THE IMPACT OF AGRICULTURAL CREDIT ON
AGRICULTURAL PRODUCTIVITY IN NIGERIA

BY

IHEGBORO, IFEOMA
PG/M.Sc/08/47285

BEING A DISSERTATION PRESENTED TO THE DEPARTMENT
OF BANKING AND FINANCE, FACULTY OF BUSINESS
ADMINISTRATION, UNIVERSITY OF
NIGERIA, ENUGU CAMPUS

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE MASTER OF SCIENCE DEGREE IN
BANKING AND FINANCE

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SUPERVISOR: DR J.U.J ONWUMERE

2014
APPROVAL PAGE

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DECLARATION

I, IHEGBORO IFEOMA, a postgraduate student in the Department of Banking and Finance with Registration Number PG/M.Sc/08/47285 has satisfactorily completed the requirements for research work for the degree of Master of Science in Banking and Finance. The work incorporated in this dissertation is original and has not been submitted in part or in full for any other Diploma or Degree of this university of any other institution for higher learning.

................................

IHEGBORO IFEOMA

(STUDENT)
This research is strictly dedicated to the Almighty God, the source of my inspiration, vision, and sense of direction and to my children for their prayers.

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IHEGBORO IFEOMA
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ABSTRACT

In most agrarian economies like the type that exists in Nigeria, agricultural production provides the needed fulcrum upon which a sustainable development would blossom. Being the main source of food for most of the population, till date, agricultural production remains the mainstay of the Nigerian economy. It provides the means of livelihood for most of the population, a major source of raw materials for the agro-allied industries and a potent source of the much needed foreign exchange. However, inadequate credit (among other factors) to the agricultural sector led to the downward trend observed in agricultural productivity in Nigeria. To avert such trend, the Federal Government of Nigeria established the Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977 to assist farmers have access to credit as to improve agricultural productivity. The setting up of the ACGSF was predicated on the unwillingness of commercial banks to give loans to smallholder farmers for reasons of high default rate on loan repayment and, therefore high risk, of repayment. In the course of the fund’s operations, a number of problems have been identified as militating against its smooth performance; some of which affected the amount of credit granted to the various agricultural subsectors. Therefore, this study sought to examine (i) the impact of Agricultural Credit Guarantee Scheme Fund on crop output in Nigeria; (ii) the impact of Agricultural Credit Guarantee Scheme Fund on livestock output in Nigeria; (iii) the impact of Agricultural Credit Guarantee Scheme Fund on fisheries output in Nigeria; and (iv) the impact of Agricultural Credit Guarantee Scheme Fund total fund granted on Agricultural output and productivity in Nigeria. The ex-post facto research design was adopted to enable the researcher make use of secondary data and determine cause-effect relationship during the period, 1978-2008. The Ordinary Least Square (OLS) estimation technique was adopted, using SPSS statistical software to test the hypotheses, where Total Agricultural Credit Guarantee Scheme Fund (TACGSF), Agricultural Credit Guarantee Scheme Fund to crop production (ACGSFCP), Agricultural Credit Guarantee Scheme Fund to livestock (ACGSFLSP) and Agricultural...
Credit Guarantee Scheme Fund to fisheries (ACGSFP) were used as the independent variables while Agricultural Production (AP), Gross Domestic Product Agricultural Crop Production (GDPACP), Gross Domestic Product Agricultural Livestock Production (GDPALS) and Gross Domestic Product Agricultural Fisheries Production (GDPAFP) were used as the dependent variable. The study found that Agricultural Credit guarantee scheme fund for crop production, livestock production and fisheries had significant positive impact on crop, livestock and fisheries productivity in Nigeria for the period of the study and also, the total agricultural credit guarantee scheme fund had significant positive impact on agricultural output in Nigeria. The study therefore recommends that stakeholders in the scheme viz: the farmers, lending institutions and government must show greater commitment and dedication for the scheme to achieve its laudable objectives.

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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Agricultural Production in Nigeria is progressively on the decline in terms of its contribution to the Gross Domestic Product (GDP) as well as satisfying the country’s food requirement, despite the fact that about 70 per cent of the population engage in agriculture, thus Nigeria’s agricultural sector is unable to fulfill its most basic and traditional role of being the source of food for the nation, therefore the food import has continued to rise (Odigbo, 2000). There is a growing recognition by the Nigerian farmers of the effect of improved inputs and new technologies on agricultural yield. The use of these inputs and the adoption of high yielding techniques have given rise to an increased need for agricultural credit since majority of Nigerian farmers are small-scale farmers and are often limited by unfavorable economic, social, cultural and institutional conditions (Olubiyi and Hill, 2000). Insufficiency of capital has been a major constraint to agricultural development (Agu, 1998) in order to improve agricultural production modern farm inputs such as fertilizers, improved seed, feeds and plant protection chemicals and agricultural machineries are needed over the hoe and machete technology. Most of these technologies have to be purchased, yet very few farmers have the financial resources to finance such purchases (Adeniji and Joshua, 2008).

Agriculture contributes immensely to the Nigerian economy in various ways, namely, in the provision of food for the increasing population; supply of adequate raw materials (and labour input) to a growing industrial sector; a major source of employment; generation of foreign exchange earnings; and, provision of a market for the products of the industrial sector (Okumadewa, 1997; World Bank, 1998; Winters et al., 1998; FAO, 2006). The agrarian sector has a strong rural base; hence, concern for agriculture and rural development become synonymous, with a common root (Eze et al., 2010).

Eze et al. (2010) posit that support for agriculture is widely driven by the public sector, which has established institutional support in form of agricultural research, extension, commodity marketing, input supply, and land use legislation, to fast-track development of agriculture. These are aside the Private sector participation is not limited to local or foreign direct and portfolio investment financing, but also to sponsorship of research and breakthrough on agricultural issues in universities, capacity building for farmers and, most importantly, the provision of financing to farm businesses. International governmental and
non-governmental agencies including the World Bank, Food and Agricultural Organization of the United Nations, etc., also contribute through on-farm and off-farm support in form of finance, input supply, strengthening of technical capacity of other support institutions, etc (see, Eze et. al., 2010).

At independence in 1960, Nigeria’s agriculture was characterized by high production achieved by mobilizing small scale farmers, provision of infrastructure (roads, railways) geared towards developing crops required for export, and foundation laid for research and export. After independence, government interventions in agriculture were realized within the framework of development plans and annual budgets. Food was abundant and demand met without resort to import (Okoro and Ujah, 2009).

Using a broad classification, the Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) document the import and export agricultural products in the following categories – live animals and animal products; vegetable products; animal and vegetable fats and oil; foodstuff, beverages, spirit and vinegar, tobacco; and raw hides and skins leather, furskins, and saddler. The agricultural exports of significance include cocoa beans and products, rubber, fish/shrimp, cotton, processed skin, etc (Okoro and Ujah, 2009). These agricultural products account for about 39.7% of the total non-oil exports in 2007 (CBN, 2007). According to Soludo (2006), agriculture has been growing at about 7% per annum in the last three years and has been driving the non-oil growth, and will continue to hold the key to growth, employment and poverty reduction.

In terms of value of import vis-à-vis export, Nigeria is a huge net-importer of agricultural products. The import-export gap has been widening since 1999 and this puts the agricultural policy of the nation to question. This situation, however, provides a unique opportunity for closing up or eliminating this ‘agricultural deficit’ through functional policies and budgets (Okoro and Ujah, 2009).

Agriculture also is a significant sector in the Nigerian economy. Although Nigeria depends heavily on the oil industry for her revenues, Nigeria is predominantly an agrarian society with the sector contributing about 42%1 of real GDP in 2008 (CBN, 2008). In 2007, the contribution of agriculture to economy totaled some $132.2 billion (Economist, Sept. 2008). Eboh, Ujah and Nzeh (2009) show that the contemporary economic significance of the
agricultural sector is even more remarkable as in the past half a decade, the impressive growth rate of the nation’s economy has been driven by the non-oil sector, particularly agricultural sector. There are, however, doubts about the sustainability of the current growth rate. The recent upsurge in agricultural growth rate could have been driven mainly by production of staple crops, while productivity has remained low and internationally uncompetitive, and yields of most crops have actually declined over the past two decades (Mogues et al., 2008; Eboh et al., 2006).

Approximately 70% of the Nigeria’s population engages in agricultural production at subsistence level, while agricultural holdings are generally small and scattered (FGN, 2008). Smallholder farmers constitute 81% of all farm holdings and their production system is inefficient. Small-scale (0.1-5.9 ha), medium scale (6.0-9.9 ha) and large scale (>10 ha) are the three broad categories of farm holdings in Nigeria, with the small-scale farm holdings predominating the country’s agriculture and accounting for about 81% of the total farm area and 95% agricultural output (see, Shaib et al., 1997; FMAWR, 2009). The estimated average operational holding is 2 ha per farm family.

Further analysis of the working population data indicates that growth rate of agriculture working population seems to be the driver of the growth rate in total working population. For instance the growth rate of agriculture working population dropped from 3.73% in 2003 to 1.94% in 2007, while that of the total working population dropped from 4.46% in 2003 to 3.25% in 2007 (see, Ujah and Okoro, 2009). The high correlation between growth rates of total working population and agriculture working population seems to suggest that agriculture holds the potential for tackling unemployment in the country at least in the short-run. Despite the significance of agriculture in the nation’s economy, the sector is clearly the least productive when compared to other sectors (Ujah and Okoro, 2009).

The Agricultural Credit Guarantee Scheme Fund (ACGSF) was formed under the military government in 1977 with an initial capital base of N100 million distributed between the federal government (60% equity) and the Central Bank of Nigeria –CBN (40%). The ACGSF is exclusively managed by a board set up under the supervision of the CBN (management agent). The fund is set up with the sole purpose of providing guarantee in respect of loans granted by any bank for agricultural purposes (Central Bank of Nigeria, 1990). Nwosu et al
(2010) noted that the ACGSF was formed solely with the objective of encouraging financial institutions to lend funds to those engaged in agricultural production as well as agro-processing activities with the aim of enhancing export capacity of the nation as well as for local consumption. This is solely exclusive for large scale farming (Somayina, 1981).

The question that comes to mind is whether the declining share of agricultural loan from commercial banks can be traceable to the challenges that encumbered ACGSF. For example, Nwosu et al (2010) identified three major problems associated with the ACGSF scheme, which include increasing incidence of loan defaulters, bank related problems and the inclusion of the term “personal guarantee”. Nwosu et al reiterates that the term is subjective in interpretation especially as the decree forming ACGSF was not able to explain this. Therefore, banks utilize personal judgment and circumstantial framework to interpret this. This will hinder the achievement of the objective of the scheme (see, Nwosu, 2010).

One of the sole objectives for the establishment of the ACGSF is to enhance the export capacity of agricultural produce (Somayina, 1981). The ACGSF is aimed at guaranteeing agricultural outfit that specializes in the following; agricultural outfit engaged in the establishment and management of plantation for cash crop produce like rubber production, oil palm extracting, cocoa plantation etc; agricultural outfit engaged in the cultivation and production of food crops like fruit of all kinds, tubers of yam, cereals and all other food crops and agricultural activities involved in the large scale production of animal husbandries. The vast employment opportunity and the quest towards diversification of the revenue source by the federal government and development agencies have shifted attention towards the informal and the agricultural sector. For example, to sustain the agricultural production in Nigeria, the World Bank developed a project called Agricultural Development Projects (ADPs) which was designed to enhance the production of agricultural outputs in Nigeria.

There are four sub-sectors of agriculture in Nigeria. These are arable crops (including food crops), livestock, fishery and forestry (including tree crops). Most of the researches conducted in this area have dealt on the overall impact of the Agricultural Credit Guarantee Scheme fund on non-oil export output (Somayina, 1981; Efobi, 2011 etc) and contribution to Nigeria’S GDP (Nwosu, et al., 2010; Shaib, et al., 1997).
1.2 Statement of the Problem

Agricultural credit is expected to play a critical role in agricultural development (Duong and Izumida, 2002). Agricultural credit has for long been identified as a major input in the development of the agricultural sector in Nigeria. The decline in the contribution of the sector to the Nigeria economy has been attributed to the lack of a formal national credit policy and paucity of credit institutions, which can assist farmers among other things. The provision of this input is important because credit or loan-able fund (capital) is viewed as more than just another resource such as labour, land, equipment and raw materials. It determines access to all of the resources on which farmers depend (Shephard, 1979). However, agricultural productions have not improved and this lead to the establishment of the Agricultural Credit Guarantee Scheme. The problems which inadequate credit through the scheme may have as pertained agricultural productivity are;

1. Low agricultural cash crop productivity in Nigeria
2. Low agricultural livestock productivity in Nigeria
3. Low agricultural fisheries productivity in Nigeria and
4. Poor Agricultural productivity in Nigeria

In the course of the fund’s operations, a number of problems have been identified as militating against its smooth performance, which have limited the funds contribution the cash crop, livestock and fisheries agricultural subsectors which have lead to low agricultural productivity in Nigeria. According to Akinleye et al (2005), some of the problems are: increasing incidence of loan defaults, high rate of loan repayment by ACGS beneficiaries, others are: natural disasters, poor farm management, low product prices, loan diversion, deliberate refusal to pay and the inability of farmers to assess loan requirements properly leading to farmers receipt of inadequate or excessive loans; Participatory banks in the ACGS do not cooperate fully in lending to farmers. Because of the high cost of processing loans relative to the actual loans and the high default, rate of the farmers, many banks prefer to pay penalty to risk lending their funds to agriculture.

Also banks fault the farmers for submitting incomplete application forms. In some cases where loans are approved, it arrives too late for it to fulfill the purpose for which it was intended. This delay seems more of administrative than any other. Another problem that militates against the smooth operation of the scheme is on “Personal guarantee” as a security
that may be offered to a bank for the purpose of a loan. “Personal guarantee” as a condition was not explained in the decree. This therefore makes it almost nothing as its interpretation rests on the bank officials. Also, the other securities recognized by the decree that could be offered to the bank for the purpose of any loan under the scheme pose problems in the smooth operation of the scheme. The securities are legal title to land, and a life assurance policy. It is a common knowledge that most people especially in the rural areas do not have clear titles to their land which could serve as collateral for loan under the scheme (Okorie, 1998). Finally, the ACGSF has the problem of publicity. Oguoma (2002) noted that there is a low turnout of farmers in most states of the federation in patronizing the scheme because of lack of awareness.

1.3 Objectives of the Study
The general objective of this study is to examine the impact of Agricultural Credit Guarantee Scheme Fund on the agricultural production in Nigeria. The specific objectives therefore include:

1. To examine the impact of Agricultural Credit Guarantee Scheme Fund on crop output in Nigeria.
2. To examine the impact of Agricultural Credit Guarantee Scheme Fund on livestock output in Nigeria
3. To examine the impact of Agricultural Credit Guarantee Scheme Fund on fisheries output in Nigeria and
4. To examine the impact of Agricultural Credit Guarantee Scheme Fund total fund granted on agricultural output and productivity in Nigeria.

1.4 Research Questions
Having considered the problems inherent in the grant of credit to the agricultural sector and specifically the impact of Agricultural Credit Guarantee Scheme Fund towards agricultural production, the following research questions were asked. These are;

1. To what extent does Agricultural Credit Guarantee Scheme Fund credit to the agricultural cash crop sub sector have a significant impact on crop output in Nigeria?
2. To what extent does Agricultural Credit Guarantee Scheme Fund credit to the agricultural livestock crop sub sector have a significant impact on livestock output in Nigeria?

3. How far does Agricultural Credit Guarantee Scheme Fund credit to the agricultural fisheries sub sector have a significant impact on fisheries output in Nigeria?

4. To what extent does Agricultural Credit Guarantee Scheme Fund credit to the agricultural sub sector have a significant impact on agricultural output in Nigeria?

1.5 Research Hypotheses

As a result of the research questions raised above, the hypotheses for this study are:

1. Agricultural Credit guarantee scheme fund does not have a significant positive impact on cash crop output in Nigeria.

2. Agricultural Credit guarantee scheme fund does not have a significant positive impact on livestock output in Nigeria.

3. Agricultural Credit guarantee scheme fund does not have a significant positive impact on fishery output in Nigeria and

4. Agricultural Credit guarantee schemes fund does not have a significant positive impact on agricultural output in Nigeria.

1.6 Scope of the Study

The research covers the period 1978 to 2008. The Agricultural Credit Guarantee Scheme Fund (ACGSF) was established by Act 20 of 1977 but started operation in 1978. The principal objective of the Scheme was to facilitate the provision of credit to farmers by providing guarantees to participating banks known as deposit money banks (DMBs) for loans granted to farmers in accordance with the scheme enabling act. Therefore, this research will examine the impact of the scheme since it was established to 2008.

