

## The Role of Commercial Banks in Agricultural Growth in Nigeria

<sup>1</sup>Anifowose, O. L. & <sup>2</sup>Ladanu, W.K.

<sup>1&2</sup>*Department of Entrepreneurship Management Technology  
The Federal University of Technology, Akure, Ondo state, Nigeria*



### Abstract

The aim of this study is to review the role of commercial banks in agricultural growth in the period 2010 – 2014. That is the impact they played in the overall development of the agricultural sector on. In this study, the research study in a scenario has attempted to examine the role of commercial banks in agricultural growth, it is a well-known fact that agriculture constitutes a very important sector of the Nigeria economy, with this in mind has really emphasized the importance and need for the development of the agriculture sectors Due to the importance for the development in this sector, the study reviewed the work and view of eminent scholars. Their views were diverse, some share some views and some disagreed. Some scholar realized the role of the agricultural sector in economic development, but was short – sighted toward the fact that there was a great importance, about developing this sector scholars bear in mind the role, problems and importance of the sector and found it necessary to develop the agricultural sector, if it is to play its role in economic development. These scholars went further to detect importance variable or catalysts or prerequisite for the development of the sector which allows for other factors like technology and research. The study also had an overview of the impact of commercial banks, as safe – keepers and channeling of funds to needy sector like agricultural sector. In conclusion, It was discovered that the commercial banks have actively been playing quite a large role under the polices of the apex regulatory body, the central banks in financing agriculture. So as to justify the hypothesis of the study that if one of the major factors that aid the agricultural sector which finance, in form of credit service from the commercial bank, is channeled into this promising sector that the sector will develop and also increase its output and play its effectively in economic development.

**Keywords:** *Commercial Bank, Agriculture, Economic Growth, Nigeria*

### Background to the Study

The term "Agriculture" is derived from the Latin word "Ager" meaning field and culture. From a literary point of view, agriculture means field cultivation. Today, the term is now broadly constructed to include production, research and training in the field of crops, forestry livestock e.t.c. Agriculture is concerned with the cultivation of land to produce crops and rearing of animals of direct value to man. It is also concerned with the processing distribution and marketing of agricultural product.

The Nigeria agriculture sector is still manifesting physical symptoms of peasant agriculture. It is dominated by small scale farmers who are responsible for about 95% of total production i.e the bulk of the source of our food. The livestock is in the hands of nomadic herdsmen; poultry is still essentially the backyard type; though a few commercial units are here and there. The fishing sector is also predominantly artisanal, very few motorized canoes are in use not to talk of fishing crawlers.

The growth of the agricultural sector to a great extent, is a catalyst a support for the economic growth of developing countries. In emphasizing the importance of agriculture generally, Gunnair Myrdal notes that it is in agricultural sector that the battle for long term economic development will be won or lost.

### Literature Review

#### Evolution of Commercial Banks

Banking activities started in Nigeria in 1892 with the establishment of the African banking corporation. It was responsible for distributing Bank of England notes for the British treasury. The Bank of British West Africa was formed in 1894 and with the support of the colonial government it took over the activities of African Banking Corporation established two years earlier. It was the first surviving bank in Nigeria and exercised monopoly over banking in Nigeria for over 30 years. The Bank of British West Africa is now the first Bank of Nigeria PLC. The colonial Bank appeared on the banking scene in 1916. This Bank (colonial Bank) joined the Barclays Bank, the Angola – Egyptian bank and the National Bank of south Africa to form Barclays Bank dominion colonial oversea (D.C.O) (now union bank of Nigeria PLC) in 1925 and established its presence in Nigeria. Another expatriate bank, the British and French bank limited was established in 1949. These three big banks dominated the banking industry in Nigeria during the period before independence. The British and French bank limited is now united bank for Africa PLC. Successful indigenous banking efforts started in Nigeria with the establishment of the National Bank of Nigeria in 1933. The Agbonmagbe Bank (now Wema Bank PLC) was incorporated in 1945 and the African continental Bank founded in 1947.

The decade between 1945 and 1955 marked a period of banking boom and banking crisis in Nigeria. According to the financial secretary, a total of 185 banking companies were registered in 1947 and 40 in 1952 but by the end of 1954 all the banks had collapsed except four. These were the National Bank of Nigeria, the ACB, the Agbonmagbe and the Mercantile Bank. The Nigeria financial system has pass through many stages (ERA) which are as follows.

1. The pre-banking era of 1892-1951
2. Pre-central banking era of 1952-1958
3. Era of banking regulation of 1959-1985
4. Era of deregulation 1986-1993
5. Era of guided deregulation 1994-1998
6. Present democratic era 1999-date

Recently in the banking sector, banks were reduced to 25 banks in the year 2005 from 89 banks which it was, in the previous year. This was due to the new recapitalization base of 25 billion which led to Mergers and acquisition of banks.

#### The Role of Commercial Bank in Agricultural Development

The role of the commercial banks is that they serve as intermediaries channeling funds from those wishing to save to those wishing to borrow. The second role is that they remove financial waste from this economy thereby helping to channel all available resources towards productive activities. Commercial bank therefore does not only protect the deposit money but also put it to work using it as the bases for loan and credit to those who needs the fund for investment, such fund injected on investment are use in capital asset accumulation and operations of Agriculture, manufacturing and services areas such as telecommunication and other utility. This way banks help in the economic development of a nation. This is why banks are regarded or refer to as wheel of economic progress of a nation.

