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Agriculture and Food Security as Vital Components of Sustainable Development in Nigeria

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Abstract

an's physiological needs are fundamental to his existence, growth and development in any society he finds himself. This is why agriculture and food security are considered vital components for sustainable development in Nigeria. Data was obtained from secondary sources such as books, journals, periodicals, magazines, and the internet etc. Analysis was done by content analysis while the neo-classical theory (Pearce 1972) of a linear closed system was adopted as the theoretical framework. The results of the analyses revealed that agriculture and food security are the very initial steps to the attainment of sustainable development in Nigeria as this sector provides the raw materials needed for other sectors to be productive. The paper recommended that government in Nigeria should redouble efforts to boost agriculture and food security.

Keywords: Agriculture, Food security, Sustainable development, Physiological needs, Fundamental

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Background to the Study

Food is a basic necessity of life. Agriculture is synonymous with food production. It is inconceivable to hear that, "globally, there is enough food for all, but over 780 million people are chronically under nourished worldwide" (FAO, 1992). This is why Isife and Albert (2009) are quick to reveal that, "no nation has actually become great without developing agriculture and its concomitant institutions going by history". Agriculture is now highly integrated with the agri food sector constituting a "global value chain" (Reardon, 2009 cited in Requier-Desjardins, 2013). Such value chain encompasses the flow of products, knowledge and information between small-holder farmers and consumers. For purposes of sustainable development, there has been a global focus on food security and poverty alleviation. This is in response to the increasing threats to food security evident in the fact that over 70% of the populations live below 1 US dollar per day. According to Agabi (2013), "out of 850 million people suffering from hunger worldwide, 98% are located in emerging markets". The Asia pacific region had the greatest number of (528 million) while sub-Saharan Africa had (237 million). In 2010, the National Bureau of Statistics estimated that, "112 million people lived below the poverty line and a significant proportion of poor Nigerians do not have sufficient food or caloric intake for their survival". In Nigeria, measures such as the devaluation of the Naira by over80% following structural adjustment of the 80s, increase in fuel prices, accelerated increase in prices of farm inputs in markets, have combined to raise production costs for farmers.

Food security means equitable access to markets and distribution of resources. This depends on agricultural production, food imports and food aid, employment opportunities, income generation and resource allocation. The world Bank (2007) observed that, "global food security crises endanger the lives of millions of people, particularly the world's poorest who live in countries already suffering from acute and chronic malnutrition". "Food security is not just a poverty issue, it is a much larger issue that involves the whole food system which affect people in society" (FAD, 2001).

Statement of the Research Problem

According to the World Bank (2001) and FAD (2013), "the core determinants of food security are-availability, accessibility, utilization and stability". This is to say that a nation whose food production is unable to satisfy these criteria is said to be food insecure. Consequently, the human food requirement consists of four principal sources as water, agricultural crops, livestock and fisheries. Any responsible government should gear its efforts towards the improvement, development and sustenance of such resources. Hence, the Agricultural Promotion Policy (APP) of Nigeria is predicated upon the guiding principles of food security, import substitution, job creation and economic diversification. It is in this vein that the effort of the current administration at achieving self-sufficiency in food production is commendable. However, the prospects of such effort to achieve the desired results become ironical on the basis of the revelation by the Agricultural Promotion Policy (APP) (2016-2020) that, "the Federal Government has allocated only 2% of the 2016 capital budget to agriculture", the lowest allocation to agriculture by a Nigerian government since the 1990s. In the light of this development, this paper seeks to investigate the extent to which agriculture

and food security are considered vital components in the quest for Nigeria's sustainable development.

Objectives of the Study

The broad objective of this study is to evaluate the importance of agriculture and food security as vital components in the quest for Nigeria's sustainable development. Specifically, the study seeks to:

- 1. Ascertain the role of agriculture in enhancing food availability for purposes Nigeria's sustainable development.
- 2. Examine the extent to which agriculture has facilitated access (purchasing power/income) to food by the average Nigerian citizen.

Research Questions

Answers will be provided to the following questions:

- 1. What role has agriculture played in enhancing food availability (supply) in Nigeria?
- 2. To what extent has agriculture enhanced access (purchasing power/income) to food among Nigerians?

Literature Review

Concepts

Agriculture: The term "Agriculture" is derived from the Latin word "agei" or "agri" meaning "soil" and "cultural" meaning cultivation. Thus, agriculture refers to the cultivation of the soil. However, in reality agriculture is not confined to soil cultivation alone, it includes all aspects of crop production, livestock farming, fisheries, forestry, etc. Agriculture may be defined as an art, science and business of producing crops and live stocks for economic purposes.

As an Art: agriculture embraces knowledge of the way to perform the operations of the farm in a skillful manner, but does not necessarily include an understanding of the principles underlying the farm practices.

