CHAPTER ONE

1.1BACKGROUND OF THE STUDY

By the time Nigeria became politically independent in October 1960, agriculture was the dominant sector of the economy, contributing about 70% of the Gross Domestic Product (GDP) employing about the same percentage of working population and accounting for about 90% of foreign exchange earnings and the federal government revenue (CBN, 2005). The early period of post-independence up until the mid-1970's saw a rapid growth of industrial capacity and output as the contribution of the manufacturing sector to GDP rose from 4.8% to 8.2%. This pattern changed when oil suddenly became of strategic importance to the world economy though its supply price nexus.

Crude oil was first discovered in commercial quantity in Nigeria in 1956, while actual production started in 1958. It became the dominant resources in the mid 1970's. The massive increase in oil revenue as an aftermath of the Middle East war of 1973 created and unprecedented, unexpected and unplanned wealth of Nigeria. The relative attractiveness of the urban centres made many able bodied Nigerians to migrate from hinder land, abandoned their farm lands for the cities and hoping to partake in the growing and prosperous (oil driven)

urban economy. This created social problems of congestion, provision, unemployment and crimes.

Notwithstanding, the enviable position of the oil sector in the Nigerian economy over the past three decades, the agricultural sector has remained the largest and arguably the most important sector of the economy. Agriculture contributes to the gross force in Nigeria (Aigbokhan, 2001). It is estimated to be the largest contributor to the non-oil foreign exchange. A strong agricultural sector is essential to economy development both in its own rights and to stimulate and support the growth of industries. Economy growth has gone hand in hand with agricultural progress stagflation in agriculture is the principal explanation for poor economy performance, while rising agricultural activities has seen the most concomitant of successful industrialization (Ukeje 1999). The labour-intensive character of the sector reduces its contribution to the GDP. Nevertheless, agricultural exports are a major earner of foreign exchange in Nigeria, in the non-oil sector.

Like in most developing countries, agriculture remains the backbone of the Nigeria economy. Typically, it is the largest source of employment often two-third or more of the population is dependent on this livelihood on farming. Its is a well-known fact that Nigeria's comparative advantage in the production of

certain food and other agricultural commodities that can earn foreign exchange for imports of other food.it has been recognised that sustained agricultural development requires striking an appropriate balance between investments that are directly productive in agriculture and investment in infrastructure. Poor infrastructural services in developing countries will lead to low productivity. Much of the high productivity of agriculture in the developed countries is as a result of massive form of investment over many years in physical and institutional infrastructure (Manyong, et al, 2003).

Conversely, the low productivity of agriculture in many developing countries reflects among other things, limited investment in rural roads and electricity. This streams from the concentration of public investments in urban areas, where the unit cost of providing services is typically less and logistic are problems fewer.

1.1 STATEMENT OF THE PROBLEM

One of the constraints of the growth in Nigeria has been the slow development of the agricultural sector. The performance of the sector was undermined by the disincentives created by the macro-economic environment. The economic stabilization Act enacted in 1982 affected expenditure on agriculture and restricted income. Indeed, the contribution of the sector to total GDP has been

falling, not necessarily because a strong industrial sector is displacing agriculture as a result of low productivity. Emerging problem which constraint the full realisation of the potentials in the agricultural sector includes inadequacies in the supply and delivery of farm input, shortage of working capital, low level of technology, diseases and pest infestation, poor post-harvest processing and shortage, environmental hazard, labour and land use constraint.

There is need to correct the existing structural distortions in Nigerian agricultural sector and put the economy on the part of sustainable growth. This study seeks to find answers to the following research questions:

1) What role does the agricultural sector play in the development of economic growth in Nigeria?

1.1 Objectives of the study

The main objective of this study is to evaluate the role of the agricultural sector as an accelerator for economic growth and development in Nigeria. Specifically, this study aims to achieve the following objectives:

 To access the impact of the agricultural sector on the Nigerian economic growth.

1.2 STATEMENT OF HYPOTHESIS

H₀: That Nigeria's agricultural sector has not contributed significantly to the economic growth of the country.

1.3 SIGNIFICANCE OF THE STUDY

The significance of this study depends on the fact that with improved economy, Nigeria stands to gain in its effects towards development. It is advantageous to both the government and citizens; in the sense that its serves as a guide for future governmental policy on agriculture and when this is well implemented, we will notice that the welfare and standards of living of the citizens will be improved.

1.4 SCOPE OF THE STUDY

This study examines the role of the agricultural sector in the economic growth and development of Nigeria. The performance of Nigeria's agricultural sector since 1960 to 2011 shall be evaluated in detail as well as effects of the government at revamping the sector examined.

CHAPTER TWO

2.1 THEORITICAL LITERATURE REVIEW

The study of economic history provides us with ample evidence that an agricultural revolution is a fundamental pre-condition for economic development (Eicher and Witt, 1964, Olusanmi, 1966, Jones and Wolff, 1969). The agricultural sector has the potentials to be the industrial and economic spring board from which a country's development can take off. Indeed, agricultural activities are usually concentrated in the less developed rural transformation, redistribution, poverty alleviation and socio-economic development (Stewart, 2000).

Agriculture can be advanced beyond its primary function of supplying food and its primary cultural sector has the potential to shape the landscape, guarantee the sustainable management of renewable resources of many rural areas (Humbert, 2000). In fact, through its different spheres of activities at macro and micro levels, the agricultural sector is strategically positioned to have a higher multiplier effect on any nation's quest for socio-economic and industrial development. It is very obvious that a sustainable agricultural growth has been highly instrumental in Brazil's rapid rural transformation, the empowerment of Brazilian peasant and the alleviation of abject poverty. Interestingly, the

Nigerian economy like that of Brazil during the first decade after independence could reasonably be described as an agricultural economy because agriculture serves as the engine of growth of the overall economy (Ogen, 2003: 231-234). From the stand point of occupational distribution and contribution of GDP, agriculture was the leading sector. During this period, Nigeria was the world's second largest producer of cocoa, largest exporter of palm kernel and largest producer and exporter of palm oil. Nigeria was also a leading exporter of other commodities such as cotton, groundnut, rubber and hides and skin (Alkali 1977: 15-16). The agricultural sector contributed over 60% to the GDP in the 1960s and despite the reliance of the Nigerian peasant farmers on traditional tools and indigenous farming method, the farmers produce 70% of Nigeria's export and 95% of its food needs (Lawal 1997: 195). However, the agricultural sector suffered neglect during the hay days of boom in the 1970s. Ever since then, Nigeria has been witnessing extreme poverty.

