AEFUNAI JOURNAL OF ECONOMICS, FINANCE AND DEVELOPMENT STUDIES (AEFUNAIJEFDS)
ISSN (Print): 2536-6793 | **ISSN (Electronic):** 2536-6742 *Volume 2 (2) September, 2025*

Impact of Microfinance Credit on Agricultural Productivity in Nigeria

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DOI: 10.48028/iiprds/aefunaijefds.v2.i2.08 ***Corresponding Author:*** Chibunna Onyebuchi Onwubiko

Abstract

This study examined the impact of microfinance credit on agricultural productivity in Nigeria. The objectives were to assess the impact of microfinance banks loans and advances on agricultural sector output in Nigeria; determine the relationship between microfinance banks agricultural credit guarantee scheme and agricultural sector output in Nigeria and evaluate the relationship between microfinance banks lending rate on agricultural sector output in Nigeria. Ex-post facto design was adopted. Data were collected from CBN Statistical Bulletin covering the period 1992 to 2023. Statistical analysis tool applied was multiple regression. Findings revealed that microfinance banks loans and advances have positive and significant impact on agricultural sector output in Nigeria. It also showed that microfinance banks agricultural credit guarantee scheme has no significant impact on agricultural sector output in Nigeria. It was further revealed that microfinance banks lending rate have no significant impact on agricultural sector output in Nigeria. The study concluded that microfinance credit has impacted positively on agricultural productivity in Nigeria for the period under review. Based on the findings, it is recommended that the government and Central Bank of Nigeria must ensure that microfinance banks provide more credit facilities to the rural famers to address the issue of inability to access capital for agricultural development and productivity. Lending rate for farmers should be reduced.

Keywords: *Agriculture, Microfinance, Loan and advances, Credit guarantee scheme, Lending rate*

Background to the Study

Agriculture is a means through which food is produced to feed a nation and generate foreign exchange from export of agro products for economic and national development. It entails using various inputs considered as resources to cultivate the land and produce crops; it also includes forestry, livestock and fishery, which are processed, stored and distributed to people for consumption (Emenuga, 2019). According to Nasir (2016), a strong agricultural sector would enable developing nations to resolve economic crises ravaging their economic development by providing food for the teeming population, feed for animals, raw materials for industries, generate employment, income, and foreign exchange earnings for the country.

In recent times, the performance of the agricultural sector in Nigeria, especially crop production, and its share of contributions to the nation's GDP have drastically reduced owing to the oil booms of the late 1970s that led to the neglect of agriculture (Efionayi, Vincent & Nwaigwe, 2020). In addition, factors such as education, infrastructure, and inflation have also led to poor performance of the sector. Other factors include lack of modern inputs, credit facilities, environmental degradation, and inadequate research and extension services (Zakaree, 2014). Lack of sufficient funds and credit facilities seems to be the core issue facing agriculture, as other matters are directly and indirectly linked to it. This has led to the recognition of microfinance banks as a source of microcredit for farmers.

Microfinance banks are established for the purpose of meeting the financial needs of rural communities who find it difficult to raise capital from the traditional banking institutions in Nigeria. Microfinance deals with small groups requiring loans for business growth and expansion and also uses microcredit as a tool to enhance economic development for the poor in the society (Akinadewo, 2020). Microcredit as an important strategy, in the global fight against poverty, is one of the products of microfinance institutions for poor people to become self-employed and self-reliant (Muthoni, 2016).

The 2012 Central Bank of Nigeria rules and regulations for the supervision of microfinance banks segregated the services into permissible activities and prohibited activities. The March 2020 Exposure Draft of the guidelines for the regulation and supervision of microfinance banks in Nigeria, however, changed the prohibited activities to non-permissible activities (CBN, 2020). Microfinance banks were established to cater for poor entrepreneurs who are excluded from the financial system because of the stringent lending conditions of the deposit money banks (Zaman & Sakib, 2023). The banks give loans to the poor entrepreneurs, such as farmers, who ordinarily cannot access funds from the conventional banks. This money received as loan enables them to boost their businesses, improve the level of income, and increase their standard of living as well as stimulate agricultural production (Ihenetu, 2021). The prohibited activities for MFBs include non-acceptance of public sector (government) deposits except for the permissible activities; foreign exchange transactions; international commercial papers; international corporate finance; international electronic fund transfers; check clearing activities; dealing in land for speculative purposes; and real estate except for its use as office accommodation (CBN, 2021). The cardinal objective of microfinance is to provide a small amount of capital in order to allow micro-entrepreneurs such as farmers to

reap the benefits of their labour. However, because of the economic importance of microfinance, the developed and developing countries consider it as a means to develop microenterprises and the agricultural sector (Abubakar, Zainol, & Abdullahi, 2015). The central essence of microfinance is therefore to provide loans to micro-entrepreneurs to invest in their businesses as well as allow them to grow out of poverty. It enables women to gain respect from their family members as well as make them contribute positively to their community. Microfinance programmes are used for rural economic development, empowering of women and low-income individuals. Microfinancing is not a new phenomenon in Nigeria as evidenced by such cultural, economic activities as Esusu, Adashi, Otataje, etc. which were practiced with the sole purpose of providing funds for producers in the rural communities (Ihetu, 2021). The current effort of government is to modernize it in rural and urban communities to improve the productive capacity of the rural and urban poor, enhance their economic standing which elevates the level of their national economy (Onyeneke & Iruo, 2012).

With the emergence of microfinance banks, access to credit has been enhanced, as it is now less stringent, unlike that of the conventional banks (Aguda & Aliyu, 2024). Microfinance banks credit are so small that they are typically insecured and given on the basis of internal information about a borrower. This, according to Solomon (2017), provides access to credit, which enhances agricultural business prospects and food security. Solomon stated further that despite the relative challenges of the microfinance banks, they have actually helped reach out to the poor who organize themselves into groups or individuals with societal recognition. In the view of Anderibom (2015), microfinance has therefore become a tool designed to improve the capacities of the economically active poor to participate in agricultural development.

The importance of finance and the role expected of microfinance banks as financial intermediaries in providing finance for agricultural development in Nigeria has received scholarly attention. It is sad to note that most empirical studies have shown a negative result on traditional commercial banks credit to the agriculture sector (Muftaudeen & Hussainatu, 2014; Solomon, 2017; Ekine & Onukwuru, 2018). Majority of them have concluded that there is a shortfall in commercial banks credit to agriculture, yet very few studies have looked at the role of microfinance banks in agricultural development. It is therefore imperative to find out the impact of microfinance bank credit on agricultural sector development in Nigeria. One of the critical challenges now is making microfinance a sustainable and ubiquitous methodology. "Scaling up" requires an increase in the scope (number of individuals reached), impact (effect on the well-being of borrowers), and depth (ability to reach the poorest of the poor) of microfinance. The microfinance providers charge the target group interest rates that enable the microfinance institution to break even without the subsidy and risk and still generate a profit. With the high lending rate charged by microfinance banks in order to break even, it makes it harder for borrowers to make significant returns, considering that most of them are farmers or small-scale business owners. These problems and many more have made this study a necessity.