Through the credit extension process of the commercial banks, additional deposits are created in the economy thereby increasing the growth of domestic product of the country. This in turn has a positive impact on the economic growth and the overall development of the country. Bank therefore can be referred to as engine of growth in societies where they operate and in a developing country like Nigeria, banking industry is an important institution in the promotion of economic growth and development.

The central bank which is the apex regulating bank in the financial industry came to the aid by issuing guidelines which it started in 1976. The central bank guidelines gave birth to two policies which acted as catalyst for the commercial banks roles in financing agricultural growth and development.

These policies are:

1. Rural Banking Scheme
2. Agricultural Credit Guarantee Scheme Fund

#### Rural Banking Scheme

This was introduced in 1977 like other tools used by the central bank to act as catalyst to ginger the commercial bank toward economic growth and development. Due to the 'built in structure reluctance' of banks in Nigeria to go to the less populated and less economically active locations (i.e. rural areas), there was a great hindrance to the effort of the government to promote the economic development at the expected rate to catch up with the rest of the world: Government therefore has to emphasize the development of

the rural areas of the country.

In 1972, at a conference proceeding of the Nigeria economic society on rural development, it was emphasize that to achieve an overall development in any country effective measure should be devised simultaneously to solve rural development problems.

The central bank of Nigeria used the power vested in it by section 4 of the 1969 banking decree, to make it mandatory that commercial banks open rural branches. Due to the result of the scheme, capital formation has been improved in the economy as saving of the rural dweller are now easily mobilized and constructively channeled to the needy sector of the economy which harbor 75% of the population of the labour force. The scheme has helped to create credit for small scale industries and farmer thus greatly encouraging development of agricultural and agro – allied based industries.

#### Agricultural Credit Guarantee Scheme Fund (ACGSF)

One of the reasons why banks tend to discriminate against agriculture is relatively the risk of the sector; the Agricultural Credit Guarantee Scheme Fund was therefore introduced by the central bank of Nigeria and the federal government to provide a hedge against some of the risks that banks lending to Agriculture involve when the scheme was launched in 1977, it was hoped that a basis had been laid for stimulating increased flow of bank credit to agricultural production and in particular to small peasant farmers who mostly belonged to co – operative bodies. The legal basis of the scheme is the Agricultural Credit Guarantee Scheme Fund act 20 of March 1977. The act provided for a fund of 100 million subscribed to by the federal government (60%) and the central bank of Nigeria (40%). The purpose of the fund was to provide guarantee in respect of loans granted by commercial and merchant banks for approved agricultural projects with the aim of increasing the flow of bank credit to the agricultural sector.

In order to increase the level of lending under the Agriculture Credit Guarantee Scheme Fund, the CBN initiated, in 2001, the Trust Fund Model (TFM) as a framework for funds intermediation for agricultural development. Under the model, state and local governments, oil companies and non governmental organization (NGOs) augments farmers' saving security by placing funds with the participating banks, thereby helping to mitigate the risks that banks face by lending to agricultural sector borrowers. The beneficiaries under the scheme are normally member of farmers' cooperative associations and formal self – help groups (SHGs). As at end of December 2005, fifteen (15) stakeholders, comprising ten (10) state governments, three (3) oil companies and two (2) NGOs have adopted the model and the total amount pledged and deposited with the banks of their choice stood at 1.6 billion. The lending role played by commercial bank may be accounted for by their greater number and under geographical spread and also due to the existence of functioning agricultural department in the commercial bank which were excluded in other categories of banks.

### Nature of Nigeria Agricultural Sector

Ajakaiye (1989) explain that agriculture constitute a very important sector of the Nigeria economy and was the dominant sector before the crude oil boom of the 1970's. He stresses that agricultural sector contribute 64.1 percent of the gross domestic product as compared to other sector. The Nigeria agricultural sector is characterized by low farm income, low level of capacity to satisfy the food and fibre need of the country and primitive techniques of production. The nature of problem of the agricultural sector boils down to finance constraints. At the heart of the finance problem is the despondence of small farmer in the Nigerian rural economy, about 90% require fairly small size loans.

Rostow (1960) identifies five stages of growth in the transition from agrarian to an industrial economy. This theory recognizes the importance of agricultural growth to general economic growth but this was not concerned with the question of how to indicate and accelerate the question of agriculture itself. Due to need to develop agriculture, the development of this sector shall review some agricultural development theories which describe the economic nature of traditional agricultural development and explained the process of moving from traditional to modern agriculture.

Professor Myint(1971) also observed that in less developed countries, the agricultural and small scale sector suffer from the foreign exchange and import controls on two counts. First, they get imported consumer goods at high prices and secondly they fail to obtain the foreign exchange and import permits easily because of red-tapism and corruption prevailing in these countries. The government in some less developed countries are precisely in the case of Nigeria as viewed by Myint have turned to improve credit facilities in the traditional sector by establishing agricultural banks and cooperative credit evaluate scheme which are to facilitate the financing of growth of developments in this traditional sector. But these tend to take the form of supplying a limited amount of subsidized loans through the cooperative societies to some highly favoured villages.

