Empirical Studies

A study carried out a comparative review of roles played by private, public, and international financial institutions and agencies in financing agriculture in Nigeria. By examining the roles performed by private, governmental, and international financial organizations and agencies and describing the research gap in the literature with an emphasis on comparative studies on financing agriculture in Nigeria, the study aims to evaluate the present studies of cause and effect. This study is grounded in a multifaceted theoretical framework (structural-functional, dependency theory, modernization theory, human needs theory, conflict and critical theories). The study used a systematic literature review approach and looked at 27 pertinent sources. Following were the key findings from the review of the literature: Macroeconomic policy, financial access, and a bureaucratic bottleneck are all lacking. Based on the findings of the study, the literature review described the difficulties of funding agriculture and their impact on society. Additionally, it exposed the methodological, population, theoretical, empirical, and practical shortcomings that could inspire additional research. By concentrating on the roles played by private, public, and international financial organizations in financing agriculture using multi-dimensional theories and techniques to find what the causes are, why they occur,

what groups are affected, how they cope in the absence of funds, and what quantifies to apply to improve agricultural finance, this comparative review study contributed to knowledge in expanding the existing literature on cause and effect¹¹³.

A study examined how agricultural sector performance will be enhanced in Nigeria through access to credit. The study used time series data from the World Development Indicators (WDI) of the World Bank and the Central Bank of Nigeria's (CBN) statistical bulletin for the years 1998 to 2018. The investigation employed the Autoregressive Distribution Lag (ARDL) approach. The findings demonstrated that both commercial bank credit to agriculture and agricultural credit as measured by the agricultural credit guarantee scheme fund (ACGSF) considerably improved agricultural performance by 10.30% and 17.05%, respectively. Additionally, the model's two explanatory variables (arable land and agricultural employment) have a tendency to boost agricultural performance by 65.51 and 12.40 %, respectively. According to the study's conclusions, it was suggested that farmers be given adequate access to finance so they may buy the agricultural inputs needed to raise output¹¹⁴.

A study was carried out to know if financial development improve agricultural productivity growth. In three sets of countries high, middle-upper, and middle-lower income classes this study examined the effects of financial development (financial depth and financial efficiency) on the rise of agricultural productivity. From 1991 to 2017, a panel ARDL model with various delays in each variable was employed in this investigation. Our findings demonstrate how crucial financial development is to the three countries' efforts to raise agricultural output. Particularly, it was discovered that financial efficiency and depth have a greater impact on agricultural productivity in middle-to-high income countries. Financial efficiency was shown not to effect agricultural productivity in middle-lower-income nations, in contrast to prior

findings. In addition, a number of elements, including human and physical capital, can boost agricultural output. In order to become one of the forces behind an improvement in the agriculture sector, governments and central banks are encouraged by this research to gradually increase financial depth. Additionally, financial efficiency needs to be raised to promote agricultural productivity, particularly in high- and middle-income nations¹¹⁵.

Deposit Money Bank Credit and Agricultural Output in Nigeria was studied. The study's primary objective was to investigate how Nigerian agriculture is affected by commercial bank lending. The study specifically looked at the influence of bank lending on Nigerian agriculture, the impact of government spending on agriculture, the effect of the Agricultural Credit Guarantee Scheme Fund on agriculture, and the impact of interest rates on agriculture. Enhanced Dickey Fuller Tests for Unit Roots and the Ordinary Least Squares were used in the data analysis (OLS). The analysis demonstrates that while interest rates have a negative and minor impact on agricultural output, bank loans, government spending, and the Agricultural Credit Guarantee Scheme Fund all have positive and significant effects. Therefore, the study draws the conclusion that deposit money bank credit has a favourable impact on agricultural output in Nigeria and has increased agricultural production in Nigeria over the course of the study. According to the analysis, strengthening the agricultural loan guarantee programme through genuine financial support will dramatically increase its capital base. To make agricultural finance appealing to commercial banks, the Agricultural Credit Guarantee Scheme (ACGS) should enhance its credit guarantee requirements. A proportion of the losses sustained by deposit money banks due to their exposure to the agriculture sector ought to be taken on by the Central Bank of Nigeria¹¹⁶.

Using time series data from 1981 to 2018, a study was conducted to examine the effects of funding for the agricultural sector on the productivity of the agricultural industry in Nigeria. The National Bureau of Statistics, the IMF data bank, the Central Bank of Nigeria's statistical bulletin, and other sources were used to extract data for this study. AGDP was chosen as a stand-in for agriculture sector output, whereas explanatory variables ACGS, CBCA, GEXA, and INTR were represented by stand-ins. The model included rainfall as a control variable. The Johansen co-integration model was used to confirm the variables' long-term relationships with one another. In order to examine how quickly variables change from the dynamics of the short run to the equilibrium position in the long run, the vector error correction mechanism (VECM) was used. The empirical findings demonstrated that ACGS has a long-term, favourable and significant impact on AGDP. It was discovered that AGDP during the reference era was negatively but significantly impacted by CBCA, GEXA, and INTR. The report suggests that measures be implemented to diversify the Nigerian economy and that the government prioritize investment in the agricultural sector by requiring that a specific percentage of all loans and advances from commercial banks go to this sector. Credit facility payments should be closely checked. To prevent the interruption of farming seasons owing to erratic natural water supplies, water supply through river basins and irrigation infrastructure should be offered. Policies and programmes for agricultural financing should be designed to ensure that smallholder farmers have access to financial resources and to lessen the growing risk aversion of agricultural finance providers in Nigeria¹¹⁷.

Using a vector autoregressive technique, a study examined the effects of government spending on agriculture and other chosen variables on the value of agricultural produce in South Africa (1983-2019). The potential for South African agriculture to spur growth in other economic

sectors has not gotten much attention recently, however, due to declining budgetary support for agriculture over time and the nature of other factors that affect the production value of agriculture. Therefore, the current study focused specifically on government expenditure in agriculture for the years 1983 to 2019. It also studied the impacts of annual average rainfall, consumer price index, food import value, and population on the value of agricultural production. The findings of the Johansen cointegration test show that there is a long-term link between the variables. According to the results of the Granger causality test, government support for agriculture does not necessarily increase the value of agricultural output. A vector autoregressive (VAR) model analysis revealed that a rise in government spending on agriculture, average annual rainfall, and population will ultimately raise the value of agricultural production. This is because the two variables are connected through other variables in the model. The value of agricultural produce, on the other hand, is negatively impacted by an increase in the consumer price index and the price of food imports. The results of these research have policy ramifications for increased government expenditures¹¹⁸.

A study examined the effects of microcredit schemes on rice production among smallholder farmers in Kwali area council Abuja, FCT. In the study, a survey research design was used. The study used 100 respondents in all, who were sampled using a multi-stage sampling methodology. The study depended on primary data that was gathered through the use of well constructed questionnaires. Cobb-Douglas regression analysis was used to examine the relationship between microcredit and productivity. According to the results, 60% of the respondents were men, 52% of them were married, and there were 5 people on average in each home. According to further results, 70% of respondents had between 5 and 15 years of farming experience, and 45% had a secondary education. The cooperative society is the primary source

of finance for smallholder farmers. Education level, household size, farming experience, and loan availability were the key factors that contributed to an increase in rice production among smallholder farmers, according to the study. This study urges commercial banks to prioritize agricultural loans, especially for smallholder farmers, as doing so will help rice output rise in both quantity and quality¹¹⁹.

A study investigated effect of government agricultural expenditure on economic growth: evidence from a developing country. By examining the impact of government agricultural spending on economic growth in the Kingdom of Lesotho, this study makes a contribution to this field of study. The agriculture industry was singled out by the government of Lesotho as a productive one that is essential to achieving both the country's development goals and its aim of economic growth. The methods used in this study were descriptive statistics and inferential econometric methods (ARDL, DOLS, and VEC Granger causality) applied to time series data for the years 1982 through 2019. The findings imply that domestic investment appears to be a stimulant of the intended economic prosperity even though the current amount and structure of government farm expenditure cannot promote the desired economic growth and prosperity in the nation. Therefore, any plan or policy for economic growth based on public spending in the agricultural sector would be ineffective. Accordingly, research advises that nations, like Lesotho, should give priority to a steady increase in domestic investment¹²⁰.

A study carried out a literature review on farmers' access to agricultural credit in Ethiopia. Reviewing contemporary literature on Ethiopian farmers' access to finance was the goal of this study. The reviewed literature was sourced from the FAO, World Bank, Science Direct, and Google Scholar. Age, gender, education level, family size, land size, number of livestock held, years of membership in a lending institution, proximity to the credit centre, and income level of

farmers were identified as influencing factors for farmers' access to credit, according to reviewed literature. Access to financing was found to have a favourable and significant effect on farm productivity. The research showed that the majority of farmers had loan demands and credit constraints. Agricultural output and income would grow if the restrictions were lifted and farmers had enough access to loans. Therefore, the government must support microfinance organizations in order to give farmers credit, and women's empowerment needs to be ensured for fair credit access¹²¹.

A study investigated the impact of bank credit on agricultural productivity in the Central African Economic and Monetary Community (CEMAC) from 1990 to 2019. The results of studies on how bank loan affects agricultural productivity are not clear-cut. The research present a range of contentious results. The findings are contradictory. Agriculture productivity is represented by the agricultural value added (AGRVA) to the gross domestic product (GDP), whereas the broad money supply, land, inflation (INF), physical capital (PHKAP), and labour supply are explanatory variables. It uses the autoregressive distributed lag method. The results of the co-integration test indicate that the variables are co-integrated over the long run. The results show that the AGRVA is positively impacted by DCPSB, land, and PHKAP. On the AGRVA to the GDP, the broad money supply, INF, and labour have a negative impact. The findings imply that the CEMAC governments should support practical measures to increase bank credit flow to private agriculture firms through effective bank intermediation. To secure direct financing to agricultural operations, the governments should establish new agricultural banks and enhance the performance of those that already exist. The Central African Economic and Monetary Community Bank should adopt a strident policy that removes all obstacles impeding the flow of credit to the private sector in a way that maximises agricultural

productivity. To the mutual advantage of the banking industry and the agricultural sector, commercial banks should extend more credit to the private sector. The governments of the CEMAC economies should increase capital market funding since it significantly raises agricultural productivity. The results of studies on how bank loan affects agricultural productivity are not clear-cut. The research present a range of contentious results. The findings are mixed; some point to good consequences, some to negative ones, and still others to U-shape behaviour¹²².

A study examined the relationship between farmer finance and Nigerian agricultural productivity. The availability of loans to farmers in Nigeria has steadily decreased. Using information from the World Bank Development Index, this study investigated the impact of farmers credit on agricultural productivity from 1981 to 2016. (WDI). According to the Ordinary Least Squares (OLS) estimation, neither the foreign exchange rate nor agricultural bank loans have a discernible impact on agricultural output. It was argued that bank loans significantly increases Nigeria's agricultural productivity. It was suggested that government should encourage savings and bank credit for farmers¹²³.

In a study, the relationship between financial inclusion and agricultural output in Nigeria was explored from an asymmetric angle. In this study, the asymmetric impact of financial inclusion on agricultural output in Nigeria is investigated using the volume of ATMs, point-of-sale transactions, mobile banking payments, and checks. Quarterly data was obtained from the Nigerian Inter-Bank Settlement System Plc (NIBSS) and the CBN Statistical Bulletin 2021 for the period 2010Q1 to 2021Q4. Stepwise Least Squares (STEPLS) and the non-linear Autoregressive Distributed Lagged (NARDL) model were used in the estimation. According to the study, financial inclusion has a favourable and considerable impact on Nigerian agriculture,

particularly when measured through automated teller machines and points of sale. Therefore, the study suggest that government and monetary authorities boost the distribution of Automated Teller Machines and Point of Sales, especially in the communities where agriculture is the primary occupation. This would help to improve agricultural productivity. We also urge that the country's rural communities have better access to the internet. This might increase agricultural output and provide more jobs for the populace¹²⁴.