Historically, the root of the crisis in Nigerian economy lies in the neglect of agriculture and the increased dependence on a monoculture economy based on oil. The agricultural sector now accounts for less than 5% of Nigeria's GDP (Olagboju and Falola 1996: 263). It is against this back drop that this paper sets out to draw comparative analysis from the Brazilian experience for possible replication in Nigeria. Such an approach is particularly feasible given the fact

that Nigeria shares so much in common with Brazil in terms of a highly conducive agricultural climate, huge and diverse population as well as the availability of natural resources.

2.1.1 MEANING OF ECONOMIC GROWTH

According to Turrets (1987) "the economic growth of a country can be defined in various ways as an increase in gross domestic product, in real GDP or in per capital GDP". It is clear therefore, that the rate of growth of the real GDP country. If we want to determine the growth in Nigeria for example, the rate of growth of its real GDP stands as the most appropriate measure.

Alternatively, we can also examine the meaning of economic growth through the use of production possibility curve. A production possibility curve is used to depict the maximum quantities of two goods or types of goods that can be produced when all the resources of the country are fully and efficiently utilized. However, smith (1996) visualised that economic growth results from specialization of labour, application of new technology as well as through international trade. But one important fact to note is that, since economic activities tend to or shift outward, countries will always record a positive growth rate and sometimes negative, such as inward of country's production possibility curve (PPC) (Clawer, Graves and Sexton, 1989).Nigeria's economy

had in some ears of the late1980s and through 1990s recorded some negative growth rate and in fact, still does till date and even beyond.

2.1.2 AGRICULTURE AND ECONOMIC GROWTH

Development economists in general and agricultural economists in particular, have focused on how agriculture can best contribute to overall economic growth and modernization. Many early analyst (Fel and Rani, 1954; Jorgensen 1961; Hirschman 1958; Scitovsky 1954; Lewis 1954; Rosentein-rodan 1943), have highlighted agriculture because of its abundance of resources and its ability to transfer surpluses to the more important industrial sector. The conventional approach to the roles of agriculture in economic growth concentrated on agriculture's important market-mediated linkages, and they are:

- i. Providing food for the expanding population with higher income.
- ii. Providing labour for an urbanized industrial work force.
- **iii.** Supplying savings for investment in industry.
- iv. Enlarging markets for industrial output providing export earnings to pay for imported capital goods and
- v. Providing primary material for agro processing industries (Timer 2002, Delgado et al 1994, Ravis et al 1990, Johnson and Mellor 1961).

Rapid agricultural productivity growth is a prerequisite for the market mediated linkages to be mutually beneficial. Productivity growth that resulted from agriculture has had enormous impacts on food supplies and food prices and consequent beneficial impacts on food security and poverty reduction (Hazel and Hag blade 1993, Binswanger 1980, Hayami and Herdt 1977, Pinstrup Anderson 1976); Alston et al (1996), posit that because a relatively high proportion of any income gain made by the poor is spent on food, the income effect of research induced supply shift can have major multinational implications, particularly if those shift results from technologies aimed at the poorest producers. Agricultural productivity growth also triggers the generation of non-market mediated linkages between the agricultural sector and the rest of the economy. These includes the indirect contribution of a vibrant agricultural sector to food security and poverty alleviation, safely net and buffer role; and the supply of environmental services (FAO, 2004). While agricultures direct private contributions to form households are tangible, easy indirect benefits tend to be over looked in assessing rate of returns. Ignoring the whole range of economic and social contributions of agriculture underestimates the returns to investments in the sector (Valdes and Foster, 2005).

Some empirical evidence exists on the positive relationship between agricultural growth (Valdes and Foster 2005). The transformation of agriculture from its traditional subsistence roots induced by technical change, to a modernizing agricultural sector is a phenomenon observed across the developing world.

Concluding, it is clear that agricultural growth has played a historically important role in the process of economic development. Evidence from industrialized countries that are rapidly developing today indicates that agriculture was the engine that contributed to growth in the non-agricultural sectors and to overall economic wellbeing. Economic growth originating in agriculture can have a particular strong impact in reducing poverty and hunger. Increasing employment and income in agriculture stimulates demand for non-agricultural goods and services, thereby providing a boost to non-farm rural income earners as well.

2.1.3 AGRICULTURE AND ECONOMIC DEVELOPMENT.

The contribution of agriculture to economic development lies in:

- Providing more food to the rapidly expanding population
- Increasing the demand for industrial product, and thus necessitating the expansion of secondary and tertiary sectors.

• It can release workers needed for the production of non-agricultural goods and services.

It can provide a source of capital that can be invested in improved productive facilities in the rest of the economy (Timer 2002, Delgado et al 1994, Ravis et al 1996. Johnson and Mellor 1961).

A progressive urban industrial economy contributes, in turn, to the rapid development of agriculture by expanding the market for agricultural products; by supplying the farm machinery, chemical fertilizers and so on, that raise the level of agricultural technology; by expanding productive employment opportunities for workers released from agriculture by technological change; and by making possible improvements in the quality of rural life by raising standards of consumption both in urban and rural areas (Binswanger, 1980).

A rise in rural purchasing power, as a result of the increased agricultural surplus, is a great stimulus to industrial development. The market for manufactured goods is very small in an underdeveloped country where the peasant farm labourers and their families, comprising typically two goods in addition to whatever they need. There is lack of real purchasing power thus reflecting the low productivity in agriculture. The basic problem thus is low investment return caused by small size of the market. Increased rural

purchasing power caused by expansion of agricultural output and productivity will tend to raise the demand for manufactured goods and extend the size of the market. This will lead to the expansion of the industrial sector (Lewis, 1954). Moreover, the demand for such inputs as fertilizers, tractors, better tools, implements, irrigational facilities in the agricultural sectors will all lead to the greater expansions of the agricultural sector. Besides, the means of transport and communications will expand to urban areas and manufactured goods to the rural areas. The long run effects of the expansion of the secondary and tertiary sectors will be towards higher profits in them whether they are operated in the private or the public sector. These profits will tend to increase the rate of capital formation through their re-investment. That is what Kuznets calls the "market contributions" of agriculture when it trades with other sectors of the economy.