Objectives of the Study

The main objective of this study is to examine the impact of microfinance credit on agricultural productivity in Nigeria. The specific objectives of the study are:

i. To assess the impact of microfinance banks loans and advances on agricultural sector output in Nigeria.
ii. To determine the relationship between microfinance banks agricultural credit guarantee scheme and agricultural sector output in Nigeria.
iii. To evaluate the relationship between microfinance banks lending rate and agricultural sector output in Nigeria.

Research Questions

The following research questions are formulated to guide the study:

i. What is the impact of microfinance banks loans and advances on agricultural sector output in Nigeria?
ii. What is the relationship between microfinance banks agricultural credit guarantee scheme and agricultural sector output in Nigeria?
iii. What relationship exists between microfinance banks lending rate on agricultural sector output in Nigeria?

Review of Related Literature

Microfinance Bank

Microfinance connotes the provision of financial services to the poor and people at the lower strata of society who are traditionally not served by the conventional financial institutions, especially the commercial banks (Onwuka, 2021). Muktar (2009) defined microfinance banks as institutions constructed as companies licensed to carry on the business of providing microfinance services such as collection of savings, loan provision, insurance money transfer services, and other nonfinancial services that are needed by the poor as well as microenterprises. The clients of microfinance banks are typically self-employed low-income entrepreneurs in both urban and rural areas, they include traders, subsistence farmers, street vendors, service provides (hair dressers, motorcycle riders), blacksmith and artisans (Aguda & Aliyu, 2024).

Anderibom (2015) defined microfinance banks as the financial institutions that are concerned with the alleviation of poverty and through which the economically active poor are encouraged and routed into the larger economy. According to Madugu and Bzugu (2012), microfinance banks provide credit to the unbanked sector of the economy and development of rural areas as well as the financial empowerment of those areas. While substantial progress has been made in this respect, there is still a need for further improvement; with the expansion of the agricultural sector, the financial need of the sector is also increasing, and there are significant opportunities for microfinance banks to deploy their funds in a remunerative manner (Ndanecho & Akum, 2009).

Accordingly, the features designed to differentiate microfinance banks from the traditional financial institutions are the administrative system of giving small and uncollateralized loans

to people in the rural communities, with a primary focus on agriculture, agro-allied activities, and small-scale businesses, among others (Obasi, Chukwuka & Akwawa, 2014). Postulating, however, Ailemen, Asaolu, and Areghna (2016) argued that the key issues in microfinance include the realization that the financial needs of the poor people are diverse, like loans, savings, money transfer, and insurance, which the MFBs provide. The scholars further opined that MFB is a powerful tool in the war against poverty through the building of assets and serving as an absorber to external vagaries and financial shocks. Thus, microfinance banks will enhance savings and investment opportunities through the mobilization of local savings into productive activities; will improve income distribution of the Nigerian population; will encourage rural industrialization, which will lead to a reduction in rural-urban migration; and also, will encourage entrepreneurial behavior among the youths, women, and the poor in becoming self-reliant (Asor, Essien, & Ndiyo, 2016).

Agriculture

Asoegwu and Asoegwu (2007) defined agriculture as the practice of cultivating the soil and raising livestock to produce plants and animals useful to humans and, in some instances, animals. Agriculture is the simplification of nature's food webs and the rechanneling of energy for human planting and animal consumption. Iganiga and Unemhilin (2011) define agriculture as the production of food, feed, fiber, and other goods by the systematic growing and harvesting of plants and animals. They stated further that it is the science of making use of the land to raise plants and animals. Agriculture is the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products. It is as old as man (Adewale, Lawal, Aberu & Toriola, 2022). It is also an important development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. It is the first occupation of mankind (Ogbuabor & Nwosu, 2017).

According to Solomon (2011), agriculture plays a major role in man's life; it is the main source of livelihood, so people should at least learn about it. Researchers say that it is difficult to pinpoint exactly where and when it started, but it is believed that agriculture was developed some 10,000 years ago, and the places that show traces of the earliest planting and gathering of crops were India, Egypt, and Western Asia. Agriculture was the key human economic activity in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. Agriculture constitutes the main source of employment of the majority of the world's poor (Cervantes & Dewbre, 2010; Adegoroye, Olutumise & Aturamu, 2021; Ogunyemi, Olutumise & Adegoroye, 2022). In Sub-Saharan Africa, sixty per cent (60%) of the economically active population work in the agricultural sector. Agriculture has been an important sector in the Nigerian economy in the past decades and is still a major sector despite the oil boom; basically, it provides employment opportunities for the teeming population, eradicates poverty, and contributes to the growth of the economy (Izuchukwu, 2011). The history of agriculture dates back thousands of years, and its development has been driven and defined by greatly different climates, cultures, and technologies. However, all farming generally relies on techniques to expand and maintain the lands suitable for raising domesticated species. For plants, this usually requires some form of

irrigation, although there are methods of dryland farming; pastoral herding on rangeland is still the most common means of raising livestock. In the developed world, industrial agriculture based on large-scale monoculture has become the dominant system of modern farming, although there is growing support for sustainable agriculture (e.g., premature or organic agriculture) (Adewale, Lawal, Aberu & Toriola, 2022). Modern agronomy, plant breeding, pesticides and fertilizers, and technological improvements have sharply increased yields from cultivation but at the same time have caused widespread ecological damage and negative human health effects (EPA, 2019). Selective breeding and modern practices in animal husbandry, such as intensive pig farming, have similarly increased the output of meat but have raised concerns about animal cruelty and the health effects of the antibiotics, growth hormones, and other chemicals commonly used in industrial meat production (Sulaimon, 2021).

The major agricultural products can be broadly grouped into foods, fibers, fuels, and raw materials. In the 21st century, plants have been used to grow biofuels, biopharmaceuticals, bioplastics (Brickates, 2007), and pharmaceuticals. Specific foods include cereals, vegetables, fruits, and meat. Fibers include cotton, wool, hemp, silk, and flax. Raw materials include lumber and bamboo. Other useful materials are produced by plants, such as resins. Biofuels include methane from biomass, ethanol, and biodiesel. Cut flowers, nursery plants, tropical fish, and birds for the pet trade are some of the ornamental products. In 2007, one-third of the world's workforces were employed in agriculture. The services sector has overtaken agriculture as the economic sector employing the most people worldwide. Despite the size of its workforce, agricultural production accounts for less than five percent of the gross world product (an aggregate of all gross domestic products).

The significance of credit in agricultural development

Agricultural finance is one of the several credit vehicles used to finance agricultural transactions, including loans, notes, bills of exchange, and bankers' acceptance specifically for agricultural producers (Nteegah, 2017). These types of finances are adapted to the specific financial needs of farmers, which determine production, planting, harvesting, and marketing cycles to achieve agricultural growth and development and facilitate economic growth and development (Anthony, 2010). Agricultural credit as a device for facilitating the temporary transfer of purchasing power from one individual or organization to another is simply the ability to command present use of goods in return for a promise to pay in the future. Thus, this brings together in a more productive union the skilled farm manager with small financial resources but lacking farm management stability. According to Adeshina, Tomiwa, and Eniola (2020), credit can be considered from its ability to energize or motivate other factors of production. It can make the latent potential or underused capacity functional. He further said that credit acts as a catalyst that activates the engine of growth, enabling it to mobilize its inherent potential and advance in the planned or expected direction. It follows, therefore, that the greater the influx of capital, the greater the propensity of the economy to move in its given path. Credit therefore constitutes the power or key to unlock latent talents, abilities, vision and opportunities which in turn acts as the mover of economic development (Egwu, 2016).