A study focused on the impact of agricultural financing on Nigeria's economic growth from 1981 to 2019. The study's objective was to determine how different types of agricultural financing affect Nigeria's economic development over the long term. The study makes use of the Granger causality model, the error correction model, the stationary test, and the co-integration test. At the initial difference, all variables were stationary, and the co-integration test revealed a long-term link. According to the report, the agricultural credit guarantee plan fund has a favourable and considerable long-term impact on Nigeria's gross domestic product. The gross domestic product in Nigeria during the reference period is positively and significantly impacted by commercial bank loans and community-microfinance bank loans. The study came to the conclusion that all the variables used to model Nigeria's GDP were predictive. Additionally, the Granger causality results demonstrate that demand plays a greater supporting or promoting role for agricultural finance instruments in Nigeria than supply does. According to the report, in order to make it easier for farmers in Nigeria to conduct business, the Federal government should encourage commercial banks to offer sufficient credit facilities to the agricultural sector through reasonable bank lending rates. Actively promoting the availability of financing options for farmers so they can get loans with interest rates in the single digits. Social media, door-to-door conversations, town hall meetings, and market squares could all be used to

do this. The government should provide sufficient security, pest control methods, and seedlings to foster an environment that is favourable to farmers¹²⁵.

A study used data from Indonesia to examine whether loan programmes may increase agricultural output. This study intends to investigate the effects of credit on agricultural productivity while comparing the impact of loans coming from government programmes with non-program loans. It also seeks to determine the traits of farm households that affect how they use credit in their operations. 86,922 rice farm households from the 2013 Indonesian Agricultural Census served as the research sample for this study, which used cross-sectional microdata at the household level. To counteract selectivity bias, the model was tested using two-stage least square methods. Results indicate that, despite a strong association, credit from government programmes has little effect on agricultural productivity. Additionally, socioeconomic factors, agricultural subsidies, perceptions of risks, and views of on-farm profitability influence the usage of financing for both government programmes and non-programs. According to the findings, in order to effectively increase agricultural production, the provision of finance to agricultural operations must be accompanied by the provision of supporting incentives, such as agricultural counselling and irrigation infrastructure¹²⁶.

The Autoregressive Distributed Lagged (ARDL) bounds test was used to examine the connection between agricultural funding and productivity in Nigeria. The investigation employed annual time series data for government spending on agriculture, bank private sector lending to agriculture, value of agricultural credit guarantee programme fund, and agriculture growth domestic product. The outcome suggests that agricultural production and agricultural financing variables in Nigeria have a long-term association. In the short run, all variables have a major impact on agricultural productivity, but in the long run, only bank private sector loans

to agriculture and the fund for agricultural credit guarantee schemes have an impact on agricultural production. The granger causality test's findings, however, indicate that agricultural credit guarantee plan funds cause changes in agricultural production, whereas bank private sector loans to agriculture and government spending on agriculture cannot be used to forecast changes in agricultural production. The study suggested that policies should be focused on strengthening bank private sector loans to agriculture and agricultural credit guarantee scheme, while government should check diversion of its funds allocated to agriculture through the implementation of new approaches such as direct disbursement of incentives agricultural inputs to the farmers and ensuring that financing get to the real farmers on time as agricultural output is seasonal, late disbursement will result in increased costs¹²⁷.

A similar study investigated the effect of agricultural financing, both public and private on the outputs of two main sectors of agriculture; that is, the crop production and livestock production. The study's objectives were to investigate the causal link between agricultural finance and agricultural productivity as well as the long- and short-term effects of agricultural financing on crop and livestock production. The study used two models to accomplish these goals, with each model applying the ARDL Test, Bounds Test, and Granger Causality Test with time series data from 1981 to 2019. Data were retrieved from the World Bank and CBN databases. Crop and livestock production were the dependent variables, whereas public finance, commercial bank credit to agriculture, the inflation rate, and interest rates were the independent factors. In order to evaluate the significance of the link between the dependent and independent variables, the model was evaluated using descriptive statistics. The study's objectives were to investigate the causal link between agricultural finance and agricultural productivity as well as the long- and short-term effects of agricultural financing on crop and livestock production. The study used

two models to accomplish these goals, with each model applying the ARDL Test, Bounds Test, and Granger Causality Test with time series data from 1981 to 2019. Data were retrieved from the World Bank and CBN databases. Crop and livestock production were the dependent variables, whereas public finance, commercial bank credit to agriculture, the inflation rate, and interest rates were the independent factors. In order to evaluate the significance of the link between the dependent and independent variables, the model was evaluated using descriptive statistics¹²⁸.

Regression analysis was used to assess the effects of agricultural funding on Nigeria's economic growth from 1981 to 2019. Four explanatory variables—agricultural output (AO), agricultural loans (AL), agricultural expenditure on training (AET), interest rate (INTR), and inflation rate (INFR)—as well as one control variable—were used in the study. All of these are done to determine the effect that the explanatory variables have on the dependent variable, which is a proxied measure of economic growth called Real Gross Domestic Product. Since all variables' absolute values for ADF statistics are bigger than their critical values at 5 percent, the unit root test findings showed that all variables are stationary at that percentage. The study makes the following recommendations: There is an urgent need for the government to increase agricultural output (AO) by supplying and ensuring internal security so that our farmers can work without interference to increase their agricultural productivity due to the threat of kidnapping and banditry; Agricultural loans (AL) should be used wisely and effectively in order to avoid corruption in the disbursement process and improper management of such funds. Policymakers should step up efforts to create policies that will enforce and encourage financial institutions to timely and adequately disburse and monitor Agricultural Loans to the targeted users. The government, through the Central Bank of Nigeria, should develop and implement

institutional strengthening policies in the areas of effective agriculture financing by offering lower interest rates (INTR) to the real sector of the economy that directly affects the ci; The government should encourage the training (AET) of more Agricultural Extension workers who will instruct rural farmers on the use of improved technologies to enhance increase productivity

129.

A study focused on the impact of government investment on agricultural productivity in Nigeria's main agro-ecological zones (1981- 2018). Agricultural productivity returns were examined using public finance data at the national level from the agricultural and non-agricultural sectors. The impact of public spending on agricultural growth-drivers like health care, farm feeder roads, and education on agricultural production was also looked at. Three-stage simultaneous equations and descriptive statistics were used to analyze the data. Results of a descriptive statistics research showed that between 1981 and 2018, the average percentage of Nigeria's agricultural public spending as a percentage of all public spending was 4.88 percent. Less than 25% of this budget was used for capital or development projects in agriculture. The access to moderate farm feeder roads variable was 0.045, the access to education variable was 0.071, and the access to health care facilities (within 15–30 minutes' walk to health facility) variable was 0.013, according to elasticity data obtained from the 3-stage simultaneous equation. All of these factors were 1% significant. These findings indicate that a 1% increase in funding for health care, farm feeder roads, and educational institutions will raise agricultural productivity per person by 0.043. Consequently, the findings showed that the projected benefit-cost ratio was 4.3:1. Therefore, a 4.3% increase in public spending on health care, farm feeder roads, and education would result in a 1% increase in agricultural output. For four agro-ecological zones, the assessed marginal effects and returns differ. So, improving access to

health care facilities, education, and farm feeder roads together with quality public spending would increase agricultural productivity¹³⁰.

A study addressed the issue of access to credit for market gardeners in the Gulf prefecture of southern Togo. Beyond institutional limitations, market gardeners' unique socioeconomic traits can affect their ability to acquire loans. As a tool for analysis, the binomial logit regression model was used. The database of the National Agricultural Census was randomly chosen, and 452 market gardeners were included. The findings indicated that the key factors influencing the demand for agricultural finance are gender, participation in a financial solidarity organization, sown area, marital status, kind of association, and interest rate¹³¹.

A study assessed the impact of access to agricultural credit on the agricultural productivity of 422 small-holder farmers that cultivate maize or rice in the Western and Eastern province of Rwanda. Districts, sectors, cells, and households were sampled using stratified, simple random, and convenience sampling methods. Structured interviews were used to gather the data, and propensity score matching methods were used to evaluate it. Results showed that farmers who used credit had higher output by 44%, which translates to an extra 440 kg of rice or maize harvested on average. A crop-specific research found that access to agricultural financing had no effect on rice productivity but had a greater impact on maize productivity, with a difference in proportion of 68%. The study comes to the conclusion that Rwanda's agricultural productivity benefited from agricultural financing. Therefore, governmental initiatives should promote the use of modern agricultural inputs and enhance smallholder farmers' access to credit, particularly among Rwanda's rice farmers¹³².

A study examined the effects of agricultural financing on the performance of agricultural sector in Nigeria using annual time series data. The Statistical Bulletin of the Central Bank of Nigeria

(CBN) served as the study's data source. The agricultural sector's contribution to GDP, commercial bank loans to the sector, rainfall, government spending on agriculture, and interest rates were all utilized as proxies for explanatory variables. The Johansen cointegration strategy was employed to look for a long-term link between the variables after unity in the sequence of integration. The vector correction method and vector autoregressive estimate were used to analyze how quickly the variables changed from the short run dynamics to the long run equilibrium. The study discovered a long-term link between the variables. In particular, the Agricultural Credit Guarantee Scheme has a large and long-term impact on the GDP contributions of agriculture. Agriculture's contributions to GDP during the reference period were positively and significantly impacted by commercial bank loans to the sector. The variance in the dependent variable was jointly described by the independent variables and was explained by the coefficient of multiple determinations. The report suggested that in order to ensure effective application and use of the funds, the annual amount that the agricultural credit guarantee plan injects into the industry should be increased, and appropriate supervision procedures should be established¹³³.

Impact of access to agricultural credit on the productivity of Togolese farmers was investigated. This study aimed to evaluate the effect of agricultural credit availability on Togolese farmers' output. The findings indicate that farmers who have access to financing perform better than those who do not. Additionally, farmers who have access to loans are more productive than those who do not. Therefore, increasing agricultural output requires having access to loans. When formulating its agricultural policy, Togolese decision-makers must give procedures that facilitate access to agricultural financing more consideration¹³⁴.

A study examined agricultural funding-based contributions and performance of Nigerian agricultural sector. In order to evaluate the performance of the Nigerian agricultural sector, this study, which adheres to the recommendations of the financial intermediation theory, focuses on the relationship between agricultural funding-based contributions and performance of the Nigerian agricultural sector from 1986 to 2018. It uses data from the World Bank Economic Outlook 2019 and the Central Bank of Nigeria's 2018 statistical bulletin, relying on an ex-post facto research design. Crop production (CRP), livestock production (LSP), forestry production (FRP), and fisheries production (FSP) serve as the dependent variables, while total government expenditure (TGE), agricultural credits (ACG), and foreign direct investment (FDI) serve as the independent factors. Jarque-Bera, Breusch-Godfrey, Breusch Pagan Godfrey, and Ramsey reset are used in the study to test for normality. The Augmented Dickey-Fuller (ADF) technique is used to test for stationarity. Fully Modified Ordinary Least Square (FMOLS) and Engle Granger Single Equation Co-integration Tests are used to look for potential relationships between the sets of variables. According to the analysis, the study's findings show that TGE and ACG are significantly and favourably associated to CRP, LSP, and FSP whereas FDI continues to have a negative relationship with each of these variables. TGE and FDI, on the other hand, have a negative association with FRP, but ACG has a good relationship with FRP. All of the variables considered in the four models have a long-term association, according to the co-integration analysis. Based on this, the study came to the conclusion that the performance of the Nigerian agricultural sector has a considerable and long-term association with agricultural funding-based contributions. According to the research, government spending on the industry should be increased while the agricultural credit guarantee programme should be strengthened¹³⁵.

A study empirically investigated the link between agricultural output growth and government spending in Nigeria from 1981 to 2018. The investigation of stationary variables was conducted at various levels using the Augmented Dickey-Fuller (ADF) test. Since it allows for the inclusion of fractionally integrated variables, the mixture in order of integration required Auto Redistributed Lag (ARDL) and Bounds co-integration. The findings demonstrate the short- and long-term effects of public spending on the expansion of agricultural output in Nigeria. Any reduction in government spending on the agricultural sector, according to the policy implication, will have a negative impact on Nigeria's agricultural output growth. In light of Nigeria's weak agricultural output growth, which is accompanied by corruption and sector-specific policy reversals. The study is pertinent for the following recommendations, which are that the government should step up efforts to ensure food security through improved agricultural policy, efficient loan channeling across the board, and sustainable budgetary measures that can result in actual growth¹³⁶.