Underdeveloped countries mostly specialize in the production of a few agricultural goods for export. As output and productivity of the exportable goods expand, their exports increase and results in larger foreign exchange earnings. Thus agricultural surplus leads to capital formation when capital goods are imported with this foreign exchange. As development gains momentum due to industrialization, the proportion of agricultural export in the country's total exports is likely to fall as they are needed in large quantities for

domestic production of imported articles. Such articles are import substitutes and conserve foreign exchange. Similarly, increased marketed surplus of food grains leads to a net saving of foreign exchange, as the economy tries to achieve the goal of self-sufficiency in food production. Larger productions of food and export crops do not only conserve and earn foreign exchange, but also leads to expansion of the other sectors of the economy. Foreign exchange earnings can be used to build efficiency of other industries and help the establishment of new industries by importing scare raw materials, machines, capital equipment and technical know-how. Kuznets calls it the "product contribution" of agriculture which first argues about the growth of net output of the economy and the growth of per capita output. An underdeveloped needs large amounts of capital to finance expansion of the infrastructure and for the development of basic and heavy industries. In the early stages of development, capital can be provided by increasing the marketable surplus from the rural sector without reducing consumption levels from population. According to Johnson and Mellor (1961) "an increase in agricultural productivity implies some combination of capital formation when it is reduced on the farm and employed in construction works". But the possibility of utilizing unskilled surplus form labour on capital project requiring skilled labour is limited. The second possibility of increasing capital formation through reduced agricultural prices is also not feasible in the early stages of development when the rise in price is not feasible. Reduction in agricultural prices is not feasible. Reduction in agricultural prices is possible in the long run but democratic countries may not be able to follow this reasoning for political reasons. A more practicable solution is to stabilize the prices in farm products. The third possibility of increasing farm receipts is perhaps the best way for capital formation. This can be done by mobilizing increased farm incomes through agricultural income tax, land registration charges, school fees, for providing agricultural technical services and other types of fees that cover all or part of the farm population. But "political and institutional problems makes it difficult to translate the increased potential for saving and capital accumulation, made possible by increased agricultural productivity, into an actual increase in investment in underdeveloped countries. According to Wald, special assessments have had their widest application in the United States. In view of the fact that they are specially designed for financing such developed projects as irrigation works, flood control system and certain classes of roads, all of which are extremely important for underdeveloped countries like India that "the penalties of too light taxation on agriculture are a stagnating farm sector, a financially starved public sector and a retarded rate of economic growth in the country as a whole; (Wald, 1995). Thus countries were

agriculture dominates, the taxation of agriculture in one form or another is essential for mobilizing agricultural surplus in order to accelerate economic development. Kuznets calls it the "factor of contribution" when there is a transfer of resources to the other sectors, these resources to the other sectors, these resources being productive factors. Agriculture also expands and diversifies employment opportunities in rural areas. As agricultures productivity and farm income increases, non-farm rural employment expands and diversifies. Landless and marginal farmers are primarily engaged in non-agricultural pursuits which includes the manufacturers of textile, furniture, tools, handicraft, leather and metal processing, marketing, transport, repair work, construction of houses and other buildings, education, medicine and other services, as these activities satisfy local demand.

Lastly, increase in rural incomes as a result of the agricultural surplus tends to improve rural welfare. Peasant starts consuming more food especially of a higher nutritional value in the form of superior quality cereals, eggs, ghee, milk, fruits etc. They build better houses fitted with modern amenities like electricity, furniture, radio, fan etc. provide themselves with bicycles, motorcycles, watches, readymade garments, shoe etc. they also receive direct satisfaction from such services such as schools, health centres, irrigation, banking, transport and communication facilities. Thus increased agricultural

surplus has the effect of raising the standards of living of the mass of rural people.

2.1.4 NIGERIAN ECONOMIC ENVIRONMENT

Nigeria was and is still basically an agricultural country despite the fact that there is significant growth in the other sector of the economy since her independence in 1960. Agriculture remains the single largest sector of the economy since it provides employment to a large segment of the work force and constituting the main stay of Nigeria's rural population. Since 1985, the percentage of gross domestic product attributable to agriculture has been maintained about 31%, well ahead of mining and quarrying, which includes crude petroleum and gas as well as whole sale and retail trade, which are also the other two major contributors to GDP in Nigeria.

Before 1970, the agricultural sector has enjoyed a relatively abundant supply of farm labour and cultivable land for agriculture was able to respond quite steadily to a rising demand. An expansion of land under cultivation and increased absorption of rural labour constituted a ready means for output expansion. However, the 1970s oil boom saw a high rate of rural-urban population migrating, which resulted into supply demand imbalance in the food

subsector, while traditional export declined sharply in both absolute and relative terms.

From 1970, Nigeria's agriculture has been characterized by excess demand over supply due to high population growth rate, stagnant declining economic growth, high rate of globalization, increased demand for agricultural raw materials by an expanding industrial sector and the rising per capita income which is stimulated by an oil export revenue boom.

The decline in production of tradable has raised serious domestic and external balancing problems. The output of domestic inputs using agro-allied firms is constrained by output fluctuation, which reduces the size of export revenues and market shares. This adversely affects the balance of payment. The agricultural sector was estimated to decline at an annual average of 0.43% between 1970 and 1985 while the periods between 1975 and 1978 recorded the highest level of decline of 7.88%. The agricultural export crop sub-sectors contribution to the total foreign earnings declined from an average of 58% in the 1960s to only 5.2% between 1971 and1985. Indeed, by 1980, Nigeria had become a net importer of food and most of its tradable export crops had either disappeared from the export list or merely maintained an insignificant presence.

As it were, the agricultural export sub-sector became increasingly unable to meet the raw material needs to the primarily processing industries and furthermore, inflationary pressure characterized the economy, general degeneration of rural life and rural urban migration.

Notwithstanding, the observed agricultural decline, agricultural policy appeared to have been more active in the 1970s than in the 1960s. In the formal period, the government implanted successful programme like National Agricultural Food Production Programme (NAFP), Operation Feed the Nation (OFN) and green revolution programme, also banks assisted Agricultural Development Programme (ADP).

Government also tried to improve marketing system for agricultural export crops by reforming the marketing board system in 1973, 1976 and 1977. Agricultural sector did not improve; as a result there was introduction of Structural Adjustment Programme (SAP) in 1986, which necessitated the deregulation of exchange rates and abolition of marketing board system.

2.1.5 AGRICULTURAL PRODUCTION DURING THE STRUCTURAL ADJUSTMENT PROGRAMME (SAP)

One of the most important debates the structural adjustment programme (SAP) has centred on the impact of the programme on agricultural sector. It

was anticipated that the measures adopted under this programme will bring about increased domestic production of food and eventual elimination of food import, increase supply of manufacturing industries of agricultural raw materials such as cotton, cocoa, oil palm, rubber etc. was also anticipated (Obadan and Egbase, 1992). Also, the diversification of export base of the economy would be enhanced with the increase in the agricultural prices and boom in the sector, production was expected to translate into rising rural employment, income and standard of living. Therefore, the agricultural production will be viewed from two perspectives, which is agricultural food production during SAP and agricultural export during SAP.

2.1.6 AGRICULTURAL FOOD PRODUCTION DURING SAP

Following the introduction of SAP in 1986, some writers have claimed that food production have been on the increasing sides. Since one of the expectations of complimenting this programme is to bring food and to make sure that the importation of food is eradicated. Iwayemi in 1994 found out that one of the positive developments in recent years is a merging trend of upward turn in the production of agricultural tradable (rice, soya beans and maize) and of the non-traded food category and cassava has performed impressively.