As a Science: it utilizes all technologies developed on scientific principles such as crop breeding, production techniques, crop protection, economics, etc. to maximize the yield and profit. For instance, new crops and varieties developed by hybridization, transgenic crop varieties resistant to pests and diseases, hybrids in each crop, high fertilizer responsive varieties, water management, herbicides to control weeds, use of bio-control agents to combat pests and diseases, etc.

As a Business: In so far as agriculture constitutes the way of life of the rural population, production is ultimately bound to consumption. However, as a business, it aims at maximum net return through the management of land, labour, water and capital, employing the knowledge of various sciences for production of food, feed, fibre and fuel. Recently, agriculture is commercialized to run as a business through mechanization. The Agriculture Act (1947), defines agriculture as including:

Horticulture, fruit growing, seed growing, dairy farming and livestock breeding and keeping, the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and the use of land for woodlands where that use ancillary to farming of land for agricultural purposes.

Agriculture has its branches. These include:

- **a) Agronomy:** Deals with the production of various crops including, food crops, fodder crops, fibre crops, sugar, oil seeds, etc. This aims at having better food production and control of diseases.
- **b) Horticulture:** Deals with production of fruits, vegetables, flowers, ornamental plants, spices, condiments and beverages.
- **c) Forestry:** This deals with the production of large scale cultivation of perennial trees for supplying wood, timber, rubber, etc. and also raw materials for industries.
- **d) Animal husbandry:** This is the agricultural practice of breeding and raising livestock in order to provide food for humans, power (draught) and manure for crops.
- e) **Fishery science:** Deals with the practice of breeding and rearing fishes including marine and inland fishes, shrimps, pawns, etc. in order to provide food, feed and manure.
- **f) Agricultural Engineering:** Deals with farm machinery for field preparation, intercultivation, harvesting and post harvesting processing including soil and water conservation engineering and bio-energy.
- g) **Home science:** Deals with application and utilization of agricultural produces in a better manner in order to provide nutritional security, including value addition and food preparation.

On integration of all the seven branches, the first three are grouped as crop production, while the next two come under animal management and the last two-allied agriculture branch.

Sustainable Agriculture

In general agricultural parlance, 'sustainability' means keeping crop productivity going without enhancing input levels. Simply stated, sustainable agriculture is a form of agriculture which aims at meeting the needs of the present generation without endangering the resource base of the future generations. This is to imply that a holistic approach is essential for achieving sustainability. Sustainable agricultural systems are capable of maintaining their productivity and usefulness to society indefinitely. Such systems must be resource-conserving, socially supportive, commercially competitive, and environmentally sound. MacRae, et al (1990), a Canadian scientist, defined sustainable agriculture as:

a philosophy and system of farming. It has its roots in a set of values that reflect an awareness of both ecological and social realities. It involves design and management procedures that work with natural processes to conserve all resources, promote agro ecosystem and social realities. It involves design and management procedures that work with natural

processes to conserve all resources, promote agro ecosystem resilience and self-regulation, minimizes waste and environmental damage, while maintaining or improving farm productivity and profitability.

The concept set out by the Technical Advisory Committee (TAC) of the Consultative Group of International Agricultural Research (GIAR) states that, "sustainable agriculture is the successful management of resources for agriculture to satisfy the changing human needs while maintaining or enhancing the quality of environment, and conserving natural resources". Baier (1990), defines sustainable agriculture system as, "those systems that are economically viable and meet society's need for safe and nutritious food whilst maintaining or enhancing natural resources and the quality of the environment for future generations". An interesting feature of these definitions is underpinned in the harmony in maintaining buoyancy and dynamism in agricultural growth for meeting basic human needs and protection and conservation of natural resources.

Sustainable Development: This is one concept that aims at maintaining economic advancement and progress while protecting the long term value of the environment. The United Nations General Assembly (1987), defines it as, "the development which meets the needs of the present without compromising the ability of meeting those of future generations".

Food Security

As a concept, food security is multi-faceted. Different scholars have advanced several definitions. However, the Food and Agricultural Organization (FAO, 1992) defines it as, "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active life". In effect, food security depends on agricultural production, food imports and food aid, employment opportunities, income generation and allocation of resources. Hence, Ojo and Adebayo (2012), see food as, "life and also an instrument of national power". Food security means equitable access to markets and distribution of resources.

Food Availability: In a country, food may be available. However, such availability must not be misconstrued for accessibility. While availability is necessary, it is not a sufficient condition to ensure that people have satisfactory access. For, instance, an increase in Nigeria's population without a commensurate supply of food could lead to unavailability of food for individuals.