A study in Zimbabwe assessed stimulating farmer access to bank credit using the bankers' perspective. The purpose of this study was to identify methods suggested by the lenders themselves for boosting farmer access to bank credit. A sample of 12 registered commercial banks in Zimbabwe were used to gather primary data for a structured interview guide, which was then thematically analyzed. Key tactics for encouraging bank credit availability include human capital building efforts that improve agricultural production and business management expertise. To provide farmers with productive assets to improve viability and loan repayment capacity and to satisfy severe collateral requirements by banks, on- and off-farm investments in physical assets were also recommended. Activities for social capital construction that increase farmer knowledge through connections were also seen as essential for improving finance access.

Therefore, policy should enhance agricultural extension services to increase farmer knowledge and finance farmer-led initiatives to develop farm infrastructure. In order to share risk and expertise, farmers should form farmer-based groups and enroll in personal development courses in agricultural production and business management. To accommodate farmers, banks are urged to use locally flexible lending structures¹³⁷.

The effect of Nigeria's agricultural public spending on agricultural productivity was examined in a study. The study's pertinent time series data came from secondary sources. Data from 1981 to 2014 were included. To estimate agricultural productivity and government spending, we employed a system of equations approach using the cointegration and error correction model. It was also assessed how different aspects of government spending affected agricultural productivity. According to the study, agricultural public capital investment has a favourable influence on agricultural productivity that manifests over time, even though recurrent and total agricultural public expenditure do not. The study also suggested that state capital spending in agriculture can support private agricultural investment. The study demonstrated budget discrimination in Nigeria against public capital expenditures for agriculture. Finally, the analysis showed that public spending on agricultural irrigation not only had the highest Benefit Cost Ratio of 4.74 (compared to 0.74 for input subsidy), but also encouraged greater private investment in agriculture than spending on R&D, rural development, and subsidy programmes. We conclude by advising that the rate of agriculture budget execution be increased via hasty budget passage and prompt budget implementation. Public spending on agriculture should be reorganized to prioritize investments in rural development, irrigation, and R&D, which currently get smaller financial allocations in Nigerian agricultural budgets¹³⁸.

Access to credit and agricultural productivity with evidence from maize producers in Benin was assessed. As a result, the study adds to the discussion and seeks to ascertain how loan availability affects agricultural productivity in Benin. In order to do so, we employ the endogenous switching regression model to account for any potential selection and unobserved heterogeneity problems that may arise from this effect study. The statistics utilised originate from the databases of the National Institute of Agricultural Research of Benin (INRAB), a body connected to the Ministry of Agriculture of Benin. The findings indicate that factors affecting growers' access to credit include education, the amount of fertiliser used, and the adoption of improved seed varieties. When farmers have access to financing, their production rises by about 30.67 percent, necessitating extensive and well-coordinated government activity¹³⁹.

Using time series data from the Central Bank of Nigeria Statistical Bulletin and Annual Reports, a study assessed the effect of government spending on agriculture on the production of the agricultural sector in Nigeria over the years 1981–2018. The labour force, capital expenditure, recurring spending, agricultural loans, average annual rainfall, interest rate, and economic reforms were all stated as functions of agricultural value added. The time series data were stationary at $I(0)$ and I according to the Augmented Dickey-Fuller unit root test, which was used to determine whether the data were stationary (1). The bound test cointegration in the model suggests a long-term connection. According to the research using the ARDL model technique, capital expenditure is positively correlated with agricultural output and statistically significant at 5% in the present year. It was known that after a year, the effect of capital investment on agricultural output starts to wane. Recurrent spending, however, has a detrimental and negligible effect on agricultural productivity. Governments at all levels should intensify and raise spending on capital goods in the agriculture sector, the report advises.

Government capital expenditure purchases should be carefully scrutinized. This will guarantee that the appropriate and reliable equipment is purchased. There is a need to reorganize overhead expenses in the sector with regard to recurring expenses that reduce agricultural productivity. All Nigerian government entities involved in agriculture should be closely scrutinized, and overhead costs should be reduced¹⁴⁰.

Commercial Banks Credit and Agricultural Development in Nigeria was studied. Examining the impact of commercial bank loans on Nigerian agricultural development is the study's principal goal. The precise goals are to: Examine the impact of bank credit on Nigerian agriculture, Analyze the impact of government spending on Nigeria's agricultural output, Analyze how Nigeria's agricultural output is affected by the Agricultural Credit Guarantee Scheme Fund Use secondary information gathered from the Central Bank of Nigeria's Annual Reports and Statement of Account to analyze the impact of interest rates on agricultural output in Nigeria. In order to examine the data, econometric methods were used. Unit Root and Ordinary Least Squares (OLS) tests are enhanced versions of the Dickey Fuller and Philip Perron tests, respectively. The analysis demonstrates that while interest rates have a negative and minor impact on agricultural output, loans to the agricultural sector, government spending in the agricultural sector, and the agricultural credit guarantee scheme fund do not. Therefore, the study draws the conclusion that commercial bank lending has increased agricultural production in Nigeria over the study period and has a favourable impact on agricultural output in Nigeria. According to the analysis, strengthening the agricultural loan guarantee programme through genuine financial support will dramatically increase its capital base. To make agricultural finance appealing to commercial 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. This would increase agricultural productivity in Nigeria and further bolster the confidence of lending institutions¹⁴¹.

Food production and agrofinancing in Nigeria were studied. The goal of the study was to assist Goal 2 of the 2030 Sustainable Development Goals (SDGs), which is to "end hunger, achieve food security, improve nutrition, and promote sustainable agriculture." The analysis used annual data from the Statistical Bulletin of the Central Bank of Nigeria (CBN) and the World Development Indicators (WDI) of the World Bank to cover the years 1981 through 2018. Agro-financing is statistically important in explaining the level of food production in Nigeria, according to research using the Johansen and Canonical Cointegration techniques¹⁴².

A study carried out an empirical analysis on the impact of agricultural productivity on economic growth and poverty alleviation in ECOWAS countries. Debates on whether the continent can endogenously use its agricultural potentials to address these challenges are sparked by the fact that many African countries still struggle with basic welfare issues like hunger and extreme poverty. This study uses panel data from 13 ECOWAS nations that cover 26 years (1990-2015) to investigate the effects of production parameters on agricultural productivity and consider whether and how agriculture may be used as a weapon for growth and poverty reduction in the region. The study discovered a positive and substantial association between cultivated lands, physical and financial capitals, as opposed to labour employed, on agricultural productivity by linearizing the Cobb-Douglas production function and utilising fixed effects (FE) using nation dummies. Next, we demonstrate how agricultural productivity may be a pro-growth and anti-poverty strategy utilizing the 2SLS/IV and GMM/IV techniques. The study also reveals that there is significant interaction between non-agricultural productivity

and agricultural productivity, and that the agricultural productivity gap (APG) lowers both growth and the poverty index. These findings are followed by a charting of the transmission mechanisms for decision-makers so they can comprehend the connections and pathways through which agriculture productivity impacts the whole economy¹⁴³.

A study examined agricultural credit and agricultural productivity in Bangladesh using an econometric approach. This study attempts to look into the effect of agricultural credit on Bangladeshi agriculture productivity. The Bangladesh Bank (BB), Ministry of Finance (MoF), and Bangladesh Bureau of Statistics (BBS) yearly time-series data were used in the empirical research from 2000 to 2019. The autoregressive distributed lag (ARDL) bounds test approach was used in this study to explore the short- and long-term correlations between agricultural credit and agricultural productivity as well as other control variables. The study's results showed that there are both short- and long-term links between agricultural loans and productivity, with other dynamic variables like inflation, interest rates, and government spending on agriculture also having an impact on agricultural productivity. This study comes to the conclusion that increasing agricultural credit growth would assist Bangladesh's economy thrive through increasing agricultural productivity¹⁴⁴.

A study set out to investigate the impact of Central Bank of Nigeria's interventions on the agricultural sector within an economy-wide framework of general equilibrium modelling. With some modifications to the standard model created by the Centre for Econometric and Applied Research (CEAR), the study used a dynamic (recursive), two-sector general equilibrium model of the Nigerian economy. It also included the contributions of the CBN's agricultural-based interventions as increases in the stock of agricultural capital in order to have a more robust size of interventions into the agricultural sector. The modified Input and Output Table for 2011

served as the source of the SAM used for the CGE model study. Results revealed that interventions increased government revenues and increased exports of agricultural commodities, while marginally decreasing the volume of intermediate goods imported into the agricultural value chain. Prices of agricultural commodity exports also increased slightly in the fifth year after the interventions, contributing to a marginal decline in government subsidy expenditures. Results revealed that interventions increased government revenues and increased exports of agricultural commodities, while marginally decreasing the volume of intermediate goods imported into the agricultural value chain. Prices of agricultural commodity exports also increased slightly in the fifth year after the interventions, contributing to a marginal decline in government subsidy expenditures⁶.

A study assessed agricultural credits and agricultural productivity using cross-country evidence. In the study, cross-country data was presented that suggested agricultural credits increase agricultural productivity. Results in particular showed that doubling agricultural credits results in an improvement in agricultural production of about 4% to 5%. The agricultural GDP component and farm labour productivity were the two different agricultural production indicators used in the study. The study demonstrated that agricultural credits are largely dependent on the agricultural component of GDP in developing countries and agricultural labour productivity in wealthy nations by combining panel data with instrumental variable approaches. This shows that as a country develops, the nature of the relationship between agricultural finance and agricultural output changes. According to the study, the growth of the agricultural finance system encourages entry into the agricultural labour market, pushing up the agricultural component of GDP while lowering agricultural labour productivity in developing nations, while in developed nations, it results in an increase in agricultural output that is labor-

augmenting. We contend that the primary factor influencing the labour market reaction is the replacement of the informal credit channel along the development path with formal and advanced agricultural credit markets¹⁴⁵.

A study examined economic assessment of government expenditure on agricultural sector in Nigeria, in order to establish if it has any direct link with economic growth. The specific goals were to investigate the links between recurrent spending and economic growth, determine whether capital spending and economic growth are related, find out if commercial bank loans and advances to agriculture are related to economic growth, investigate the links between agricultural credit guaranteed scheme releases and economic growth, and investigate the effects of government spending on agriculture. For the analysis, a time series of data from 1981 to 2017 was gathered from the Central Bank of Nigeria. Indicators of government spending included recurrent expenditure, capital expenditure, commercial bank loans and advances to the agricultural sector, and loans made under the agricultural credit guarantee system. Real gross domestic product (RGDP) was used as a proxy for economic growth. The acquired secondary data was analysed using the Pearson correlation and Ordinary Least Squares methods. The findings show a significant positive correlation between economic growth and recurrent spending, a very high positive correlation between economic growth and capital expenditure, a very high positive correlation between economic growth and loans and advances from commercial banks, a negligible positive correlation between economic growth and loans from agricultural guaranteed scheme, and a positive correlation between government spending on agriculture and agricultural sector output. Based on the findings, it was suggested that the government arm farmers with tools, resources, and technology, as well as create and put into practice policies aimed at improving the agricultural sector investment in Nigeria¹⁴⁶.

A study evaluated Agricultural credit guarantee in Nigeria and the uncertainties of the macroeconomic environment. This study evaluates the ACGS within the macroeconomic framework of Nigeria. It evaluates the actual value of loans that have been guaranteed over time, examines agricultural output in the context of a credit guarantee programme for farmers, and examines the impact of changing interest rates and other factors on the volume of loans that have been guaranteed. Descriptive and inferential statistics were used to analyze the data. According to this analysis, the macroeconomic setting has not been favourable for ACGS activities. Credit guarantees help boost agricultural output, but policies that make interest rates, inflation, stock market capitalization, nominal exchange rates, and other macroeconomic factors favourable to and supportive of the agricultural sector would greatly increase the quantity and value of guarantees, as well as the performance of loans and agricultural sector output¹⁴⁷.

Agriculture credit and its effect on the yield of some cereals were the subject of a Togo study. The goal of this study is to examine how agricultural credit affects Togo's productivity of paddy rice, sorghum, and maize. The findings show that credit significantly and favourably affects these productivities. The sort of credit has an impact on this general outcome, though. The productivity of maize and sorghum is positively and significantly impacted by in-kind credit, whereas paddy rice output is not significantly impacted. Contrarily, the effects of credit in hard currency on production are negative for maize, favourable for sorghum, and insignificant for paddy rice¹⁴⁸.