Furthermore, it was discovered that immediately after the introduction of SAP, there were sharp increase in the prices of staples such as yam, cassava, rice, maize, etc. for instance the average market retail price in Kwara state rose from \$\frac{1}{4}50\$ per tonne to \$\frac{1}{4}50\$ per tonne in 1986 and \$\frac{1}{4}686\$ per tonne in 1986. Also, the average market price of rice in Kaduna state rose from \$\frac{1}{4}1500\$ in 1985 to \$\frac{1}{4}1700\$ and \$\frac{1}{4}2213\$ in 1992. These increases in the price of staples are adduced to high inflationary pressures resulting from SAP. Also Edgbai (1988)argued that the devaluation of the Naira following the advent of the SAP lead to spectacular increase in the prices of most agricultural inputs, implements and machinery. The percentage price increase of these inputs between 1985, the last pre-SAP year's ranges between 50% and 70% using official prices subsequently there have indeed been increases in the producer prices of maize development.

Finally, Iwayemi (1994) concluded that the most pressing problem in the sector is the lack of adequate production capacity to meet domestic food requirement of rapidly raising large population.

2.1.7 AGRICULTURAL EXPORT DURING S.A.P

The major aim of introducing SAP was to improve the agricultural export through the depreciation of the country's currency. However, different researches hold different opinions concerning this. For instance, Obadan (1993)

found out that SAP policy of exchange rate adjustment was an important factor that positively affected supply of rubber and suggested that real depreciation of the naira for example, tends to stimulate rubber farmers to increase supply of export, thus talking advantage of the improved international competitiveness. In modern development, with the exception of rubber, the export elasticity of cocoa, palm kernel and processed or semi processed product with respect to change in exchange in Nigeria was generally of low order even in the long run.

Hence, Obadan and Egbase (1992) concluded that export base production activities especially agriculture, have benefited from the SAP incentive arising particularly from naira to depreciation and trade liberalization. Thus, quantity of natural rubber exported rose from 32000 in 1985 to 108600 in 1991, changes in naira exchange rate significantly affected natural rubber supply under SAP. In contrast, Ajilim and Agba, (1986) claimed that there is over whelming evidence that SAP has very slim prospect for stimulating non-oil export e.g. cocoa. Also Dayo, (1996) discovered that the low elasticity estimate was due to limited volume of agricultural export earning in response to devaluation of the naira. Also, Ajayi (1988) and Osagie (1985) posit In that in Nigeria, exchange rate devaluation is stagnant and have no significant effect on the external trade balance because of low prices elasticity generally associated

with the excess import and export demand functions. In other words Balogun (1987) estimated agricultural export function with exchange export has the redress and the result showed unresponsiveness of aggregate agricultural export to exchange rate, price and imported and agricultural input. He thus, concluded that the agricultural sector, which is dominated by smaller hold farming, is insulated from external trade variables or shocks.

Finally, Obadan and Egbase (1992) argued that export base production activity, especially agriculture, have benefited from SAP incentives arising particularly from naira depreciation and trade liberalization, for example in response to the price and exchange liberalization, the quantity of natural exported rose from 32000tonnes in 1985 to 33000 in 1986 and 108800 in 1991 changes in naira exchange rate significantly affected natural rubber supply under SAP. However Obadan (1993) argued that the main objective of SAP has not been realized even though that the number of agricultural export have increase, the value is still in significant.

2.1.8 THE EFFECT OF SAP AND THE AGRICULTURAL SECTOR AND ECONOMIC DEVELOPMENT.

Warder (1995) analysed the economic and political development on Nigeria's agricultural sector including the application of the structural adjustment

programme (SAP). He discovered that with the application of SAP, that the country was able to orient her agricultural production toward the production and exportation of cash crops while Husia and Farugee (1994) found out that for any developing country like Nigeria to experience the turn-around in our country, the country should establish and maintain macro-economic stability, eliminate discrimination against agriculture and take measures to remove anti export bias. Furthermore, Obadan (1994) stated that the agricultural sector during SAP was able to reverse negative growth of the economy during the early 1980s, because of more favourable more weather conditions and adoption of a floating exchange rate system which favoured agriculture deregulation of agricultural prices and the priority according to the implementation of the key public sector agricultural programs. Stanley (1987) added that SAP policy consisted of measures that are aim at achieving viability in the medium term balance of payment why the level and rate of growth of economy activity was maintained at the optimal level of operation. In addition Ojo (1988) stated that the effect of SAP on agricultural and rural development has brought about an increase in agricultural production and there was an improvement in rural development. He however, noted that the fundamental problems of Nigeria agriculture still persist. In contrast, since the theoretical bases of SAP is based on the invisible hand or market mechanism, Obadan and

Ekuarhare (1993) opined that a Pareto system which required a free market economy may not be idea for a developing or even a developed country. This is because the market mechanism may faster efficiency but not equity. The price mechanism which is concerned with state resources allocation undermines economic growth and development in developing countries. "consequently, without governments intervention in economic activities, the market leads to misallocation of present and future resource or at least to one which may not be in long run in the best interests of the society" (Torado 1977, 164 quoted in Obadan and Ekuarhare 1993).

Finally, Obadan and Ekuarhare opined further that the fiscal monetary exchange policy mix contained in SAP is inter-consistent with economic recovery from a recession (from which the country has been battling due to external shock and the crisis of accumulation within the domestic bourgeoisie). Recovery from this cyclical downturn characterized by below capacity nation production would require an increase in government expenditure to provide greater employment and increased social benefit. In other words, the deflation an economy coupled with deregulation and liberalization will not lead to an upturn of the economy. Therefore Obadan (1993) discovered that the main objective of SAP has not been realized even though the number of non-oil manufactured agricultural export items have increased the value and is still

insignificant. For instance, exchange in-flow from non-oil exports reduce from \$557million in 1985(per SAP) to \$538 million in 1987. It increased to \$613 million in 1988 but reduced drastically to \$406million in 1990 and by 1992; the sector only contributed 3.6% of the nation's foreign exchange. The value of agricultural export which stood at an average of ₦408.7 million before declining sharply to ₩270.8 million in 1981-1985, owing largely to decline in cash crop producers. During SAP, export earnings grew to ₩1822.9 million in 1986-1990 for primary agricultural commodities such as tubers, fruits and spices coming on board. In addition, export of manufacturers and semi manufacturers of agricultural products which earned only ₦37.2 million in 1891-1985 recorded the sum of ₩214.9 million in 1986-1990 as Nigeria became exporter of textile, soap, detergent, beer, beverages and skin in addition to cocoa products. Emmanuel (2002) viewed productivity as the wealth of a nation. According to him, Nigeria is generously endowed with abundant natural resources. He further argued that if this enormous resources base is well managed, through increased productivity, the wealth of the nation is bound to increase. He argued that a farmer plants a seed and reaps several harvesting period, productivity has increased and the wealth of a nation has increased too. The mercantilists (18th century) argued that productivity in the agricultural sector contributed the least to the economic growth. They said that it only promoted domestic trade and did not fore see mechanization and modernization that took over manual labour in the agricultural sector, as agricultural commodities are not only traded domestically but exported to other countries.