There has been misallocation of resources between the modern and the traditional sector and the obstruction of the development of an integrated domestic capital market in the less developed countries, which Nigeria belongs.

### Problems of Agriculture and Agricultural Development

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.

Allison A. Ayida (1987) in his book “some reflections of Nigeria economic development”. He asserted 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 administration.

Tomori (1979) maintains that one of the obstacle to the development of agriculture in Nigeria relate to the inadequate of credit. According to him, lack of credit facilities is one factor that makes it difficult for farmers to innovate, he goes further to stress that innovation which a farmer might wish to carry out is a function of his financial resources and for any innovation to take place, financial resources through rural credit among other factors must be adequate.

Oluwasanmi (1985) contends that underdeveloped economics especially Nigeria are agriculture oriented with low levels of productivity in income, saving and investment. He is of the opinion that, by raising agricultural output and productivity, the agricultural sector can make a net contribution to the industrialization process.

The major problems confronting agriculture in Nigeria as reviewed by the third National development plan are as follows.

- A. Shortage of qualified man power in different areas
- B. Inadequate supply of agriculture inputs
- C. Inadequate extension services
- D. The poor condition of feeder roads and other transport facilities.
- E. The problem of land ownership imposed by the land tenure system in most parts of the country.
- F. The problem of diseases and pests.
- G. Labour shortage especially at peak periods of Demand during the farming seasons.
- H. Lack of appropriate technology for many food crops.

Generally, and consequent to the above the causes of slow growth in agriculture can be classified into the followings.

- 1. Credit
- 2. Research and extension services
- 3. Marketing and pricing
- 4. Manpower development and Utilization.

#### Credit

Credit is require to purchase improved technology which is vital for increased output and overall expansion of the farm. The problem about credit is not only its inadequacy but also its ineffective mobilization use in the most unproductive way and more importantly its effective and economic cost of availability. It is in this respect that the role of commercial banks as a major and unique financial intermediary becomes imperative to this study.

Ojo (1982) stresses that lack of agricultural credit is increasingly becoming a major handicap for agricultural production. According to him, agricultural finance is traditionally derived from non – institutional, unorganized financial sources such as personal or family savings and from money lenders.

### Research and Extension Service

For quite some time, the government has taken the lead in promoting various research projects relating to Nigerian agriculture.

This has been carried out through its own research institutions and indirectly through the support it gives to various international agencies. The applied research conducted in this specialized institution is aimed at improving the agriculture sector. The applied research that is being done to improve the productivity of agriculture is faced with a number of problems. First of all, it takes a long time before a break – through can be achieved and mean – while the position of agriculture is unchanged. Additionally many of the research institution in Nigeria do not have sufficient financial resources to support the necessary scientific equipment performing their functions.

### Marketing and Pricing

Generally, the marketing and pricing policy for agricultural product is directly important to export crops such as coca, palm produce, cotton and groundnut. Marketing board have been define as “public bodies” set up by the government with delegated legal powers of compulsion over producers and handlers of primary or processed agricultural products. The operations of marketing boards have long been criticized on the grounds that the systems have failed to provide incentives to farmers to increase their output. It has also been claimed that the system subjects producers to double taxation.

### Manpower Development and Utilization

The public sector is constantly in short supply of well trained technical personnel partly because the private sector is always there to offer better remunerations for ready made materials.

### Problems Which Are Responsible for the Dramatic Fall of Agricultural Sector in the Economy

- i. The progressive development of agriculture in the 1960 was obstructed by the civil war in Nigeria which kept most farmers away from their farms.
- ii. Following the crisis, the discovery of petroleum came to shift emphasis from the agricultural sector to the industrial sector and this caused the contribution of agriculture to the economy to decline as private sector quickly depend on oil boom to import for industries.
- iii. The peasant farmers were therefore left in the poor environmental condition without either the essential factor (or accelerators) of developing agriculture and this gave rise to large rural – urban migration of the young farmers leaving the ageing ones in the farming system.

An analysis of the problem of agricultural development in this country is incomplete without mentioning the problem of shadow government policy and mismanagement in agriculture which have become an incurable disease in Nigeria agricultural development successive government have made several effort to attain self – sufficiency in food by launching agricultural programmes such as operation feed the Nation (OFN) and Green Revolution with the establishment of these effects, the end result have not been

encouraging. The cause of the failure of Nigeria in her effort to feed her citizens is because the various agricultural project and programmes were being handled by unpatriotic people who divert government funds to other selfish areas. Agricultural loans meant for the farmer go to non farmers and many agricultural project where enormous amount of money have been spent for their establishment have now turned into white elephant projects.

#### Problems of Agricultural Financing that could be Associated to the Government, Financial Institutions and Farmers

##### Government

Inconsistent government policies and time lag especially implementation lags, in its policies, Lack of adequate project studies which leads to poor conception and implementation of agricultural project. There is also problem of Infrastructure and marketing, taking a narrow conception of infrastructure; those aspects of capital investment and infrastructure which include; Transportation, Road, Railways, Bridges. Marketing is closely connected with roads since agricultural produce have to be transported to markets so as to affect their sales.

There is also the inability of the existing government officials of agricultural agencies to reach farmers at the grass root due to some reasons like the poor transportation and communication network, Provision of enabling environments in the development and growth of agricultural sector of the economy has been strategically deficient and all efforts by way of research funding and its dissemination through government extension activities; Lack of adequate storage facilities to ensure good marketing for farm produce coupled with wrong financing culture have been part of the problems.