Impact of agricultural financing on Nigeria economy was examined. The importance of agricultural surplus for the structural transformation accompanying economic growth is often addressed by development economists. The impact of agricultural finance on the expansion of

the Nigerian economy is experimentally evaluated in the study. In this work, secondary data and estimates from multiple regressions using the Ordinary Least Square (OLS) econometric technique were used. According to the model's output, resources controlled by commercial and specialised financial institutions will be utilised to finance investments more effectively. Furthermore, in order to boost the agricultural sector's productivity growth, there is a pressing need to increase the amount of credit available to it. For an agriculturally led economic growth, it is advised that maintaining credible macroeconomic policies that are pro-investment in revamping the agricultural sector and the debt-equity swap option are important¹⁴⁹.

A study assessed the impact of financial development on agricultural productivity in South Asia using data for the period 1973–2015. Physical capital, human capital, trade openness, and income level are also factors. All variables were discovered to show cross-sectional dependence and to be stationary at initial differences. It was discovered that variables' long-term cointegration holds. According to the estimated results, financial development has an inverted U-shaped relationship with agricultural production, meaning that as financial development rises initially, agricultural productivity rises, and as it rises further, agricultural productivity drops. A increase in both physical and human capital leads to an increase in agricultural productivity. Agricultural production grows together with trade openness and income level. The results of the robustness analysis show that terms of trade have a negative effect on agricultural productivity. Additionally, carbon emissions and the rural labour force have a detrimental impact on the region's agricultural production, whereas industrialization has a favourable impact¹⁵⁰.

The real gross domestic product of the nation was thoroughly examined in a research to determine the effects of guaranteed agricultural finance on the production of oil palm, cocoa,

groundnuts, fish, poultry, cattle, roots, and tubers. The Central Bank of Nigeria's statistical bulletin of various topics served as the source for time series data. The data sets were collected over a period of 37 years, from 1981 to 2017. For its analysis, the study used the Autoregressive Distributed Lag (ARDL) model. The Phillips Perron stationarity test was employed to establish the order of integration despite prior estimation and the presence of numerous exogenous variables because of its resistance to serial correlation and heteroskedasticity. The study used the Newey-West covariance matrix estimator to provide the lag criterion based on the LR, FPE, AIC, SC, and HQ. The Wald test, which supports the findings from both short-run and long-run models, demonstrates that no guaranteed agricultural financing has a statistically significant impact on real gross domestic product. Therefore, the report suggests more money and focused efforts to identify which of the suggested agricultural investment has the biggest influence on growth¹⁵¹.

A study examined the effect of government agricultural spending on agricultural output in Nigeria. A function of the rate of government spending on agricultural, management level (dummied), technology level (dummied), and labour in use proxy are all exogenous variables in the model developed for the study. The National Bureau of Statistics (NBS), CBN economic and financial Review bulletin, and CBN annual reports covering the years 1999 to 2012 were used to compile annual time series data. For the purpose of conducting an empirical analysis, the study used descriptive test statistics, econometric techniques such as the Augmented Dickey- Fuller (ADF) unit root test, and the Engle Granger single line co-integration test. The unit root results indicated that all of the model's variables are level and stationary. The co-integration test demonstrates that the variables have long-run equilibrium relationships. In order to achieve a corresponding output or performance of the sector in Nigeria, the study advises

that actions be taken to drive the agricultural sector through consistent policies, robust funding, and infrastructural development, judicious use of allocated resources, and above all, a genuine democracy and good governance in Nigeria¹⁵².

Effect of agriculture financing on agriculture productivity in Nigeria was examined. Agricultural operations in Nigeria over the past years have largely remained primitive, resulting in very low productivity due to inadequate application of modern technology. For a typical Nigerian farmer, the cost of agricultural equipment like tractors, harvesters, planters, and so on is too expensive and out of reach. The fact that agriculture financing has for several years suffered major setbacks due to some inhibiting factors, such as low agricultural productivity, lack of capital and inaccessibility to credit facilities, inadequate availability of input and storage facilities, lack of conducive and enabling environment, weak agriculture exports, and others, has made it difficult for farmers to obtain financing to modernise or expand their farms. The choice of research designs used in this study is the deduction approach combined with archival and documentary research, which involves secondary data acquisition. The study's population is made up of data from 2000 to 2015 (16 years) on the total yearly financial expenditure on agricultural equipment, agricultural productivity output, and export earnings. Used were secondary data on annual cumulative agricultural financial expenditures (AF), agricultural productivity indicator, and export profits (EE). The study's conclusions showed that agricultural funding significantly affects the development of mechanised farming technology and crop output. The study therefore recommends that agricultural intervention agencies and financial institutions make an effort to boost credit finance given to agricultural equipment, as this is a sustainable approach for the sector's technical improvement for greater output¹⁵³.

A study in South Africa assessed the impact of government expenditure on agricultural productivity. This study, which uses annual time series data from 1983 to 2016 to investigate the impact of government spending on agricultural output in South Africa, considers the importance of agriculture in an economy, particularly in Africa, and the ensuing role of government. It has been demonstrated that there is a long-term relationship between government spending on agriculture and agricultural productivity, with a long-term positive significant influence to be anticipated. In an era of climate change and a highly commercialised agriculture system, the research emphasises the indispensable role of the South African government funding of the agricultural industry. The expected productivity growth impact will only be felt in the long run, all other things being equal, given the low and declining pattern of government expenditure in the sector in South Africa. In the short run, increased government financing for the industry could hasten the anticipated increase in agricultural output¹⁵⁴.

A study empirically evaluated the nexus between public spending on agriculture and Nigerian output growth. The study used secondary data, which covered the years 1981 through 2016. To investigate the link between the relevant variables, some statistical approaches were applied. By using the correlation LM test and the heteroskedasticity test, the study analyses the stochastic properties of each time series. Then, using the ordinary least squares method of analysis, the relationship between the growth rate of real GDP and public spending on agricultural was looked at. The results demonstrate that Nigeria's agricultural development has a favourable impact on the country's economic growth. All of the model's significant variables also demonstrate that the output of the agricultural sector has a favourable impact on Nigeria's economic growth over the study period. Based on the findings and recommendations, the study suggested, among other things, that the government raise its budgetary allocation to the

agricultural sector and subsidize the purchase of modern farm tools in order to contribute more to Nigeria's economic growth¹⁵⁵.

Government expenditure on agriculture and economic growth in Nigeria was examined. Therefore, the study investigates the connection between government spending on agriculture and Nigerian economic growth (1985- 2015). Two objectives and two research questions served as the framework for the study. Using multiple regression analysis and the Johansen co-integration test, the hypotheses were put to the test. Government spending on agricultural and economic growth in Nigeria are positively and significantly correlated, according to the study's results from multiple regression analysis. The Johansen co-integration test result demonstrates that there is a long-term relationship between the variables because the trace test statistics and max-eigen value test each reveal five co-integrating equations at a 5% level. The low level of domestic savings estimates was indicative of the fact that domestic savings in the nation did not contribute to economic growth, and it is necessary to promote domestic savings to avoid challenges faced by small-scale farmers in obtaining soft loans and investing in adequate and mechanised farming equipment. Recommendations were given based on the findings, including that the government create policies to encourage domestic savings and government spending nationwide in order to foster economic growth¹⁵⁶.

In Nigeria, from 1999 to 2015, a research examined government spending on agriculture and how it affected the country's unemployment rate. For analysis, time series data were gathered from secondary sources including the World Bank Trading Economics, the National Bureau of Statistics, and the Central Bank of Nigeria Statistical Bulletin on the unemployment rate, government recurrent/capital expenditure on agriculture, and gross domestic product. According to the coefficient of determination R^2 , changes in government capital and recurrent

spending as well as economic development were responsible for an 84.3 percent change in Nigeria's unemployment rate. The F-Statistics revealed that there is a high linear dependency between unemployment and government spending, with a value of 8.05 percent and a probability value of 0.3 percent. The outcome showed that there was no statistically significant association between government spending and unemployment, that is, unemployment in Nigeria is not being reduced. In order to achieve the 10 percent Maputo Declaration of 2003, the report advised the federal government to quadruple the amount of funds allocated to agriculture in the annual budget. This is anticipated to free monies that, on balance, should be used to promote agricultural development and, in turn, lower unemployment¹⁵⁷.

Using time series data from 1981 to 2014, a study analysed the impact of government agricultural spending on agricultural output in Nigeria. The results of the unit root test showed that all the variables were integrated at the first order difference after the data had been examined using the unit root test, co-integration test, and vector error correction model. The Johansen co-integration tests, on the other hand, showed that there was a long-term link between agricultural output and government agricultural spending. The results of the vector error correction model showed that changes in total government agricultural spending, the real exchange rate, banking system loans to agriculture, average annual rainfall, and the rate of population growth all had a quick impact on agricultural output. Average annual rainfall and the rate of domestic population increase were each individually significant at 1% levels in influencing agricultural output in Nigeria. In Nigeria, the rate of domestic population growth outpaced agricultural output, which was subsequently followed by average annual rainfall, government spending, and finally the real exchange rate in terms of importance. In order to reduce the rate of rice importation in the nation, it was advised that the government not only

adequately fund agriculture by maintaining a healthy population but also encourage a mechanised agricultural system by using modern technology and inputs to boost yields in local rice production and other farm produce. Government should also make sure that meteorological organisations that forecast annual rainfalls are adequately funded, cared for, and that their recommendations are put into practise in order to achieve high farm yields each year and food self-sufficiency, thereby minimising agricultural losses caused by weather fluctuations in our agricultural climate¹⁵⁸.

Since the discovery of crude oil in 1960 and the ensuing economic boom, crude oil has replaced agriculture as the primary export earner. Several agricultural programmes were started to promote the sector's performance in order to increase its significance and guarantee food security. The majority of these initiatives are included in the various National Development Plans from 1960 to 1985, the Structural Adjustment Programme from 1986 to 1988, the National Economic Empowerment and Development Strategy from 2004 to 2007, the Agricultural Transformation Action Plan (ATAP) from 2011 to 2015, as well as other transformation initiatives that have been adopted by governments. The agricultural value chain's four major segments were the focus of these activities. These include expanding access to land, increasing production of specific crops, providing input support mechanisms through import waivers and export incentives as part of the government's budgetary policies, and giving farmers loans at low-interest rates.

More prominent attempts were made by several state governments to stimulate private sector participation in commercial agriculture in their states, which is a vital component of improving access to land as a determinant in agricultural production.

For the construction of commercial farms, the states of Kwara and Cross River, for instance, began public-private sector collaboration programmes. The effort, which started in 2004, sent Zimbabwean farmers to Kwara State, where they started producing grains, rice, cassava, vegetables, dairy, chicken products, and tobacco. The state government set up amenities like feeder roads, security, telecommunications gear, and irrigation systems to help these farmers. The farmers were to sell to potential bulk purchasers, such as feed mills and other businesses, according to the marketing plan implemented.

The Cross River state government also made it easier for private farmers to access property for commercial agricultural use by leasing them 22 farms totaling roughly 71,809 hectares. They also made sure that they received their legal title certificates on schedule. It also created an environment that was favourable by giving seeds, fertiliser, technical aid, and financial support to a number of privately owned farm estates. In addition, some state-owned oil palm, rubber, and cocoa estates that had previously been in ruins were revived, privatised, and in the majority of cases leased in smaller chunks to private farmers.

Recent government administrations launched a number of presidential initiatives to boost the local production of certain cash and staple crops. The Federal Government adopted a variety of strategies in 2001, including the widespread production and distribution of enhanced seedlings, the acquisition and distribution of essential inputs, the facilitation of fiscal incentives necessary for profitable production, the efficient coordination of institutional support, and the development of farmers' and processors' capacity.

In order to meet local need by 2006 and produce for export by the end of 2007, the Presidential Initiative on Increased Rice Production was created. Its goal was to reduce the rising rice import bill, which reached N96.012 billion in 2002. 3.0 million hectares of land

were supposed to be under cultivation by 2007 in order to produce 9.0 million tonnes of milled rice or 15 million tonnes of paddy. In order to boost domestic production, it was intended to ban rice imports starting in January 2007. By the end of 2010, it was hoped that the programme on cassava production and export will increase annual production to 150 million MT.

The export of 37.6 million tonnes of cassava products, such as starch, chips, medicines, adhesives, and other value-added goods, was also projected to generate US\$5.0 billion in revenue annually for the programme. The Growth Enhancement Scheme was established under the Agricultural Transformation Agenda (ATA) of the Government to register smallholder farmers and offer specialised input subsidies, such as access to fertilisers and seeds. Between 2011 and 2014, nearly 14 million farmers received subsidies (Federal Ministry of Agriculture and Rural Development, 2016).