1.7 Significance of the Study

This study is bent on contributing to the literatures available in finance. It will go further in establishing reasons why subsequent research in this area will contribute to the growth and development of emerging markets like Nigeria. The following users will find this study useful and pertinent;
i) Government
The government is keen on exploring ways by enacting policies that are in consonance with the establishment and promotion of improved Agricultural productivity and output. Hence, the government stands the better position of making sure that the growth of the economy is taken into consideration to better the standard of living of its citizenry.

ii) Academic Purpose
An advancement of knowledge is achieved when series of research are being carried out in the academic environment. Thereby the scope and horizon of the readers or researchers are widened in order to achieve academic excellence through series of research, development of the intellectual faculty and planning. This also led to the gathering and update in the volume of literature for various field of study that are applicable majorly to finance students.

1.8 Definition of Terms
The following terms as they relate to this study is defined; these are:
Agricultural development: is a process that involves adoption by farmers of new and better practices (Garba, 1987; Orebiyi, 1999).

Agricultural Credit: Credit that facilitates the acquisition and application of state of the art technology and enables such enterprise to be in the driving seat in technology application (World Bank, 2000).

Agricultural Productivity: Increased in agricultural sector contribution to the Gross domestic Product of the nation (Idachaba, 1995)
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CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Agricultural Financing Policies in Nigeria

Macroeconomic policies that tend to promote growth of the sector, such as credit-channelling financial policies, price stabilizing monetary and exchange rate policies, and farm incentive-laden fiscal policies including tax exemptions for agricultural businesses, duty-free import of farm machinery, etc. Nigerian agricultural policy provides, among others, for adequate financing of agriculture. The role of finance in agriculture, just like in the industrial and service sectors, cannot be over-emphasized, given that it is the oil that lubricates production. Public expenditure on agriculture has, however, been shown not to be substantial enough to meet the objective of the Government agricultural policies (IFPRI, 2008). For a developing country with a mono-product oil economy such as Nigeria’s, inadequate financing of agriculture portends great danger for many reasons. For one, fluctuating food prices are a precursor of inflation. Secondly, from the expenditure approach to national income accounting, it is likely that Engel’s Law that a large chunk of expenditure in developing economies goes to food holds, meaning that shocks to the domestic agricultural production and supply could be damaging to price stability. There is also the perspective of food security, in an era when food has been used as a weapon of war (United Nations Oil for Food Deal in Iraq) and as bargaining tool (North Korea – United States food deal), even within Nigeria, the Federal military Government during the Nigeria – Biafra war used food blockade as tool of war. The objective of agricultural financing policies in Nigeria is to establish an effective system of sustainable agricultural financing schemes, programmes and institutions that could provide micro and macro credit facilities for the micro, small, medium and large scale producers, processors and marketers.

Policy is said to be an intervention, a course of action taken by government, or management (in the case of an organization) or, better still, an individual, to influence or arrive at predetermined outcomes. The Federal Government of Nigeria (FGN) did recognize the importance of the agricultural sector early enough, so it decided to pursue policies that promote access to finance and financial infrastructure for agricultural production, with the ultimate aim of achieving the country’s developmental goals. The reasons for government intervention in the agricultural financial market are to:
1. Smoothen out imperfections in the agricultural financial market. The agricultural financial market (also the rural financial market) exists to facilitate exchange, a platform for the reconciliation of demand for and supply of capital for agriculture and rural development. Often times, the market is constrained by certain factors such as information asymmetry, moral hazard, adverse selection, etc, from performing its roles effectively. Government then intervenes to iron out those imperfections and create a more Pareto-optimal environment for market players.

2. Ensure food security. Since finance is critical for investment in agricultural production, either in form of equity or debt, government intervention in form of expenditure on credit to farmers, direct production, etc, is to guarantee that food is available and affordable. There is the realization that securing access to cheap food for Nigerians would ensure social stability and lessen reliance on food imports which supply can be cut at any time depending on prevailing global political and economic conditions or similar conditions in the exporting countries.

3. Achieve favourable balance of payments. A high food import bill exerts pressure on the foreign reserves of the country, leading to its depletion. This adversely affects the balance of payments and hence, the international position of the country. Whereas we have been endowed with abundant land resources and farming-friendly climate, just a little push in the direction of other resources, including financial capital, is all that is needed to boost production and reduce dependence on food imports. The government intervenes to ensure that this happens, thereby saving foreign reserves for the more productive use.

4. Promote foreign exchange earnings from agricultural exports. Government policies on agricultural financing aim at, first, ensuring self-sufficiency in food production and then, exporting the surplus to earn foreign exchange. So, not only does government actions help reserve foreign reserves to improve our balance of payments position, it also stimulates accretion to the reserves.

5. Enhance other socio-economic issues, such as poverty reduction, employment generation, reduction in rural-to-urban migration and especially, food price stability since it is known that food price fluctuations are the precursor of inflation in developing countries. This follows from Engel’s Law, which states that a higher proportion of income in developing countries is
spent on food. And since income elasticity of demand for food is highly elastic, it is easy to see why expenditure on food is large enough to cause inflationary trends in the economy.

6. Use finance as engine of growth and development since the major occupation of the people is farming. It is expected that a farmer encouraged with credit will be in position to improve his operation, use improved implements, seeds, livestock, manpower, transportation and markets for sale of the output and purchase of inputs at good market price. Moreover, the farmer will reap the economies of scale, discover new and cheaper products, create demand where none exists and provide utilities to satisfy a widening market, generate in him the optimism and determination to venture into new fields. Through this, credit will constitute the power or key to unlock latent talents, abilities, visions and opportunities, which will lead to economic development and growth among the rural farmers who benefited from government credit policies.

2.2 Challenges of agricultural financial policies
These challenges have been the reason for failure of previous policies, and they continue to threaten existing ones.
1. Lack of adequate skills to deliver services effectively. Most of the credit institutions undertook lending to agriculture without the use of trained agricultural credit officers vested with knowledge of agriculture and the constraints to farmer performance. Additionally, supervision of credit programmes has often been below acceptable standards. Invariably, the schemes fail due to poor repayment performance.

2. Low management capacity of farmer-clients. Most farmers who should benefit from the financing policies, especially the financing schemes, lack the basic skills of farm management, including record keeping. And when these are called up as requirement for accessing facilities, as is always the case, they become ineligible.

3. Unwillingness of conventional banks to support agriculture. Even with mandatory (preferred sector) lending, guarantee of exposure and subsidized fund schemes, most banks prefer not to lend for farming, citing its lower productivity and higher risk relative to the non-agricultural sector as their reason.
4. Paucity of loanable funds. Most of the loanable funds have come from government sources and is not sufficient for any meaningful agricultural investment. The government cannot go it all alone. This creates a finance supply deficit relative to demand. Statistics show that bank credit to agriculture as a proportion of total bank credit to the economy has hardly exceeded 17 per cent since recorded history in 1970, yet the sector contributes over 35 per cent of the gross domestic product annually (CBN, 2007b).

5. Weak institutional support in the sector. Infrastructure for processing and storage, land tenure systems, legal system for registration and perfection of collateral, judicial system for the enforcement of loan contracts and foreclosure of collateral, etc, are weak. This does not encourage private sector commitment to the agricultural financing policies.

6. Poor funding of public financing institutions. The NACRDB, for instance, has a capital base of N50 billion to be contributed to by the FGN and the CBN in a 60:40 ratio. However, as of date, about N23 billion has been paid up. DFRRI and other non-bank institutions were or have been similarly starved of funds. These institutions cannot deliver effectively in the face of this dearth in funding.

7. Some of the policies have been criticized for being excessively skewed against the small farmer, given the eligibility requirements and documentation e.g. Agriculture Credit Support Scheme, etc. Those schemes that are within the reach of these farmers often have cumbersome procedures which soon prove insurmountable.

8. Save for the RRF, most policies does not favour long gestation farm enterprises. This leaves much to be desired as the implication is that the major agricultural exports which are long gestation crops such as oil palm and cocoa may not be rehabilitated soon.

9. Undue political interference in lending operations. Any time Government initiates a credit policy; most beneficiaries are those close to corridors of power. The result is diversion of the fund and default in repayment

10. Government belief that the appropriate interest rates for agricultural loans be kept low to promote agricultural development and to assist small farmers ends up in the hands of big farmers who now invest this fund in their farm business leaving their own funds free for
investment outside farming thereby negating the intention of government to increase agricultural output and encourage adoption of new technologies as well as develop the rural areas.

11. Credit flowing into unproductive areas leads to policy dislocation or distortion. Example, River Basin Development Authority building an irrigation facility in an irregular flowing river which is not likely to produce the necessary water for irrigation. Or the same scheme engaging in food production with unnecessary high overhead costs.

12. The most challenging is the issue of inconsistency and lack of continuity as well as insider abuse in the implementation of policies.

A lack of credit facilities has always been regarded as a major problem of small scale farmers and other micro-entrepreneurs in Nigeria, as in most developing countries worldwide. This has been attributed to the non-availability of collateral securities and inadequate information that prevented this category of people from accessing credit facilities. Nigerian farmers in recent times have witnessed immense involvement of microcredit institutions by accessing credit facilities without demands for collaterals and at concessionary rates of interest. Hence, micro-credit schemes in Nigeria are becoming popular, and agricultural credit options are changing and expanding with innovative products in which farmers are offered different alternatives.

2.3 Agricultural Production in Nigeria
Agricultural development is a process that involves adoption by farmers (particularly small farmers) of new and better practices (Garba, 1987; Orebiyi, 1999). 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 polices and established credit institutions and schemes that could facilitate the flow of agricultural credit to farmers (Adegeye & Dittoh, 1985). One of such laudable Schemes has been the Agricultural Credit Guarantee Scheme Fund (ACGSF). The ACGSF is not the first credit scheme that the Federal Government put in place to encourage agricultural development. According to CBN (1986), other farm credit schemes included the

- Nigerian Agricultural and Co-operative bank (now known as the Nigerian Agricultural Co-operative and Rural Development Bank) established in November, 1972;
• Establishment of rural branches of Commercial banks throughout the country following a mandatory Federal Government policy directive in 1976;
• Creation of the River Basin Authorities in 1979 throughout the Country; Establishment of both enclave and state wide. Agricultural Development Project throughout the Country between 1972 and 1980 to facilitate among other things the provision of agricultural credit to farmers;
• Development of State Ministry operated and other government sponsored agricultural credit programmes in the second half of the 1970s;
• Development of technical support and agro service establishments that would facilitate the supply of Credit to farmers throughout the country between 1976 and 1980.

However, the persistent failure of the above institutions and conventional banks to adequately finance agricultural activities in the mid 1970s was a clear evidence that the country was in need of further financial and institutional reforms that would revitalize the agricultural sector by encouraging the flow of institutional credit into it. Also, the unpredictable and risky nature of agricultural production, the importance of agriculture to our national economy, the urge to provide additional incentives to further enhance the development of agriculture to solve the problem of food insecurity, and the increasing demand by lending institutions for appropriate risk aversion measures in agricultural lending provided justifications for the establishment of the Nigerian Agricultural Credit Fund (ACGSF) by the Federal Government of Nigeria in 1977 (Mafimisebi et al, 2009).

The Scheme was established by Decree 20 of March, 1977 and as amended on 13th June, 1988. It provides for a fund of N100 million subscribed to by the Federal Government (60%) and Central Bank of Nigeria (40%). The fund was enhanced to N1billion on the 8th December, 1999 and later to the present level of N4 billion as at early 2006 (CBN, 2007). All these are aimed at solving the problem of inadequate funding of farm operators by banks and to cushion these financial institutions against the effects of high risks associated with investments in farm enterprises as well as to raise the productivity and earnings from farm investments so that the incidence of loan repayment default among the farmers will be minimized (CBN, 1977; Ogwuma, 1985; Eyo, 1985; Oguoma, 2002).
2.4 The Agricultural Sector and Nigeria’s Development

Ogen (2007) say the neglect of the agricultural sector and the dependence of Nigeria on a mono-cultural, crude oil-based economy have not augured well for the well-being of the Nigerian economy. In a bid to address this drift, the Nigerian government as from 1975 became directly involved in the commercial production of food crops. Several large scale agricultural projects specialising in the production of grains, livestock, dairies and animal feeds, to mention but a few were established (Fasipe, 1990). Sugar factories were also established at Numan, Lafiagi and Sunti (Lawal, 1997). The Nigerian Agricultural and Co-operative Bank (NACB) was established in 1973 as part of government’s effort to inject oil wealth into the agricultural sector through the provision of credit facilities to support agriculture and agro-allied businesses (Olagunju, 2000).

In spite of these efforts, it is heartrending to note that as from the mid 70s, Nigeria became a net importer of various agricultural products. In 1982 alone, Nigeria imported 153,000mt tons of palm oil at the cost of 92 million USD and 55,000mt tons of cotton valued at 92 million USD (Alkali, 1997). Between 1973 and 1980, a total of 7.07 million tons of wheat, 1.62 million tons of rice and 431,000 tons of maize were imported. Thus, from N47.8 million in the 60s, the cost of food imports in Nigeria rose to N88.2 million in 1970 and N1, 027.0 million in 1988 (Alkali, 1997). Since the 1990s and until the recent ban on rice importation, Nigeria has been spending an average of 60 million USD on the importation of rice annually. Indeed, in 1994, the agricultural sector performed below the projected 7.2 per cent of budgetary output (Lawal, 1997).

Between 1995 and 1998 the government further embarked on the reformation of the lending policies of the Agricultural Credit Guarantee Scheme (ACGS) for easier access to agricultural credit schemes. It also established the Calabar Export Processing Zone (EPZ) and initiated the Enugu, Kaduna, Jos, and Lagos EPZs with each specialising in specific food and export crops. In fact, the National Rolling Plan for 1996-1998 assumed that by year 2000, Nigeria would have been able to feed its population, develop the capacity to process agricultural raw materials both for local industries and for export and significantly increase the contributions of the agricultural sector to the GDP (Lawal, 1997). These lofty objectives have turned out to be a mirage mainly because of official corruption and lack of commitment on the part of those saddled with the responsibility of implementing the government’s agricultural policies. In order to get out of this doldrums, Nigerian policy makers need to be wary of development
economists who assign a relatively minor role to agriculture in economic development and fervently believe that industrialisation is synonymous with economic development (Ogen, 2002; Ogundipe, 1998).

Nigerian government needs to actively promote the establishment of the kind of agro-based industries that are capable of processing Nigeria’s agricultural raw-materials in a most efficient manner. Thus, the emphasis should be on the local processing of raw crops for local industries as well as for export. This will create more employment opportunities and additional income will be generated. The provision of agricultural subsidies for fertilizer, farm implements and equipment would also boost agricultural production. In addition, there is the need to put in place an agricultural tariff regime that would protect Nigeria’s agricultural produce from unbridled foreign imports and competition.

There is also the need for the provision of replanting grants to cash crop farmers so that they can replace their old trees with newer varieties. It has been observed that in spite of the fact that these newer varieties are high-yielding and relatively easy to maintain with a shorter maturation period, most farmers are reluctant to do away with their old plantations because of the high cost of replanting new ones (Ogen, 2004). It is equally important to provide special welfare schemes for farmers that will form part of a social policy to alleviate rural poverty and the redistribution of income in favour of the rural poor. Government should also strive to promote greater efficiency in the rural areas by extending equal social benefits; establishing rational schemes for agrarian reforms and improving the quality of life in areas that are quite remote from the main centres so as to alter the movement of people from rural communities to urban areas.

Furthermore, the resuscitation and development of the critically ailing Nigerian sugar industry and its bye-product especially ethyl alcohol (ethanol) which comes from molasses (a by-product of sugarcane) is of an urgent and critical necessity. Given the intractable and embarrassing problem of fuel queues in Nigeria, ethanol could be used to produce a brand of automobile fuel known as alcogas or green petrol. Apart from being a renewable source of energy, and unlike fossil fuels, alcogas has little or no adverse effect on the environment. In fact, with alcogas Nigeria will be able to reduce her dependence on imported fuel and save additional foreign exchange for capital projects (Ogen, 2004).
2.5 The Agricultural Credit Guarantee Scheme: Roles, Problems and Prospects

The agricultural sector in Nigeria was a major source of foreign revenue prior to the discovery of oil in commercial quantity. Then Nigeria was reckoned with the production and export of ground-nut, cocoa, rubber and other agricultural crops in Nigeria. The discovery of oil at large scale exploration in the 1970s turned the tide against the agricultural sector in favour of the oil sector. For instance, as at 2000, oil and gas exploration accounted for more than 98% of export earnings and about 83% of federal government revenue (Export Import Bank, 2009). The oil sector also accounted for more than 40% of the gross domestic product (GDP) in Nigeria and about 95% of the foreign exchange earnings. Despite this seemingly high revenue from the oil sector, the paradox of it that over 70% of the Nigerian population is engaged either in the informal sector or in agricultural production (Olaitan, 2006).