2.1.9 AGRICULTURAL PRODUCTION AND EXPORT

The breakdown of agricultural production into its component parts reveals the problems during 1985 period. While food production recorded only a marginal increase export crop production declined sharply. The inadequate domestic food production is reflected in Nigeria's massive food imports, especially in the 1970's to argument domestic supply. The supply in the production of some of Nigeria's cultural export commodities was most worrisome for instance, Nigeria that was ranked as the world leading producer and exporter of palm oil in the 1960s had become the net importer of this commodity in the mid-70s. Similarly, Nigeria's cocoa production, which reached its peak of 309000 tonnes in 1970-71, fell drastically to 160000 tonnes in 1985. The sharp turn down in the gross value terms of trade in agriculture was equally serious. The ratio of agricultural exports to food imports which stood at 143% in 1970-1975 suffered significant deterioration and reached the lowest at 38% by 1976-1982. The performance of agriculture during the review period was underdetermined

mainly by its neglect coupled with a chain of distributive created by the oil boom.

2.2 AGRICULTURAL POLICY AND PROGRAMME

Several policies as well as policy instruments have been put to place over the year by successive government in Nigeria. Some had positive effect while the others had negative effects. Olayami (1985) identified three distinct agricultural policy era under which the agricultural sector developed for the past three decades, these includes; the 1960-1969 era, the 1970-1985 eras. These policies were targeted at improving the performance of the sector during this period. A review of these policies would be discussed;

Agricultural policy during these periods was limited to marketing and pricing for which the marketing board were established. Actually, at the outbreak of World War 2 in 1939, government owned marketing boards were setup in British, West Africa to assure orderly marketing and to protect British supplies of raw materials (Adegbola and Akinbode, 1986). Government was involved in agricultural research and extension of services but the issue of self-sufficiency in agriculture for food and raw materials was not pursued. Also investment in agriculture with initiatives to improve employment was left to the initiative in farming. During this period, there was decentralised approach to agriculture

with initiatives being left to the regions and the states while the federal government played a supportive role. Regional government were executing abhor policies, programme and projects. There was no institutional federal responsibility for agriculture and there were no specific agricultural sector objectives. There were a number of policies and programme and some of them are discussed below;

2.2.1 AGRICULTURAL MARKETING POLICY

The agricultural marketing board system was used extensively in marketing agricultural products during this period. The system started with the establishment of a commodity marketing board in 1947 and for groundnut, palm produce and cotton in 1949. In 1954, the board became regionalized with one multi commodity marketing board for each of the regions, and later for each of the states. The board accumulated huge trading surpluses which were used to mobilize substantial savings for the government. These surpluses were generated at the expense of the stability of farmers' income. The farmers' income was kept low and with increasing risk on the farm declining world commodity prices of the mid 60s, there was an incentive for peasant increase production (Adubi, 1966).

2.2.2 AGRICULTURAL DEVELOPMENT COPERATION PROJECTS

The regional government of the east and western Nigeria stared this project and then later the north, to encourage the development of these crops. There financed from surpluses of the marketing boards. This was before the creation state), the UNIX oil palm plantation (now in Rivers and Cross Rivers), the Hushin rubber estates (now in Ogun state), the upper Ogun cattle ranches etc.

2.2.3 FARM SETTLEMENT SCHEME

In the early 1960s the regional government assisted school leavers who were willing to go into agriculture establishment farm settlement scheme. The farm settlement were setup as model for other farmers who often look up practises being carried out by settlers and had easy access to farm equipment and services. However, due to non-ownership pattern of the scheme, farm and house power supply problems and the limited individuals' holdings, most settlers were not committed. The owned land outside the greater settlement and mainly used the opportunity to obtain services through membership of a settlement scheme (Adegbola and Akinbode, 1986)

2.2.4 1970-1985 ERA (PERIOD OF MAXIMUM GOVERNMENT INTERVENSION)

Agricultural production started to decline towards the end of the decades of 1960s. Export crops outputs were stagnating while export volumes begin to

decrease, and there was evidence of food shortages in the country. The 1963 GDP figures for example shows that agriculture crops, livestock, fishing and forestry accounted for 64% of total GDP and the average for 1960s decade estimated at 56%. Similarly, in the export sector, the percentage of agricultural produce was declining (Adubi, 1966). The problem of agricultural production decline was ascribed partly to the civil war and partly to the declining commodity process in the world market and the incentive to production due to taxation of the commodity board. There was therefore greater involvement of the government in agriculture. The expenditure of government and therefore for its investment increase in the sector specific sector emphasis of policy was on accelerating production of the staple food crops and some export crops. There was a fundamental shift in the strategy compared with the decade of 1960s and the federal government became more involved in the sector. The strategy taken, led to the launching of several special programme and projects. Also specialised in institutions were setup to ensure smooth implementation of the agricultural policies; the period witnessed many macroeconomic and sector specific policies, which directly or indirectly affects agricultural production. Many of the macroeconomic policies of the government had wide spread effect on agriculture, though not targeted at the agricultural sector, until there are some programme which includes marketing policy, input supply and

distribution policy and input subsidy policy. Agricultural Development Projects (ADPs) and River Basin Development Authority (RBDA) were also established to promote agricultural developments.

2.2.5 THE 1985-1999 ERA (SAP AND POST SAP PERIOD)

With the Structural Adjustment Programme (SAP) in 1986, government admitted the failure of past policies to significantly improve the economy and reverse the declining trend of production in the agricultural sector. The SAP relied most especially on the agricultural sector to achieve the objectives of its far reaching refunds on diversification of export and adjustment of the consumption structure of the economy. The philosophy of SAP for the agricultural sector was that only the interplay of the market forces could foster efficiency in the sector. The government was therefore expected to play minimal role for private sector initiative in the sector. Many of the policy measure adopted in SAP and macro in nature and those that affect agriculture also fall directly into fiscal, monetary, trade and exchange rate policies as well as institutional policy refunds. Many institutions such as National Directorate of Employment (NDE), Directorate of Food, Roads and Rural Infrastructure (DFRRI), National Agricultural Insurance Company (NAIC), National Land Development Authority (NALDA) were established to assist new farmers and promote agriculture development in the rural areas. Essentially, these policies and programme were implemented until 1999. The changes in the government during the review period 1985-1999 also led to modifications of some of the policies above, which essentially formed the major focus of government on agricultural development.