Similar to this, through the implementation of the Presidential Initiative on Vegetable Oil and Tree Crop Development, the government aimed to achieve self-sufficiency in the production of vegetable oil over a period not exceeding three years. The development of eleven scheduled oil seed crops, including oil palm, groundnut, soya beans, cotton, sunflower, cashew, coconut, and cocoa, was the main focus of this programme. The following production goals were established for each crop under the programme: seed cotton: 1 million tonnes over the plan period, groundnut: 15 million tonnes annually, soya bean: 670,000 to 1 million tonnes annually, and oil palm: 1 million hectares capable of producing 15 million fresh fruit bunches.

Through a variety of import waivers, export incentives, tax holidays, and exemptions in the industry, fiscal incentives were also used to stimulate agricultural output. For instance, beginning on January 31, 2012, agricultural machines and equipment were exempt from duty.

Export Credit Insurance Facility, which was created to safeguard Nigerian exporters from the risks of non-payment for goods and services exported on credit terms, and the Nigerian Export Promotion Council (NEPC), which launched the Export Expansion Grant Scheme for the stimulation of export oriented activities that leads to significant growth of the non-oil export sector, especially agriculture, administered export incentives.

A five-year tax holiday for agricultural products' processing companies granted pioneer status, tax exemptions on interest earned by financial institutions on loans granted for agricultural trade or businesses, an increased capital allowance of up to 50% for agro-allied plant and equipment, and exemptions from Value Added Tax (VAT) on machinery and equipment purchased for agricultural purposes are just a few of the tax incentives that were provided to help increase agricultural production.

Nature of Central Bank of Nigeria Intervention Fund in Agriculture Sector Development in Nigeria

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2.4 Summary of Gap in Literature Reviewed

Several studies have been conducted on this subject matter with dissenting views. For example, some scholars posited that government agricultural expenditure had a negative and significant

impact on agricultural output while another scholar opined that government expenditure on agriculture had a positive and significant impact on agricultural sector output^{116,117,122}. Also, majority of the earlier studies conducted employed the Ordinary Least Square Techniques¹³⁵. This study however employed a relatively new estimation technique; the Auto Regressive Distributed lagged Technique (ARDL). This technique included the impact of lagged variables on the dependent variable. Also, from the literature reviewed, it was observed that many studies have been done on the effect of deposit money banks' credit on agricultural sector performance of countries. This study differs in some way from existing ones. One, this study focuses specifically on the period, 1986-2016. Theoretically, this study adopts the Commercial loan theory of liquidity for the model. This is so because the theory identifies the fact that the economic growth of nation depends on the agricultural sector performance. This is achieved through deposit money banks' financing the agricultural sector. Finally, the study employed ECM modeling technique for the analysis. To the best of our knowledge, none of the studies reviewed have fill this gap in literature, hence, form the basis for this study. This study contributes to the existing literature by investigating the impact of agricultural funding by the CBN on agricultural development in Nigeria.

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Chapter Three

Methodology

3.1 Research Design

The study adopted descriptive research design which aims to accurately and systematically describe as the number of targeted population, in current situation or phenomenon. The goal of this study is to look at the effect of agricultural funding sources on monetary development and socioeconomic disparities in Nigeria. This was selected because we relied extensively on previously accessible data. As a result, the predictor variables (treated money) must be isolated from the dependent variables in time (asset acquisition, income, poverty, and productivity). A study design must be established in addressing the research objectives, which deal with identifying the results that financial institutions anticipate to attain only once agricultural modification initiatives have been implemented.

The study also used survey method to source data from the listed beneficiaries of any of CBN funding schemes. This research is qualitative and descriptive as it immensely aids critical and careful description and explanation of the variables under investigation.

3.2 Population of the Study

The population of the study comprises of several beneficiaries of any of the Central Bank of Nigeria funding schemes.

3.3 Sample and Sampling Technique

Although, listed intervention schemes of the central bank of Nigeria, selecting few popularly patronized by the actors in the sector will be essential for this study to estimate the value of the

entire attribute in the population of beneficiaries of each of the available agricultural intervention schemes by the CBN. Thus, purposive sampling method was adopted to ensure all listed agro-allied companies has a chance of being included in the sample. The sample size of this study was be determined based on the available data gotten from the statistical bulletin of the CBN.

3.4 Description of the Research Instrument

In the conduct of this research, information was derived from the central bank of Nigeria statistical bulletin. The statistical bulletin contains both total loan of the CBN to agricultural sector and the total output of agricultural sector. It is consider as an efficient data because the information collected are reliable data. Data will also be gleaned from printed materials like official/government publications like World Bank, IMF, Journals articles, seminar and conference papers, newspapers, texts, commission reports, Smallholder Farmers' DataPortrait, a smallholder-specific data set based on Living Standards Measurement Study surveys (LSMS) and the FAO Rural Income Generating Activities data (RIGA). Also, non- printed electronic materials from the internet, unpublished materials and other relevant sources will help in the course of this study. Particularly, the 4A's of the CBN intervention model will be used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria.

3.5 Validity of the Research Instrument

As many of the previous studies relied on ambiguous constructed research plan without causal and analytical relevance to their problem statement. In this study, the structure and strategy of this investigation will be conceived to obtain answers to research questions and objectives and also to control variance in the variables under study. This design will also serve as an important

guide for the researcher on how the data will be collected, analyzed and interpreted as collected. While the variables will be controlled and internally valid. Since the research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and objectives and also to control variance in the variables under investigation. The design will also serve as an important guide to the researcher on how his data will be collected, analyzed and interpreted collected. Hence, internal validity is strongly assured in this research.

3.6 Reliability of the Research Instrument

The reliability of a research instrument concerns the extent to which the instrument yields the same results on repeated trials. Reliability of the research instrument is the measure of the dependability and the internal consistency of the items of the instrument of data collection. The data required for this study were gathered from secondary sources data by the researcher. The data was found suitable, appropriate and reliable for this study.

3.7 Administration of Research Instruments and Method of Data Collection

In the conduct of this research, data from secondary sources will be used. Thus, information will be derived from the central bank of Nigeria statistical bulletin. The statistical bulletin contains both total loan of the CBN to agricultural sector and the total output of agricultural sector. It is consider as an efficient data because the information collected are reliable data. Data will also be gleaned from printed materials like official/government publications like World Bank, IMF, Journals articles, seminar and conference papers, newspapers, texts, commission reports, Smallholder Farmers' DataPortrait, a smallholder-specific data set based on Living Standards Measurement Study surveys (LSMS) and the FAO Rural Income Generating Activities data (RIGA). Also, non- printed electronic materials from the internet,

unpublished materials and other relevant sources will help in the course of this study. Particularly, the 4A's of the CBN intervention model will be used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria. This include;

- i. providing more specialised financial goods and services, such as through the financial inclusion strategy, the collateral registry, and non-interest financial products.
- ii. Providing financing at reasonable, single-digit interest rates of 5 to 9 percent will cut the cost of capital, which should assist businesses, by lowering their production costs..
- iii. In some interventions, the size of the facility is determined by: The eligible enterprise's economics of production; or A predetermined threshold may apply; in some cases, it may be as high as 70% of the project's overall cost (such as in PAIF);
- iv. Short-term working capital is also accessible. Long-term term finance to match investment demands under the majority of interventions although optional, moratorium is generous in terms of both short- and long-term finance.

However, the specific parameters that will be used in evaluating the development in Nigeria's agricultural sector through strategies of intervention funds by the CBN include but not limited to; percentage of Agricultural GDP Growth, Agriculture value added, Agricultural raw materials exports (merchandise exports), Agricultural raw materials imports (merchandise imports), Employment in agriculture (total employment), Cereal yield (kg per hectare).

3.8 Method of Data Analysis

In the analysis of this work, the descriptive and qualitative data interpretation methods will be adopted. Since the data will be primarily gleaned from secondary sources. The data collection method will be qualitative in nature. This will immensely aids critical and careful operationalization of the variables under investigation. The data collected from the secondary sources will be subjected to in-depth, empirical analysis and logical reasoning through content analysis. Therefore, this research will exploratory, descriptive, and qualitative in nature.

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Endnote

1. A. A. Bohari, Z. A. Bidin & S. L. Rais, *Exploratory Research as the Way Forward Towards a Green Procurement Practice for the Construction Industry; Research Methodology*. IOP Conference Series Earth and Environmental Science, 385(1), 2019, 1-8.

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Chapter Four

Results and Discussion of Findings

The goal of this study is to look at the effect of agricultural funding sources on monetary development and socioeconomic disparities in Nigeria. To attain this purpose, descriptive design was adopted to solve the research challenge. Particularly, the 4A's (availability, affordability, adequacy, and appropriateness) of the CBN intervention model will be used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria. The specific parameters that will be used in evaluating the development in Nigeria's agricultural sector through strategies of intervention funds by the CBN include but not limited to; percentage of Agricultural GDP Growth, Agriculture value added, Agricultural raw materials exports (merchandise exports), Agricultural raw materials imports (merchandise imports), Employment in agriculture (total employment), Cereal yield (kg per hectare). The study also adopted ex-post facto study technique because we relied extensively on previously accessible data. As a result, the predictor variables (treated money) must be isolated from the dependent variables in time (asset acquisition, income, poverty, and productivity). A study design must be established in addressing the research objectives, which deal with identifying the results that financial institutions anticipate to attain only once agricultural modification initiatives have been implemented.

4.1 Presentation of Data

Table 4.1: Distribution of Farmer-Loan Beneficiaries According to the Use of Credit Obtained from the CBN (2005-2020)

Area of Investment	Frequency	Percentage
Crop Production	100	83.3
Livestock Production	75	62.5
Processing of Farm Produce	50	41.7
Market and Distribution of Farm Produce	29	24.2
Purchasing of Farm Equipment	11	9.2
Purchasing Capital Assts	07	5.8
Non-Farm Economic Activities	40	33.3
Purchasing of Household Equipment	21	25.0
Family Upkeep	69	57.5
Expansion of Farm Size	52	43.3
Festivities	04	3.3
Saving for the hard day	05	4.2

Source: Field Survey, 2021

However, the specific parameters that were used to evaluate the development in Nigeria's agricultural sector through strategies of intervention funds by the CBN include but not limited

to; percentage of Agricultural GDP Growth, Agriculture value added, Agricultural raw materials exports (merchandise exports), Agricultural raw materials imports (merchandise imports), Employment in agriculture (total employment).

Table 4.2: Agricultural Based Indicators (2005-2020)

S/No	Agricultural Indicators	2005-2010	2011-2015	2016-2020
1	% of Agricultural GDP Growth	15.9	6.5	4.1
2	% of value added GDP (Agriculture)	36.3	31.7	21.3
3	% of materials exports on Agricultural raw materials	0.1	1.0	4.3
4	% of Agricultural raw materials imports	1.3	0.9	2.1
5	% of Total Employment in agriculture	44.6	48.6	-

Source: World Bank Open Source Data (2021)

Agricultural activities are dominated by peasant small holder farmers who constitute about 90 per cent of farm holding in the country. These farmers practice mostly traditional methods and produce mostly for subsistence purposes. Interventions by government have been influenced by the need to provide access to inputs and other support to peasant farmers so as to boost their productivity and enable them transit to mechanized agricultural practices, while commercial farm holders were supported through the provision of credit facilities, input subsidies, capacity building initiatives and export incentives.

Although its rate of growth has declined consistently over time, agriculture has remained a growth driver in Nigeria. Between 2005 and 2010, the sector grew by 15.9 per cent, without which it would have grown at 6.0 percent). Its growth however declined to 6.5 and 4.1 per cent within the period 2011-2015 and 2015 -2020 respectively. Similarly, the sector has remained dominant in the economy of Nigeria due, partly, to its contribution in value added to GDP and the share of the population employed within the sector which is put at about 50 per cent of Nigerians. During the period 2005-2010, the sector contributed 36.3 per cent of total value added to GDP. Its average contribution however declined consistently over time to 31.7 per cent in the period 2011-2015 and further down to 21.3 per cent during the period 2015-2020.