Agricultural development is a process that involves adoption by farmers (particularly small farmers) of new and better practices (Garba, 1987; Orebiyi, 1999). 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 polices and established credit institutions and schemes that could facilitate the flow of agricultural credit to farmers. (Adegeye and Dittoh, 1985).

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However, the persistent failure of the above institutions and conventional banks to adequately finance agricultural activities in the mid 1970s was a clear evidence that the country was in need of further financial and institutional reforms that would revitalize the agricultural sector by encouraging the flow of institutional credit into it. Also, the unpredictable and risky nature of agricultural production, the importance of agriculture to our national economy, the urge to provide additional incentives to further enhance the development of agriculture to solve the problem of food insecurity, and the increasing demand by lending institutions for appropriate risk aversion measures in agricultural lending provided justifications for the establishment of the Nigerian Agricultural Credit Fund (ACGSF) by the Federal Government of Nigeria in 1977 (Mafimisebi et al, 2009).

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Various Studies have shown that Credit plays an important role in enhancing agricultural productivity of the farmer (Okorji and Mejeha, 1993; Nweze, 1991; Mafimisebi et al, 2008). The general purpose of the Nigerian 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 is 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 programme. The scheme is expected to provide 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 at May, 2006. Also, 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. The agricultural activities that can be guaranteed under the scheme include the: Establishment and / or management of plantation for the production of rubber, oil palm, cocoa, cotton, coffee, tea and other cash crops; Cultivation and production of cereals, tubers, and root crops, fruits of all kinds, beans, groundnuts, peanuts, beniseed, vegetables, pineapples, bananas and plantains; Animal husbandry that covers poultry, piggery, rabbitry, snail farming, rearing of small ruminants like goats, sheep and large ruminants like cattle (Olaitan, 2006).

The scope of the above was expanded in the amendment decree of 1988 to include fish culture, fish captures and storage. The scheme guarantees loans to farmers from lending institutions up to the tune of 5 million naira for individual farmers and ten million Naira for group/cooperative farmers (CBN 2007), 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 there after 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 (Olaitan, 2006).

From various studies on the Agricultural Credit Guarantee Scheme Fund in Nigeria, it is evident that the scheme has increased the flow of funds to agriculture. However, stakeholders in the scheme viz: the farmers, lending institutions and government must show greater commitment and dedication for the scheme to achieve its laudable objectives. Farmers should be encouraged to be applying for loans from the participating banks to enhance their agricultural activities and productivity; and also to repay the loans as and at when due (Nweze, 1991)

The lending institutions should make efforts to grant agricultural loans at the appropriate time to farmers who met the conditions. Late release of loan to a farmer leads to loan diversion / misuse which has been established to be a major cause of poor loan repayment. Secondly, it
behooves on the lending institution to ensure that the loan being granted to a farmer is “quite adequate” for the purpose, as granting of an inadequate loan for a purpose is a prelude for loan diversion and its consequence on the loan repayment ability. The government should take a second look at the securities that may be offered to the bank for the purpose of a loan under the scheme. There is the need for government to review the idea of a farmer using a certificate of occupancy on a land as “Security” before any amount above N20,000 is approved. It is a common knowledge that small farmers (especially in the rural areas) do not have legal title on their farmlands. Therefore, there is the need to review this subsection so that the traditional ruler or President-General of the applicant’s community or a civil servant of a particular category could stand as surety for loans under the scheme (CBN, 2007).

The scheme still needs publicity as most farmers especially in the rural areas are oblivious of the scheme’s objectives. It therefore behooves on the government (Federal, State and local Governments) to use its agencies like National Orientation Agency (NOA), Agricultural Development Programme (ADP) extension officers and other relevant bodies to organize lectures on the scheme in the farmers’ locality.

Finally, government should ensure that bank claims as a result of default and borrowers’ interest draw backs are paid without delay. This will not only motivate both participating banks and farmers in the scheme but will also attract others who are skeptical. The end result is the nation reaping the dividend of adequate credit into our agricultural sector and that is increased productivity, which is a sine qua non in agricultural development (Nwosu et. al., 2010).

2.6 Structure, Organization and Mandate of the ACGSF

The Nigerian ACGSF (henceforth “the Scheme” or “the Fund”) was set up by the Federal Government Act No. 20 of 1977. Its purpose was to serve as an inducement to banks (commercial and merchant) to increase and sustain lending to agriculture. Under the Scheme, bank loans to farmers are guaranteed 75% against default. Thus, the Scheme is a partial credit guarantee type. When a default occurs, the CBN; the Managing Agent for the Scheme’s day to-day administration, remits to the participating lending banks, (PLBs), 75% of the amount in default, net of any amount realized by the bank from the security pledged (where applicable) by the farmer. This is done after careful verification and approval by the Board of Directors responsible for managing the Scheme. Verified defaults are settled by the CBN.
from a fund set up by the FGN and CBN for the purpose. At the commencement of operations by the Scheme on April 3rd, 1978, the authorized capital of the Fund was N 100 million; subscribed to in the proportion of 60% and 40% by the FGN and CBN respectively. The proportion of the authorized capital paid up as at the time operations commenced was N 85.5 million.

For the purpose of administering the Scheme, the country, with its then nineteen (19) State structure, was divided into four zones. They were Bauchi Zone (covering Bauchi, Borno, Gongola and Plateau States); Enugu Zone (covering Anambra, Benue, Rivers, Imo and Cross River States); Ibadan Zone (covering Kwara, Ogun, Ondo, Oyo, Bendel and Lagos States) and Kano Zone (covering Kano, Sokoto, Niger, and Kaduna States). Despite the official recognition of six geo-political zones for political purposes in the early 1990, the earlier four zones for the purpose of administration of the Fund subsists. The only difference now is that the then nineteen States classified into four zones have since metamorphosed into 36 courtesy of states creation exercises in 1987, 1991 and 1996. Thus, more states have been included under each zone and the names of many of the erstwhile states have changed.

2.7  Overview of the agricultural finance policies in Nigeria
The policies aimed at strengthening the agricultural and rural financial markets include the establishment of schemes, programmes, and institutions to address and deliver government’s intentions in the sector. Some of these were encapsulated in the various national development plans and budgets.

2.7.1 Agricultural Finance Policies Schemes
The schemes for financing agriculture have the first objective of encouraging banks to lend to the sector despite the relatively higher inherent risk and uncertainty. This was done by providing the banks with low-cost funds for lending. Another way was to cover their risk exposure to some extent using one instrument or the other. The second objective is promoting farmers’ access to credit by the provision of concessory terms.

1. Agricultural Credit Guarantee Scheme Fund (ACGSF), 1978 till date. Established by Act No. 20 of 1978, this offers a 75 per cent guarantee backed by the Central Bank of Nigeria (CBN) on agricultural credit in default, net the amount realized from the disposal of security for such credit. Financing is at market-determined interest rates. The CBN offers a rebate
equivalent to 40 per cent of the loan interest when loans are duly repaid. This scheme deals with small scale farmers who need small loans to operate. For instance, in 2005, more than 70% of all loans were smaller than fifty thousand naira to each farmer who applied and accounted for 36% of total loan value. Only 11% of all loans were larger than N100, 000 and accounted for 32% of total loan value. The scheme has, however, suffered bureaucratic and administrative bottlenecks. For instance the processing of applications and claims has been slow so much so that at the end of 2005, there was an accumulated backlog of 4064 unprocessed claims, the oldest of which dated back to 25 years (IFPRI, 2008).

2. Small and Medium Enterprises Equity Investment Scheme (SMEEIS), 2001. This is a voluntary initiative of the Bankers’ Committee to support micro, small and medium enterprises (MSMEs), including agro and agro-allied businesses. Financing is in form of either debt or equity. In the case of debt, the borrowing rate is not to exceed single digit.

3. Refinancing and Rediscounting Facility (RRF), 2002 to date. Banks that lend long-term to agriculture and are in need of liquidity are availed an amount which is a certain percentage of the outstanding asset portfolio to long-term agriculture by the CBN at reduced rates at the discount window.

4. Agricultural Credit Support Scheme (ACSS), 2006 till date. The initial ACSS fund of N50 billion was established with contributions mostly from the CBN and deposit money from banks for the financing of large agricultural projects such as establishment or management of plantations, cultivation or production of crops, livestock, and fisheries and farm machinery and hire services. The borrowing rate is 14 per cent, with the CBN absorbing 6 per cent while the borrower pays 8 per cent at full repayment. The purpose of ACSS is to facilitate the development of the agricultural sector by advancing credit to farmers at low interest rates. By pursuing this strategy, the government hopes to exert downward pressure on prices of agricultural produce, especially food, leading to reduced inflation, increased exports, diversification of government revenue base, and increased foreign exchange earnings.

5. Large Scale Agricultural Credit Scheme (LASACS), 2009. A N200 billion fund established by the Federal Government in the wake of the current global economic crisis to finance large integrated commercial farm projects with an asset base of at least N350 million (excluding land) with prospects of increasing this to N500 million in three years time, and
medium-sized agricultural enterprises with an asset base of N200 million (CBN, 2009). The terms of borrowing are favourable, including a long tenor and single digit lending rate.

6. Supervised Agricultural Loans Board. Most state governments set up these boards to dispense finance in form of credit to farmers. It should be added that aside this boards, the state Agricultural Development Programmes (ADP) have recently been working in conjunction with the National Programme for Food Security (NPFS) in the provision of credit to farmers.

2.7.2 Agricultural Finance Policies Programmes

1. National Accelerated Food Production Programme (NAFPP), 1972. This was part of the Second National Development Plan (1970 – 74). The plan itself had no clear statement on rural development, although N1, 353 million was voted for it (FGN, 1972). It targeted self sufficiency in the production of rice, maize, sorghum, millet and wheat. It was a joint programme of Federal Government and USAID. Its objectives include accelerating and increasing food production through the adoption of improved packages of production technology, speedy up the transfer of research results to farmers, pursuing intensive and extensive cultivation of crops and linking research to production agencies through extension services.

2 Agricultural Development Programme – 1975. It is jointly funded by the world Bank, Federal and States in Nigeria aimed at provision of rural roads, farm service centers, agricultural Extension services, credit etc towards achieving food production. Extension activities implemented by ADPs included establishing demonstration farms, identifying lead farmers, providing information to lead farmers on improved farming practices, facilitating access to improved technology and inputs and helping lead farmers teach others.

3. Operation Feed the Nation (OFN), 1976. The OFN was part of the Third National Development Plan (1975 – 80) which was voted N2, 050.738 million. Like the earlier plan, there was no categorical strategy for rural development, except some N500 million for rural regrouping (Olayiwola and Adeleye, 2005). However, it had objectives to mobilize the people to embrace agriculture, eliminate the traditional disdain for agriculture by the educated, enhance food production on a large scale, create jobs and income and utilize all available land resources in the country.
4. Green Revolution programme - 1980. The civilian regime initiated this programme aimed at wiping away hunger through credit supply to farmers, encourage and intensify cooperative education, mobilizing the local people to actively participate in agriculture, application of research on food and fibre to enhance abundance in staple food production, processing and distribution in Nigeria.

5. Rural banking programme, 1977 to 1991. Banks were encouraged to not only establish rural branches but also to extend at least 50 per cent of the deposit mobilized from the rural areas as loans and advances to rural dwellers. Defaulting banks were to be penalized.

6. Community banking programme, 1991 to 2007. The programme provided for the establishment of community banks with a focus on rural banking operations. The National Board for Community Banks (NBCB) was the regulator of these banks until 2002 when this function was transferred to the CBN. It was intended to serve communities that were able to establish one based on personal recognition, character and credit worthiness of the borrower.

7. Root and Tuber Expansion programme - 2000. It was established to commercialize root and tuber crop production and improve living conditions, income, food security and nutritional health of the poorest small holder households.

8. National FADAMA Development programme aimed at increasing income of beneficiaries by at least 20%. The programme was designed in 1993 to promote simple and low cost improved irrigation technology under World Bank financing. FADAMA is a Hausa word for low lying flood plains usually with easily accessible shallow groundwater. It is a major instrument for achieving the government’s poverty reduction objective in rural areas of Nigeria. The beneficiaries are meant to come as a group known as FADAMA Community Association to the National FADAMA Development Programme. The programme empowers the association with resources, training, and technical assistance support to properly manage and control the resources for their own development. FADAMA adopts a socially inclusive and participatory process in which all FADAMA users will collectively identify their development goals and pursue it when assisted. The programme is in its third phase currently due to its success in the States that adopted it.
9. Family Economic Advancement Programme (FEAP), 1997 to 2001. This was established to serve the credit needs of the family in their daily economic activities through input supplies, loan in form of cash, and capacity building.

10. National Poverty Eradication Programme (NAPEP), 1999 to date. Like FEAP, NAPEP was established by the federal government. The mode of operation is tailored towards directed (subsided) credit to farmers. The programme consists of four schemes namely, Youth empowerment scheme which involves capacity acquisition, mandatory attachment, and credit delivery; Rural infrastructures Development scheme which involves the provision of portable water, rural electrification, transportation and communication development.; Social welfare Services Scheme which is involved with qualitative education, primary health care, farmers empowerment and provision of social services, provision of agricultural input and credit delivery to rural farmers.; and Natural Resources Development and Conservation Scheme which contains programmes for environmental protection through conservation of land and space, development of agricultural resources, solid minerals and waters resources.

11. Microfinance, 2005 to date. Microfinance brings financial services such as savings, deposit, payments, transfers, micro insurance and micro leasing to the active (or productive) poor and low income people, who would otherwise have no access to such services. The Microfinance Policy outlines the principles and guidelines for the practice of microfinance in Nigeria, including provision for the establishment of private sector driven microfinance banks with market-centred operations, veritable source of loanable funds for microfinance banks is the Micro Credit Fund, integration of microfinance institutions into the formal banking system. The specific objectives of the Nigerian microfinance policy are to; make financial services accessible to a large segment of the potentially productive Nigerian population which otherwise would have little or no access to financial services, promote synergy and mainstreaming of the informal subsector into the national financial system, enhance service delivery by Microfinance institutions to micro, small, and medium entrepreneurs, contribute to rural transformation and promote linkage programmes between universal and development banks, specialized institutions and microfinance banks. The micro finance banks are of two types; those licensed to operate as a unit bank with capital base of #20million (88,890 Euros) and those licensed to operate in a state with capital base of #1 billion (444,500 Euros)
12. There have been several recent presidential initiatives aimed at financing the production and export of certain commodities such as cassava, rice, cocoa and oil palm.

13. Preferred sector allocation of credit, 1970 to 1996. Banks were mandated to extend 40 per cent of their loans and advances to agriculture which was designated a preferred sector. Banks that failed to meet this target were penalized. The funds not lent were transferred to the then Nigerian Agricultural and Cooperative Bank, NACB.

14. Concessionary interest rates for agricultural loans, 1980 to 1987. Banks were further mandated to extend credit to agriculture at a regulated rate of 9 per cent per annum.

2.7.3 Agricultural Finance Policies Institutions

1. Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB), 1972 to date. Formerly Nigerian Agricultural and Cooperative Bank, NACB, it was jointly established by the Federal Government of Nigeria (FGN) and the Central Bank of Nigeria (at a ratio of 3:2) to dispense credit to cooperatives, agribusiness, and individual small holder farmers at a subsidized interest rate. As we as direct investment through equity participation in projects, guarantees for agricultural ventures and rural savings services. Its present name came after a merger of people’s bank of Nigeria, Family Economic Advancement Programme and Nigerian Agricultural and Cooperative bank in 2002. Even though it now collects deposits, it has not lived up to expectation due to poor funding.

2. River Basin Development Authority (RBDA), 1977 to date. Nine RBDAs were established in 1977 as part of the Third National Development Plan (1975 – 80) to add to the existing Sokoto and Rima RBDAs. Their focus is the provision of especially rural water infrastructure but also roads; N32.8 billion was budgeted for this plan. It was the first plan to make rural development and, especially rural electrification, a priority area of government (FGN, 1975). The scheme also involved a massive development of the nation’s water resources through creation of irrigation schemes to encourage all season farming.

3. National Grains production company (1979) for the expansion of grain production through giving the farmers improved seeds as credit.

4. Directorates of Foods, Roads and Rural Infrastructure (DFRRI), 1986 to 1993. This agency adopted an integrated approach to rural development. The philosophy recognized that increased food production was tied to development of rural economic infrastructure. Budget
allocation to DFRRI was N433 million in 1986, N500 million in 1987 and N1 billion in 1988 respectively.

5. Nigerian Agricultural Insurance Corporation (NAIC), 1987 to date. This provides insurance cover for all types of farming and farming related activities, including insurance for stock in transit. The premium paid on NAIC policy is heavily subsidized by the CBN to make it affordable for small holder farmers. The indemnity paid in the event of occurrence of a risk insured against helps in ploughing the farmer back to business.

6. People’s Bank of Nigeria, 1990 to date. This was an initiative that targeted self help groups with credit for micro and small business. It was merged with the FEAP and NACB to form NACRDB in 2002.