2.2.6 THE NEW MILLINIUM AGRICULTURAL POLICIES (1999-2003)

At the inception of the new democratic administration in May 1999 and shortly before then, several institutional changes were made in order to realise the sector's objectives and in line with its belief that agricultural and rural development are sine que non for improved economy recovery (Olamola, 2003) these includes the relocation of department of cooperatives. Division of the ministry of Water Resources to the ministry of agriculture all before 1999, the scrapping of the erst while National Agricultural Land Development Department, the scrapping of the Federal Agriculture Coordinating Unit (FACU) and the Agricultural Project Monitoring and Evaluating Unit(APMEU) and the setting up of Project Co-ordination Unit (PCU) and the stream lining institution for agricultural credit delivery with the emergency of the Nigerian Agricultural Co-operative and Rural Development Bank (NACRDHB) and the peoples bank and the asset of the Family Economic Advancement Programme (FBEAP). New

institutions are also evolving to enable the Nigerian agricultural sectors respond to the imperative of the emerging global economic order. The new agricultural policy has a clear statement of objectives amid the structural transformation necessary for the overall socio-economic development of the country as well as the improvement in the quality of life of Nigeria. This objective reflects the current policy recognition of agriculture as a vital sector under the poverty reduction programme (FMARD, 2003). The government also seeks to pursue the following specific objectives:

- i. Attainment of self-sufficiency in basic food commodities with particular reference to those which consume considerable shares of Nigerian's foreign exchange and for which the country has comparative advantage in local production.
- ii. Increase in production and processing of exportable commodities with a view to increase their foreign exchange earning capacity and further diversifying the country's export base and source of foreign exchange earnings.
- iii. Increase in production of agricultural raw materials to meet the growth of an expanding industrial sector.
- **iv.** Modernization of agricultural production, processing, storage and distribution through the infusion of improved technologies and management

so that agriculture can be more responsive to the demands of other sectors of the Nigerian economy.

Creation of more agricultural and rural employment opportunities to v. increase income of farmers and rural dwellers, productivity absorbed and increasing labour force in the nation. These objectives are properly in agreement with the whole concept of agricultural sustainability and interlinkage between agriculture and each of the relevant sectors of the economy. As it is usual with the specification of agricultural policy objectives from time immemorial, these objectives are clearly presented and are basically consistent with the overall strategy of diversifying the productive base of the economy for an increased foreign exchange generation, higher level of employment and productivity and improved economy recovery. Specification of policy objectives had been the most easily accomplished component of agricultural policy formulation in particular and development planning experience in the country in general. It is therefore not surprising that the specified objectives in the new policy document are indeed comprehensive and quite appropriate.

2.3 POLICY EVALUATION

It might be difficult to evaluate all the policies objectively given the space and the focus. However, evidence from some authors (Olayemi 1995, Olamola

1998, Garb 1998) has indicated minimal positive impact of these policies. Also, the performance of the sector is far from being fully satisfactory. The evidence of these is the decaying rural infrastructure, decline domestic and foreign investment in agriculture. In fact the increasing withdrawal of manufacturing companies from their backward integrated agricultural ventures has reduced investment in the sector considerably. Input supply and distribution have been inefficient and most agricultural institutions are ineffective. The evidence of ineffectiveness is the scrapping in the year 2000 of some of the institutions established for agricultural production, a critical examination of the policies and there implementation over the years to show policy instability. This problem is not unconnected with the political instability in the country. Between 1979 and 1999, the country has passed through five military and civilian regimes. In between the minister of agriculture at the federal level and the various commissioners for agriculture at the state level were changed several times on the average of one per two years. Several policy measures were stated and changed without sufficient rating for policy effect or result.

2.3.1 POLICY INCONSISTENCIES.

With respect to agricultural production, the sector has passed through several periods of production and unbridled opening up for competition. It has also

passed through eras of no government and less government involvement in direct agricultural production. The consistencies of policy transparency, leads to poor implementation and mismanagement of policy instruments.

2.4 EMPERICAL REVIEW

Fosu (1992) employed a linear logarithm equation to estimate the effect of real exchange on Ghanaian's agricultural exports. This study shows that the response of agricultural export to changes in the exchange rate is inelastic. However, Nigeria has little empirical evidence on the effect of exchange on agricultural production. In another development, Jeje (1988) conducting the study find out whether SAP was the right decision for Nigeria, argued that higher input prices was as a result of SAP in both agricultural and industrial sectors. The study showed that there was a boom in domestic supply of raw materials and increased exports on non- oil export commodities like cocoa, oil palm etc.

CHAPTER THREE

3.1) RESEARCH METHODOLOGY

In order to give an objective assessment of the role of agricultural sector on the growth of the Nigerian economy, there is need to specify an evaluating criteria. The macro economic analysis will be used to find the effect of the growth in the agricultural sector on the Gross Domestic Product (GDP) of the Nigerian economy over the years. Agricultural output and growth rate of the agricultural sub-sectors will be analysed. The technique to be used in this research work is the regression analysis, which is an econometric method that is used to derive estimates of the parameters of economic relationships from substantial observations (Koutsoyiannis 1997).

3.2) MODEL SPECIFICATION

This research shall employ econometric method. According to Modella (1992), this method gives the best techniques for the verification and refutation of theories. It also provides qualitative estimates of the relationship among variables without much subjective judgement. The specification of economic model is always based on econometric theory or any available information relating to the phenomenon being studied (Koutsoyiannis 1997).

Hence, the specification of the model adopted for the investigation is implicitly stated as follows: $\label{eq:model} \mbox{Model: GDP= f(EXR, TAP, FDI, INTR)}$ It can also be stated as $\mbox{GDP= $\beta_1+\beta_1EXR+\beta_2TAP+\beta_3FDI+\beta_4INTR+et.}$ Where: $\mbox{GDP= Gross Domestic Product}$ $\mbox{GDP= Intercept of the function}$ $\mbox{B}_1-\beta_4= \mbox{Regression co-efficient}$ $\mbox{EXR= Exchange rate}$

TAP= Total Agricultural Product

FDI= Foreign Direct Investment

INTR= Interest Rate

t = 1961-2010

et =Error terms

3.3) METHOD OF EVALUATION

Having specified and estimated the parameters of the model, the researcher would proceed with the evaluation of the results of the calculation, that is with the determination if the reliability of these results. The evaluation consists of deducing whether the estimates of the parameters are theoretically meaningful and statistically satisfactory. In the view of these, the researcher will evaluate the estimated parameters using the economics and econometrics test.

3.3.1) ECONOMIC A PRIOR TEST

Based on the principles of economic theory, the economic test will be used to examine the meaningfulness of the equation with regards to meeting a prior expected test signs of the parameters. The theoretical expected signs of the macroeconomic variable in the models are stated below:

| VARIABLE | EXPECTED SIGNS |
|----------|---|
| GDP | This is the dependent variable so it has no sign. |
| EXR | Positive(+) |
| TAP | Positive(+) |

| FDI | Positive(+) |
|------|-------------|
| INTR | Negative(-) |

3.3.2) STATISTICAL TEST (1ST ORDER TEST)

In evaluating, the results of the regression the use of economic test, first order statistical test are employed. This aims at the evaluation of the statistical reliability of the estimated parameters. The statistical test used includes the R², student t-test, and F-test.