##### Financial Institutions

There are many problem facing financial institution as far as agricultural finance is concerned, some of them are discussed below:

There is the delay in the processing of agricultural loan application and in implementing approval loan agreement. The period when loan application is submitted to the period it is finally approved on many occasions is too long to extent that rising prices during the period of delay would have changed the situation of things drastically. Another problem faced by financial institution is the granting of inadequate loans to farmers. Inadequate loan, to financing of whatever reason can endanger the successful implementation of otherwise viable projects. This would not be the case if financial institution were flexible enough or even endowed with technical expertise and skilled project analysts who would comments on project fund adequacy.

Other problem of financial institution include: inconvenient disbursement and amortization schedule; unjustifiable insistence on a particular type of collateral; inadequate interest shown towards agricultural lending and the mutual distrust between the lender and the borrower.



## Farmers

The problems faced by farmers at large in Nigeria are discussed below:

Firstly, there is the problem of high level of illiteracy, owing to the low educational level among the majority of small – scale farmers and also farmers are not in a position to indicate or understand the name, location and type of existing credit sources not to talk of the question of interest rate which apply to farm loans. The farming communities are also faced with the problem of shortage of labour. For instance, crops like rice, maize, and cassava need large number of workers during the harvesting period, finding such money to pay for labour is a continuing farmer's problem. Finally, farmer do not have easy access to financial institution, most farmers are faced with the problem of management lending to inefficient application of funds and also the diversion of fund to non-agricultural project and sometimes to non-productive ventures. Most farmers think that bank loan is a means of equitable distribution of national cake instead of depositor money

## Functions of Credit to Farmers

Credit in general sense can be defined as a device for facilitating the temporary transfer of purchasing power from one individual or organization to the other.

## Financing Production

The output of small scale farmer is constrained by his low and stagnant level of technology. To adopt technology on the farm, the small farmer needs credit to purchase input such as improved seeds, fertilizers, chemicals pesticide, Farm tools and hiring or purchasing of tractors to aid production.

## Financing Marketing

Marketing has three main function, concentration, equalization and dispersion and each of these functions require funds at various stages to finance its operations. These funds are used to pay for storage cost, packaging, warehousing, advertising, transportation, processing, insurance and standardization etc. financial place a vital role not just by making goods and services available to consumers but it helps to stabilize prices throughout the year by making storage and processing facilities available.

## Financing Consumption

The production from agriculture normally comes at one or a few period of harvest while consumption occurs steadily throughout the year. Gordon (1976) holds the opinion that when loans are granted to small farmers, considerations should be given to their personal consumption needs too. He pointed out that payments for wedding, funerals and other ceremonies, should also be given consideration in order to avoid diversion of funds or credits.

## Reserve of Precautionary Financing

Small farmers, like all other people have precautionary demand for money to meet contingencies agricultural production is characterized by uncertainties such as bad weather, disease, pest, fire outbreak, technological changes, policy dangers, sickness

e.t.c. Small farmers income are usually so low that they cannot meet their family expenses and still have sufficient for precautionary financing, especially against vagaries weather, natural hazards and unforeseen circumstances including. emergencies.

#### Agriculture Financing Policies

The main objectives of agricultural credit policies over the years have been to make adequate credit available to the farmers at the right time and at affordable cost. A policy measure adopted to achieve this during the period 1990-1995, was the purveyance of credit to the agricultural sector at concessionary interest rate. Based on the fact that banks were likely to discriminate against agriculture in granting credit facilities. Financial Institutions were compelled to support agricultural activities through credit quotas at concessionary interest rate.

In addition, specialized commercial banks were established in 1973 and 1987 respectively, to increase supply and access to credit through lending. In the same vein, rural banking Programme which required banks to establish specified number of rural branches was promulgated in 1977. They were required to lend at least 45 percent of funds mobilized in those areas to rural dwellers for investment in various economic activities. The financial Institutions such as the peoples bank of Nigeria (PBN) and community banks were established with the objective of making more credits available to the rural sector. An evaluation of these financial policy measure showed that they had little or no impact on agricultural production. Annual loan to agriculture exhibit impressive growth, but the proportion of sector actually served remain very small, reflecting the fact that commercial banks did not generally comply with policy stipulations. There was also no guarantee that the reported loans were actually applied to agriculture.

Over the years the rate of growth in agricultural production has been stagnated and failed to keep pace with the need of rapidly growing population, resulting in a progressive increase in import bills for food and industrial raw material. Under National Economic Empowerment Development and Strategy (NEEDS) Programme, agricultural development is expected to be vigorously pursued, with the aim of achieving food security and reducing poverty. Accordingly, the government is committed to increasing investments in food and agricultural production. The main policy thrusts include the following:

- i. Providing the right policy environment and target incentives for private investment in the sector: Implement a new agricultural and rural development policy aimed at addressing the constraints in the sector
- ii. Fosters effective linkages with industry to achieve maximum value – added and processing for export.
- iii. Modernize production and create an agricultural sector that is responsive to the demands and realities of the Nigeria economy in order to create more agricultural and rural employment opportunities, which will increase the income of farmers and rural drivellers.