7. National Agricultural Land Development Authority – 1991 to open up more areas for agricultural production with supporting credit.

To achieve these schemes, programmes, and institutions, the government over the years made budgetary allocations to agriculture which when compared with the total budget, fall short of meeting policy intentions. For instance during the first to third (1962 to 1980) development plan periods, the federal government budgeted #3.57 billion but only #2.41 billion was actually released for the sector(Federal Department of Agriculture, National Development Plan, 1992). The record also showed that in the first Plan, 11.6 percent of the budget was allocated to agriculture but only 9.8 percent was released, in the second Plan 9.9 percent was budgeted but 17.7 % was actually spent and in the third plan 7.2 allocation was budgeted and 7.1 of this amount was released for the period. Table 1 shows the budgetary allocation to agriculture 1990- 2002.

2.8.1 Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB)
Both public and private sector lending activities constitute agricultural financing landscape in Nigeria. Public sector lending agencies include the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB). The birth of the Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) Limited as the single largest development finance institution in Nigeria followed the successful merger of the former People’s Bank of Nigeria (PBN); the defunct Nigerian Agricultural and Cooperative Bank (NACB) Ltd. and the risk
assets of the Family Economic Advancement programme (FEAP) in October, 2000. Thus, NACRDB is dedicated primarily to agricultural financing at both the micro and macro levels, as well as micro financing of small and medium scale enterprises. The Bank is a registered limited liability company that is wholly owned by the Government of the Federal Republic of Nigeria with the share capital fully subscribed by the Federal Ministry of Finance Incorporated (60%) and the Central Bank of Nigeria (40%). The Bank’s broad mandate encompasses savings mobilization and the timely delivery of affordable credit to meet the funding requirements of the teeming Nigeria population in the agricultural and non-agricultural sectors of the national economy (NACRDB, 2009).

The bank has a network of 201 branches spread across all the thirty-six (36) states and the Federal Capital Territory, Abuja. The major areas of the bank’s participation in agricultural and rural developments are: Purveyance of affordable credit facilities to less privileged segments of Nigerian society who cannot readily access the services of conventional banks; Acceptance of savings deposit from customers and the payment of same with accrued interest, as at when due; Provision of opportunities for self employment in the rural areas, thereby reducing rural urban migrations; Augmentation of government efforts in the diversification of the productive base of the national economy; Inculcation of banking habits at the grassroots of the Nigeria society; Promotion of capacity building through the provision of relevant training and advisory services to rural entrepreneurs; Fostering an accelerated growth and development of the agricultural and rural economy; Encouraging the formation of cooperative societies at all levels; and Provision of retail banking services to its client.

In order to fulfil the above objectives, the new NACRDB provides three types of credit facilities to its customers. These are micro, macro and on-lending, while the micro loans constitute 40% of its loanable funds, the macro and on-lending which are for small and medium farmers constitute 60%. Since 2003 when it was restructured it has kept the interest rate for micro loans at 8% while the rate for other facilities has been increased to 18% which is comparable to the minimum market rate charged by commercial banks in the country. A summary of NACRDB loans performance between July 2001 and December 2006 showed that, it approved N34.65billion loans, disbursed N21.40 billion loans while repayment of the loans disbursed during this period was only N8.68billion representing 58.56 percent. Detail
analysis of the loan disbursements showed that micro, macro and on-lending were N10.60billion, N6.71billion and N4.1billion respectively (Ujah and Okoro, 2009).

2.8.2 Agricultural Credit Support Scheme (ACSS)

The joint initiative of the Federal Government of Nigeria and the Central Bank of Nigeria/the Bankers Committee in 2006 led to the introduction of the Agricultural Credit Support Scheme (ACSS). With a prescribed fund of N50.0 billion, the ACSS was introduced to enable farmers exploit the untapped potentials of Nigeria’s agricultural sector, reduce inflation, lower the cost of agricultural production generate surplus for export, increase Nigeria’s foreign exchange earnings as well as diversify its revenue base. At national level, its activities are carried out by a Central Implementation Committee (CIC), while those of the Federal Capital Territory (FCT) and states are carried out by State Implementation Committees (SICs). The Scheme is geared toward lending mainly to large scale commercial agriculture.

To access loans under ACSS, applicants (practising farmers and agro-allied entrepreneurs with means) are encouraged to approach their banks for loans through the respective state chapters of farmers’ associations and State Implementation Committees. However, large scale farmers are allowed to apply directly to the banks in accordance with the guidelines. ACSS funds are disbursed to farmers and agro-allied entrepreneurs at 14% interest rate. While the farmer pays 8% to the bank, the Central Bank of Nigeria off-sets the balance 6% in favour of the borrower. The 14% is inclusive of all charges, thus reducing the effective rate of interest paid by farmers to 8% (Ujah and Okoro, 2009).

2.8.3 Micro Credit Fund (MCF)

In furtherance of efforts to ensure steady flow of funds in the Small and Medium Scale Enterprises (SMEs), particularly micro enterprises, the Bankers’ Committee has with effect from February 2008, established a Micro Credit Fund (MCF). The Fund has started operations with the balance of the Small and Medium Enterprises Equity Investment Scheme (SMEEIS) which was put at N20.3 billion as at December 2007, while annual contributions of 5 percent of profit after tax would continue to be made by each bank to grow it to N100 billion by the end of 2010 by setting aside 5% of their profit after tax, annually. The major objective of the MCF is to complement the poverty and small and micro credit interventions
of government and the activities of the microfinance banks in supplying a large but cheap source of finance to the small and micro entrepreneurs. Under the fund, state governments can engage in wholesale borrowing from banks and on-lend to more entrepreneurs in their respective states through channels acceptable to the CBN. To access the fund, the states would have to put in place appropriate institutional arrangement for disbursing and recovering the amount to be accessed which shall be confirmed by the CBN, as well as monitoring mechanism to ensure efficient utilization. In situation where the state governments are unable to exhaust the fund set aside by the banks in any year, micro finance banks and NGOs’ micro finance institutions could borrow from the fund for on lending to small and micro enterprises (Ujah and Okoro, 2009).

2.8.4 Rural Finance Institution Building Programme (RUFIN)
In an effort to facilitate farmers’ access to credit through sustainable microfinance institutions in Nigeria, the International Fund for Agricultural Development (IFAD), Federal Government of Nigeria and the Central Bank of Nigeria jointly designed Rural Finance – Institution Building Programme (RUFIN) for a loan of US$27.17 from IFAD. RUFIN is a rural financial sub-sector development programme that fits well within the policy and institutional framework for the overall development of the financial sector in Nigeria. Basically, RUFIN focuses on two areas namely: The expansion of rural financing institutions through development of cooperatives, the saving and credit groups to fully participate in the rural finance sector. Over the 7 year programme life, 272 cooperative savings and credit Unions will be developed to provide rural financial services to members. These institutions are free to transform into rural banks and microfinance institutions under the microfinance Policy Framework; and Stimulation of agriculture and rural economy for poverty alleviation and overall economic development through mobilization and capacity building of the rural communities to fully and actively participate in the process of development.

The benefits the rural poor would derive from RUFIN are the following: Provision of a guarantee fund through direct contributions of USD1.5million to the Microfinance Development Fund under the auspices of CBN; Improving the financial management of Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) though adoption of suitable soft ware, staff training and introduction of financial products suitable to its clients’ base; Promoting rural savings which can be used as deposit guarantee for credit by cooperatives/savings and credit groups; and Linking commercial banks and other rural
finance institutions to facilitate expansion of financial services to agriculture and SMEs in the rural areas (Ujah and Okoro, 2009).

2.8.5 Nigerian Agricultural Insurance Scheme (NAIS)
The Nigerian Agricultural Insurance Corporation (NAIC) was established in 1987 with the objective of providing insurance covers to farmers against natural disasters and other risks associated with agricultural activities. The existence of NAIC has encouraged banks to be more liberal in providing agricultural credit to farmers. According to Dele (2009), NAIC paid N102 million in 2008 as claims to farmers out of the N156 million expected to be paid to farmers during the period under review, while the balance of N54 million was still being processed for payments. The breakdown of the amount showed that N39.8 million was paid for crops, N79.7 m for livestock, while N22.3 was paid for other forms of claims. Also NAIC underwrote businesses worth N20.6 billion during the same period including crops (N6.5 billion), livestock (N5.1 billion), and other businesses (N8.9 billion). This development has put NAIC on the right track to continue to provide the much needed risk management services for the Agricultural Insurance Scheme and other insurance services (Ujah and Okoro, 2009).

Specifically the Scheme covers agro-allied, information technology and telecommunication, manufacturing, educational establishments, services, tourism and leisure, solid minerals and construction. The total set aside fund by all the banks as at February 2008 was N42.02 billion while the total investment was N21.15 billion in 302 projects (Alegieuno, 2008). The 10% set aside fund is meant to finance micro enterprise activities. For this purpose, a small and medium enterprise is defined as any enterprise with a maximum asset base of N1.5 billion (excluding land and working capital), and with no lower or upper limit of staff. However, the scheme was discontinued in 2007 and made optional. Banks are no longer required to mandatorily set aside 10 percent of their profit after tax for the scheme (Ujah and Okoro, 2009).

2.9 Credit Guarantee Schemes in Nigeria Countries
Agriculture has been a vital and dominant sector in the economy of Nigeria. From the early 1950s to the early 1970s, the sector was a source of employment for about 80% of the labour force (World Bank, 1993). It generated foreign exchange earnings which made it possible for Nigeria to finance development projects. Abundant and affordable food emanated from the
sector for both domestic consumption and exportation during this period. This ensured a highly stable economy with a low rate of inflation (NISER, 2003).

However, starting from the early 1970s when crude oil discovered in the 1960s began to be exploited and exported, the importance of agriculture began to wane. Attention virtually shifted to the mining sector which increasingly accounted for the bulk of foreign exchange earnings. As a result of inflow of petrol dollars, Nigerians increasingly relied on importation for both food and raw materials instead of investing in and developing the agricultural sector to widen its capacity to provide these commodities. Rather unfortunately, the goose that laid the golden egg (agriculture) was abandoned as most investment went to the mining, industrial and construction sectors. The reason given for this was that returns from agriculture were far lower than that of other sectors. As if to compound the problem of low investment in agriculture in an era in which government was directly involved in financing agricultural production through state farms, public agro-chemicals and agro-processing companies etc, commercial and merchant banks also became increasingly apathetic and reluctant to lend to the agricultural sector.

Agricultural loans were classified as low-yielding, high administrative cost and thus, high-risk loans. This situation continued to the extent that by the late 1970s, Nigeria had become a net importer of many of the major food commodities it hitherto exported. Thus, it can be said that the oil boom of the late 1970s brought along with it the agricultural doom which Nigeria is frantically battling to reverse in the last three decades. Apart from the almost total neglect of agriculture in terms of funding, faulty policy reforms and ineffective implementation of potentially sound ones resulting in unintended beneficiaries in the agricultural sector were also implicated as contributory factors to the present poor performance of the Nigerian agricultural sector (Idachaba, 1995; 2000). The unbridled importation of goods especially food commodities and its attendant demand on the country’s foreign account has also placed her balance of payment in a precarious position (NISER, 2003).

The poor performance of the agricultural sector which was first noticed about three decades ago became worsened through inadequate capital investment which culminated in the vicious circle of low farm size, low use of modern inputs, low output and low income (Mafimisebi, et al., 2006). This phenomenon became prevalent and its adverse impacts were magnified because small-scale operators, who are regarded as highly unorganized and poor in resource
endowment and managerial skills, preponderate in the Nigerian agricultural sector (Akinwunmi, 1999). These inadequacies notwithstanding, the small-holders account for about 95% of agricultural production in Nigeria (Olayide, 1980, World Bank, 1993; 1996). To remedy the problem of persistent low performance of the agricultural sector, there is the need for injection of capital into agricultural activities since the funds required for farm expansion and greater use of modernized and improved inputs could not be provided by the resource-poor farmers owing to widening demand-supply gap for investible funds in the rural locales where most of these peasant farmers reside (Olayemi, 1999; Udoh, 2002 and Mafimisebi et al., 2006).

In recognition of the indispensable role of credit in the development of Nigerian agriculture, a government-sponsored, credit-granting institution exclusive to the agricultural sector (The Nigerian Agricultural Co-operative Bank, NACB) was established in 1973. Further efforts targeted at providing institutional credit for agricultural purposes and bridging the credit gap included mandatory opening of branches of commercial banks in rural areas for easy and enhanced access to institutional credit by farmers. In addition to this, commercial and merchant banks were also mandated by the Central Bank of Nigeria (CBN) to commit a stipulated proportion (15% and 8% respectively) of their loan portfolios to agriculture (Mafimisebi, Oguntade and Mafimisebi, 2009).

Despite these laudable and potentially workable policies, availability of institutional credit to farmers remained a perennial and hydra-headed problem. The major reason for this was the high default rate of agricultural loans occasioned by low returns compared with other sectors. This problem assumed such an alarming dimension that many commercial banks deliberately refused to comply with the CBN directive on lending to agriculture. They preferred instead to pay the prescribed fines for non-compliance. The persistent problem of paucity of formal credit is reported by numerous researchers to be responsible for peasant farmers’ extensive patronage of traditional lending institutions which are characterized by very low credit volume, usurious interest rates and brutal and dehumanizing treatment of borrowers in cases of failure to repay as and when due. On the positive sides of the traditional lending institutions are their timeliness of credit disbursement and waiver of collaterals (Adekanye, 1993; Aryetey, 1995; and Mafimisebi et al., 2006). The persistent failure of the conventional and specialized banks to adequately finance agricultural activities in the mid-1970s was a clear evidence that the country was in need of further financial and institutional
reforms that would revitalize the agricultural sector by encouraging the flow of institutional credit into it. The unpredictable and risky nature of agricultural production, the importance of agriculture to the national economy, the urge to provide additional incentives to further enhance the development of agriculture and the increasing demand by lending institutions for appropriate risk aversion measures in agricultural lending, provided justifications for the establishment of the Nigerian Agricultural Credit Guarantee Scheme Fund (ACGSF) by the Federal Government of Nigeria.

Since the Fund is resident in the CBN, there are no separate administrative infrastructures needed for it to function. This is probably made possible by the fact that the PLBs have institutionalized procedures and mechanisms of meeting with the authorities of the CBN for other purposes other than that relating to Fund administration. This has made the Scheme less costly to run in terms of overhead compared with other government-sponsored programmes, policies and institutional reforms which require such capital expenditure. Despite the fact that the Scheme has been under various Boards of Directors (almost 10 since inception) giving an average life span of three years per board, its institutional structure remains essentially the same. Up to December, 1986, when Nigeria adopted an economy-wide reform tagged Structural Adjustment Programme (SAP); loans to agriculture by PLBs were granted at concessionary interest rates. The general activities covered under the Scheme have witnessed little or no modifications since inception and they include: the establishment and or management of plantations for the production of rubber, oil palm, cocoa, cotton, coffee, tea and other cash crops; the cultivation and production of cereals, tubers and root crops, fruits of all kinds, beans, groundnuts, sheanuts, beni-seeds, vegetables, pineapples, bananas and plantains; animal husbandry, that covers poultry, piggery, rabbitry, snail farming, rearing of small ruminants like goats and sheep and large ruminants like cattle and fish farming which was included from 1981 (Mafimisebi, Oguntade and Mafimisebi, 2009).

2.10 Agricultural Budget in Nigeria

By way of definition, a budget is a financial plan, which embodies estimates of proposed expenditures for a given future period and the proposed means of financing them. It is an instrument used by organizations to allocate expected resources to its various activities such as distribution, stabilization, development and growth with a view to achieving equilibrium efficiency and effectiveness (Anya, 2001).
In the words of Okuneye (2001), a budget is a statement of expected revenue and proposed expenditure of government for a specific period of time, usually one year. It is always prospective, that is, futuristic in both information and accomplishment. It may equally be defined as aggregation of various requirements, properly articulated and critically related to the volume of resources that are expected to be available within a given time frame. It is also a quantitative expression of a plan of action and an aid to coordination and implementation. It involves the systematic evaluation of prior commitments and their consequences in terms of anticipated achievements. It follows, therefore, that if properly applied, budget can contribute significantly to greater efficiency of operations, effectiveness of programmes and general accountability in the management of the organization’s financial resources.

Budgets are formulated to achieve certain prime objectives such as to reduce inflationary pressures, to sustain growth and development, increase employment opportunities, reduce poverty and enhance rural development. It could also be aimed at developing a specific sub-sector or a certain group of sub-sectors or indeed an aspect of the economy to achieve a specific goal. Over the years the government of most less developed countries, including Nigeria, have come up with different polices and budgets that aimed at enhancing the standard of living of the populace.