Co-efficient of multiple determinations (R²): The R² is used to test for the goodness of fit of the model in the economy. That is, to show the percentage of total variation in dependent variable explained by the regression plane the values between 0 and 1.

The higher the value of R², the higher percentage the of variation of the dependent variable that is being explained by the regression plane.

t-test: This is used to test the statistical significant or reliability of the estimates of the regression co-efficient. If the probability at which the test is significant in our regression result for any dependent variable or less or equal to our chosen level of significant (0.05), we reject the null hypothesis (H_0) , which says that the

independent variables is not significant. The invariability means accepting the

alternative hypothesis (H₁), which states that the independent variable in

question is statistically significant in our model.

F-test: The F-statistics is used to test for the overall significance of the

regression result that is the test that aims at finding out whether the

explanatory variables do actually have any significant influence on the

dependent variables.

3.3.3) ECONOMETRIC TEST (2ND ORDER TEST)

This is used to test for the presence of serial auto-correlation. That is the serial

independence of successive terms in regression. Auto-correlation usually

indicates that an impact of the variation of the dependent variables has not

been explained. The problems of auto-correlation are usually dictated by

Durbin Watson (DW) statistics. It is usually given as:

 $DW = \sum \{et(et-1)\}^2$

 $(et)^2$

Where: DW= Durbin Watson

 Σ = summation of

et= present period errors

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et₁= previous period errors

NORMALITY TEST: This test is carried out to check whether the error term follows a normal distribution. The normality test adopted in this research work is the Jacque Bera (JB) statistic which follows the chi-square distribution.

TEST FOR MULTICOLINEARITY: This will be used to check for multicolinearity among the explanatory variables, the basis for the test being the correlation matrix result, using the correlation co-efficient between pairs of repressors.

3.4) DATA REQUIRED AND SOURCES: The data used in this research is secondary data. All the statistical data for the study are from various publication of central bank statistical bulletin.

CHAPTER FOUR.

PRESENTATION AND ANALYSIS OF RESULT.

4.1 Presentation and Interpretation of Result:

Dependent variable: Real Gross Domestic Product.

Method: Ordinary Least Square.

Period of study: 1961-2010

Included Observations: 50

| Variable | Coefficient | Standard | t-statistics | t-prob. |
|----------|-------------|-----------|--------------|---------|
| | | error | | |
| Constant | 2.460283 | 0.5281451 | 4.66 | 0.000 |
| TAP | 0.622949 | 0.0953927 | 6.53 | 0.000 |
| FDI | 0.4392091 | 0.0948118 | 4.63 | 0.000 |
| INTR | 0.0206541 | 0.0145209 | 1.42 | 0.162 |
| EXR | 0.0028516 | 0.0028196 | 1.01 | 0.317 |
| | | | | |

 $R^2 = 0.9835$ $F\{4, 45\} = 671.17\{0.0000\}$

DW = 1.099291Root MSE =0.41744 for 4

variables and 50 observations.

From the above, the interpretation of the result as regard the coefficient of various repressors' is stated as follows:

The value of the intercept which is 2.460283 shows that the Nigerian economy will experience 2.460283 and will increase when all other variables are held constant.

The estimate coefficients which are 0.622949 {TAP} shows that one per cent increase in TOTAL AGRICULTURE PRODUCTION will cause a 0.622949% increase in GDP, 0.4392091 {FDI} shows that one per cent increase in FOREIGN DIRECT INVESTMENT will cause a 0.4392091% increase in GDP, 0.0206541 {INTR} shows that a unit change in INTEREST RATE will cause a 0.0208516% increase in GDP, 0.0028516 {EXR} shows that an increase in EXCHANGE RATE will cause a 0.0028516% increase in GDP,

4.2 Economic Apriori Criteria:

The test is aimed at determining whether the signs and sizes of the results are in line with what economic theory postulates. Thus, economic theory tells us that the coefficients are positively related to the dependent variable, if an increase in any of the explanatory variables leads to an increase in the dependent variable and negatively related if an increase in any of the explanatory variables leads to a decrease in the dependent variable

Therefore, the variable under consideration and their parameter exhibition of a priori signs have been summarized in the table below.

| Variables | Expected signs | Realised Sign | Remark |
|-----------|----------------|---------------|----------|
| TAP | + | + | Conforms |
| FDI | + | + | Conforms |
| INTR | - | - | Conform |
| EXR | + | β > 0 | Conforms |

From the above table, it is observed that all the variables conform to the economic theories.

A positive relationship which exists between TAP, FDI, INTR, EXR and GDP indicates that an increase in TAP, FDI, INTR and EXR will result in a positive change in the Growth Rate of GDP. This conforms to the priori criteria because an increased or high TAP, FDI, INTR and EXR over the years will increase growth rate of GDP

4.3 <u>Statistical Criteria {First order test}</u>

4.3.1. Coefficient of Multiple Determinants {R²}:

The R^2 {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value of 0.9835 = 98.35% approximately 98%. This indicates that the independent variables accounts for about 98% of the variation in the dependent variable.

4.3.2. The Student's T-test:

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H₀: The individual parameters are not significant.

H₁: The individual parameters are significant.

Decision Rule:

If t-calculated > t-tabulated, we reject the null hypothesis $\{H_0\}$ and accept the alternative hypothesis $\{H_1\}$, and if otherwise, we select the null hypothesis $\{H_0\}$ and reject the alternative hypothesis $\{H_1\}$.

Level of significance = α at 5%= 0.025

Degree of freedom: n-k

Where n: sample size.

K: Number of parameter.

The t-test is summarised in the table below:

| Variables {t-value} | t-tab | Remark |
|---------------------|---------|---------------|
| TAP {6.53} | ± 2.000 | Significant |
| FDI {4.63} | ± 2.000 | Significant |
| INTR{1.42} | ± 2.000 | Insignificant |
| EXR{1.01} | ± 2.000 | Insignificant |

The t-statistics is used to test for individual significance of the estimated parameters $\{\beta_1, \beta_2, \beta_3 \text{ and } \beta_4\}$.

From the table above, we can deduce that intercept $\{4.66\}$, TAP $\{6.53\}$, FDI $\{4.63\}$ is greater than ± 2.000 , which represents the t-tabulated implying, that intercept, TAP and FDI is statistically Significant.

On the other hand, the INTR $\{1.42\}$ and EXR $\{1.01\}$ are less than the t-tabulated $\{\pm 2.000\}$ signifying that INTR and EXR are statistically insignificant.