Nasir (2016) provides that agricultural financing is used to fund operations, purchase equipment, or acquire more land for production. The provision of inputs to the agriculture sector is important because credit or loanable funds help in determining access to all the needed inputs to facilitate farming. Agricultural finance is the process through which farmers 'access credit, loans, donations, assistance, or capital to acquire the needed inputs to increase their productivity, output, incomes, employment, savings, investment, and standard of living and reduce their poverty, income inequality, and poor living standard. Farmers require credit to purchase seeds, fertilizers, and herbicides; buy or rent mechanized equipment; and related services (Adewale, Lawal, Aberu & Toriola, 2022).

The role of finance in agriculture, just like in the industrial and services sectors, is very crucial given that it is oil that lubricates production for smooth and greater productivity (Adewale et al., 2022). Credit is the backbone for any business and more so for agriculture, which has traditionally been a non-monetary activity for remote rural farmers. He further asserted that agricultural credit is an integral part of the process of the modernization of agriculture and the commercialization of the rural economy. Finance for agricultural development has an increasing role in contemporary times. According to Udoka, Mbak, and Duke (2016), finance affects economic growth, stagnation, or even decline in any economic system. The Nigerian government recognizes that finance is an essential tool for promoting agricultural development because the agriculture sector is one of its main sources of sustainability. Access to finance for agriculture is an incentive for increasing the agricultural sector's performance; it stimulates productive growth and supports the survival of small and new enterprises. Ubesie et al., (2019) noted that access to finance increases the average inputs of labor and capital, which has positive effects on production output. Irrespective of the benefits that can be derived from financing agriculture, there is an inherent risk of loan defaults amongst farmers, which discourages banks from lending to farmers.

Finance plays an important role in the process of agricultural development, and having access to credit facilities for farming purposes is an incentive for increasing the agricultural sector's performance. It is important that financial resources be made available to create access for farmers to contribute to agricultural development (Ayeomoni & Aladejana, 2016). In Nigeria, agricultural credit is necessary to enable the farmers to take advantage of new technologies in the form of farm machinery and pay for such items as improved varieties of seeds and livestock, fertilizers, pesticides, labor, and other running costs (Ejike, Ohajianya & Lemchi, 2013). 80% of the small and medium rural farmers of Nigeria lack access to adequate and just agricultural credit to source sufficient inputs and boost their agricultural production (Adewale et al., 2022).

In the view of Nwankwo (2013), the role of agricultural credit as a factor of production to facilitate economic growth and development, as well as the need to appropriately channel credit to rural areas for economic development of the poor rural farmers, cannot be overemphasized. Agriculture contributes immensely to the Nigerian economy in many ways, namely, in the provision of food for the increasing population; the supply of adequate raw materials to a growing industrial sector; a major source of employment generation and foreign

exchange earnings; and the provision of a market for the products of the industrial sector (Food and Agricultural Organization, 2023). The agrarian sector has a strong rural base; hence, generating concern for agriculture and rural development. Support for agriculture is widely driven by both the government and the public sector, which has established institutional support in the form of agricultural research, extension, commodity marketing, input supply, and land use legislation to fast-track the development of agriculture and rural economic empowerment (CBN, 2022). Although the commercial banks finance agricultural activities, their credits are urban-based and so small that their impact cannot be felt in the rural areas where farming actually takes place. Lack of priority attention to the rural population in credit delivery by commercial and other banks in the economy contributed to the depressed economic conditions in the rural economy, and this situation also affects the overall economic growth and development of the nation (Akinuli & Osagiede, 2023).

Microfinance banking and agricultural development in Nigeria

Microfinance banks were established to cater for poor entrepreneurs who are excluded from the financial system because of the stringent lending conditions of the deposit money banks. The banks give loans to the poor entrepreneurs who ordinarily cannot access funds from the conventional banks. This money received as a loan will enable them to boost their businesses, improve the level of income, and increase their standard of living (Ihenetu, 2021). The poor in this context refers to the active poor, that is, the poor entrepreneurs who are engaged in economic activities but do not have enough funds that can liberate them from the shackle of poverty. The poor people, especially rural dwellers, have very limited, if not, no access to the financial services provided by commercial banks due to the disparities between their needs and concerns, and the procedures of the banks (CBN 2020).

As already noted microfinance banks were founded because of the perceived deficiencies in the existing financing schemes for the poor and small businesses. They were licensed to begin operations in 2007 and existing community banks and NGO microfinance institutions that met the conditions spelt out by CBN for licensing were allowed to transmute into microfinance banks. To qualify for a microfinance, license an existing community bank was required to increase its paid-up capital from ₦5m to ₦20m. Unlike the community banking policy framework which compulsorily confined all community banks to unit banking, the microfinance banking guideline permitted the branching of microfinance banks within a state (CBN, 2007).

Accordingly, the features designed to differentiate microfinance banks from the traditional financial institutions are the administrative system of giving small and uncollateralized loans to people in the rural communities, with a primary focus on agriculture, agro-allied activities, and small-scale businesses, among others (Obasi, Chukwuka, and Akwawa, 2014). Postulating, however, Ailemen, Asaolu, and Areghna (2016) argued that the key issues in microfinance include the realization that the financial needs of the poor people are diverse, like loans, savings, money transfer, and insurance, which the MFBs provide. The scholars further opined that MFB is a powerful tool in the war against poverty through the building of assets and serving as an absorber to external vagaries and financial shocks. Thus, microfinance

banks will enhance savings and investment opportunities through the mobilisation of local savings into productive activities; will improve income distribution of the Nigerian population; will encourage rural industrialisation, which lead to reduction in rural-urban migration; and will encourage entrepreneurship behavior among the youths, women, and the poor in becoming self-reliant (Asor, Essien & Ndiyo, 2016).

The performance of any microfinance bank cannot be determined in isolation, but from the data gathered, studies have noticed major discrepancies in the amount of deposit mobilized and loan disbursement on a yearly basis. Throughout the years, the deposit was far higher than the loans. However, it is disheartening to notice that from the year 2001 the deposit mobilization rate went so high, and in some years, like 2003 to 2006, it was more than double the loans and advances for the same period. The implication of this scenario is that cheap funds are sourced from the rural areas without an equivalent disbursement in the form of loans and advances to the same community where the deposits were mobilized. Perhaps these funds might have been invested by these microfinance banks outside the rural areas for better income generating ventures (Oluyombo, 2010).

This is perhaps one of the important roles of microfinance banks, as the loans extended are used to expand existing businesses and, in some cases, to start new ones. According to CBN (2008), microfinance loans granted to clients are increasing from 2007 to date, and most of them go to financing microenterprises in rural areas. Ketu (2008) observed that microfinance banks have disbursed more than N800 million in microcredits to over 13,000 farmers across the country to empower their productive capacities. As such, it is expected that agricultural output will increase with the increase in funding. The entrepreneurial capacity of the farmers will thus improve. Other roles played by microfinance banks include reorientation of the rural populace on sound financial practices, as well as issues such as reproductive health care and girl child education. All these areas have a direct link with the entrepreneurial capabilities of the rural people (Muktar, 2009).