As a rule of thumb, every Federal government budget covers all the various sectors of the economy irrespective of whether it is a servicing, manufacturing or production outfit. However, much emphasizes are usually laid on one or some sectors than others depending on the exigency of the situation on hand. Successive governments in Nigeria have made concerted efforts at enhancing the quality of life of the populace over the years but with little achievement to show for it most especially, in the agricultural sub-sector of the economy.

In an agrarian economy like the type that exists in Nigeria, agricultural production provides the needed fulcrum upon which a sustainable development would blossom. Being the main source of food for most of the population, till date, agricultural production remains the mainstay of the Nigerian economy. It provides the means of livelihood for over 70 percent of the population, a major source of raw materials for the agro-allied industries and a potent source of the much needed foreign exchange (World Bank, 1998: Okuneye, 2001).
Several programmes aimed at enhancing rural development were put in place by successive government administration in Nigeria. During the period before the Structural Adjustment Programme (i.e. Pre-SAP Era), the government showed concern for rural development indirectly. For example, the objectives of the first National Development Plan in Nigeria included the development of opportunities in health, employment and education as well as improvement of access to these opportunities. Similarly, the fourth National Development Plan, which appeared to be more precise in the specification of objectives that are associated with rural development emphasized increase in real income of the average citizen as well as reduction of income inequality, among other things. During this era according to Ogwuumike, (1995) many of the programmes, which were put in place by the Nigerian government either wholly or in association with international agencies, had positive effects on rural development although, the target population for some of the programmes were not specified explicitly for poor people or communities. Such programmes include the River Basin Development Authorities (RBDAs), the Agricultural Development Programmes (ADPs), the Agricultural Credit Guarantee Scheme (ACGS), the Rural Electrification Scheme (RES) and the Rural Banking Programme (RBP). These programmes were designed to enhance rural development in one way or the other by taking care of objectives such as employment generation, increasing agricultural output and income and, stemming the tide of rural-urban migration. It cannot be said that there were no successes recorded on these programmes but, many of them ultimately failed as a result of diversion from the original focus. Good examples are found in the Rural Banking and the Agricultural Credit Guarantee Scheme both of which at many stages failed to deliver the desired credit for agricultural and rural transportation because, much of the saving which were mobilized in the rural areas were diverted to urban areas in form of credits/investments.

Other notable rural development related programmes put in place before the advent of the Structural Adjustment Programme (SAP) include, Operation Feed the Nation (OFN) set up in 1977, Free and Compulsory Primary Education (FCPE) set up also in 1977, and Green Revolution came on board in 1980 along with Low Cost Housing Scheme. Both OFN and Green Revolution were set up to boost agricultural production and improve the general performance of the agricultural sector among other things. These programmes made some laudable impact by enhancing the quality of life of many Nigerians. However, the programmes could not be sustained due to lack of political will, lack of commitment of
policy, instability and insufficient involvement of the beneficiaries in these programmes (CBN Enugu Zone, 1999).

In the past three decades, the inflation rate has skyrocketed at a pace, which has confounded policy makers. Both agricultural and manufactured commodities have been affected, though its effect on agricultural and food prices have been excruciating considering the fact that basic food need is topmost in the hierarchy of wants. It is important to note, however, that the development of agriculture is highly necessary to ensure that more food is produced and made available to non-producers at affordable prices.

2.11 Agricultural Finance through Bank Lending

The recent global crisis, along with revitalized and growing debate over the role of agriculture amid food crisis and food price increases has opened a new chapter for discussion of development banks serving rural areas (Trivelli and Rios, 2009), which is the home of small-scale farmers in Nigeria. Development banks have a central role to play in the development of rural finance and it is widely accepted that without them, rural finance cannot develop or serve the neediest rural dwellers. While capital is not the only factor that allows for the growth or creation of enterprises, it is the most vital as without it, creativity, drive, and innovation cannot be transformed into material actions.

Rural finance, which includes the range of retail and wholesale institutions, have the capacity or potential to offer financial services to the poor and extremely poor. This is commonly referred to as “microfinance”. From the 1990s, many donors including the World Bank (IBRD/WB), International Fund for Agricultural Development (IFAD), and Food and Agriculture Organization (FAO), increasingly focused on the sustainable and large-scale delivery of financial services for the poor, especially small loans for both farm and off-farm activities, savings and micro-insurance services, and more recently remittance transfer services (IBRD/World Bank, 2009). In Nigeria, banking services are available to about 40% of the population and more than 70% of the poor do not have access to formal finance (Soludo, 2008). Access to well-designed financial services can help small-scale farmers build assets, engage more effectively with markets, and reduce their vulnerability to crisis, especially when access to services is planned as part of household livelihood strategies and sustained over time.
It should be noted ab initio that the impact of these schemes on the small-scale farmers are debatable and unclear, although the popular belief even among small-scale farmers is that the following agricultural financing schemes are inaccessible to them. Besides, it is rather difficult to identify, policy-wise, who the small-scale farmer is in Nigeria. Also, the multiplicity of institutions and schemes should be jettisoned for one functional and effective agricultural credit and insurance institution each that can deliver services to all farmers, whether small, medium or large in scale.

Agriculture in Nigeria is the most dominant sector and major source of livelihood for the majority of the population. It accounts for about 70% of employment and in spite of this Binswanger, et al (1999) say it has not been able to achieve the major objectives of agricultural development which the World Bank (1997) identified to include: (I) increase food production and firm income, (ii) make household food, water and energy secure and (iii) restore and maintain the natural resources. They stated that the failure of agriculture to meet these objectives is due to limited use of purchase inputs and mechanization. This limitation is tied to undercapitalization or lack of credit (See Aku, 1995).

However, since the availability of adequate credit is central to improvement in agricultural production in the economy, the Federal Government of Nigeria prioritized the agricultural sector, and direct the commercial banks through the Central Bank of Nigeria (CBN) to devout a certain percentage of their loanable fund to the sector. To encourage the commercial banks to meet this target, the CBN introduced the Agricultural Credit Guarantee Scheme (ACGS) in 1977 to guarantee credit disbursement by commercial banks to the sector. The loan amount was raised and the guarantee rate was raised to 75% against default payment of loans.

However, despite this incentive and others, the agricultural sector contribution to the total Gross Domestic Product (GDP) is still very low. However, to enhance an increase in agricultural contribution, farmers have to adopt a capital-intensive strategies and this call for an additional demand for credit. Therefore, the aim of this paper is to determine what commercial bank credits are needed in the next ten years (between years 2003-2012) that would guarantee an increase in agricultural sector contributions to the total GDP of the country.
Essang and Olajide (1974) define a commercial bank as a monetary institution owned by either government or private businessmen for the purpose of profit. In pursuit of the profit, the bank undertakes a number of functions. One of these functions is the acceptance of deposits from the public, these deposits are in turn given as credit to trade industry, agriculture etc. which lead to more production and employment (see also Stephen & Osagie 1985, Ekezie 1997, Ijaiya and Abdulraheem, 2000).

According to Aryeetey (1996), credit is the amount extended out with a future date of repayment. The NDIC prudential guidelines of 1990 however, provides a wider definition of credit, and this includes aggregate of all loans, advances, overdraft, commercial papers, bankers acceptance, bills discounted, leases and guarantees (NDIC, 1990). Agricultural credit on the other hand is defined as credit granted to farm and ranch operators to assist in planting and harvesting crops to support the feeding and care of livestock Credit to agricultural sector could take the form of an overdraft, short-term, medium-term or long-term depending on the purpose and gestation period of the project. Such credits granted to farmers to purchase inputs are paid directly to the suppliers who must furnish the bank with evidence of delivery; this is done to avert diversion of fund, which is common with Nigerian fanners (see Adekanye, 1986; Nzotta, 1999).

Discussing the importance of credit to agricultural sector, Nzotta (1999) posited that it reactivates, expands or modernizes all types of agricultural enterprises which are considered economically feasible and desirable to the achievement of stated economic goals of self-sufficiency in agricultural production. While Qureshi, et al (1996) reported that such credit removes financial constraints faced by farmer as it provides incentives to adopt new technologies that would otherwise be more slowly accepted. Thus the availability of credit enables farmers to switch quickly to new technologies which enable the achievement of rapid productivity and growth.

In comparison with some countries, Nigeria’s banking sector credit to the private sector cannot be applauded. Nigeria’s bank credit to the private sector remains the least, from 2002-2007, among other countries like South Africa, Tunisia, Morocco and Egypt. While bank credit to the private sector in Nigeria increased from 18.4% of non-oil GDP in 2002 to
31.4% of non-oil GDP in 2007, that of South Africa increased from 62.4% of GDP in 2002 to 92.1% of GDP in 2007.

Commercial banks’ loans and advances to the economy of Nigeria occur in four broad activity areas including production (agriculture, forestry and fishery; manufacturing; mining and quarrying; real estate and construction), general commerce (bills discounted, domestic trade, exports, and imports), services (public utilities, transport and communications, credit to financial institutions), and others (government, personal and professional, and miscellaneous). Data from CBN indicate that the total commercial banks’ loans and advances to these four broad activity areas increased from approximately N2 trillion in the year 2000 to approximately N28 trillion in 2008.

A detailed analysis of the sectoral distribution of commercial banks’ loans and advances reveals that while manufacturing and mining/quarrying received about N2, 904 billion and N2, 645 billion respectively in 2008, agriculture received only N521 billion also in 2008. In terms of significance, agriculture’s share of total commercial banks’ loan and advances to the economy declined from 8% in 2000 to 2% in 2008. Due to the high transaction cost of dealing with numerous small lenders scattered in remote and sometimes inaccessible areas of the country, agricultural credit is seen as a risky business by commercial banks. This meagre flow of credit to agriculture reflects the poor attractiveness of agriculture to organized private sector in Nigeria. Another indication of the poor resource flows to the agricultural sector is that only a paltry sum of N6.5 billion in 2008 was guaranteed under the Agricultural Credit Guarantee Scheme Fund, operated by the Central Bank of Nigeria.

The licensing of microfinance banks is aimed at improving access of the poor, small borrowers to formal sector loans for production and operational expansion of businesses and enterprises. Microfinance banks, therefore, have the potentials to enhance the flow of capital into small-scale agriculture, if the mechanisms to channel those flows are put in place. Available information shows that the largest chunk of loans and advances from microfinance banks since the year 2000 has been going to the transport and commerce sub sector. The loans and advances to the transport and commerce sub sector increased from N2 billion in 2000 to N18 billion in 2008, representing 49% of total loans and advances of microfinance banks in 2008. In comparison, the loans and advances to agriculture (including forestry) increased from N1 billion in 2000 to N13 billion in 2008, representing 34% of total loans and
advances of microfinance banks in 2008. It is not clear, however, to what extent small-scale farmers have benefitted from microfinance loans and advances given the general belief that microfinance banks lend at exorbitant rates – about 22% per annum.

2.12 Agricultural Credit and Crop Productivity in Nigeria

Agriculture in Nigeria constituted about 61.2% of GDP at 1962–1963 constant prices in the pre 1970s. By 1981, this percentage had fallen to 33.63%. The descent of the sector from glory in the Nigeria’s economy was gradual. There were cracks in the framework of the sector that suggested that the sector never actually enjoyed any stability of tenure during its days of “glory”.

The pre 1970 national plans were separate regional plans fused into one unwholesome plan. The only binding string was the general agreement on objectives and general direction of the priorities accorded the different sectors. Cash crops production was emphasized after national political independence, as was the case in colonial times. This distorted the agricultural base of the nation. Any support for food crop production was devoid of organized market facilities. The Marketing Board which was expected to stabilize farmers’ income and therefore facilitate capital formation within the sector became machinery for exploiting farmers (Nwankwo, 1992). The story remained so even after the reformation of the marketing boards in 1977.

The framework for the supply and distribution of agricultural inputs had its own problems. The National Seed Service (NSS), established in 1972 to produce and multiply improved seeds to farmers, was, apart from the problem of inadequacy of qualified staff, constrained by poor funding. Policy on major agricultural inputs availability and subsidies kept changing in an attempt to finding a lasting solution to the problems of availability, leakage and arbitrage (Nagy and Edun, 2002). The National Fertilizer Company (NAFCOM) set up in 1988 to minimize the problem of fertilizer availability discontinued production in 1999.

These policies were supposed to influence farmers’ behaviour in desired directions. However, they became super structures on the weak foundation of smallholder farmers. Even though smallholder farmers constitute about 80% of all farm holdings (Okolo, 2004) and produce about 90% of the nation’s agricultural output, they suffer from low levels of education and ignorance of available facilities and modern farm practices. The poor agricultural resource
base of these farmers coupled with the problems of inadequate and poorly motivated extension service providers compounded the situation.

Credit is a pre-requisite for any forward looking economic activity. Accessibility to credit facilitates the acquisition and application of state of the art technology and enables such enterprise to be in the driving seat in technology application. This facility is, however, in short supply to smallholder farmers in Nigeria, as it is indeed for most developing countries (Adams and Ladman, 1979; Abraham, 1985; World Bank, 2000).

Agricultural credit sources remained grossly imbalanced in favour of informal/traditional sources until 1972. These traditional sources of farm credit, though considered effective in loan disbursement (Aryeetey, 1997), were judged to be charging interest rates that stifled the smallholder farmer. The realization of this may have informed the setting up of the Nigeria Agricultural and Cooperative Bank (NACB) in 1972 to increase institutional credit flow to farmers. NACB was in 2003 transformed into the Nigeria Agricultural, Cooperative and Rural Development Bank (NACRDB) with the merger of the People’s bank and the Family Economic Advancement Programme (FEAP) with NACB. The formation of NACB was followed in quick succession by other schemes designed to enhance rural banking habits and to encourage commercial banks to increase lending to the agricultural sector. One such scheme was the Agricultural Credit Guarantee Scheme Fund (ACGSF), set up in 1977 and operational in 1978.

The setting up of the ACGSF was predicated on the unwillingness of commercial banks to give loans to smallholder farmers for reasons of high default rate on loan repayment and therefore high risk of repayment. This was compounded by lack of collateral for banks to fall back on in case of default and the high cost of administering low unit value loans to farmers who remained widely scattered.

The ACGSF had an initial authorized capital of =N= 100.00 million. This was reviewed upward to N1.00 billion in 1999 and then N3.00 billion in 2000 (CBN, 2004). This fund was meant to provide cover to commercial banks to the tune of 75% of any net default, which might arise from loans given to farmers. The financial risk of default in loan repayment was to be borne by the ACGSF. The scheme required commercial banks to give 10% of their profit before tax to farmers as loans.
Any defaulting banks were to be penalized by the Central Bank. In addition, commercial banks were required to have a certain percentage of their branches in rural areas. The aims of the Scheme were: to increase institutionalization of credit; to decentralize institutional credit agencies; to reduce conditions of borrowing; to give incentives to banks to give loans to farmers (Isiorhovoja and Chukwuji, 2009).

2.13 Agricultural Credit Rationing by Commercial Banks in Nigeria

Agricultural credit is expected to play a critical role in agricultural development (Duong and Izumida, 2002). Farm credit has for long been identified as a major input in the development of the agricultural sector in Nigeria. The decline in the contribution of the sector to the Nigeria economy has been attributed to the lack of a formal national credit policy and paucity of credit institutions, which can assist farmers among other things. The provision of this input is important because credit or loan-ablefund (capital) is viewed as more than just another resource such as labour, land, equipment and raw materials. It determines access to all of the resources on which farmers depend (Shephard, 1979).

Agricultural sector is situated within the framework of the rural economy and the financial markets. A key feature of the sector is the dominance of smallholding farm families, rural households, agricultural households, or farm households. They cultivate less than 5 hectares. Hence, they look significant individually but collectively they form the foundation on which the nation’s economy rests (Falusi, 1995).

Agricultural household models (Singh et al; 1986; Sadoulet and de Janvry, 1995) suggest that farm credit is not only necessitated by the limitation of self-finance, but also by uncertainty pertaining to the level of farm inputs and output and the time lag between inputs and output (Duong and Izumida, 2002). The farm household is typically located in an environment characterized by a number of market failures. A frequent cause of market failure is limited access to working capital / credit (Duong and Izumida, 2002). According to Swinnen and Gow (1999), access to agricultural credit has been severely constrained in developing countries. This is because of the imperfect and costly information problems encountered in the financial markets. Such problems are known to be particularly important in agriculture (Stiglitz, 1993).
As a result of the informational imperfections between the lenders and the borrowers, rationing of credit demand becomes necessary for financial institution (Stiglitz, 1994). Credit rationing policy is, however, regressive to the small–holder farm households as it has serious implication for growth and equity objectives of development policy. This is because when credit is rationed some borrowers cannot obtain the amount of credit they desire at the prevailing interest rate, nor can they secure more credit by offering to pay a higher interest rate. In such circumstances, liquidity can become a binding constraint on farmers’ operations. Yet the rationing behaviour by the banks may be due to their rational and efficient response to information and contracting problems inherent in agricultural credit markets.