Food Accessibility: Access to food depends on economic access and physical access. Economic access depends on individual's income, the price of food and the purchasing power of that individual. Physical access refers to the availability and quality of infrastructure needed for the production and distribution of food.

Food Utilization: This is measured by two indicators which reflect the impact of inadequate food intake and utilization in a country. The first outcome is measured by under

five years of age nutrition level while the second measures the quality of food, health and hygiene. FAO (2013) notes that "measuring the nutritional status of under five years of age is an effective approximation for the entire population.

Food Stability: Stability has to do with exposure to short term risks. Key indicators for exposure to risk include climate shocks such as droughts, erosion and volatility in the prices of inputs for food production.

The Literature

Studies abound on the relationship between agricultural production, food security and sustainable development in Nigeria. For instance, Oyakhilomen and Zibah (2014), carried out a study titled, "Agricultural production and economic Growth in Nigeria: Implications for rural poverty alleviation". The research was carried out to provide empirical information on the relationship between agricultural production and the growth of Nigerian economy with a focus on poverty reduction. Time series data were employed in the study and analyses were carried out using unit root tests and the bounds (ARDL) testing approach to cointegration. The result of the data analyses indicated that agricultural production was significant in influencing the favourable trend of economic growth in Nigeria. Despite the growth of the Nigerian economy, poverty is still on the increase and this calls for a shift from monolithic oil-based economy to a more plural one with agriculture being the leading sector. It was recommended that pro poor policies should be designed for alleviating rural poverty through increased investments in agricultural development by the public and private sectors.

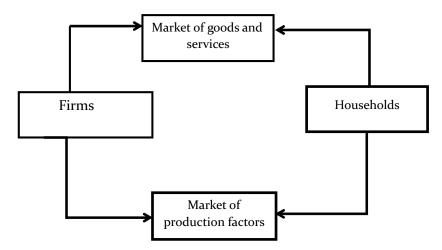
In another study by Dim and Ezenekwe (2013), titled, "Does Agriculture Matter for Economic Development? Empirical evidence from Nigeria, it was revealed that agricultural output has negative and significant impact on life expectancy in Nigeria. Life expectancy was modeled against agricultural output and agricultural expenditure, among other variables. Agricultural output is also modeled against a host of socio-economic, natural and human factors, which influence agricultural productivity. Augmented Dickey-Fuller unit root test, ordinary least squares, and the Newey-West method on secondary data and dummy variables were used in the study to yield results. The impact of agricultural expenditure was found to be positive but non-significant. Real Gross domestic product and industrial output were also found to influence life expectancy. Careful examination of the hypothesized socioeconomic factors (political instability and industrial output), natural factor (rainfall), and human factor (carbon emission) showed that only industrial output and rainfall matter for agricultural output in the country: both variables have positive impacts on agricultural output. The study submitted that, as much as agriculture may matter for economic development, reliance on the sector alone without corresponding and simultaneous development of other crucial sectors such as education, health and industry will not yield positive fruits for economic development in Nigeria.

Ojeka, Effiong and Eko (2016), studied the constraints to agricultural development in Nigeria. The study investigated the constraints to agricultural development in Nigeria using

time series data spanning the period 1970-210 and contemporary econometric methods of unit root test, co-integration and error correction mechanism. Empirical findings reveal that rainfall, exchange rate and food export (lag one) are the most significant positive determinants of agricultural output in Nigeria. However, food imports, diversion of funds meant for agricultural purposes and low technology diffusion in Agriculture are among the factors identified as constraints to agricultural development in Nigeria. The study recommends among others, maintenance of stable and favourable exchange rate regime and the pursuance of programmes that will bolster partnerships between research institutions and other stakeholders in agriculture as a route to facilitating agricultural development and hence, economic development in Nigeria.

Theoretical Framework

The Neo-classical theory of a closed linear system (Pearce, 1972) is adopted as the theoretical framework of this study. The Economic system of a closed linear system (Pearce, 1972). This study adopts as its theoretical framework, the Neo-classical theory of a closed linear system.



Source: Romanian Statistical Review nr/2/2013. An Elaboration on Turner, K et al, p.28.

The endogenous growth models are in alignment with the basic philosophy of the Solow approach (i.e. removing both the assumptions of decreasing productivity of capital and exogeneity of technical progress), which lead both to deny that in the future we have the process of convergence between the growth rates of the various countries and to predict the tendency to continue expanding. However, there is no implicit mechanisms to stop (it was in fact, the diminishing marginal productivity of capital which has led to the rest of growth unless it was offset by exogenous technical progress). For classical economists like Malthus, Ricardo, Mill, etc, it is clear that the economic activity was conditioned by the environment. They believed in the role of the market as an indispensable basis for economic growth. The market would have in fact, distributed merits and efficiency, generating wealth for all. The theoretical conclusion and confidence by the classics held only in the short-term context. In the long-run however, the economy would still be found in a stationary state which coincides with the mere subsistence level by all. This is because of the full awareness of natural

resources as a scarce and limited entity, or as a finite set of natural resources, causing a brake on growth. The point of view, 'pessimistic' of the classics in the long-term is well expressed in the studies of Thomas Malthus and Ricardo who watched the constraints imposed by the environment in terms of scarcity of fertile land for cultivation.