- iv. Reversing the trend in the import of food (which stood at 14.5 percent of total import at end of 2001), through a progressive programme for agricultural expansion.
- v. Striving toward food security and a food surplus that could be exported.
- vi. Investment in the improvement of the quality of the environment in order to increase crop yields.

#### Prospects of Agriculture Financing

The commercial banks have a long history of lending to the agricultural sector of the economy. In 1950's and 1960's commercial bank played significant roles in the activities of the marketing boards which were the agent of the farmers. Credit was traditionally being made available to likeness agent throughout the country. Commercial bank credit to the agricultural sector has been growing over the years while at the same time covering wide areas. Since the beginning of the 1990, commercial bank loans and advances to the agricultural sector have consistently been on the increase and the monetary guidelines stipulated that loans and advances allocated to agriculture from percent of total lending.

#### Impacts of Recapitalization on Agriculture and Challenges

The compulsory recapitalization and consolidation programme mandated by the central Bank of Nigeria (CBN) which today has resulted in 25 big and strong banks (Mega) has opened up new opportunities and challenges for the agricultural sector. It is expected that the financial system has become deeper and more robust with increased ability to lend deeper and longer, should benefit the agricultural sector move and enable it to increase capacity and capabilities in support of building bigger economy.

The agricultural sector has constantly complained of inadequate financing to optimize its productive capacity and increase its contribution to Gross Domestic Product (GDP). The problem affecting the growth of this sub sector, inadequate and inappropriate financing has been a major issue. For instance where medium to long term investment grade financing has been made available by some of the very "courageous and patriotic" banks, it has been found to be inappropriate. It is either that the pricing is too high or the tenure is too short or the repayment condition too stringent. The cumulative effect of all these, is that while the banks have become reluctant to lend to the Real sector, the sector blames its lackluster performance on the 'shylocks' in our banking system.

#### Challenges Facing Agricultural Sector

The Agricultural sector must be prepared to compete with other sectors of the economy that are equally deserving of increased financing.

As it has been well established, there are two sides, to every coin. Nothing good comes easy as most good thing come with some pain. Those who must pluck roses must be prepared to be pricked by the thorns. Thus certain challenges are present.

- I. It may be true that the banking sector will be much able to finance long term project, but banks will be more tasking in obtaining assurance that new credit will be serviced strictly in line with agreement. Then failure gap will be greatly narrowed.

- ii. The Agricultural sector must be prepared to do business with the banking sector that will operate under increase regulation and supervision by central bank of Nigeria. They must be prepared to operate in more transparent manner and face the consequence of new regulatory regime.
- iii. The Agricultural sector should build up itself to over come some worst weakness of the past.
- iv. They must provide a new system of project conception and feasibility that lend themselves to positive appraisal by bank credit committees.

#### Research Methodology

This chapter deals mainly with the method used in collection data and information for the purpose of this project which becomes on indispensable condition and which is necessary in order to accomplish the aim of the study.

All the methods and approaches used for data collection and analysis are enumerated and discussed.

#### Population of the Study

Population in social researches refers to all the numbers of the target group within a geographical area as specified by the aims and objectives of the study being conducted.

The study population of this research study is restricted to commercial banks and the agricultural sector of the economy. The research is to study how commercial banks extend loans for agricultural development.

#### Relevant Research Questions

1. In what way does commercial bank aid agricultural development?
2. Does the loan from commercial bank really affect the output from the agricultural sector?
3. Does commercial bank plays its role in financing the agricultural sector?
4. Is the loan sourced from the commercial banks sufficient in carrying out agricultural activities?

#### Data Collection Instrument

The instrument used in the collection of data for this research study was a secondary data and it was collected from central bank of Nigeria statistical bulletin. The statistical bulletin contains both total loan of commercial bank to agricultural sector and the total output of agricultural sector. It is consider as an efficient data because the information collected are reliable data.

#### Restatement of Hypothesis

Ho: There is no significant relationship between total loan from commercial bank to the agricultural sector and the total output from the agriculture sector.

Hi: There is significant relationship between total loan from commercial bank to the agricultural sector and the total output from the agricultural sector

### Method of Data Analysis

The variables to be put to test are measure that can easily be correlated. The total agricultural outputs represent the dependent variable while total loan from the commercial bank to agriculture represent the independent variable. In this study, we examine the effect of the loans from the commercial banks to the agricultural and the output of this important sector using the economic techniques of correlation co-efficient. The model to be applied are specified below, Correlation co-efficient measure the degree of relationship between two variable (dependent and independent variable) that is the correlation between total loan of commercial bank to agricultural sector and total output of agricultural sector.

Correlation co-efficient formular is given below:

$$R = \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}}$$

where

$$\sum XY = \sum xY - \frac{\sum X \sum Y}{N}$$

$$\sum X^2 = \sum X^2 - \frac{(\sum X)^2}{N}$$

$$\sum Y^2 = \sum Y^2 - \frac{(\sum Y)^2}{N}$$

where

R= correlation co efficient

X= Independent variable

Y= dependent variable

$\sum$  = summation

N= Number

Correlation coefficient normally lies between -1 and 1.

Therefore -1  $\leq$  r  $\leq$  1

If r= +1 it means there is a perfect positive correlation

If r= -1 it means there is a negative correlation

If r= 0 it means there is no correlation.