Agriculture Credit Guarantee Scheme and Agricultural Development in Nigeria

Agricultural development is a process that involves adoption by farmers (particularly small farmers) of new and better practices (Aziz, 2018). This is due to the fact that most of the new practices have to be purchased, but few farmers have the financial resources to finance it. It was in recognition of this fact that the Federal Government at various periods put in place credit policies and established credit institutions and schemes that could facilitate the flow of agricultural credit to farmers (Eyo, Nwaogu & Agenson, 2020). One such laudable scheme has been the Agricultural Credit Guarantee Scheme Fund (ACGSF) (Sulaimon, 2021).

The Agricultural Credit Guarantee Scheme Fund is to encourage banks to lend to those engaged in agricultural production and agro-processing activities. Thus, the specific objectives of the scheme are the stimulation of total agricultural production for both domestic consumption and export and the encouragement of financial institutions to participate in increasing the productive capacity of agriculture through a capital lending program. Nwosu, Oguoma, Ben-Chendo, and Henri-Ukoha (2010) noted that the scheme is expected to

provide a guarantee on loans granted by financial institutions to farmers for agricultural production and agro-allied processing. The fund's liability is limited to 75% of the amount in default net of any amount realized by the lending bank from the sale of the security pledged by the borrower. Since the inception of the scheme in 1978, there has been a continuous aggregate increase in the number of loans to agriculture from a paltry 341 loans amounting to N11.28 million in 1978 to 3,571 loans amounting to N218.60 million as of May, 2006. In addition, data at the Central Bank of Nigeria show that a total number of 453,748 loans valued at N11.28 billion were guaranteed from the inception of the scheme in 1978 to May, 2006. This translates to an average of 16,205 loans valued at N402.86 million per annum (Sulaimon, 2021).

The agricultural activities that can be guaranteed under the scheme include the:

a. Establishment and / or management of plantation for the production of rubber, oil palm, cocoa, cotton, coffee, tea and other cash crops.
b. Cultivation and production of cereals, tubers, and root crops, fruits of all kinds, beans, groundnuts, peanuts, beniseed, vegetables, pineapples, bananas and plantains;
c. Animal husbandry that covers poultry, piggery, rabbitry, snail farming, rearing of small ruminants like goats, sheep and large ruminants like cattle.

The scope of (c) above was expanded in the amendment decree of 1988 to include fish culture, fish capture, and storage. The scheme guarantees loans to farmers from lending institutions up to the tune of 5 million naira for individual farmers and 10 million naira for group/cooperative farmers (CBN, 2022). In the event of default in loan repayment, the lending bank will serve the guarantor (the CBN) a notice of default. Afterwards the lending bank is expected to make further effort as it deems fit to recover the amount in default from the borrower. If any balance remains after the above steps and the default persists after 6 months of notice of default, the lending bank could realize the pledged security and thereafter put a claim on the scheme fund so as to realize 75% of the balance outstanding as at the time of application for claim to the bank (Eyo, Nwaogu & Agenson, 2020). By 2022, the loans guaranteed stood at over N10 billion, corresponding to about 443,660 loans (CBN, 2022). Loans fully repaid totalled N6 billion in value and 310,653 in number by the same year, representing 60.08 percent and 70.02 percent, respectively, of the value and number guaranteed. The statistics cut across all major crop and livestock enterprises, including long-gestation tree crops. The CBN (2022) emphasizes high volumes of loans guaranteed and repaid, to the extent that both indices, among others, form part of the appraisal of the ACGSF scheme as well as that of its development finance officers. This is quite in line with the concept of guarantee, which is intended to expand lending and induce high repayment performance. Within the period of observation, according to the CBN (2022), about N36.7 million in agricultural credit facilities was granted to the farmers in the sector in 1981, which decreased slightly by about 13.3 percent to N31.9 million before rising by about 25.1 percent to attain N39.9 million in 1983. This trend in credit facilities to farmers within the period followed the government's green revolution program introduced in 1980 with the aim of ensuring self-sufficiency in food production and introducing modern technology into the Nigerian agricultural sector through the introduction of modern inputs such as high-yielding variety seeds, fertilizer, and tractors.

The agricultural funds to the farmers attained N48.2 million in 1985 and rose sharply by about 114.5 percent in 1990 to attain N103.3 million and further increased to N1,266.6 million, or 61.17 percent, in 2022. The sharp increase in the credit facility to farmers within this period could be linked to two government agricultural policies within the period, that is, the Directorate of Food, Roads and Rural Infrastructures (DFRRI), with the objective, among others, to identify areas of high production potential for the country's priority food and fiber requirements and to support production of such commodities along agro-ecological zones within the context of one national market with unimpeded interstate trade in farm produce (Magaji, Musa & Yusuf, 2022).

The domestic supply of food within the period of observation, however, cannot be said to follow the same trend as the credit facilities extended to the agricultural sector by the Central Bank of Nigeria. For instance, total food supplied domestically was 57.06 million tons as of 1988 and rose by 20.26 percent to attain 68.79 million tons in 1990. There was a further increase of about 41.9 percent in domestic food supply in 1995, and it attained it peak in 2000 with an increase of about 152.97 percent. The domestic food supply decreased sharply by about 45.38 percent in 2005 and then slightly rose by about 35.82 percent in 2011. Comparing the trend of agricultural credit guarantee funds extended to the agricultural sector with the domestic food supply within the period of observation, the highest rise in the fund was in 2005, with an increase of 2,567 percent; during the same period, there was a decrease of about 45.38 percent in domestic food supply (Zakaree, 2014). However, the domestic food supply attained its peak in 2015 with an increase of about 152.9 percent, when the increase in agricultural credit facility to the agricultural sector was about 116.7 percent (CBN, 2022). A study carried out by Sulaimon (2021) found that the value of loans guaranteed was identified to be positively related to the number of loans guaranteed and the number and value of loans repaid, and inversely related to the policy instrument. The findings of the author suggest that agricultural output has increased, hence the ability to pay back the loans by farmers. Although Izuogu and Atasie (2015) called on the Nigerian agricultural extension system to be redefined for effective agricultural transformation, which can be achieved through decentralization, pluralism, cost sharing, cost recovery, participation of stakeholders in development initiatives, and the decisions and resources that affect them.