4.3.3. F-Statistics:

The F-statistics is used to test for simultaneous significance of all the estimated parameters.

The hypothesis is stated;

$$H_0$$
: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$

$$H_1$$
: $\beta_1 = \beta_2 = \beta_3 = \beta_4 \neq 0$

Level of significance: α at 5%

Degree of freedom: $V_1 = k-1$ $V_2 = N-K$ d/f

Decision Rule:

If the f-calculated is greater than the f-tabulated $\{f\text{-cal} > f\text{-tab}\}\$ reject the null hypothesis $\{H_0\}$ that the overall estimate is not significant and conclude that the overall estimate is statistically significant.

From the result, f-calculated $\{671.17\}$ is greater that the f-tabulated $\{2.53\}$, that is, f-cal > f-tab. Hence, we reject the null hypothesis $\{H_0\}$ that the overall estimate has a good fit which implies that our independent variables are simultaneously significant.

Econometrics Criteria. 4.4

Test for Autocorrelation: 4.4.1.

One of the underlying assumptions of the ordinary least regression is that the

succession values of the random variables are temporarily independent. In the

context of the series analysis, this means that an error {Ut} is not correlated with

one or more of previous errors $\{U_{t-1}\}$. The problem is usually dictated with

Durbin-Watson (DW) statistics.

The durbin-watson's test compares the empirical d* and du in d-u tables to their

transforms $\{4-d_L\}$ and $\{4-d_U\}$.

<u>Decision Rule:</u>

• If d* < D_L, then we reject the null hypothesis of no correlation and accept that

there is positive autocorrelation of first order.

• If $d^* > \{4-d_L\}$, we reject the null hypothesis and accept that there is negative

autocorrelation of the first order.

• If $d_{IJ} < d^* < \{4-d_{IJ}\}$, we accept the null hypothesis of no autocorrelation.

• If $d_L < d^* < d_U$ or if $\{4-d_U\} < \{4-d_L\}$, that test is inconclusive.

Where: $d_L = Lower limit$

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 D_U = Upper limit

 $D^* = Durbin Watson.$

From our regression result, we have;

 $D^* = 1.099291$

 $D_L = 1.378$

 $D_U = 1.721$

 $4-d_L = 2.622$

 $4-d_{U} = 2.279$

Conclusion:

Since if d* $\{1.099291\}$ < D_L $\{1.378\}$, then we reject the null hypothesis of no correlation and accept that there is positive autocorrelation of first order.

4.4.2. Normality Test for Residual:

The Jarque-Bera test for normality is an asymptotic, or large-sample, test. It is also based on the ordinary least square residuals. This test first computes the skewness and kurtosis measures of the ordinary least square residuals and uses the chi-square distribution {Gujarati, 2004}.

The hypothesis is:

$$H_0$$
: $\mu_i = 0$ normally distributed.

At 5% significance level with 2 degree of freedom.

$$JB = + = 16.40$$

While critical JB >
$$\{X^{2}_{\{2\}}df\} = 5.99147$$

Conclusion:

Since 16.40 > 5.99147 at 5% level of significance, we reject the null hypothesis and concluded that the error term do not follow a normal distribution.

4.4.3 Test for Multicollinearity:

The term Multicollinearity is due to Ragnar Frisch. Originally it meant the existence of a "perfect" or exact, linear relationship among some or all explanatory variables of a regression model. The tests were carried out using correlation matrix. According to Barry and Feldman {1985} criteria; "Multicollinearity is not a problem if no correlation exceeds 0.80".

| | EXR | INTR | TAP | FDI | REMARK |
|------|--------|-------|-----|-----|--------|
| EXR | 1.000 | | | | - |
| INTR | 0.5468 | 1.000 | | | Nm |

| TAP | 0.8870 | 0.7482 | 1.000 | | M, Nm, |
|-----|--------|--------|--------|--------|-----------|
| FDI | 0.7643 | 0.7305 | 0.9401 | 1.0000 | Nm, Nm, M |

Where M = Presence of multicollinearity

Nm = No multicollinearity.

CHAPTER FIVE

SUMMARY POLICY RECOMENDATION AND CONCLUSION.

5.1 **SUMMARY OF FINDINGS**

The study examines the role of agriculture as an accelerator for economic growth in Nigeria over the period of 1961-2010. The study employs the ordinary least square (OLS) method of estimation. The research found out that;

- Agricultural sector has a positive and significant impact on economic growth in Nigeria
- 2. Foreign direct investment contributes positively to economic growth in Nigeria.
- 3. Interest rate has a positive but non-significant impact on the Nigerian economic growth.
- 4. Exchange rate has positive impact on economic growth but its impact is not significant.

5.2 POLICY RECOMMENDATION

The analysis on this research work has shown that the agricultural sector has a key role to play on the growth and development of the Nigerian economy. The following policy recommendation should be made to the government and all the agencies in charge of policy implementation in Nigeria that;

- i. Agriculture is very necessary for the growth of Nigeria's economy, so for effectiveness, fertilizer procurement and distribution should be privatized with agricultural development projects (ADPs). Also government should be able to fund these projects.
- ii. Though interest rate does not conform to its expected sign, we need to recall that Interest rate is a reward for capital, so more capital is always attracted when interest rate rises. Thus when interest rate raises, more capital in the form of foreign direct investment (FDI) and portfolio investment flow into the country which enhance economic growth.
- iii. The positive impact of exchange rate on economic growth justifies that devaluation favours the growth of Nigerian economy. Therefore, we recommend that the naira should be devalued in order to increase export. By extension, government should encourage increased production through subsidies and soft loans so that the increased in demand for our export be matched with our supply. This because it is only through this that devaluation can be meaningful. The government should also make the environment

conducive through ensuring both political and economic stability so that more FDI can be attracted to the country.

5.3 CONCLUSION

This research work has shown that despite Nigerian's total reliance on oil for foreign index exchange earnings and government revenue, agriculture still remains the main stay in the Nigerian economy and has great potentials for the future. No matter how rich a country is, the ability to feed her citizens is an important index of economic growth. A country that is not food sufficient or cannot produce a substantial part of her food requirement locally puts her food security on the line. This is because food has become a weapon of international politics and welfare. This research has presented the situation of Nigeria agricultural sector in the past, its strategies and policies and the extent of performance of the sector. The very dismal performance of the Nigerian agricultural sector since independence has been attributed to the subsequent policies indirectly impacted on the agricultural sector negatively. One of such is the unilateral increase in the early 1970s which led to the rural-urban drift of able bodied men from agricultural productive areas in search of white collar jobs. In a bid therefore to keep the Nigerian agricultural sector moving, there is urgent context in which agricultural development must take place. Various

view of agricultural strategy such as essential technology and good macroeconomic policy are inadequate.