The t-test will be used in order to test the reliability of this study the t calculated has to be compared with the t table value at a chosen level of significant which is 5% and degree of freedom of n-2

$$TCAL = \frac{r - p}{\sqrt{\frac{1 - r^2}{n - 2}}}$$

If  $t_{cal}$  falls in the acceptance region (i.e.  $t_{cal} < t_{tab}$ ) we accept the null hypothesis ( $H_0$ ) and reject the alternative hypothesis, but if  $t_{cal}$  fall in the critical region (i.e.  $t_{cal} > t_{tab}$ ) we accept the alternative hypothesis and reject the null hypothesis.

#### Scope and Limitation

This research is based on the commercial bank in its area of channeling fund into the agricultural sector of the economy in order to aid the development of this sector. The work covered a period of five years; also data used in the research study are from statistical bulletin and various textbooks. The major limitation to this study is in availability of adequate time and financial constraints and restriction from entering central bank.

#### Data Presentation, Analysis and Interpretation

##### Introduction

This section will attempt to ascertain empirically the relationship between total loans from commercial bank and agricultural sector of Nigeria. Attention will be focused on testing the total loan from commercial banks to agriculture and total output from agriculture.

A correlation coefficient is employed to estimate the parameter of the identified variables on the correlation co-efficient model. Correlation coefficient is employed to measure relationship and strength between two variable which are the independent and dependent variables.

##### Hypothesis

$H_0$ : There is no significant relationship between total loans from commercial banks to the agricultural sector and the total output from the agricultural sector.

$H_1$ : There is significant relationship between total loans form commercial banks to the agricultural sector and the total output form the agricultural sector.

## Data Analysis

### Correlation between the Total Loan from Commercial Bank (Loan) to Agriculture and Total Output from Agriculture (Agricout)

#### Correlations

##### Notes

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#### Correlations

		Loan	Agricout
Loan	Pearson Correlation	1	.916*
	Sig. (2-tailed)		.029
	N	5	5
Agricout	Pearson Correlation	.916*	1
	Sig. (2-tailed)	.029	
	N	5	5

Correlation is significant at the 0.05 level (2-tailed).

Source : Output from SPSS

Since the Pearson correlation coefficient is 0.916 ( 92%), it means the result shows that there is a very high positive correlations between X and Y that is, there is positive correlation between the total loan form commercial bank to agricultural sector and the total output of the agricultural sector.

R = + 1 means there is a perfect positive correlation this will be accepted.

To Test the significance of correlation coefficient (r)

$$T = \frac{(r-p) \sqrt{n-2}}{1-r^2}$$

$$n = 5$$

$$r = 0.92$$

$$p = 0$$

$$t = \frac{(0.92-0) \sqrt{5-2}}{1-0.8464}$$

$$= \frac{0.92 \times \sqrt{3}}{0.15}$$

$$= \frac{0.92 \times 1.73}{0.39}$$

$$= \frac{1.5916}{0.39}$$

$$t_{cal} = 4.08$$

#### Discussion of the Result

The sign of the estimated parameter for total loans from commercial banks to the agricultural sector is positive correlated showing that total loans form commercial banks to agriculture has the tendency to increase total output from the agricultural sector i.e. This implies that there is a direct relationship between total loans from commercial bank to agriculture and total output from agriculture. However, based on the t cal test. Since t cal is greater than t tab (i.e. 4.08 > 3.18), with a degree of freedom of 3 at significance level of 5%, so we accept H<sub>i</sub> and reject H<sub>o</sub>. Therefore, the test shows that there is a significant relationship between total loans from commercial banks to the agricultural sector and the total output of agriculture.

#### Economic Implication of Findings

There are numerous economic implications of commercial banks to the agricultural sector. The commercial banks which enhance the development of the agricultural sector by granting credit facilities and loans are yet to be fully developed.

Commercial banks have deviated to other sector apart form the agriculture section because of the productive nature of these sectors. The deviation of the commercial bank credit is to increase their profit as a result of lending to other sectors, not knowing that havoc is being caused in the economy by hindering the development of other sector by not paying much attention to the agricultural sector obviously, the agriculture sector also



have a positive economic implication on the economy. As a result of commercial banks loans and credit, the agricultural sector has increased tremendously in productivity. Commercial banks also contribute immensely to the agricultural sector by creating employment opportunities to the idle farmer also advisory service rendered by the banks to the agricultural sector is also very important.

In conclusion, it has been justified, in spite of the risk involved in agricultural lending, the level of banks loan to agriculture has been rising. Also the empirical analysis shows a positive relationship between the agricultural sector and finance, in terms of loans from commercial banks. If all these are in place the agricultural sector plays its role effectively in economic development positively.

### Conclusion

In spite of the problem and risk involved in agriculture lending, the level of banks loans to agriculture has been rising both in fulfillment of central bank of Nigerian directives and also the schemes that is the Rural Banking Scheme (RBS), the Agricultural Credit Guarantee Scheme Fund (ACGSF) and also a result of efforts by the banks themselves to help develop the economy. I have no hesitation in stating here that the future of agriculture and agricultural Financing is bright having regard to the awareness of nearly all levels about the importance of the agricultural sector.