Lending Rates and Agricultural Sector Output in Nigeria

Credit, which may be on a short, medium, or long-term basis, is one of the services that deposit money banks do render to their customers. In other words, banks do grant loans and advances to individuals (Adewale et al., 2022), business organizations, and the government in order to enable them to embark on investment and development activities as a means of aiding their growth in particular or contributing toward the economic development of a country in general (Felicia, 2011; Oparinde, Olutumise, & Adegoroye, 2023). However, deposit money banks decisions to give out loans are influenced by a lot of factors, such as the prevailing interest rate. Rasheed (2010) states that the Nigerian economy saw different interest rates for different sectors from the 1970s through the mid-1980s (Regulated Regime, 1960-1985). The preferential interest rates assumed that the market rate, if universally applied, would exclude some of the priority sectors. Interest rates were, therefore, adjusted

periodically with 'visible hands' to promote an increase in the level of investment in the different sectors of the economy. For example, agriculture and manufacturing sectors were accorded priority, and the commercial banks were directed by the Central Bank to charge preferential interest rates (varying from year to year) on all loans and advances to small-scale industries. Since 1986, the inception of interest rate deregulation, the government of Nigeria has been pursuing a market-determined interest rate regime, which does not permit direct state intervention in the general direction of the economy (Ogunyemi, Olutumise & Adegoroye, 2022).

Prior to the deregulation of the banking sector, interest rates were administratively determined by the Central Bank. Both the deposit and lending rates were fixed by the CBN on the basis of policy decisions. At that time, the major goals were socially optimum resource allocation and promotion of orderly growth of the financial market, as well as reduction of both inflation and the internal debt service burden on the government. During the period 1970 to 1985, the rates were unable to keep pace with the prevailing inflation rate, resulting in negative real interest rates (Adelakun, 2011). According to Adegoroye, Olutumise, and Aturamu (2021), the existence of externalities and imperfections in the financial markets of most developing economies has often called for intervention by the government through its appropriate agent (the Central Bank of Nigeria in the case of Nigeria) to encourage investment and to re-channel credit to agriculture with a high social rate of return but a low commercial rate of return.

Theoretical Framework

Financial Intermediation theory

Financial Intermediation Theory was developed by Guttentag and Lindsay in 1968. Financial intermediation is the transfer of funds from agencies that have a surplus to agencies that have a deficit through financial intermediation. Financial intermediation is based on the regulation of money production and of saving and financing of the economy (Bert & Dick, 2003). The assumption of financial intermediary theory is that at least one party to a transaction has relevant information, whereas the other(s) do not. The criticism of the theory is the applications of the theory—that is, the theory only considers asymmetries in one direction. It may, however, be that there are also information differences in favor of the other party. Another criticism is the competitive dynamics assumed in the model are simplistic (Cole & Akintola, 2021). The importance of the theory to this present study is that microfinance banks are seen as intermediaries between savers and borrowers who are mostly the poor and small-scale businesses at the grassroots. With the low interest rates and ease of accessing loans, these groups of people are able to engage in businesses that will increase their financial status and reduce their poverty. Again, access to cheap credit increases the profitability and income status of the poor in the society.

Empirical Review

Akemieyefa (2024), investigated the effect of microfinance bank performance on agricultural productivity in Nigeria. Empirical results on the impact of bank credit on agricultural productivity are inconclusive. These studies demonstrated diverse results, which are

debatable and conflicting. Agricultural productivity was proxied by crop output and livestock output. The datasets for the study were collocated from the Central Bank of Nigeria (CBN) from 2005 to 2020. The formulated hypotheses are tested using the Granger causality test. The result revealed that microfinance credit has a non-significant effect on both crop output and livestock output. The non-significant effect theoretically can be attributed to information asymmetry, the bank capital channel, moral hazard, and adverse selection. The results indicated that farmers lack access to microfinance credit facilities. The results revealed that to a large extent, farmers are self-sponsored, and for economic diversification, governments must encourage effective ways to increase bank credit flow to the agricultural sector through efficient bank intermediation. It recommended more agricultural banks and improvement on the operational activities of the existing ones to ensure direct credit to agricultural activities. Policies creating bottlenecks and undermining credit flow to agricultural productivity should be eliminated.

Ananwude and Lateef (2024), determined the effect of microfinance bank activities on economic development in Nigeria. The study specifically investigated the effect of microfinance credit, microfinance deposit, and microfinance investment on the human development index. Secondary data from 1986 to 2022 were carefully sourced from the Central Bank of Nigeria (CBN) statistical bulletin and the World Bank. Ordinary Least Square (OLS) was followed in estimating the model. The result revealed that microfinance bank loans have no significant effect on the human development index; microfinance bank deposits have no significant effect on the human development index; and microfinance bank investments have no significant effect on the human development index in Nigeria. Based on the foregoing, the study recommended that with respect to microfinance participants, the government authorities, and the microfinance institutions in Nigeria, the initial focus of microfinance institutions should be providing loans to improve consumption.

Ayodele and Adesanya (2022), examined the effect of financial intermediation by microfinance banks on the output of the agricultural sector in Nigeria between 1992 and 2018. Data were collected in this study from the secondary sources and analyzed by means of inferential statistics. Specifically, the study employed the Vector Error Correction model technique in data analysis after establishing the stationarity of the data series by means of the Augmented Dickey-Fuller test and determined the long-run equilibrium relationship via the Johansen cointegration technique. Findings from this study revealed that in the long run, there was a positive and significant relationship between microfinance banks' credits to agriculture and the output of the agricultural sector in Nigeria, as MCA was found to be positively promoting agricultural output by about 2.7%. Also, microfinance banks' gross saving deposit (MGSD) was found to have a negative and significant relationship with agricultural output both in the short run and in the long run. Moreover, the deposit interest rate was found in this study to exhibit positive behavior in the short run but a negative and significant relationship with agricultural output in the long run. The lending interest rate, by the finding of this study, negatively facilitated agricultural output in the short run but maintained a positive relationship with agricultural output in the long run. Based on these findings, it concluded that financial intermediation by microfinance banks was an

insignificant determinant of agricultural output in Nigeria. Consequently, it was recommended that microfinance banks should be brought under close monitoring and supervision by the monetary authorities to ensure that a significant portion of their deposits is not left fallow and unproductive but optimally converted to credits for lending, especially to the grassroots farmers who lack investable capital for agricultural investment.

Taiwo, Naomi, and Isibor (2020), examined microfinance as a strategy of small-scale agricultural development. The Covenant University microfinance banks were examined, including the farmers in the Covenant University farm. The relationship and significance between the independent and dependent variables were established using the primary source of data, which is to determine the strength and direction of each variable through the linear regression model. Therefore, microfinance was seen as an important factor in agricultural development. In line with the study, this recommendations were given: Micro finance institutions should generate policies and programmes for the agricultural sector, developed infrastructure and adequate social services must be constantly provided at the farmers groups, the government should focus on land reforms, the agricultural sector should be treated as a priority sector, in this farmers groups, there should be further divisions made in which small and marginal farmers will be in a special group for direct income support, trade policies should be designed for sustainable agricultural growth and protection of agricultural markets, the government should emphasize on agriculture oriented research and education, misuse and diversification of land for non-agricultural activities must be stopped, microfinance institution should ensure market access and sales for small scale farmers, microfinance institutions should aid macro-economic development of the Nation Nigeria.