By 2008, about 34 years after Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) formerly Nigerian Agricultural and Cooperative Bank(NACB) established in 1973 and 31 years after the Agricultural Credit Guarantee Fund Scheme(ACGFS) put in place in 1977, one would have thought that the problem of agricultural credit inadequacies would have been solved. The problem is still very much around and be-devilled with many bottlenecks. Viewed against this background, it is felt that there is the need to examine the operation of commercial banks in terms of agricultural credit approval and rejection. The aim is to identify key determinants in their decision making process.

Agricultural credit access has particular salience in the context of agricultural and rural development in Nigeria. Some 70% approximately of the population lives in the rural areas with their main source of livelihood being agriculture. Credit constraints to farm households thus impose high cost on the society. This is in terms of rural unemployment, rural poverty, and distortion of production and liquidation of assets. Governments in both developed and developing countries attempt to overcome these problems by subsidizing credit, setting up credit guarantee fund schemes (e.g. ACGFS in Nigeria) and specialized agricultural credit bank (e. g NACB, now NACRDB, 2002) and stimulating institutional innovations in the financial system (e.g. People’s Bank, Community Bank, Rural Banking Schemes, etc). There were policies which subsidized loans advances to agriculture. This was available at 16-18 percent interest rate to individuals and 15-16 percent to cooperatives or corporate farms when the ruling market interest rates for the other sectors of the economy range between 30 and 40 percent.
This indicated that the shadow price of capital was far in excess of its social opportunity cost and implies a weak financial intermediation (Sial and Carter, 1996). Carter and Boucher (1994) noted that in an economic environment that is characterized by a weak financial market, the provision of interest rate subsidies on formal credit does not seem to be a rational economic policy. This is because it may reduce access to agricultural credit. In Nigeria, it is feared that the attempt at credit price discrimination led to policy distortion and the divergence of its benefits from the intended to the unintended beneficiaries.

Even then, many banks perceive agricultural credit as risky and seek to channel credit to less risky sectors. This behaviour calls for empirical quantification in the Nigerian context. It is, therefore, pertinent to ask how formal lenders respond to the borrowing demands of farm households in Nigeria. More so, farm households are quite heterogeneous in terms of resource endowments, production and consumption opportunities. Hence, lenders are supposedly able to obtain and use information about the potential credit-worthiness of the borrowers. Credit rationing models have been developed and applied (Zeller, 1994; Barham et al; 1996; Duong and Izumida, 2002). According to Zeller (1994), as pioneers in this field, Feder et al. (1990) enumerated the occurrence of loan rationing through household survey. Juppeli (1990) asserted that most of the literature on the issue lack information on loan rationing. It is the contention of this study that households survey data can not sufficiently capture the decision making process of the formal credit market in terms of credit rationing.

Credit rationing results from a situation where the demand for loan exceeds supply at the prevailing interest rate. Credit rationing occurs when lenders grant the loans demanded by applicants who are identified as credit worthy borrowers while granting loans smaller than demanded to some applicants and completely rejecting other applicants willing to pay the interest rate demanded. Credit rationing in the commercial loan market has received considerable attention in terms of its definition and the criteria for testing its existence. Banking regulations sometimes constrains the lender who in practice has learned that transaction costs are an effective means to ration credit, especially when they must change concessionary interest rates and hence face excess demand for loans. Lending transaction costs are assumed more or less constant, irrespective of loan size and increasing attention has been directed to the transaction costs of credit use as serious deterrents to borrowing (World Bank, 1997; IFPRI, 2001). Despite these constraints, they have little incentive to change the credit delivery system and are motivated to use the high borrower transaction costs associated
with the credit delivery system to help ration credit by raising borrowing costs to non-preferred clients while simultaneously lowering lenders costs.

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Yet many banks perceive agricultural credit as risky and seek to channel credit to less risky sectors. This behaviour may be due to the rational and efficient responses to information and contracting problems inherent in agricultural credit markets by the lenders. It is, therefore, pertinent to ask how formal lenders respond to the borrowing demands of farm households in Nigeria. More so, farm households are quite heterogeneous in terms of resource endowments, production and consumption opportunities. Hence, lenders are supposedly able to obtain and use information about the potential credit-worthiness of the borrowers. Credit rationing models have been developed and applied (Zeller, 1994; Barham et al; 1996; Duong and Izumida, 2002). According to Zeller (1994), as pioneers in this field, Feder et al. (1990) enumerated the occurrence of loan rationing through household survey. Juppeli (1990) asserted that most of the literature on the issue lack information on loan rationing (Rahji and Adeoti, 2010).

2.14 Issues on Banking Lending for Agricultural produce

Apart from the interest rate channel Bernanke and Gertler (1995) suggested two other mechanisms through which monetary policy may affect bank loan supply: the balance sheet channel, also known as broad credit channel, and the bank lending channel or the narrow credit channel. Both channels exist because of market frictions, in particular asymmetric information between banks and borrowers (balance sheet channel) or between banks and their lenders (bank lending channel), and eventually affect the final supply of loans.
Balance sheet channel works because changes of the monetary interest rates affect the net wealth or collateral of borrowers and thereby have an impact on the possibilities of obtaining external financing. Thus, a decline in the net wealth of borrowers (due to increased interest rates), increases the external finance premium they have to face on the credit market and shifts upward the bank loan supply curve to these borrowers.

The existence of bank lending channel is conditional on two important assumptions. First, monetary policy decisions impact bank liquidity position, and, second, changes in the supply of loans affect borrowers, because of constrained access to other sources of financing than bank loans. Tightening of monetary policy usually leads to decrease in the demand for deposits because banks adjust their deposit rates only partially to the changes in official rates. This, in effect drains liquidity from the banking sector to equity investment funds thus shrinking banks' liabilities forces banks to decrease the supply of loans accordingly.

Some authors recall Modigliani-Miller paradigm and argue that banks may off-set a drain of deposits by increasing non-deposit source of financing, e.g. issuing deposit certificates (Stein, 1998; Romer and Romer, 2000). However, due to information asymmetries, frictions exist and banks tap non-deposit sources of funds to a different extent. Adjustments on the asset side of the balance sheet by selling liquid assets may cushion to some extent the funding problems of banks; however both liquidity and capital constraints limit substantially this kind of adaptation. In effect, increased cost of funding shifts the loan supply curve upwards. This effect should be less pronounced in case of banks which have better access to alternative sources of financing, e.g. are larger (Kashyap and Stein, 1995), well capitalised (Peek and Rosengren, 1995; Kishan and Opiela, 2000; Van den Heuvel, 2002) or have better liquidity position (Stein, 1998; Kashyap and Stein, 2000).

However, changes in supply only do not determine the credit growth, because different elasticity of demand for loans across banks' borrowers has to be taken into account. In order to control for these demand effects we follow the identification approach adopted by Kashyap and Stein (1995). The idea is that the changes in the demand for loans that different banks have to face after the monetary policy shock are determined by the degree of information asymmetries between banks and their lenders. In literature, the most common variable to measures this friction is bank size (Kashyap and Stein, 1995; Loupias et al, 2001; Hernando
and Martinez-Pages, 2001). Introducing also some exogenous macro-variables we control for demand effects, and hence, can interpret the results as changes in the supply of loans.

An important aspect of bank lending channel is related to credit rationing, which, in severe cases, may take a form of credit crunches. Credit rationing is defined as a situation in which bank is unwilling to lend even if a borrower is willing to pay the demanded price for a loan (Stiglitz and Weiss, 1981). Banks play a crucial role in this process whereby they set loan terms and lending standards, which are not related to the price of credit (interest rate). This kind of bank behaviour, recently referred in the literature as risk taking channel (Borio and Zhu, 2008), may be triggered by a shift in perception of risk or by a shortage of bank capital (Bernanke and Lown, 1991; Woo, 1999). In the first case banks are not willing to lend and in the latter they are not able to lend.

In the neo-Keynesian models with credit, these aspects of bank lending channel, namely willingness to lend, are determined by banks uncertainty about creditworthiness of bank borrowers and the state of bank expectations, which is related to fundamental uncertainty about the future which both borrowers and lenders face (Wolfson, 1996). According to these models, in bank lending channel not only information asymmetry between borrowers and lenders is essential, but also asymmetry of expectations between borrowers and lenders about the profitability of a project (corporate loans) or future ability to service debt (household loans) is also important.

2.15 Lending risks and agricultural loans
Risk taking channel may operate via several ways. Most importantly, low interest rates boosting asset prices may increase the value of collateral and thereby allow banks to accept higher credit risk (Borio et al, 2001). Altunbas et al (2009) report also on other possible impacts of lower interest rates on higher risk taking of borrowers. Low interest rate environment may facilitate search for higher risk assets, the so called "search for yield" (Rajan, 2005) and increase banks' risk tolerance.

It is a necessary but not sufficient condition for the existence of risk taking channel. Also banks' risk perception would have to change following the change in the monetary policy stance. Although they do not test this in their research, they give some insights into the determinants of the changes of bank lending policies, which seem to support their view that
changes in perception of risk by banks is an important driver of changes in lending policies. Since according to Bernanke and Lown (1991); Woo (1999), changes in bank lending policy are related either to capital constraints (for which we control) or to shifts in perception of risks, our results provide some support toward the significance of risk taking channel. Moreover, Rajan (1994) and Berger and Udell (2004) demonstrate that banks tend to curb lending in economic downturns by changing lending standards. Their results point to the importance of bank lending policies to the broad economy and the business cycle.

Altunbas et al (2009) also suggest that monetary policy may influence risk taking behaviour via habit formation, whereby banks become less risk-averse during economic expansions. Relatively few papers have focused so far on testing empirically if risk taking channel works. Using individual data from credit register (Jimenez et al, 2008) shows that Spanish banks eased their lending policies and extended more risky loans when interest rates were low, Ioannidou and Penas (2008) also find that when interest rates are low banks' price the credit risk lower. Moreover, banks tend to reduce credit margin on risky borrowers relatively more than on average. Altunbas et al (2009) also find strong evidences in favour of the influence of low interest rates on banks risk taking using the data for 1100 banks from the EU and the US.

2.16 Credit Risk Management in Bank Lending to Agriculture
The Nigerian economy is increasingly being globalized by deliberate government actions since July 1986 when the Federal Government began the implementation of the Structural Adjustment Programme (SAP). The SAP sought to deregulate and free the economy from government control with a view to allowing market forces determine the production and consumption decisions of economic agents within the country. The deregulation process, which was accompanied by privatization and commercialization of government enterprises, has had far reaching impacts on the entire economy. In particular, deregulation of interest rates affected bank lending to the real sectors of the economy, including agriculture. In more recent times, government adopted business consolidation strategies, viz – mergers, acquisitions and takeovers as part of its efforts to facilitate the ability of firms in the financial services industry to become consolidation in the banking sector was to, among other things, “make Nigerian banks compete favourably in the global financial markets” and to generate a high capital base that “will provide banks with the resources to meet the cost of compliance in the areas of credit and market risk management” (Soludo, 2005).
Nigerian banks are traditionally reluctant in financing agricultural firms because of credit risks and high costs of loan administration. This made Government to adopt several subtle and overt measures to encourage the flow of bank credit to farmers. Beginning with the 1972 fiscal year, the Central Bank of Nigeria (CBN) used credit guidelines to prescribe the size of credit allocation by banks to preferred sectors of the economy, including agriculture. Also the CBN, through its Monetary Policy Circulars, directed banks to lend a specified minimum percentage of their loan portfolio to agriculture. Failure to comply attracted a penalty in the form of the amount in default being given interest-free to the Nigerian Agricultural and Cooperative Bank.

With effect from 1985, the CBN started stipulating grace period for agricultural loans, which ranged from one year for loans for staple crop production to seven year for livestock production loans. Concessionary interest rate(s) was introduced in 1980 whereby interest charged on loans to farmers was kept below or at par with the Minimum Rediscount Rate (MRR) of the CBN. The Rural Banking Scheme (RBS), Nigerian Agricultural Insurance Corporation (NAIC), and the Agricultural Credit Guarantee Scheme (ACGS) were other measures used by Government to promote bank lending to farmers (Nnanna, 2005).

However, following SAP and economic reforms, lending rates have been deregulated since 1987. Mandatory credit allocation to agriculture was abolished on October 1, 1996. Consequently, the volume of bank lending to the agricultural sector has been shrinking. In more recent times, the Federal Government introduced a new agricultural credit scheme in March 2006. The scheme involves a tax waiver on interest earned by banks on loans to agricultural sector and reduction of interest rate to farmers through government subsidy. It was reported that “the tax relief was based on the agreement by stakeholders that interest rates on agricultural loans be reduced in return for government suspension of tax on such facilities. With interest rate for agricultural loan currently at 14%, the Central Bank of Nigeria has also undertaken to subsidize the payment of the 14% by 6%, which, in effect, brings the interest farmers will pay on such loans to 8%” (Nnanna, 2005).

2.17 Potentials for diversifying Nigeria's non-oil exports to non-traditional markets

Prior to the 1970s, agricultural exports were Nigeria’s main sources of foreign exchange. During this period, Nigeria was a major exporter of cocoa, cotton, palm oil, palm kernel, groundnuts and rubber, and in the 1950s and 1960s, 3% – 4% annual output growth rates for
agricultural and food crops were achieved. Government revenues also depended heavily on taxes on those exports. Thus, during the period, the current account and fiscal balances depended on the agricultural sector.

However, between 1970 and 1974, agricultural exports as a percentage of total exports declined from about 43% to slightly over 7%. From the mid 1970s, the average annual growth rate of agricultural exports declined by 17%. The major cause of this development was the oil price shocks of 1973 – 1974 and 1979, which resulted in large receipts of foreign exchange by Nigeria and the neglect of agriculture.

The consequence of the phenomenon described above was that owing to the reduced competitiveness of agriculture, Nigeria began to import some of those agricultural products it formerly exported and other food crops it had been self-sufficient in. For example, between 1970 and 1982, Nigeria lost over 96.6% of her agricultural exports in nominal terms (Oyejide, 1986). Domestic food production also declined substantially, causing the food import bill to attain a high of about US$4 billion in 1982. The ballooning imports were financed with oil revenues, which ensured current account positive balances in 1979 and 1980. However, beginning in 1982, the oil market plunged; reducing significantly Nigeria’s ability to finance such imports, and persistent current account deficits began to emerge. Unpaid trade bills also began to accumulate and at a point, foreign suppliers began to dishonour letters of credit originating from Nigeria. By 1986, the situation had become a crisis, dramatizing the ineffectiveness of the prevailing external sector policy of import-substitution industrialization. This strategy, which was essentially inward looking, conferred substantial protection on import competing manufacturing activities by imposing relatively high import duties on finished products and very low or no import duties on industrial raw materials and intermediate capital inputs.

The policy also invariably taxed the exportable (agricultural) sector of the economy so that by the time the oil market crashed, many manufacturing concerns could no longer operate due to lack of foreign exchange to import raw materials. One consequence of the failure of this policy regime to cope with the negative oil price shock was its substitution with an outward looking external policy stance under structural adjustment programme (SAP) introduced in 1986. Under SAP, emphasis was on diversifying Nigeria’s export base away from oil and increasing non-oil foreign exchange earnings. To achieve the objectives of the programme,
the government sequentially put in place a number of policy reforms and incentives to encourage the production and export of non-oil tradeable as well as broadening Nigeria’s export market.

Nominal naira exchange rate devaluation, strict fiscal discipline, controlled monetary expansion and a more liberal trade policy were initially introduced to ensure a depreciation of the real exchange rate facing exporters. These were followed by the introduction of export incentives comprising a duty draw-back scheme explicit export bonuses, currency retention scheme and other direct fiscal incentives (such as the exemption of export transactions from stamp duties). Having ensured that appropriate macroeconomic and sectoral incentives had been instituted, the government established the Nigerian Export-Import Bank (NEXIM) in 1991 to provide necessary financial and risk management support to the export sector.

2.18 Causes of Credit Risks in Agricultural Financing
Credit risk – delinquency and default – is the main risk that commercial banks face in lending to firms in the agricultural sector. Agricultural firms (i.e. farms) are prone to pure and price risks, which may impinge on their ability to repay loans from banks. The pure risks of agricultural firms include crop and livestock failure, which may be due to poor yield, pest and disease outbreak, and physical or mechanical damage to farm produce. Natural disasters such as drought, flood, wind and fire can also damage farms and yields. The price risk of farm firms, on the other hand, include fluctuations in input and output prices which may cause variability in business value and impinge on the ability of such firms to meet loan obligations to banks.