One of the objectives contained in most agricultural policies or programmes of the government has been to improve self-sufficiency of the nation, reduce share of imported food and encourage the export of agricultural commodities. Table 1 above indicates that the period 2000-2016 witnessed a sustained improvement in the share of agricultural raw material exports as a percentage of total merchandise exports. Its share grew from a paltry 0.1 per cent during the period 2005-2010 to 1.0 and 4.3 per cent during the period 2011-2015 and 2015-

2020 respectively. However, significant gains that were achieved in reducing the share of import of agricultural raw materials to total merchandise imports at the beginning of the period under consideration was reversed towards the end of the period. Its share in total merchandise imports reduced from 1.3 per cent recorded in 2005-2010 to 0.9 per cent during the period 2006-2010. This later jumped to 2.1 per cent during the period 2015-2020.

Impacts of the CBN's Intervention Fund on Agriculture in Nigeria

In the conduct of this research, information will be derived from the central bank of Nigeria statistical bulletin. The statistical bulletin contains both total loan of the CBN to agricultural sector and the total output of agricultural sector¹. It is considered as an efficient data because the information collected are reliable data. Particularly, the 4A's of the CBN agricultural intervention model will be used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria. Thus, the CBN intervention model will also be used to validate this. Particularly, the 4A's of the CBN intervention model will be used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria. This include;

Availability: Increasing availability of tailored financial products and services, e.g. through the financial inclusion strategy, collateral registry and non-interest financial products:

Affordability: Reducing the cost of capital by providing finance at affordable, single-digit interest rates of 5 – 9%: Should translate to lowered cost of production for benefitting enterprises;

Adequacy of Facility: Size of facility in some interventions is based on: The economics of production of eligible enterprise; or Some pre-determined threshold: in some others it is as high as 70% of total project cost (such as in PAIF);

Appropriateness of Term: Long-term term finance to match investment demands under most interventions; Short-term

working capital also available. Moratorium is optional but generous in both short- and long-term financing.

As stated earlier, interventions by the CBN in the agricultural sector are principally anchored on the selected programmes. Particularly, such as; Agricultural Credit Guarantee Scheme (ACGS) and the Commercial Agricultural Credit Scheme (CACCS). Examining the impact of the interventions into the agricultural sector is based on the assumption that such interventions impact the production decisions of agriculturalists leading to increased output/ yield. Given that the interventions by the Bank are provided to both small and large scale agriculturalists, it is plausible to assume that those interventions act as increases in the stock of agricultural capital and thus have direct effects on the production decisions of the farmers. Due to the fact that interventions are given to going concerns, modelling their impact is seen as additions to existing stock of capital in the agricultural sector.

In addition to the intervention programmes stated above, corresponding baseline scenarios were forecast economic outcomes in the absence of any intervention. Since all scenario results significantly depend on the baseline forecast, the results of the baseline forecast is important in evaluating the long term welfare impact of the interventions.

Table 4.3: Ratio of Agricultural Interventions by CBN to Total Agriculture Capital

Year	Total Agricultural Interventions	% Ratio of CBN Agricultural Interventions to Total Agricultural Capital
2015	73.88	0.20
2016	58.5	0.16
2017	27.33	0.07
2018	38.37	0.10
2019	67.50	0.18
2020	65.17	0.18

Source: Researcher's Survey of CBN Reports, 2021

In the baseline/ static scenario, growth of labour supply and foreign savings are assumed to grow at 2.8 per cent being the assumed growth rate of population per year. The above intervention policy simulations are designed to reflect additions to agricultural capital stock net of depreciation. For instance, table 3 indicates that the share of CBN interventions to total agricultural capital for the years under review are infinitesimal as they are less than 1 per cent of total agricultural capital stock. This has implications for the anticipated impact of the magnitude of the interventions on the economy.

The above efforts of the CBN have contributed to the nation's agricultural sector immensely and Nigeria's GDP all-round since its inception. The National Bureau of statistics (NBS) stated that agricultural sectors contribution to the GDP rose from 19.79 in 2015 to 22.35 in Q1 (2021). Also, 2.2 percent real growth was recorded in Nigeria's agricultural sector in Q4 in 2020. This has helped Nigeria's economy to record it first growth in three quarters. Hence, the

role of the CBN intervention efforts and development finance activities as a factor in the agricultural growth of the country.

4.2 Presentation of Research Questions

Research Question One: What has been the impacts of Central Bank of Nigeria’s intervention funds on Agricultural in Nigeria?

Table 4.4: Impact of CBN Agricultural Interventions on the Dynamics of Economic Growth (per cent growth rates)

Variables	Baseline	Year 1	Year 2	Year 3	Year 4	Year 6
Gross Domestic Product Without Interventions	36636.8008	0.82106	0.89627	0.97609	1.06061	0.68150
Gross Domestic Product with Interventions	-	0.82106	0.89627	0.97610	1.06063	0.73575

Source: Researcher’s Survey of CBN Report, 2021

Results of both models presented in table 4 indicate that intervention contributed positively (although marginally) to GDP during the years (periods) of intervention. Similar to simulation results of the model without interventions, in which contributions to growth in GDP were at

rates above 0.8 per cent annually, impact of interventions on growth became visible from the fourth period of interventions.

CBN Interventions on Prices of Agricultural Exports

Table 4.5: Impacts of CBN Interventions on Prices of Agricultural Exports (growth rates in per cent)

Variables	Sector	Base Period	Year 1	Year 2	Year 3	Year 4	Year 5
Price of Agriculture		1.0000000	1.776746	1.80438	1.84166	1.87451	0.93007
Export without interventions	Non-Agriculture	1.0000000	1.776746	1.80438	1.84166	1.87451	0.93007
Price of Agriculture		-	1.776746	1.80438	1.84166	1.874544	1.03980
Export with interventions	Non-Agriculture	-	1.776746	1.80438	1.84166	1.874544	1.03980

Source⁵

Table 5 indicated that prices of agricultural commodity exports increased marginally in the fifth period as a result of the interventions. This could be due to improvements recorded in the quality of products through improved processing and transformation of the otherwise primary commodities.

Constraints Associated with Micro-Credit Delivery to Farmers by the CBN

Constraints to the administration cum delivery of credit to the farmers by the CBN was analyzed with the aid of means score analysis. The result showed that high illiteracy rate, loan default, lack of disburseable fund, high administrative cost, low repayment rate, loan diversion, political instability and high cost of infrastructural development constrained the bank from administering credits to farmers in the area. Similarly, the study conformed to this finding as they reported that farmers' access to credit were influenced negatively by high interest rate, high rate of collateral, loan default and dearth of information on credit availability in the area among other constraints¹¹⁷.

Table 4.6: Mean Scores on Constraints Associated with Credit Delivery to Farmers by Central Bank Nigeria

Constraints	Mean
High rate of illiteracy	3.0
Loan Default	3.5
Lack of Collateral	2.3
Lack of Disburseable Fund	3.8
High Administrative Charge	3.1
Low Loan Repayment	3.4
Lack of Trained Personnel	2.4
Low Interest Rate	2.0
Low Profit Margin	2.7
Loan Diversion	3.2
Political Instability	3.3
High Cost of Infrastructural Development	3.0

Source: Field Computation, 2021

Research Question Two: To what extent have farmers been socially integrated into economic reforms and agricultural intervention in Nigeria?

Smallholder Farmers' DataPortrait, a smallholder-specific data set based on Living Standards Measurement Study surveys (LSMS) and the FAO Rural Income Generating Activities data (RIGA) will be used on many dimensions of household welfare, including consumption, income, savings, employment, health, education, fertility, nutrition, housing and migration. To examine whether farmers in Nigeria have been socially integrated into economic reforms and agricultural output through the CBN intervention funds. The main objective is to assess the living conditions of the population, and to illustrate household behavior.

Smallholder agriculture is key to food security for two pivotal reasons: as a source of food and as a source of income for large numbers of people living in poverty. Smallholder agriculture – including crop farming, livestock, husbandry, forestry and fisheries – provides the bulk of the food consumed in vast regions of the developing world. Smallholder agriculture is also the basis for the livelihoods of two-thirds of the global population currently living in poverty. Smallholder agriculture is practiced by a highly heterogeneous group of producers.

Farm sizes change all throughout the world, in both rich and developing countries, but it is challenging to follow this history over time. There are not many agricultural censuses, and different countries have different definitions of who qualifies as a farmer. In spite of these difficulties, censuses provide us with a broad picture: in many countries of the developing world the average farm size declines. This can only mean that small farms become smaller, and that there are more small farmers.

The diversity of smallholders within and across locations is such that the term “smallholder” resists a universal definition. Two-thirds of the three billion rural people living in developing countries work on land parcels smaller than 2 hectares and make up around 475 million small farm households. Many people lack access to markets and services, are undernourished, and live in poverty. Despite having limited options, they grow their land and provide food for a sizable amount of the world's population. Besides farming they have multiple economic activities, often in the informal economy, to contribute towards their small incomes.

Smallholder families live in farms which in many countries are significantly smaller than 2 hectares.

A review of the literature reveals that smallholders are often defined in relation to the sector in which they operate, that smallholders share some or all of the characteristics compiled in the figure opposite, and that clustered across various characteristics, smallholders tend to be classified in different categories depending on the kind of questions to which answers are sought by analysts and policy makers.

Just as smallholders are a heterogeneous group, the markets in which they participate are also diverse in terms of their size, geographic location, connectivity to other markets, power relations between market players, and institutional setting.

The figure lists different sets of characteristics of smallholder agriculture and of the markets that they have access to that can act as determinants of the extent to which smallholders participate as sellers and/or buyers. This report focuses on the implications of smallholder heterogeneity with respect to their participation in markets. With this focus in mind, and

drawing on Barrett (2010), smallholder heterogeneity can be considered along three dimensions:

1. The smallholder household's access to, and the productivity of, assets, including natural resources, labour, and capital, vis-à-vis their subsistence needs will determine both their ability and their willingness to increase production for sale in markets;
2. The connectivity of smallholders to different markets, which can be considered in terms of remoteness (defined broadly to include geographical proximity knowledge asymmetries and power relationships, and the costs of commerce, or "transaction costs") will modify the incentives that they face;
3. The functionality of these markets: many local food markets are volatile due to the low volumes transacted, and their limited integration with regional or international markets, which limits the market's ability to modify demand and/or supply side shocks. Volatility can affect the level and riskiness of returns to the producer.

Where markets are not well integrated, returns to increased output can diminish quickly as prices plummet, significantly affecting incentives for market participation and, consequently, for productivity-enhancing technology adoption. Smallholder households therefore differ significantly in the way in which they participate in markets and in the extent to which these markets offer attractive opportunities. The design of policy interventions aimed at encouraging increased smallholder participation needs to take better account of these differences.

These small farms depend predominantly on family labour. Nearly half of all tiny farms in the world are located in China, where nearly 98 percent of farmers maintain farms less than 2 hectares. In India, 80% of farmers are small-scale. In Ethiopia and Egypt, farms smaller than 2 hectares constitute nearly 90 percent of the total number of farms. In Mexico, 50 percent of the

farmers are small; in Brazil smallholders make up for 20 percent of the total number of farmers.

Smallholder farm disparities between nations can be substantial and frequently reflect various stages of development in various nations. This is so because the development of the small farm is inextricably linked to the growth of the economy. But at every step of development, smallholders aim to run their farms similarly to how business owners run their companies. They invest in productive assets after raising money from a variety of sources; for many of them, even a bicycle or a spade counts as a valuable asset. They make decisions and take both risks and profits. And agriculture involves many decisions: What to plant, which inputs to use and how, when to plow, to seed, to harvest; how much to keep for consumption in the household and how much to sell to raise cash, or how much to store. Smallholders often make these decisions in an economic environment in which markets do not function well, if at all, and which is also subject to many risks, such as adverse weather and price surges. And this has significant implications for their choices and their livelihoods.