Gidigbi (2021), investigated the implication of specialized banks' credit provision in Nigeria on poverty reduction. Time-series data on the specialized banks, which include microfinance banks and development banks, were extracted from the Central Bank of Nigeria Statistical Bulletin and regressed on poverty incidence using the Autoregressive Distributed Lagged Model (ARDL), as preliminary tests suggest. Per capita income and other (uncategorized loans) reduces poverty. In the short run, per capita income, manufacturing and food processing, transport and commerce, and microcredit lending to other sectors that are unclassified reduce poverty; all are statistically significant. The study concluded that the credit provisions by the specialized banks in Nigeria were not very effective in poverty reduction. Microcredit lending was found not to be reaching intended borrowers, as many of the lending components do not reduce poverty. It recommended for checks and balances, especially in an instance of a commercial credit guarantee by the government or donor.

Kasali, Ahmad, and Lim (2015), examined the role of microfinance vis-à-vis poverty reduction, particularly in the Southwest Zone of Nigeria. Data were collected through a survey questionnaire in the study area, while descriptive statistics together with the binary logit regression model were employed to analyze the data collected. The result of the analyses revealed that microfinance loans made a significant impact on the loan beneficiaries in the study area, which led to poverty reduction.

Methodology

This study adopted ex-post facto research design, this is because the study involved the use of time series data collected from the statistical bulletin of the Central Bank of Nigeria on microfinance bank activities. The data for this work were drawn from the Statistical Bulletin of the Central Bank of Nigeria covering all microfinance credit in Nigeria. The time frame considered for this study is thirty-three (33) years, covering the period from 1992 to 2023. This implies that the sample size is 33. Convenience sampling technique was used, which is based on easy access to data. A regression model was employed to establish the relationship between dependent and independent variables. The study used of an econometric approach, the ordinary least square (OLS) techniques in obtaining the numerical estimates of the coefficients in different equations in the model. The ordinary least square (OLS) method was chosen because it possesses some optimal properties.

The estimated model is stated as follows:

$Y = F(X_1, X_2, X_3)$ … … … … … … … … … … … … … … … … ……… … … … …. . . .Eq (2)

PI= f (MFBLADV, MFBCGS, MFBLDR)

Using *t* to denote time period (years) the model can be rewritten as follows

AGRICGDP = f (MFBLADVt, MFBCGSt, MFBLDRt)

$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2$ . . . . + βnXn … … ……… … … … …... Eq (3)

We specify the above model linearly in the form of an equation

AGRICGDP = $\beta_0 + \beta_1$ MFBLADV+ β_2 MFBACGS + β_3 MFBLDR … … … Eq (4)

Where;

AgricGDP= Agricultural sector output

MFBLADV = Microfinance banks loans and advances

MFBACGS= Microfinance banks agricultural credit guarantee scheme

MFBLDR= Microfinance banks lending rate

β_0 = Constant

β_1, β_2= Coefficients of the explanatory/Independent variables

U*t* = Stochastic or error term

Analysis of data

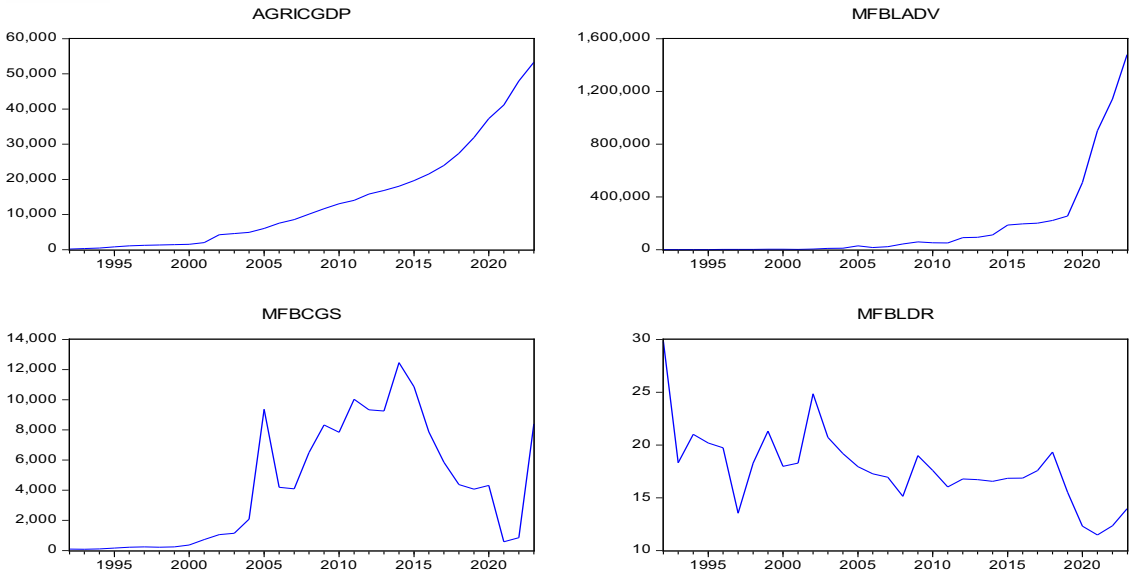

Figure 1: Graphical representation of the variables

The graph shows that agriculture output and microfinance bank loans and advances have similar patterns of trend. This suggests that an increase in microfinance banks' loans and advances is likely to bring about an increase in agriculture sector output.

Table 1: Correlation Matrix

	AGRICGDP	MFBLADV	MFBCGS	MFBLDR
AGRICGDP	1.000000	0.896961	-0.640042	0.338682
MFBLADV	0.896961	1.000000	-0.549150	0.092750
MFBCGS	-0.640042	-0.549150	1.000000	-0.303123
MFBLDR	0.338682	0.092750	-0.303123	1.000000

Source: Author's Computation

Table 1, above shows the correlation matrix which aims to provide picture of the correlation between the independent variables. MFBLADV has positive relationship with MFBLDR (0.092750) and negative relationship with MFBCGS (-0.548150). MFBLDR has negative relationship with MFBCGS (-0.303123). This suggests that there is low level of correlation among the independent variables.

Table 2: Descriptive Statistics

Date: 03/08/25
Time: 10:56
Sample: 1992 2023

	AGRICGDP	MFBLADV	MFBCGS	MFBLDR
Mean	14049.87	178541.4	4227.889	17.79563
Median	9326.155	35628.93	4077.865	17.58500
Maximum	53273.14	1488235.	12456.30	29.80000
Minimum	184.1200	135.8000	80.80000	11.48000
Std. Dev.	14803.14	352004.3	4012.592	3.569713
Skewness	1.167260	2.603448	0.455832	1.051404
Kurtosis	3.455078	8.904179	1.758482	5.666950
Jarque-Bera	7.542769	82.62812	3.163328	15.37924
Probability	0.023020	0.000000	0.205633	0.000458
Sum	449595.9	5713324.	135292.4	569.4600
Sum Sq. Dev.	6.79E+09	3.84E+12	4.99E+08	395.0284
Observations	32	32	32	32

Source: Author's Computation

In table 2, which is the descriptive statistics for the variables, AGRICGDP has a mean value of ₦14049.87 and a standard deviation of ₦14803.14, MFBLADV has a mean value of ₦178541.4 and a standard deviation of ₦352004.3, MFBLDR has a mean value of 17.79% and a standard deviation value of 11.48, while MFBCGS has a mean value of ₦4227.889 and a standard deviation value of ₦4012.59. This implies that an average of ₦14803.14 million in loans was provided by microfinance banks annually, while there was an average of ₦14049.87 billion in output from the agriculture sector annually. The lending rate stands at 17.79%, which is considered high since most developed economies have interest rates below 5%.