Empirical studies have produced a variety of reasons for loan default. Adeyemo (1984) identified the principal cause of loan default in Kwara State as loss of production due to natural calamities. He found that educated borrowers and landowners repaid loans more promptly than uneducated and tenant borrowers. Okorie (1998) identified poor project supervision, evaluation and management; untimely loan disbursement; diversion of funds; and dishonesty of loan beneficiaries as causes of loan default. A study in India found that defaults were, by and large, willful and mostly large borrowers were responsible (World Bank, 1975; Padmanabhan, 1988).
Studies have shown that big farmers have tended to be the major beneficiaries of agricultural credit throughout the world. According to the World Bank (1975), “it is common to find 70 to 80 per cent of small farmers in a given country with virtually no access to such credit”. In Nigeria, big farmers have benefited mostly from official farm credit programs and they have also been the greatest defaulters. Given the variety of reasons for credit risks in bank lending to the agricultural sector, it may be necessary to classify them into three broad sources: causes at borrower level, at financial institution level, and at economy level. Such a classification offers a quick checklist and guide to Credit Risk Managers of banks in dealing with credit risks emanating from bank lending to agricultural firms.

2.19 Sources of Risks of Agricultural Firms

The sources of risks of agricultural firms, which are related to the type of risks discussed in the preceding section, are as follows:

- **Production risk**, which is due to variability in production caused by such unpredictable factors as weather, disease, pests, droughts, etc.
- **Market risk**, which involves the variability and unpredictability of prices that farmers receive for their products and pay for their production inputs.
- **Financial risk** relates to the financing of business assets. The increased use of borrowed capital and unpredictable cash flows create the risk of not having enough cash to meet all obligations, which could ultimately mean disaster (bankruptcy). There is also the risk of losing the lease on the farmland.
- **Obsolescence risk**, whereby production methods requiring large investments could be made obsolete by new technology. Adopting new technologies too soon or too late is a major source of risk that modern farmers must face.
- **Casualty loss**, which refers to the loss of assets to fire, wind, flood, and theft. Inflation increases the possibility that potential losses are underestimated.
- **Legal risk**, including the risk of lawsuits stemming from damages to customers, suppliers, shareholders, etc as well as risk of payment of benefits to injured workers under worker compensation laws. In addition, there is the risk of death, illness and disability (and sometimes to family members) for which business agreed to make payments under employee benefit plans, including obligations to employees under pension and other retirement savings plans (Castle, et.al., 1987; Harrington and Niehaus, 1999).
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CHAPTER THREE
METHODOLOGY

3.1 Research Design
According to Onwumere (2005), a research design is a kind of blueprint that guides the researcher in his or her investigation and analyses. The research design adopted for this research is the *ex-post facto* research design. This is because according to Kerlinger (1970), the *ex-post facto* research design also called causal comparative research is used when the researcher intends to determine cause-effect relationship between the independent and dependent variables with a view to establishing a causal link between them.

3.2 Nature and Sources Of Data
The issue of data is at the very centre of research and also the nature of data for any study depends entirely on the objectives of the research and the type of research undertaken (Onwumere, 2005). The data used for this research is secondary data from the Central Bank of Nigeria annual statistical bulletin and according to Onwumere (2005); secondary data are data which have been processed, collated and exist in published form.

3.3 Sampling Size
As started in the scope of this research and in line with the nature of this type of research, which is a time series analysis, the population of the research covers the impact of credit on agricultural productivity in Nigeria, specifically examining the impact Agricultural credit Guarantee Scheme Fund the date it was established in 1977-2008. However the fund began operation in 1978, hence the choice of 1978. Thus, the study was a ten (30) years study from 1978-2008. The choice of 1978-2008 is based on the availability of data from the Central Bank of Nigeria Annual Statistical Bulletin and also to examine the impact of the fund from the date of establishment till date.

3.4 Model Specification
A model is a simplified view of reality deigned to enable a researcher describe the essence and inter relationship within the system or phenomenon it depicts (Yomere and Agbonifoh, 1999).

The model for this research is adopted from Efobi and Osabuohien (2011) and Mafimisebi, et al. (2006), and the model is in the form;
\[ y = a + bx + \mu \]  \hspace{1cm} \text{(1)}

where
\[ y = \text{Dependent variable} \]
\[ a = \text{Constant} \]
\[ b = \text{Coefficient of the Independent variable} \]
\[ x = \text{Independent Variable and} \]
\[ \mu = \text{Error Term} \]

However, in writing the model equation, the following symbols were used to denote their respective variables; these are:

\[ \begin{align*}
\text{AP} &= \text{Agricultural Production} \\
\text{TACGSF} &= \text{Total Agricultural Credit Guarantee Scheme Fund} \\
\text{ACGSFCP} &= \text{Agricultural Credit Guarantee Scheme Fund for Crop Production} \\
\text{ACGSFLSP} &= \text{Agricultural Credit Guarantee Scheme Fund for Livestock Production} \\
\text{ACGSFFP} &= \text{Agricultural Credit Guarantee Scheme Fund for Fisheries Production} \\
\text{GDPACP} &= \text{Gross Domestic Product Agricultural Crop Production} \\
\text{GDPALS} &= \text{Gross Domestic Product Agricultural Livestock Production} \\
\text{GDPAF} &= \text{Gross Domestic Product Agricultural Fisheries Production}
\end{align*} \]

Therefore rewriting the model in line with equation 1 above;

For hypothesis One, which states that Agricultural Credit guarantee scheme fund does not have a significant positive impact on cash crop output in Nigeria, it is expressed as:

\[ \text{GDPACP} = a + b \text{ACGSFCP} + \mu \]  \hspace{1cm} \text{(ii)}

For hypothesis two, which states that Agricultural Credit guarantee scheme fund does not have a significant positive impact on livestock output in Nigeria, it is expressed as:

\[ \text{GDPALS} = a + b \text{ACGSFLSP} + \mu \]  \hspace{1cm} \text{(iii)}

For hypothesis three, which states that Agricultural Credit guarantee scheme fund does not have a significant positive impact on fishery output in Nigeria, it is expressed as:

\[ \text{GDPAF} = a + b \text{ACGSFP} + \mu \]  \hspace{1cm} \text{(iv)}
Lastly for hypothesis four, which states that Agricultural Credit guarantee scheme fund does not have a significant positive impact on Agricultural output in Nigeria, it is expressed as;

\[
\text{GDPAP} = a + b \text{TACGSF} + \mu................................. (v)
\]

3.5 Model Justification

The Agricultural Credit Guarantee Scheme Fund (ACGSF) was established in 1977 with the aim of enhancing commercial banks’ loans to the agricultural sector in Nigeria with focus on agro-allied and agricultural production. Efobi and Osabuohien (2011) examined the impact of the fund on non-oil using the simple linear regression model (OLS) and found, among others, that there exist a long-run relationship between the ACGSF and export, but the magnitude is minimal. It was therefore recommended, inter alia, that adequate infrastructural and storage facilities, which increase the shelf-life of agricultural outputs are needed to improve non-oil exports in Nigeria. Nwosu et. al. (2010) examine the Scheme, its roles, problems and prospects in Nigeria’s quest for agricultural development, It was concluded that since credit is needed for enhanced productivity and agricultural development, the three tiers of government in Nigeria should give the scheme the necessary support and publicity so that farmers (particularly small farmers) can benefit from its laudable objectives. This will go a long way in ameliorating the seemingly dismal output of our farmers and Mafimisebi, et al. (2006), examined the impact of the fund using (OLS) on Agricultural productivity in Nigeria, it was found that there are remarkable differences in growth rates of volume and value of loans earmarked for different sub-sectors of agriculture and deliberate attention is due to the almost neglected agricultural activities. There was a long-run relationship between number and volume of guaranteed loan and the performance of the agricultural sector. This finding shows that it is important to expand the quantum of funds available for guaranteeing agricultural loans to increase these two performance indicators. Other policy recommendations which have implications for the performance of the Scheme were stated. Therefore, in line with the above researches, this study modifies the model used by Efobi and Osabuohien (2011) and Mafimisebi, et al. (2006). In Efobi and Osabuohien (2011) and Mafimisebi, et al. (2006), they aggregated data, however, this work disaggregated the agricultural output into cash crop, livestock and fisheries production.
3.5 Techniques of Analysis

The hypotheses stated in chapter one will be tested using the OLS Linear Regression model using SPSS statistical software for the hypotheses. The signs and significance of the regression coefficients was relied upon in explaining the nature and influence of the independent and dependent variables as to determine both magnitude and direction of impact. The form of OLS Model implies that there is a one-way causation between the independent and dependent variables. The signs of the coefficient and the t-value were used to explain the direction and magnitude of impact of the independent variables TACGSF, ACGSFCP, ACGSFLSP and ACGSFP on the dependent variables AP, GDPACP, GDPALS and GDPAFP.
References


Yomere, G.O. and B.A. Agbonifoh (1999), *Research Methodology in the Social Sciences and Education*, Benin City; Centre Consultants Nigerian Limited
4.1 Presentation of Data

Below are presented relevant data for the test of hypotheses stated in Chapter one. They are observable from Tables 4.1 and 4.2 and Figures 4.1 and 4.2.

Table 4.1 Agricultural Outputs in Nigeria 1978-2008 at Basic Prices

<table>
<thead>
<tr>
<th>Years</th>
<th>Crop Production (N, 000)</th>
<th>Livestock (N,000)</th>
<th>Fisheries (N,000)</th>
<th>Total (N,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>5033.4</td>
<td>1315.3</td>
<td>1386.2</td>
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</tr>
<tr>
<td>1979</td>
<td>5547.5</td>
<td>1492.5</td>
<td>1866.3</td>
<td>9213.1</td>
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<tr>
<td>1980</td>
<td>6607.3</td>
<td>1870.6</td>
<td>1218.6</td>
<td>10011.5</td>
</tr>
<tr>
<td>1981</td>
<td>10088</td>
<td>1706.8</td>
<td>723.3</td>
<td>13580.3</td>
</tr>
<tr>
<td>1982</td>
<td>11274</td>
<td>2678.6</td>
<td>885.1</td>
<td>15905.5</td>
</tr>
<tr>
<td>1983</td>
<td>12870</td>
<td>3510.4</td>
<td>1297.7</td>
<td>18837.2</td>
</tr>
<tr>
<td>1984</td>
<td>16920</td>
<td>4474.7</td>
<td>1140.8</td>
<td>23799.4</td>
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<tr>
<td>1985</td>
<td>19729</td>
<td>4841.6</td>
<td>710.3</td>
<td>26625.2</td>
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<td>1986</td>
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<td>4994.9</td>
<td>1010.8</td>
<td>27887.5</td>
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<td>1987</td>
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<td>873.7</td>
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<td>69713</td>
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<td>84344.6</td>
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<td>231832.7</td>
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<td>1994</td>
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<td>1995</td>
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<td>2001</td>
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<tr>
<td>2002</td>
<td>3050243.5</td>
<td>183202.2</td>
<td>3357062.9</td>
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<tr>
<td>2003</td>
<td>3275429.2</td>
<td>202263.1</td>
<td>3624579.5</td>
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<tr>
<td>2004</td>
<td>3478096.4</td>
<td>243887.5</td>
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</tr>
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<td>2005</td>
<td>4228284.2</td>
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<td>2006</td>
<td>5291619.1</td>
<td>378702.6</td>
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<tr>
<td>2007</td>
<td>6024381</td>
<td>434151.7</td>
<td>6757667.7</td>
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<td>2008</td>
<td>6544570.6</td>
<td>482107.3</td>
<td>7359558.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: CBN Statistical bulletin 50th Anniversary Edition 2010

As could be observed from the above table, the total crop production, livestock and fisheries from 1978 -2008 were 39,126,937.1m, 3,122,080m and 1,505,080.9m respectively. The mean which is the average were 1,262,159.26m, 100,712m and 48,551m respectively for crop production, livestock and Fisheries. A look at the table indicates a gradual increase in output from 1978 to 2008 for the Agricultural outputs. Thus from 5,033m, 1,315m and 1386.2m for
crop production, Livestock and Fisheries in 1978, it rose to 6,544,570.6m, 482,107.3m and 238,608.4m in 2008.

Below is a graphical representation of Table 4.1 above.

**Figure 4.1 Agricultural Outputs in Nigeria 1978-2008 at Basic Prices**

Source: CBN Statistical bulletin 50th Anniversary Edition 2010
Table 4.2  Agricultural Credit Guarantee Scheme Fund 1978-2008

<table>
<thead>
<tr>
<th>Years</th>
<th>Crop Production (N,000)</th>
<th>Livestock (N,000)</th>
<th>Fisheries (N,000)</th>
<th>Total (N,000)</th>
</tr>
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<td>1980</td>
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<td>21064.8</td>
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<tr>
<td>1981</td>
<td>9608.7</td>
<td>25147.5</td>
<td>0</td>
<td>35642.4</td>
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<td>1982</td>
<td>6404.2</td>
<td>21835.9</td>
<td>39.6</td>
<td>31763.9</td>
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<td>1983</td>
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<td>21789.7</td>
<td>1575</td>
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<td>14158.5</td>
<td>718.1</td>
<td>44243.6</td>
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<td>1698.2</td>
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<td>262195</td>
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<td>2007</td>
<td>3913774</td>
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<td>140690</td>
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</tr>
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<td>2008</td>
<td>4965965</td>
<td>1108483.8</td>
<td>368630</td>
<td>6721074.5</td>
</tr>
<tr>
<td>Total</td>
<td>27,414,968.9</td>
<td>3,478,523.5</td>
<td>990,671.8</td>
<td>26,059,593.4</td>
</tr>
</tbody>
</table>

Source: CBN Statistical bulletin 50th Anniversary Edition 2010

Table 4.2 reveals the total Agricultural Credit Guarantee Scheme Fund 1978-2008 for crop production, Livestock and Fisheries. A total of 27,414,968.9m have been disbursed for crop production from 1978 to 2008. For Livestock, a total of 3,478,523.5m have been disbursed while a total of 990,671m have been disbursed for Fisheries production in Nigeria. The highest disbursement of fund for the three agricultural subsectors was in 2008 for crop production where a total of 4,965,965m was disbursed, for Livestock, the highest disbursement was made in 2008 where a total of 1,108,483.8m was disbursed. Also 2008 recorded the highest disbursement for Fisheries, where a total of 368,630m was disbursed.

Below is a graphical representation of Table 4.2
4.2 Test of Hypotheses

The hypotheses stated in chapter one is tested in this chapter. According to Onwumere (2005), to test a hypothesis, it has to be stated in both Null and Alternative forms. The rejection of the null means the acceptance of the alternative form. In this research, three steps are used at arriving at the decisions on the hypotheses tested. These are step one; restatement of hypothesis in null and alternate forms; step two; analysis of SPSS model result and step three; decision.

4.2.1 Test of Hypothesis One

Step one: Restatement of hypothesis in null and alternate forms

$H_{01}$: Agricultural Credit Guarantee Scheme Fund for crop production does not have significant positive impact on cash crop output in Nigeria
**H_{a1}:** Agricultural Credit guarantee scheme fund for crop production have significant positive impact on cash crop output in Nigeria

**Step two:** Analysis of SPSS model result

**Table 4.3** SPSS Model Summary for Hypothesis One

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
<th>t-value</th>
<th>Beta</th>
<th>Sig. F Change</th>
<th>Durbin Watson</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.833*</td>
<td>.694</td>
<td>.683</td>
<td>1096538.27</td>
<td>.694</td>
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<td>.833</td>
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<td>1.486</td>
<td>0.866</td>
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</tbody>
</table>

*Source: See Appendix 3*

Model Equation GDPACP = 490000 + 0.866ACGSFCP

As indicated from the model equation, the impact of Agricultural Credit guarantee scheme fund on crop production output in Nigeria is positive as the ACGSFCP coefficient is 0.866 and significant as the t-value is greater than 2, t-value was 2.270. Thus, Agricultural Credit guarantee scheme fund for crop production have significant positive impact on cash crop output in Nigeria. It also indicates a positive correlation with correlation coefficient (R) of 0.833 which is positive as indicated by the beta, the variation in the dependent variable as explained by the independent variable is 69.4% as indicated by the coefficient of determination (R^2) while the adjusted coefficient of determination (R_{adj}^2) was 68.3%. From the table the DW test statistic value is 1.486.

**Step three: Decision**

Based on the result obtained, the null hypothesis is rejected while the alternate hypothesis is accepted which indicates shows that Agricultural Credit Guarantee Scheme Fund has significant positive impact on cash crop output in Nigeria

**4.2.2 Test of Hypothesis Two**

**Step One:** Restatement of hypothesis in null and alternate forms

**H_{a1}:** Agricultural Credit Guarantee Scheme Fund for livestock production does not have significant positive impact on livestock output in Nigeria

**H_{a1}:** Agricultural Credit Guarantee Scheme Fund for livestock production has significant positive impact on livestock output in Nigeria
Step Two: Analysis of SPSS model result

Table 4.4 SPSS Model Summary for Hypothesis Two

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
<th>t-value</th>
<th>Beta</th>
<th>Sig. F Change</th>
<th>Durbin Watson</th>
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<td>.818</td>
<td>.000</td>
<td>1.179</td>
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</table>

Source: See Appendix 4

Model Equation GDPALS = 50000 + 0.450ACGSFLS

As shown from the model equation the impact of Agricultural Credit guarantee scheme fund for livestock production on livestock production output in Nigeria is positive as the ACGSFLS coefficient is 0.450 and significant as the t-value is greater than 2, t-value was 7.622. Thus, Agricultural Credit Guarantee Scheme Fund for livestock production have significant positive impact on livestock output in Nigeria. It also indicates a positive correlation with correlation coefficient (R) of 0.818 which is positive as indicated by the beta, the variation in the dependent variable as explained by the independent variable is 66.9% as indicated by the coefficient of determination ($R^2$) while the adjusted coefficient of determination ($\text{Adjusted } R^2$) was 65.8%. From the table the DW test statistic value is 1.179.