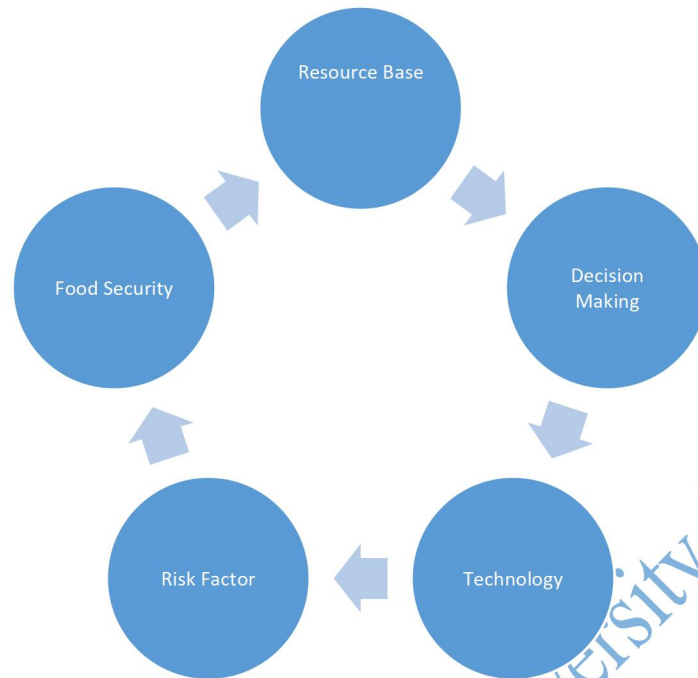


Figure 4.1 Producers, Market, and Productivity

Source: Smallholder Farmers' DataPortrait, 2021

Smallholder productivity improvements are key in ensuring the sustainability of inclusive and broad-based agricultural transformation processes. Increased marketed production can help not only in stabilizing local market prices, providing improved incentives for investment, but also in the creation of opportunities for households to generate cash surpluses, which when spent or reinvested within the rural economy can generate significant multiplier effects.

This process evolves in the market place: productivity growth and smallholder market integration not only go together, but are also mutually reinforcing. In the developing world, smallholders produce the bulk of food that is consumed. In Nigeria, farmers produce 63 and 69 percent of the food in the country respectively. In Nepal, 2.7 million smallholder farms make up for 70 percent of the food produced and in the Pluri-national State of Bolivia, 653 thousands small holdings supply 85 percent.

Small farms produce a wide range of foods, often wider than larger and commercialized farms. Small and poor farmers, who may not be fully integrated in markets, choose to produce their main staple but also diversify their production to achieve better diets. Even if smallholders were commercialized, selling and buying food in the market, they diversify their crops as a risk management strategy to stabilize their income. By growing many crops, they minimize their exposure to risk, such as price shocks. Even if specialization in one crop increases efficiency, poor smallholders diversify to spread risk over many crops. The owners of large farms are wealthier and therefore, less risk-averse to employ diversification strategies.

Development entails changes in crop diversification patterns as farms become more commercialized and income rises. With farmers participating more and more in the markets, crop-mix gives way to specialized production which responds to market prices and the demand for higher value and quality foods.

The technologies smallholders use are difficult to depict only with data. But in simple terms, farmers combine land with labour, seed, fertilizer and other inputs to produce food and other commodities. Labour, land and other capital warrant a separate discussion – they are inputs that make a marked distinction between smallholders and other farmers.

Different smallholders face different incentives and constraints to productivity growth and market integration. Some smallholders have the capability and the willingness to participate in markets; others do not. Processes of smallholder integration to food markets and of technical change are well documented, but the determinants of their patterns of market participation are yet to be adequately understood. This disconnect has compromised the formulation of successful policies aimed at facilitating greater smallholder market participation. The constraints to participation of different types of smallholder are not only multifaceted, but

change as a result of market developments. While, traditionally, domestic food markets have been conceptualized and analyzed as spot market transactions, an increasing number of opportunities are becoming available to smallholders for participating in, and benefiting from, processes of value chain development. Other inputs, such as fertilizers and seed, are important as means towards intensification of production, and smallholders appear to use both more intensively than larger farmers.

Although the focus of value chain development has often been on higher value products for trade in more lucrative markets, whether export or higher income segments of domestic markets, processes of value chain development are also significant in basic food product chains. An example is the formalization of staple grain value chains in Eastern and Southern Africa, including the harmonization of standards and the potential use of commodity exchanges and warehouse receipt systems. Case study examples of success in the development of product-specific value chains, inclusive of smallholders, reveal that this process has often been slow, and made possible only following the sequential alleviation of key constraints, generally underpinned by appropriate public sector support. Developing an inclusive chain can be a painfully slow process, requiring patience and trust from both buyer and producer, sometimes requiring the presence of an honest broker of the relationships and guardian of business confidentiality, for example an NGO. In many cases where development has been short lived, or confined to a subset of stakeholders, appropriate support from the public sector was absent.

Research Question Three: What is the extent to which the Central Bank of Nigeria’s financial intervention improved the productivity of, and access to market by low-income farmers in Nigeria?

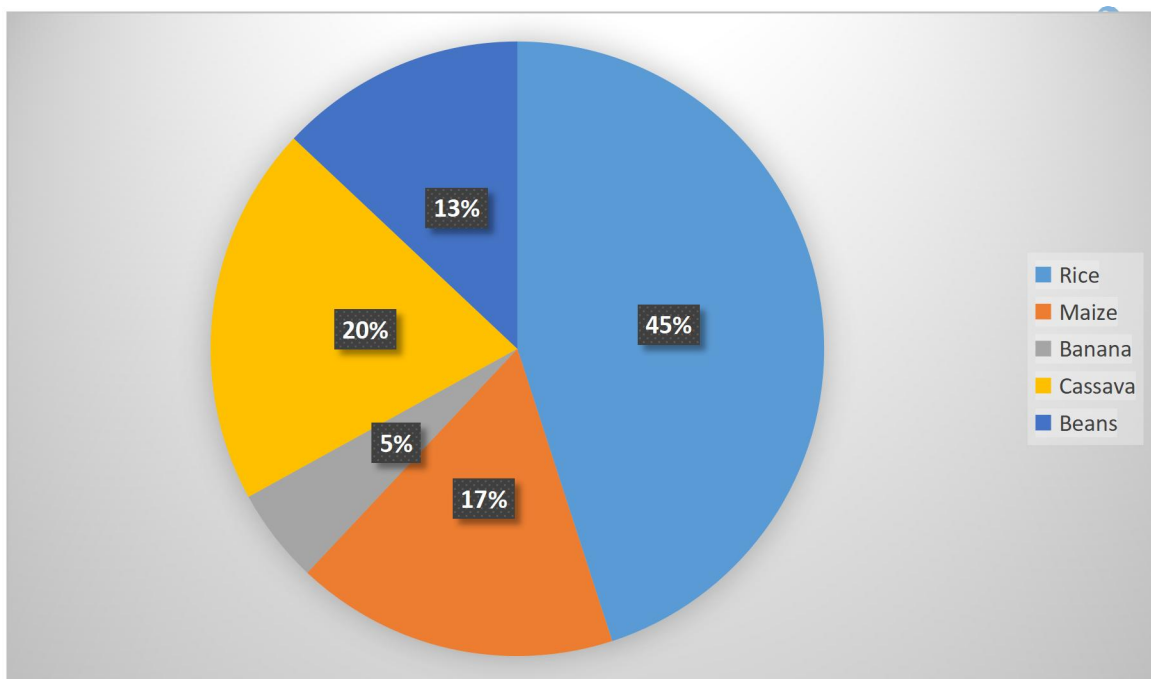


Figure 4.2 CBN Intervention in Small Farm Production Diversification

Source: Smallholder Farmers’ DataPortrait, 2021

Inclusive Market Development and the CBN’s Intervention in Agricultural Sector

Multiple programmes and approaches have been developed in support of promoting greater integration of smallholders into markets. The diagram opposite is illustrative of the wide variety of issues and perceived constraints that have been addressed by such approaches in seeking to develop the capacity to supply commodity markets. These include, for example, those that support capacity to increase productivity, those that seek to reduce the cost of

marketing, or those that are designed to assist in improving the environment in which stakeholders conduct their transformative and transaction-related activities and thereby their capacity to respond to capacity support programmes.

Given the heterogeneity of smallholder participation in different markets illustrated in the first two chapters of this report, greater attention must be placed on mechanisms for identifying the design and sequencing of appropriate institutional solutions — such as improvements to regulatory frameworks, contract farming, farmer organizations or street markets — and provision of support services for alleviating key constraints faced by different categories of producers.

Value chain approaches provide a framework for identifying key constraints and considering appropriate solutions. A chain can be defined as “a set of interlinked activities and agents connected by flows of resources, materials and information that goes towards the production and trade of particular products”. This definition highlights:

1. The chain as a sequence of activities;
2. The key focus on the linkages and relationships that characterize the types of contractual arrangements and the degree of coordination along the chain;
3. The impacts of stakeholders’ activities and decisions on others in the chain;
4. The importance of recognizing the context in which the chain exists (economic, policy and institutional environment);
5. That the chain is not isolated from the rest of the economy

A chain provides a framework for showing how linked activities are performed, evaluating performance, identifying barriers to development (strengths and weaknesses associated with

different activities and linkages), and assisting in the identification of prioritized intervention.

Chain analyses have been used to analyze a range of issues, including:

1. As an empirical tool for identifying binding constraints to growth and competitiveness;
2. To understand and promote market access for small scale producers;
3. Determine the relative merits of different types of contractual relationships between enterprises in a chain;
4. To map the distribution of power and/or benefits of interventions among stakeholders;
5. To identify approaches to improving value chain financing and/or risk management.

Their results have been used:

1. To promote enterprise development through strategy formulation;
2. To undertake situation analysis/ baseline for benchmarking or monitoring;
3. For identification of actions for improved efficiency and performance of whole or components of chain;
4. For improved policy formulation and implementation;
5. For identification and formulation of projects and related activities.

The term "value chain approach" therefore covers an array of potential options, including:

1. Simple approaches to improved understanding of constraints to improved competitiveness or profitability of chain activities;

2. Analytical studies, for example to determine the potential effects of alternative policy interventions or institutional innovations;
3. Chain development related approaches such as participatory chain diagnosis and strategy formulation.

In the late 1990s, the value chain conceptual framework was adopted for the design of development approaches. This was in response to structural changes in international food and forest product markets and the need for greater impact and sustainability of development interventions through increased private-sector involvement. Value chain approaches pursued by public sector agencies or civil society organizations have tended to focus on poverty reduction and, hence, target smallholders and rural communities as the main beneficiaries. Related interventions involve development projects, government agencies and NGOs, who typically provide subsidized technical assistance and training and, to varying degrees, inputs and credit to a select group of smallholders. The overall aim is to upgrade their resources and capacities for their positioning in value chains. In some cases, interventions have focused on improving the overall competitiveness of a given sector, through improved services, infrastructure investments, financial incentives, and increased information sharing.

In addition, the private sector, in particular lead firms that buy or process agricultural or forest products, have implemented value chain approaches to enhance sourcing of raw materials or inputs and to promote their environmental and social credentials.

The value chain framework is important because it orientates production, intervention and innovation towards the demands of downstream buyers and processors. However, little evidence exists that value chain promotion has the desired impact on pro-poor development.

To understand the poverty reduction impacts, it is necessary to identify the equity effects of

intervention strategies within the household by age and gender, as well as between households and communities. Little is known about minimum levels of asset endowment required for value chain development at the household and community levels. While research has addressed asset endowments at the enterprise level, rural households and communities remain a 'black box' in value chain analysis.

Alternative approaches to value chain development include the territorial paradigm of rural development, which has a long history in Latin America. The territorial paradigm is based on shared visions of pathways of change. This approach makes it virtually impossible to predict and plan social change in a top-down fashion. Capacity for territorial governance is critical in rural governance of resilience. System resilience refers to the capacity of actors to adjust the desired pathway whenever external shocks threaten its viability, or in certain cases, impose the need for a more fundamental change in the prevailing system and the desired pathways of change.

Research Question Four: What mechanisms can be used to optimize Agricultural Sector productivity in Nigeria?

Government have a key role to play in alleviating market failures that prevent smallholders from participating in markets, but they must do so in a way that allows producers to make choices consistent with broader social, economic and environmental objectives. Policy should therefore be formulated in a way that ensures that external costs to the society do not accrue from poor, and potentially damaging, private sector investment choices in the agriculture sector. This is particularly so where agriculture plays a primary role in food security, the provision of social safety nets, and social cohesion. Faced with an array of demands on scarce budgetary and human resources, the public sector must address a number of questions.

Policy objectives are multiple and cover both efficiency (i.e. income generation, employment growth) and non-efficiency (i.e. reducing levels of poverty and food insecurity rates) objectives. Policies can be in support of either objective depending on the context, but generally, the number of sub-sectors, chains or chain components in which greater levels of smallholder participation could be beneficial will outweigh the resources available to the public sector. Governments need to make decisions as to whether to “pick winners”, or to develop a conducive environment that benefits most. Decisions will also be required as to the level at which interventions are made.