The Jarque-Bera statistic has a prob value of 0.023020, 0.000000, and 0.000458 for AGRICGDP, MFBLADV, and MFBLDR, respectively, which is less than the 0.05 level of significance, implying that the variables are significant but not normally distributed. MFBCGS has a p-value of 0.205633, which is greater than the 0.05 level of significance, suggesting that the variable is not significant but normally distributed.

Hypotheses testing

Table 3: OLS regression Result

Dependent Variable: AGRICGDP
Method: Least Squares
Date: 03/08/25 Time: 11:07
Sample: 1992 2023
Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14101.10	6840.129	2.061526	0.0486
MFBLADV	0.033841	0.003293	10.27629	0.0000
MFBCGS	0.828678	0.253353	3.270847	0.0028
MFBLDR	-539.2818	339.2957	-1.589415	0.1232

R-squared	0.881107	Mean dependent var	14049.87
Adjusted R-squared	0.868368	S.D. dependent var	14803.14
S.E. of regression	5370.741	Akaike info criterion	20.13179
Sum squared resid	8.08E+08	Schwarz criterion	20.31500
Log likelihood	-318.1086	Hannan-Quinn criter.	20.19252
F-statistic	69.16851	Durbin-Watson stat	1.573877
Prob(F-statistic)	0.000000		

Source: Author's Computation

The model which was found to be linear in shape in given as AGRICGDP = 14101.1017454 + 0.0338412850734*MFBLADV + 0.828678075371*MFBCGS -539.281785274*MFBLDR.

Coefficient of determination (R^2)

The variables were found to be perfectly fitted as R^2 estimated was found to be 0.8811 or 88.11%.

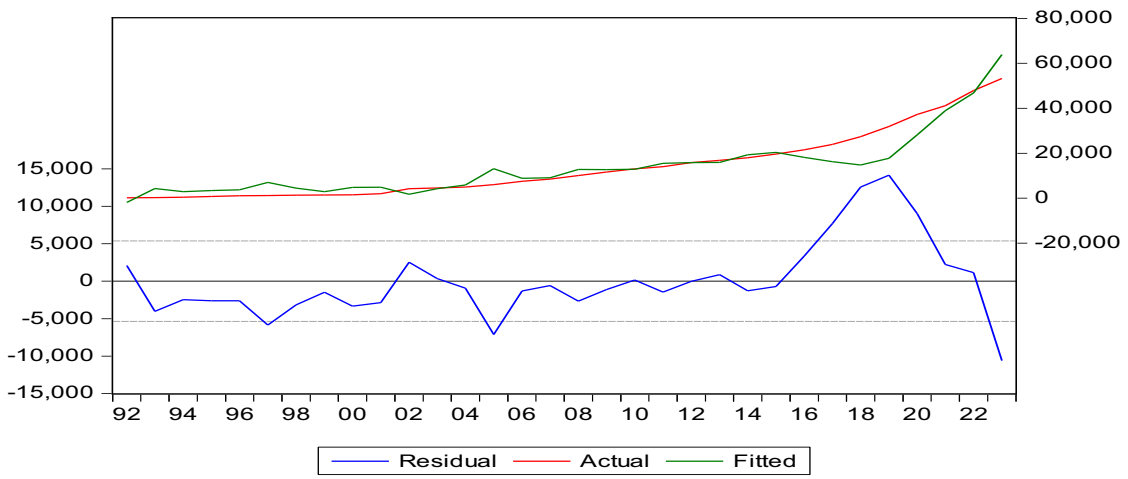

Figure 2: Graphical Representation of the Regression line

Adjusted Coefficient of Determination (R^{-2})

The adjusted Coefficient of determination (R^{-2}) is 86.84% which implies that 86.84 percent of loans and advances, agriculture credit guarantee scheme and lending rate.

Test of hypothesis 1

H_o: Microfinance bank loans and advances has no significant impact on agricultural sector output in Nigeria

H_1: Microfinance bank loans and advances has significant impact on agricultural sector output in Nigeria

The model in table 3 shows that microfinance bank loans and advances have a positive relationship with agricultural output; that is, 1 unit rise in MFBLADV will result in a 0.033841 unit rise in agricultural output. This conforms to an a priori expectation. The t-statistic shows a value of 10.27629 with a prob. value of 0.000, which is less than 0.05, or a 5% confidence level of significance. From our result, we reject the null hypothesis and accept the alternative hypothesis that microfinance bank loans and advances have a significant impact on agricultural sector output in Nigeria.

Test of Hypothesis 2

H_{o2}: Microfinance bank agricultural credit guarantee scheme has no significant impact on agricultural sector output in Nigeria

H_{a2}: Microfinance bank agricultural credit guarantee scheme has significant impact on agricultural sector output in Nigeria

The result of the model in table 3 further shows that the Agriculture Credit Guarantee Scheme has a positive relationship with agricultural output; that is, 1 unit rise in MFBCGS will result in a 0.828678 unit rise in agricultural output. This conforms to an a priori expectation. The t-statistic shows a value of 3.270847 with a prob. value of 0.000, which is less than 0.05, or a 5% confidence level of significance. From our result, we reject the null hypothesis and accept the

alternative hypothesis that Microfinance banks agricultural credit guarantee scheme has a significant impact on agricultural sector output in Nigeria.

Test of hypothesis 3

H_{o3}: Microfinance bank lending rate has no significant impact on agricultural sector output in Nigeria

H_{i3}: Microfinance bank lending rate has significant impact on agricultural sector output in Nigeria

The result of the model in table 3 also shows that the microfinance bank lending rate has a negative relationship with agricultural output; that is, a 1-unit rise in MFBLDR will result in a 539.2818-unit decrease in agricultural output, which conforms to a priori expectation since a high lending rate implies a higher cost of borrowing, thereby discouraging borrowings by the farmers and small-scale business owners who mainly dominate microfinance banks. The t-statistic shows a value of -1.589415 with a prob. value of 0.1232, which is greater than 0.05, or the 5% confidence level of significance. From the result, the null hypothesis is accepted that microfinance banks lending rates have no significant impact on agricultural sector output in Nigeria.