Banks over the years have been accused of being averse to lending to the risk – prone agricultural sector. But this is almost a thing of the past, commercial banks are now more dynamic and adventurous in this direction. Furthermore the rural branch expansion, by commercial banks will no doubt enhance the level of agricultural financing at the grass root level, which harbours 75% of the population.

If agricultural financing is enhanced, it would surely bring about development in this sector which would be reflected in its output. This has been justified by the correlation coefficient model which shows a positive relationship between the agricultural sector and finance, in terms of loans from commercial banks. If all these are in place, the agricultural sector plays its role in economic development positively.

### Recommendations

For a better involvement of commercial banks in financing the agricultural sector for its development I would make the following recommendation which if pursued vigorously, the commercial banks will go a long way in achieving their desired development in the Nigeria agricultural sector which would then allow this sector play its role in economic development.

First, Agricultural Credit Guarantee Scheme Fund (ACGSF) should continue to be enforced by the central banks to enable small – scale peasant farmers to benefit from the scheme. Commercial banks should have 100% guarantee and also allow charging at least minimum lending rates.

Mandatory policy directives during the 1980s should continue but the target must be carefully set and attainable. The difference between commitment and penalty is imposed on the bank for failure to attain the target set by guidelines. The central bank should also delegate people to monitor the loans been given out farmers. Commercial bank should reduce interest rate charges given out to farmers. Commercial banks should also strengthen their agricultural department with technically trained agriculturist and agricultural economists. They should also simplify their cumbersome procedure for obtaining credit to reduce the difficulties that are faced by the farmers. To ensure loan repayment and avoid diversion of credit that is given out to farmers. Loan should be given in form of fertilizers and equipment

#### References

- Adunbi, A.A (1996) , “The Design and Management of Sectoral Policies in Nigeria: Agriculture and the Economic Reform Programme”. *Macroeconomic Policy Analysis :Tools Techniques and Applications to Nigerian*. NCEMA, Ibadan. Pg 360 -385
- Agu, C. C. (2004), “An Overview of the Contributions of the Private Sector to Economic Growth in Nigeria”. *CBN's Proceedings of the Thirteenth Annual Conference of the Regional Research Units: Enhancing Private Sector-Led Growth in Nigeria*, pp 47-60.
- Aribisala, T.S.B. (1983), “Nigeria's Green Revolution: Achievements, Problems and Prospects”. *Distinguished Lecture No. 1, Nigerian Institute of Social and Economic Research (NISER), Ibadan, Nigeria.*
- Aryeetey, E. (1996), “Rural Finance in Africa: Institutional Developments and Access for the Poor”. *The World Bank Annual Conference on Development Economics, 25–26 April, Washington, D.C.*
- Aryeetey, E. & Gockel, F. (1991), “Mobilising Domestic Resources for Capital Formation in Ghana: The Role of Informal Financial Sectors”. *AERC Research Paper, No. 3.*
- Aryeetey, E.; Hettige, H.; Nissanke, M. & Steel, W. (1997), “Financial market Integration and Reforms in Ghana, Malawi, Nigeria and Tanzania”. *World Bank Economic Review, Vol. 11, No. 2, pp. 195–218.*
- Aryeetey, E. & Udry, C. (1997), “The Characteristics of Informal Financial Markets in sub-Saharan Africa”. *Journal of African Economies, Vol. 6, No. 1.*

- Bell, C. (1988), "Credit markets and Interlinked Transactions". Handbook of Development Economics, vol 1, North Holland.
- Besley, T. (1994), "How do Market Failures Justify Intervention in Rural Credit Markets?" The World Bank Research Observer, Vol. 9, No. 1, pp. 27-47.
- Boyede, O. (1999), "Production of Non-oil Exports: A Must Step in Economic Revitalisation" Nigerian Business Tribune. January 13.
- Central Bank of Nigeria (2010) Statistical Bulletin. Abuja: Central Bank of Nigeria.
- Central Bank of Nigeria (2010) Annual Report for the Year Ended 31<sup>st</sup> December. Abuja: Central Bank of Nigeria.
- Ellis, F. (1988), "Peasant Economics: Farm Households and Agrarian Development". Cambridge: University Press.
- Essien, E. A. (2005) "A consistent macroeconomic Framework for the Agricultural Sector under the National Economic Empowerment and Development Strategy (NEEDS)". CBN Bullion, Vol. 29, No. 4.
- Fakayode, B. S., Omotesho, O. A., Tsoho, A. B. & Ajayi, P. D. (2008), "An Economic Survey of Rural Infrastructures and Agricultural Productivity Profiles in Nigeria". European Journal of Social Sciences, Vol. 7, No. 2, pp. 158-171.
- Gollin, D. (2009), "Agriculture as an Engine of Growth and Poverty Reduction: What We Know and What We Need to Know. A Framework Paper for the African Economic Research Consortium Project on "Understanding Links between Growth and Poverty Reduction in Africa".
- Gollin, D. & Rogerson, R. (2010), "Agriculture, Roads, and Economic Development in Uganda". NBER Program on African Successes, pp. 1-61.
- Ikpi, A. (2001) Nigeria's Agriculture Sector Assessment: Issues of Technology Development and Transfer (Revised Final Report), United States Agency for International Development, Washington DC, USA.
- Ikpi, A. E. & Ikpi, A. L. (1998), "Governments and Agricultural Research Funding in sub-Saharan Africa". An Invited Paper Presented at an IITA Workshop on The Role of African Governments in Agricultural Research. IITA, Ibadan, May 17-20.
- Jhingan, M. L. (2001), "Advanced Economic Theory. Delhi: Vrinda Publications (P) Limited.