Step three: Decision

From the result obtained, the null hypothesis is rejected while the alternate hypothesis is accepted which indicates shows that Agricultural Credit guarantee scheme fund have a significant positive impact on livestock output in Nigeria.

4.2.3 Test of Hypothesis Three

Step One: Restatement of hypothesis in null and alternate forms

$H_{01}$: Agricultural Credit Guarantee Scheme Fund for fisheries does not have a significant positive impact on fishery output in Nigeria

$H_{a1}$: Agricultural Credit Guarantee Scheme Fund for fisheries has a significant positive impact on fishery output in Nigeria

Step Two: Analysis of SPSS model result

Table 4.5 SPSS Model Summary for Hypothesis Three

<table>
<thead>
<tr>
<th>Model</th>
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<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
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<th>Beta</th>
<th>Sig. F Change</th>
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Source: See Appendix 5
Model Equation GDPAFP = 26000 + 0.696ACGSFP

As revealed from the model equation the impact of Agricultural Credit guarantee scheme fund for fisheries production on fisheries output in Nigeria is positive as the ACGSFP coefficient is 0.696 and significant as the t-value is greater than 2, t-value was 7.640. Thus, Agricultural Credit guarantee scheme fund for fisheries production have significant positive impact on fisheries output in Nigeria. It also indicates a positive correlation with correlation coefficient (R) of 0.817 which is positive as indicated by the beta, the variation in the dependent variable as explained by the independent variable is 66.8% as indicated by the coefficient of determination (R^2) while the adjusted coefficient of determination (R^2) was 65.7%. From the table the d test statistic value is 1.047.

**Step Three: Decision**

From the result obtained, the null hypothesis is rejected while the alternate hypothesis is accepted which indicates shows that Agricultural Credit guarantee scheme fund for fisheries have a significant positive impact on fishery output in Nigeria.

**4.2.4 Test of Hypothesis Four**

**Step One: Restatement of hypothesis in null and alternate forms**

H$_{04}$: Agricultural Credit Guarantee Scheme Fund does not have a significant positive impact on Agricultural output in Nigeria

H$_{a4}$: Agricultural Credit Guarantee Scheme Fund has significant positive impact on Agricultural output in Nigeria

**Step Two: Analysis of SPSS model result**

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**Source: See Appendix 6**

Model Equation AP = 340000 + 1.288TACGSF

As revealed from the model equation the impact of Agricultural Credit guarantee scheme fund on agricultural productivity in Nigeria is positive as the TACGSF coefficient is 1.288 and significant as the t-value is greater than 2, t-value was 16.865. Thus, Agricultural Credit guarantee scheme fund have significant positive impact on agricultural productivity in
Nigeria. It also indicates a positive correlation with correlation coefficient (R) of 0.953 which is positive as indicated by the beta, the variation in the dependent variable as explained by the independent variable is 90.7% as indicated by the coefficient of determination ($R^2$) while the adjusted coefficient of determination ($R^2_a$) was 90.4%. From the table the t test statistic value is 0.680.

**Step Three: Decision**
From the result obtained, the null hypothesis is rejected while the alternate hypothesis is accepted which indicates shows that Agricultural Credit guarantee scheme fund have significant positive impact on Agricultural output in Nigeria.

**4.3 Comparison of the Findings with the Objectives of the Study**

**Research Objective One: Examine the impact of Agricultural Credit Guarantee Scheme Fund on cash crop output in Nigeria.**

Isiorhovoja and Chukwuji (2009) contend that the pre 1970 national plans were separate regional plans fused into one unwholesome plan. The only binding string was the general agreement on objectives and general direction of the priorities accorded the different sectors. Cash crops production was emphasized after national political independence, as was the case in colonial times. This distorted the agricultural base of the nation. Any support for food crop production was devoid of organized market facilities. The Marketing Board which was expected to stabilize farmers’ income and therefore facilitate capital formation within the sector became machinery for exploiting farmers (Nwankwo, 1992). The story remained so even after the reformation of the marketing boards in 1977. Credit is a pre-requisite for any forward looking economic activity. Accessibility to credit facilitates the acquisition and application of state of the art technology and enables such enterprise to be in the driving seat in technology application. This facility is, however, in short supply to smallholder farmers in Nigeria, as it is indeed for most developing countries (Adams and Ladman, 1979; Abraham, 1985; World Bank, 2000). As revealed from the findings in this research, increase in ACGSF credit to crop production subsector increases crop productivity, this is consistent with the works of Isiorhovoja and Chukwuji (2009).
Research Objective Two: Examine the impact of Agricultural Credit Guarantee Scheme Fund on livestock output in Nigeria

The setting up of the ACGSF was predicated on the unwillingness of commercial banks to give loans to smallholder farmers for reasons of high default rate on loan repayment and therefore high risk of repayment. This was compounded by lack of collateral for banks to fall back on in case of default and the high cost of administering low unit value loans to farmers who remained widely scattered. The research findings also indicated that an increase in credit to the livestock sector increases livestock production in Nigeria. At this time in the nation’s history where there is ban on importation of livestock product, credit to this area should be encouraged as to enhance self sufficiency in livestock productivity in Nigeria.

Research Objective Three: Examine the impact of Agricultural Credit Guarantee Scheme Fund on fisheries output in Nigeria

Fisheries business is a thriving business which must exploited, an increase in credit to this important subsector increases productivity as indicated from the research findings. The use of these important inputs to fisheries business and the adoption of high yielding techniques could give rise to an increased need for agricultural credit since majority of Nigerian fish farmers. Insufficiency of capital to this agricultural sector has been a major constraint to its development. Thus in order to improve agricultural fisheries production more funds needs given to this important sector.

Research Objective Four: Examine the impact of Agricultural Credit Guarantee Scheme Fund on Agricultural output in Nigeria

In an agrarian economy like the type that exists in Nigeria, agricultural production provides the needed fulcrum upon which a sustainable development would blossom. Being the main source of food for most of the population, till date, agricultural production remains the mainstay of the Nigerian economy. It provides the means of livelihood for over 70 percent of the population, a major source of raw materials for the agro-allied industries and a potent source of the much needed foreign exchange. The research findings in this work revealed that the fund from Agricultural Credit Guarantee Scheme for agricultural productivity impacts positively and significantly on agricultural productivity. This implies that an increase in ACGSF increases productivity; therefore, the relationship that exists should be exploited by policy makers as to increase agricultural productivity in Nigeria.
Reference

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION
This chapter summarizes the various research results which emerged from the study. The results are aligned with the various objectives and hypotheses set out in chapter one of the dissertation. Conclusions are drawn and necessary recommendations made from the research findings.

5.1 SUMMARY OF FINDINGS
From the hypotheses tested the following findings were observed

1. Agricultural Credit guarantee scheme fund for crop production have significant positive impact on cash crop output in Nigeria.
2. Agricultural Credit guarantee scheme fund have a significant positive impact on livestock output in Nigeria.
3. Agricultural Credit guarantee scheme fund for fisheries have a significant positive impact on fishery output in Nigeria.
4. Agricultural Credit guarantee scheme fund have significant positive impact on Agricultural output in Nigeria.

5.2 CONCLUSION
The ACGSF was established by Decree No. 20 of 1977, and started operations in April, 1978. Its original share capital and paid-up capital were ₦100 million and ₦85.6 million, respectively. The Federal Government holds 60% and the Central Bank of Nigeria, 40% of the shares. The capital base of the Scheme was increased to ₦3 billion in March, 2001. The Fund guarantees credit facilities extended to farmers by banks up to 75% of the amount in default net of any security realized. The Fund is managed by the Central Bank of Nigeria, which handles the day-to-day operations of the Scheme. The guideline stipulates the eligible enterprises for which guarantees could be issued under the Scheme.

Between 1978 and 1989 when the government stipulated lending quotas for banks under the Scheme, there was consistent increase in the lending portfolios of banks to agriculture, but after the deregulation of the financial system, banks started shying away by reducing their loans to the sector due to the perceived risk. In order to reverse the declining trend several
innovations and products were introduced under the Scheme such as: self-help group linkage banking, trust fund model and interest draw back and application forms under the Scheme are obtainable from various branches of participating banks throughout the country.

In the course of the fund’s operations, a number of problems have been identified as militating against its smooth performance. According to Akinleye et. al. (2005), some of the problems are: increasing incidence of loan defaults, the rate of loan repayment by ACGS beneficiaries is very low. This view is also held by Njoku (1986) and Ojo (1986). Reasons adduced to this are natural disasters, poor farm management, low product prices, loan diversion, deliberate refusal to pay and the inability of farmers to assess loan requirements properly leading to farmers’ receipt of inadequate or excessive loans.

Participatory banks in the ACGS do not cooperate fully in lending to farmers. Because of the high cost of processing loans relative to the actual loans and the high default rate of the farmers, many banks prefer to pay penalty to risk lending their funds to agriculture. Also banks fault the farmers for submitting incomplete application forms. In some cases where loans are approved, it arrives too late for it to fulfill the purpose for which it was intended. This delay seems more of administrative than any other.

Another problem that militates against the smooth operation of the scheme is on “Personal guarantee” as a security that may be offered to a bank for the purpose of a loan. “Personal guarantee” as a condition was not explained in the decree. This therefore makes it almost nothing as its interpretation rests on the bank officials. Also the N20, 000 loans which the scheme allowed to be collected through “Personal guarantee” cannot do much for any farmer in his farming activities. Also, the other securities recognized by the decree that could be offered to the bank for the purpose of any loan under the scheme pose problems in the smooth operation of the scheme. The securities are legal title to land, and a life assurance policy. It is a common knowledge that most people especially in the rural areas do not have clear titles to their land which could serve as collateral for loan under the scheme (Okorie, 1998).

Notwithstanding the problems of the scheme above, the findings of this research indicates that the credit guarantee by the scheme had positive and significant impact on agricultural productivity in Nigeria, however it is worrisome to note that, Nigerians had not actually
benefitted from the so call credit. The implication is that, the credit guarantee by the scheme have not been judiciously utilized for the intended purpose, these have led to insignificant benefit in terms of welfare of Nigerians. Therefore, it si recommended that effort should be made by all stakeholders

5.3 RECOMMENDATIONS

Various Studies have shown that Credit plays an important role In enhancing agricultural productivity of the farmer (Okorji and Mejeha, 1993; Nweze, 1991; Mafimisebi et al, 2008). The general purpose of the Nigerian 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 is 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 programme.

From various studies on the Agricultural Credit Guarantee Scheme Fund in Nigeria, it is evident that the scheme has increased the flow of funds to agriculture. However, stakeholders in the scheme viz: the farmers, lending institutions and government must show greater commitment and dedication for the scheme to achieve its laudable objectives. Farmers should be encouraged to be applying for loans from the participating banks to enhance their agricultural activities and productivity; and also to repay the loans as and at when due.

The lending institutions should make efforts to grant agricultural loans at the appropriate time to farmers who met the conditions. Late release of loan to a farmer leads to loan diversion/ misuse which have been established to be a major cause of poor loan repayment. Secondly, it behooves on the lending institution to ensure that the loan being granted to a farmer is adequate for the purpose, as granting of an inadequate loan for a purpose is a prelude for loan diversion and its consequence on the loan repayment ability. The government should take a second look at the securities that may be offered to the bank for the purpose of a loan under the scheme. There is the need for government to review the idea of a farmer using a certificate of occupancy on a land as “Security” before any amount above N20, 000 is approved. It is a common knowledge that small farmers (especially in the rural areas) do not have legal title on their farmlands. Therefore, there is the need to review this subsection so
that the traditional ruler or President-General of the applicant’s community or a civil servant of a particular category could stand as surety for loans under the scheme.

The scheme still needs publicity as most farmers especially in the rural areas are oblivious of the scheme’s objectives. It therefore behooves on the government (Federal, State and local Governments) to use its agencies like National Orientation Agency (NOA), Agricultural Development Programme (ADP) extension officers and other relevant bodies to organize lectures on the scheme in the farmers’ locality. Government should ensure that bank claims as a result of default and borrowers’ interest draw backs are paid without delay. This will not only motivate both participating banks and farmers in the scheme but will also attract others who are skeptical about the scheme.

Farmers should be encouraged to be applying for loans from the participating banks to enhance their agricultural activities and productivity; and also to repay the loans as and at when due. Thus enough sensitization exercise must be carried out to local areas where majority of farmers need the funds.

Finally, government should ensure that bank claims as a result of default and borrowers’ interest draw backs are paid without delay. This will not only motivate both participating banks and farmers in the scheme but will also attract others who are skeptical. The end result is the nation reaping the dividend of adequate credit into our agricultural sector and that is increased productivity, which is a *sine qua non* in agricultural development.
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## APPENDIX 1

### Agricultural Output in Nigeria 1978-2008 at Basic Prices

<table>
<thead>
<tr>
<th>Years</th>
<th>Crop Production (N, 000)</th>
<th>Livestock (N,000)</th>
<th>Fisheries (N,000)</th>
<th>Total (N,000)</th>
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APPENDIX 2

AGRICULTURAL CREDIT GUARANTEE SCHEME FUND 1978-2008

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<th>Years</th>
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APPENDIX 3
SPSS MODEL RESULTS FOR HYPOTHESIS ONE

Descriptive Statistics

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Correlations

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- a Predictors: (Constant), ACGSFCP
- b Dependent Variable: GDPACP
### ANOVA(b)

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a Predictors: (Constant), ACGSFPC
b Dependent Variable: GDPA

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Dependent Variable: GDPACP

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a Dependent Variable: GDPACP

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a Dependent Variable: GDPACP
### Descriptive Statistics

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a All requested variables entered.
b Dependent Variable: GDPALS

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a Predictors: (Constant), ACGSFSLSP
b Dependent Variable: GDPACP
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a Predictors: (Constant), ACGSFLSP  
b Dependent Variable: GDPALS

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Dependent Variable: GDPALS

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a Dependent Variable: GDPALS

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a Dependent Variable: GDPALS
APPENDIX 5
SPSS MODEL RESULTS FOR HYPOTHESIS THREE

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a  All requested variables entered.
b  Dependent Variable: GDPAFP

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a  Predictors: (Constant), ACGSFP
b  Dependent Variable: GDPAFP
**ANOVA(b)**

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a Predictors: (Constant), ACGSFP  
b Dependent Variable: GDPAFP

**Coefficients(a)**

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Dependent Variable: GDPAFP

**Coefficient Correlations(a)**

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a Dependent Variable: GDPAFP

**Residuals Statistics(a)**

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a Dependent Variable: GDPAFP
APPENDIX 6
SPSS MODEL RESULTS FOR HYPOTHESIS FOUR

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Correlations

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Variables Entered/Removed(b)

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<td>1</td>
<td>TACGSF(a)</td>
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Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig. F Change</th>
<th>Durbin Watson</th>
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<tbody>
<tr>
<td>1</td>
<td>.953</td>
<td>.907</td>
<td>.904</td>
<td>67416.304</td>
<td>.907</td>
<td>284.438</td>
<td>1</td>
<td>29</td>
<td>.000</td>
<td>.680</td>
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</tbody>
</table>

a Predictors: (Constant), TACGSF  
b Dependent Variable: AP
## ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tr>
<td>1 Regression</td>
<td>129526701</td>
<td>1</td>
<td>129526701</td>
<td>284.438</td>
<td>.000(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>132059342</td>
<td>29</td>
<td>4553770439</td>
<td>2.548</td>
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<td>Total</td>
<td>142732635</td>
<td>30</td>
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a Predictors: (Constant), TACGSF  
b Dependent Variable: AP

## Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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<tbody>
<tr>
<td>(Constant)</td>
<td>347622.2</td>
<td>2.535</td>
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<tr>
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Dependent Variable: AP

## Coefficient Correlations(a)

<table>
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<th>Model</th>
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<tr>
<td>Correlations</td>
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<tr>
<td>Covariances</td>
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a Dependent Variable: AP

## Residuals Statistics(a)

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>362152.96</td>
<td>9002293.000</td>
<td>1430096.9323</td>
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<tr>
<td>Residual</td>
<td>-1642734.7</td>
<td>1777491.50000</td>
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<tr>
<td>Std. Predicted Value</td>
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<td>Std. Residual</td>
<td>-2.434</td>
<td>2.634</td>
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a Dependent Variable: AP