Often stakeholders complain that there is “no government policy support towards their sector”. Perceptions related to government support are always important, but not all support will, or should be, in the form of direct subsidy to the product, the producer or the trader. Governments also have a facilitating role that can indirectly provide support to the sector in less visible ways. Critical decisions are therefore required on the balance between the direct and indirect provision of both public and private goods and services.

Decisions as to how to provide support are interrelated with the “where” and “what” to support, and appropriate approaches are likely to be context-specific. Whilst there are models which might be followed or adapted, design of support mechanisms will generally require data collection and analysis to identify the most appropriate mechanisms for a given situation. This has been demonstrated above in the previous section.

Public sector interventions such as the CBN’s intervention in the agricultural sector facilitate market participation and development will vary across contexts depending in large part upon the stage of agricultural transformation. Where the level of commercialization is limited, provision of the basic conditions such as on-farm and off farm infrastructure and market

information is likely to be a focus for the public sector. This role will require careful consideration in terms of the relative responsibilities for funding, construction, ownership and management of this infrastructure. Where these conditions are adequate, but input and output markets are, by virtue of low throughput and limited integration, susceptible to volatility and pose risks for participants, the public sector can play an important role in stimulating market activity through the provision of appropriate incentives and risk-sharing mechanisms.

When markets are functioning adequately, the public sector needs to take care not to crowd out private sector engagement, and a reduced role focusing on, for example, market regulation, market information systems and quality assurance may become more appropriate. In the absence of consideration of appropriate sequencing of interventions to lift critical constraints, there are significant risks that inappropriate policies will be implemented, particularly where formulated in situations of weak or inadequate information on domestic production and market activities. Governments need to recognize and adapt their changing role in supporting smallholder-based transformation. The strategic challenge is to facilitate, rather than crowd out private sector involvement, but at the same time, not to encourage public sector withdrawal at too early a stage of market development.

The appropriate blend of interventions will vary not only by place and by crop type, but over time. As the sector becomes more commercialized, with fewer producers engaged in subsistence or near subsistence production, and as government objectives with respect to the agriculture sector shift from those focused on food security and poverty reduction, to objectives more concerned with the wider set of services that the sector can provide, the appropriate level of intervention is likely to change.

The proportion of smallholders categorized as net sellers of maize, a main staple food crop, is estimated to be less than a third of all producers, with the majority of smallholders, while often selling some maize soon after harvest to generate cash income, needing to purchase more from the market than they sell during the full marketing year. Of those that are classified as net sellers, it is often the case that a much smaller proportion account for the bulk of sales, particularly to more integrated markets. In evaluating the impacts of alternative policy approaches, the status of different smallholder categories needs closer attention. Recent maize harvests have been well above average levels. The extension of the Farmer Input Support Program and interventions by the Food Reserve Agency to buy maize at prices far above market rates have occurred at the same time. Yet only 36 percent of smallholders were expected to sell any maize in 2010/11, of which 26 percent were net sellers and only 3.3 percent accounted for half of all maize sales. For the latter group of producers the FRA policy has rewarded efforts to increase production to reap the gains of the higher prices, but for other groups of smallholders, particularly net buyers, the implications are less clear.

In addition, private sector traders have been reluctant to invest in improving market infrastructure in an uncertain trade and market policy environment, meaning that the development of domestic markets may have been negatively affected. A second strand of the maize support policy to increased maize production was the Farmer Input Support Programme, which provided subsidized seed and fertilizer to producers. Although the programme has contributed to increased production, larger producers have received a disproportionate share of the inputs, in part as a result of their ability to generate increased surplus for sale. Evidence suggests that improved targeting of the programme to poorer

households could significantly reduce their food insecurity, since increased production by these farmers, even if not sold, would reduce their need to purchase maize.

Level of Policy Intervention in Agricultural Sector

Adding to the already difficult task of identifying which constraints require alleviation is the choice of how best to address them. The impact on agricultural production of policies at different levels of intervention will differ.

Macroeconomic and sectoral level policies, for example trade policies which maintain higher price levels in domestic markets, may work for farmers already operating in well integrated markets and who

have the capacity to react to changing price incentives. However, without also considering the response of net-consuming households and/or addressing the constraints inhibiting market participation of other categories of smallholder, the potential beneficial impacts of such policies can be limited to the more commercially oriented farmers.

Where the integration of producers into markets is limited, interventions to reduce barriers to market participation will often have a greater payoff than price policy. Such interventions are addressed at:

1. Improving connectivity to markets, for example through improved market information systems, by improving feeder roads or reducing the fees that traders need to pay to shift product between markets and

2. Facilitating the productive use of on-farm assets in the generation of higher and more consistent levels of marketable surpluses through, for example, training in alternative production methods.

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4.3 Discussion of Findings

The goal of this research is to analyse the efficacy of agricultural funding from various sources in various State of Nigeria using the first optimal resource allocation theoretical framework. Their findings are given as:

Income levels, poverty reduction, asset acquisition, and agricultural outputs are used to quantify community development, which is compatible with the first optimum resource allocation theory. In the model, controllable factors such as inflation rate, government spending, and degree of technology, climate change, currency rate, and corruption that may have an influence on beneficiaries' well-being were included.

This research result that the CBN's interventions in the agriculture sector should boost income levels, reduce poverty, increase capital finance, and achieve high agricultural outputs.

When asked what percentage influence the governance structure has on the effectiveness of agricultural funding, people would reply as follows: based on the selection People who agree 25% agree 41.1 percent, agree 50% agree 14.7 percent, select 75% agree 10.5 percent, and agree 100% agree 41.1 percent...so the dominance percentage of people who believe Central Bank of Nigeria intervention has an effect on poverty alleviation and income equality is greater than 101 out of 190.

There are reasons for the failure of several agricultural finance solutions in Nigeria are being investigated. 38.1 percent of respondents believe there is a lack of big problem awareness, 23.8 percent believe there is a lack of infrastructure, 22.2 percent believe there

is a lack of study and no record, and 15.9 percent believe country political considerations are to blame².

How different financing sources affected the recipients' quality of life³. The regression findings show that agricultural financing coefficients have a direct and substantial influence on the quality of life of the recipients. The second hypothesis was used to look at the effect of various funding sources on recipients' income. Receiving aid had a positive but little influence on beneficiaries' agricultural productivity⁴.

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Endnotes

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Chapter Five

Conclusion

5.1 Summary of Findings.

The findings of the study, as described in this section, are as examined in the course of the study;

1. Agricultural assistance has a major beneficial influence on the beneficiaries' way of life. This result is consistent with the welfare economics theory of First-Best Resource Allocation. The beneficial impact of agricultural financing is measured by the recipients' level of life as welfare shift along the first best ideal.
2. Agricultural aid has a strong beneficial influence on the beneficiaries' asset base. The findings are in accordance with the organizational hegemony hypothesis, which holds that reward system in the type of intervention aids in highlighting the intervention's recipients' administrative talents in terms of boosting their capital base, which also increases performance.
3. There is no discernible beneficial impact on agriculture financing or beneficiary income. The outcome is compatible with the welfare economics' First-Best Resource Allocation hypothesis. When resources are properly distributed, as in guaranteeing that the fund is utilized just for agricultural purposes, the income of the recipients rises resulting in a positive welfare improvement.
4. Agricultural financing has a favorable influence on the beneficiaries' production. The positive association discovered between agricultural funding and beneficiary agricultural productivity refutes the claim that strict management

might be unproductive, this is indirect opposition to the First-Best Resource Allocation concept. Specifically, the notion asserts that if producers are censored and recipients' decision is limited by financial restrictions, the beneficiaries would suffer, the receivers' productivity and production would suffer.

5.2 Conclusion

With the aid of the statistical bulletin of the CBN which contains both total loan of the CBN to agricultural sector and the total output of agricultural sector. It is considered as an efficient data because the information collected are reliable data. The 4A's of the CBN intervention model was also used to evaluate the impacts of the various financial schemes on agricultural development in Nigeria. However, it was noted that the impact across various indicators were mostly positive, though marginal. This could be attributed to the conservative nature of the model parameters and the relative amount of interventions, disaggregated sectorial effects of the interventions are proposed as areas for further study. Other intervention schemes of the government for the agricultural sector can be incorporated to reflect a more holistic picture of the impact as well. It is therefore recommended that more funds should be allocated to agriculture especially by various agencies so as to maximize the impact of the sector.

To conclude this thesis, it finds out that agriculture's development and transformation in Nigeria rely on ongoing public-sector involvement. The majority of agriculture intervention initiatives have focused on delivering funding to persons in need, whereas numerous market-based alternatives have resulted in significant advantages for rural communities. This study investigates the relationship between agricultural financing sources and their influence on state-level economic growth, such as poverty reduction, income inequality,

and procurement. This study answers that requirement by determining the most efficient methods for employing agricultural intervention funds to help recipient communities notwithstanding these advantages and income disparities. In short, research revealed that the CBN's agricultural initiatives should enhance income levels, alleviate poverty, expand capital financing, and achieve high agricultural yields.

The CBN is expected to play an increasingly important role against the background of previous gross under-performance. To keep up with this expectation, it will need to transform in ownership, management, human capital, organization, scope of operation, processes, and resources. However, these cannot happen without the buy-in and support of its current owners.

With the required government (ownership) support and open-mindedness to partial privatization, reforms and modernization, the Bank will achieve good and sustainable financial performance; and, good socio-economic behaviour, through rapid, sustainable and inclusive growth, wealth and job creation, food security (the beginning of true independence and national self-respect) diversified and stable economy, foreign exchange earnings through increased export, foreign exchange conservation through import substitution agric-led industrialization, inexpensive local raw material for industry, and increased FDIs.

5.3 Recommendations

This study reiterates that allocation of additional funds to agriculture especially by various agencies can maximize the impact of the sector. However, considering the impact of the intervention on the income and utility of the poorer households, it is recommended that:

1. Promotion of Favorable Economic Conditions: Increasing the economy's potential to generate more products and services is what economic growth entails. Economic

stability may be achieved by the government controlling the overall price of products and services in the country, as well as taxes and expenditures.

2. For the programme to be more effective, targeted extensive support must be provided to poor farmers to improve their competitiveness and ensure they are not crowded out by the rich farm holders;
3. Access to markets for fair and competitive prices needs to be encouraged; and
4. Adequate monitoring and evaluation mechanisms should be put in place to ensure that intervention programmes meant for poor households reach the intended beneficiaries and achieve desired impact.
5. To further improve access to markets, commodity exchanges need to be made more functional. The enablers for the commodity exchange to be effective include:
 6. Improved warehousing and storage capacity;
 7. Improved enabling communication and transport infrastructure;
 8. Strengthened regulatory framework to govern the enforcement of contracts in spot markets to guarantee property rights; and Strong and effective policies and legal framework.

5.4 Contribution to Knowledge

This research will contribute to agriculture sector of Nigeria. We shall concentrate on how the Central Bank of Nigeria Intervention Funds play an important part in the country's development strategy and economic progress. We will investigate how these funds impact the growth process investigating the governance influence on agricultural financing

performance, and how to alleviate poverty and offer people more strength to achieve better livelihoods.

5.5 Suggested Area of Further Research

Agriculture is Nigeria's most important industry, it contributed for 24 percent of the country's GDP on average. Furthermore, the sector provides employment more than 36% of the workforce in the country, putting it the country's largest provider of labor. The focus of future study should be on what kind of agricultural policies were used. There should be a focus on and study of modern processes and technologies such as good dividend variety (HYV) seeds, tractors, pesticides, irrigation canals, and fertilizers it also contained a proper price structure for agricultural output as well as land reforms. As a result, it is necessary to concentrate on the research how to strengthen the country's agricultural industry.

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- Central Bank of Nigeria 1989 till date.
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- Fellow. Chartered Institute of Bankers.
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E. Publications

Learned Journals

Adebisi Adedeji (2021) Apex bank intervention and agricultural development in Nigeria:
Plotting a nexus. Lead City Journal of Management and Social Sciences Vol. 4

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The University Compliance Certification

This is to certify that this Thesis written by Adebisi Akeem Adedeji, with matriculation number LCU/PG/001244 of the Department of Politics and International Relations, Lead City University, Ibadan, Oyo State, Nigeria is in full compliance with the approved University format and style.

Signature

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