- Manyong, V. M.; Ikpi, A.; Olayemi, J. K.; Yusuf, S. A.; Omonona, R. & Idachaba, F. S. (2003), "Agriculture in Nigeria: Identifying Opportunities for Increased Commercialization and Investment". Report Prepared from International Institute of Tropical Agriculture (IITA), in Collaboration with University of Ibadan (UI) for USAID/Nigeria. November.
- Meijerink, G. & Roza, P. (2007), "The Role of Agriculture in Development". Markets, Chains and Sustainable Development Strategy and Policy Paper, No. 5, pp. 1-33.
- Muhammad-Lawal, A. & Atte, O. A. (2006), "An Analysis of Agricultural Production in Nigeria". African Journal of General Agriculture, Vol. 2, No. 1, pp. 1-6.
- Nagarajan, G., Meyer, R. L. and Hushak, L. J. (1995) "Demand for agricultural Loans: A Theoretical and Empirical Analysis". Department of Agricultural Economics, Ohio State University, USA Economic and Sociology Paper, No. 2233.
- Nissanke, M. & Aryeetey, E. (1995) "Financial Integration and Development in sub-Saharan Africa". Report Prepared for the African Technology Department, AFTPS, Washington, D.C.: The World Bank.
- Nwosu, A. C. (2005), "Private Sector Initiatives in Agricultural Development in Nigeria". CBN's Proceedings of the Thirteenth Annual Conference of the Regional Research Units): Enhancing Private Sector-Led Growth in Nigeria, pp 97-111.
- Obadina, T. (1999), "Nigeria's Economy at the Crossroads New Government faces a legacy of Mismanagement and Decay". Journal of Africa Recovery, June.
- Ogen, O. (2007), "The Agricultural Sector and Nigeria's Development: Comparative Perspectives from the Brazilian Agro-Industrial Economy, 1960-1995". Nebula, Vol. 4.1, pp. 184-194.
- Ogunlela, Y. I. & Mukhtar, A. A. (2009), "Gender Issues in Agriculture and Rural Development in Nigeria: The Role of Women". Humanity and Social Sciences Journal, Vol. 4, No. 1, pp. 19-30.
- Ojo, M. O. and Akanjo, O. O. (1996) "The Impact of Macroeconomic Policy Reforms on Nigerian Agriculture". CBN Economic and Financial Review, Vol. 34, No. 2.
- Okuneye, B. (2002) "Livestock Sub-sector in Nigeria: Challenges & Prospect". CBN Bullion, Vol. 26, No. 3.
- Ojo, M. O.; Balogun E. D. & Evbuomwan, G. O. (1992), "Sustaining Agricultural Production in a Deregulated Economy". CBN Economic & Financial Review, Vol. 31, No. 2, pp. 71-85.

- Oladipo, J. A. (2008), "Agro-Industry as Strategy for Rural Development: An Impact Assessment of Nigeria Oil-Palm Industry". *European Journal of Social Sciences*, Vol. 7, No. 1, pp. 75-87.
- Olayiwola, K. & Okodua H. (2009), "Foreign Direct Investment, Non-Oil Exports, and Economic Growth in Nigeria: A Causality Analysis". Department of Economics and Development Studies Covenant University, Ota, Nigeria.
- Omene, G. E. (2002), "Solid Minerals Oil & Gas: Key To The Economy". Being a Distinguished Lecture Presented to the Metallurgical and Mining Division of the Nigerian Society of Engineers at Abuja on 26th September.
- Rahji, M.A.Y & Adeoti, A. I. (2010), "Determinants of Agricultural Credit Rationing by Commercial Banks in South-Western, Nigeria". *International Research Journal of Finance and Economics*, Issue 37, pp. 7-14.
- Ross, M. L. (2003), "Nigeria's Oil Sector and the Poor". Prepared for the UK Department for International Development "Nigeria: Drivers of Change" program. UCLA Department of Political Science Los Angeles, CA.
- Stringer, R. & Pingali, P. (2004), "Agriculture's Contributions to Economic and Social Development". *Electronic Journal of Agricultural and Development Economics*, Vol. 1, No. 1, pp. 1-5.
- Todaro, M. P. & Smith, S. C. (2003), "Economic Development". Eighth Edition.
- Udry, C. (1994) "Risk & Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria". *The Review of Economic Studies*, Vol. 61, No. 495 and 526.
- Ukeje, S. A. (2002), "Incentives for Private Sector Development in Nigeria". CBN's Proceedings of the Thirteenth Annual Conference of the Regional Research Units): Enhancing Private Sector-Led Growth in Nigeria, pp 177-207.
- Ukpong, G. E. (1992), "Some Strategies for the Development of Nigeria's Agricultural Sector in the 1990s". *CBN Economic and Financial Review*, Vol. 31, No. 2, pp. 86-109.
- Utomi, P. (2004). "The Curse of Oil". A Paper Delivered for Heinrich Böll Foundation Oil-Conference by Lagos Business School, May.