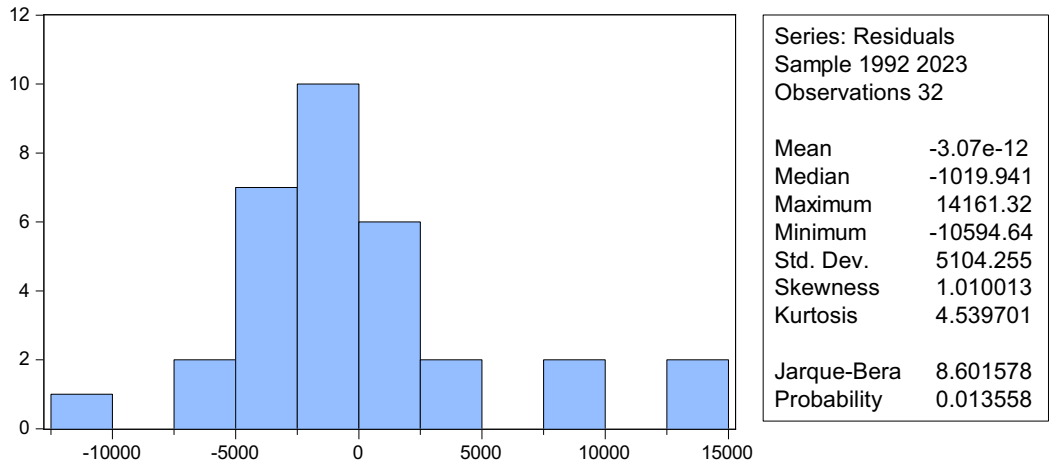

Figure 3: Histogram of Residuals
Source: Authors computation

The histogram of residuals, as shown in Fig. 3, is a simple graphic device that is used to learn something about the shape of the probability density function (PDF) of the random variables. Since the skewness (a measure of symmetry), which should be zero, is 1.010013, and Kurtosis (a measure of how tall or squatty the normal distribution is), which should be 3, is 8.601578, it means that the residuals are not normally distributed.

Table 4: Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	21.38640	Prob. F(2,26)	0.0000
Obs*R-squared	19.90219	Prob. Chi-Square(2)	0.0000

Source: Author's Computation

The BG, LM test in table 4 shows that the F-statistic and obs*R-Squared are significant to result to serial correlation, suggesting that there is first order serial correction in the series.

Table 5: Heteroskedasticity Test: Breusch-Pagan-Godfrey

Heteroskedasticity Test: Breusch -Pagan-Godfrey			
F-statistic	1.159712	Prob. F(3,28)	0.3426
Obs*R-squared	3.536703	Prob. Chi-Square(3)	0.3160
Scaled explained SS	4.792380	Prob. Chi-Square(3)	0.1876

Source: Author's Computation

Is there any heteroskedasticity in our short run model? Table 5, BPG test's F-stat, obs* R^2 and scaled explained SS stats respectively suggest that the residuals in our model were insignificantly influenced by the presence of heteroskedasticity. Therefore, there is homogeneity in our model.

Table 6: Granger Casualty Test

Pairwise Granger Causality Tests
Date: 03/08/25 Time: 11:09
Sample: 1992 2023
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
MFBLADV does not Granger Cause AGRICGDP	30	0.30279	0.7414
AGRICGDP does not Granger Cause MFBLADV		9.04145	0.0011
MFBCGS does not Granger Cause AGRICGDP	30	2.45929	0.1059
AGRICGDP does not Granger Cause MFBCGS		0.44301	0.6470
MFBLDR does not Granger Cause AGRICGDP	30	0.07501	0.9279
AGRICGDP does not Granger Cause MFBLDR		4.46130	0.0220

The Granger causality test result in table 6 shows that there is a uni-causality relationship between MFBLADV and AGRICGDP running from AGRICGDP to MFBLADV, implying that agriculture output influences the decision by microfinance bank management to extend more loans. There is no causality relationship between MFBCGS and AGRICGDP. This implies that the two do not influence the direction of each other. There is also a uni-causality relationship between MFBLDR and AGRICGDP running from AGRICGDP to MFBLADV, implying that agriculture output influences the decision by microfinance bank management to set their lending rates.

Discussion of Findings

The results revealed that loans created by microfinance banks loans positively impacted on development of the agricultural sector. In other words, the higher the loans provided to the rural farmers the higher the agriculture sector output. The result further suggested that access to loans by farmers is very important in their quest for better farm production. This result agrees with findings by Gidigbi (2021) and Akemieyefa (2024) that microfinance loans play significant roles as financial intermediaries to those not served by conventional banks. It however disagrees with the observation made by Kasali, Ahmad, and Lim (2015) that microfinance banks have not contributed significantly to Nigeria's economic output. Regulatory mechanisms should be set up to monitor and evaluate microfinance credits in agriculture. Impact should be tracked to ensure that the credit policies are relevant, and that any policy change should be evidence-based.

The second result shows that agricultural credit guarantee scheme has positive impact on agricultural output, which is an indication that government efforts at collaborating with microfinance banks in the funding of agriculture is moving in the right direction. This supports the claims by Taiwo, Naomi, and Isibor (2020), who revealed that the Agricultural Credit Guarantee Scheme Fund and government fund allocation to agriculture produced a significant positive effect on agricultural productivity. The usefulness of any agricultural credit policy does not only depend on its availability, accessibility, and affordability, but also on proper and efficient allocation and utilization for intended user who are mainly farmers. Regrettably, in Nigeria, the funds are more often diverted and given to the wrong people who are not in any way involved in agricultural production, thereby negatively affecting agricultural output. Policy makers should ensure that the credits reach the right farmers to improve agricultural productivity in the country. Agricultural Credit guarantee Scheme Fund should be expanded and improved to de-risk lending to smaller famers by Microfinance institutions.

The result also showed that microfinance banks lending rate has negative effect on agricultural sector output which implies that the higher the lending rate, the lower the contribution of the agriculture sector. This is in line with the a priori expectation and conforms to economic expectation since a higher interest rate discourages borrowing, which tends to affect output. The findings support the claim by Ayodele and Adesanya (2022) that interest rates have a negative effect on the agricultural sector in Nigeria. The policy implication here is that government should subsidize interest rates for farmers accessing microfinance loans for productivity-enhancing investments.

Conclusion and Recommendations

It has been established that access to loans is associated with economic growth vis-à-vis higher agricultural output. Rural and urban development leads to an increase in the level of income and agricultural production. By increasing the level of income and quantity of stock of goods, investment increases the standard of living and reduces the poverty level. As one of the vehicles to alleviate the poverty level in Nigeria, the Central Bank of Nigeria (CBN) launched the Microfinance Policy Framework in 2005. Microfinance banks, which were the fallout of the policy, were required to engage in investments, among other products. From the findings, it could be concluded that microfinance credit has positive impacts on agricultural productivity in Nigeria for the period under review.

Based on the findings, the study recommends as follows:

1. It is imperative that microfinance banks should provide more credit facilities to farmers and make it easily accessible. This can be done by organizing farmers into groups of cooperatives with leaders who have complete information of the farmers under them. Through this process, loans that are provided can easily be distributed to the right farmers and collected back with a smaller number of defaults.
2. Government should continue to support the Agricultural Credit Guarantee Scheme and ensure that the right farmers have access to such funds. It is also imperative that effective monitoring, distribution and collection process are carried out by the government vis a vis the various microfinance banks that they are partnering with.
3. The Central Bank of Nigeria should do a downward review of the lending rate of loans provided by microfinance to farmers. This can be done by discounting the lending rates and making it cheaper for the famers. In short, the government should consider reducing interest rate for farmers.

Contribution to Knowledge

This research contributes to knowledge as follows:

1. An increase in microfinance loans and advances will help in agricultural sector output increase in Nigeria.
2. The present lending rate needs a review as it is too high for the farmers.

Suggestion for Further Studies

From the foregoing, the followings have been suggested for further research:

1. Impact of microfinance credit on economic growth in Nigeria.
2. Impact of microfinance credit on micro small-scale business development in Nigeria.

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