Unlike the classical, the traditional neo-classical economists in considering the economic system as a closed and linear system (Turner, Pearce and Batenan), did not take into account, the binding connection between the economic system and the environment. The environment has only instrumental value. There are resources to be shaped and used in the production function to meet the market equilibrium. The unlimited exploitation of natural resources is commonly accepted as the prices to pay for fuelling economic growth and provide employment.

Sources of Data and Analysis

In this study, data obtained from secondary sources are analyzed by means of content analysis in the following sequence:

Research Question one (1): what role is agriculture playing in enhancing food availability in Nigeria?

In the 40s and 50s, agriculture in Nigeria was so productive that the nation was able to feed her citizens and at the same time export surplus food items. Each region of the country specialized in the production of certain major crops (food or cash crops). "The country was relatively self-sufficient in food production. While the North had the groundnut pyramids, cocoa was produced in the West, oil palm and kernel heaps in the east and the rubber plantations were in the mid-west" (Tell, August 3, 2009). This situation changed with the discovery (1956), and exportation (1958) of oil. As oil prices rose, interest in agriculture began to wane and marked the beginning of an era of the decline in food supply and crisis. Rice particularly witnessed a price increase of about 100% in 2006 alone. It is instructive to note that, "Nigeria requires 2.5 million metric tones of rice annually while local production is less than half a million metric tones peryear" (Tell, ay 5, 2008)

The above figures were reeled out by the minister of Agriculture and Water Resources who observed that,

Nigeria is short of two million tones of rice which it has to source from other countries. It is estimated that Nigeria spent a whopping 2billion dollars importing about six million tonnes of wheat, \$750 million on rice, \$700 million on sugar and \$500 million on milk and other dairy products (Tell, May 5, 2008).

It is against the above background that one may appreciate the statement from a renowned Nigerian agricultural economist. Idachaba (2009) laments that, "Nigeria, blessed as it is, with abundant agro-ecological resources and diversity, has become one of the largest food importers in Sub-Saharan Africa".

The dwindling fortunes in Nigeria is the result of the neglect of the agriculture sector by government. The allocation of funds by the Federal Government, relative to other key economic sectors shows an increase by 78% (N17.3 billion in 2005 to N30.8 billion in 2006).

However, rate of increase went down to 25.97% between 2006 and 2007 budgets. Nevertheless, agriculture budget has remained paltry relative to the sectoral budgets of the Federal Government; 3.09%, 4.2% and 4.04% of sector budget portfolio for 2005, 2006 and 2007 respectively. These figures fall short of the Maputo Agreement of 10% of the national budgetary provisions for Agriculture (See Table 1 below)

Table 1: Agriculture share of Federal Government budget (2003-2010) in N billion

Source	2003	2004	2005	2006	2007	2008	2009	2010
Total national budget	1,223.2	1,462.0	1,840.7	1.942.6	2,34.6	3,240.8	3452.9	4194.2
Total agricultural budget								
Agric. Budget as % of total national budget	16.0	50.0	76.6	107.4	164.3	65400.0	22432.2	62232.1
Capital budget (agriculture) % of total capital budget	1.31	3.42	4.16	5.53	7.0	2.0	6.49	5.4
	8.5	38.7	60.3	89.5	136.4	138.4	141.3	140.2
	3.52	11.2	11.61	16.20	17.95	18.10	18.65	19.66

Source: Computed from CBN Annual Report and statement of Accounts, 2010

Table 2: Summary of Agriculture's Annual Budgetary Allocations, 1990-2010

Year	To	otal budget	Al	Allocation to agric.		
	N 'b	US \$'b		US \$'b		
1990	39.76	4.94	1.96	0.24	4.95	
1991	38.66	4.80	0.67	0.08	1.74	
1992	52.03	6.47	0.92	0.11	1.78	
1993	112.10	13.94	2.83	0.35	2.53	
1994	110.20	13.71	3.71	0.46	3.37	
1995	153.49	19.09	6.92	0.86	4.51	
1996	337.21	41.95	5.71	0.71	1.69	
1997	428.21	53.27	8.66	0.07	2.02	
1998	487.11	60.60	9.04	1.12	1.86	
1999	947.69	117.90	12.15	1.15	1.28	
2000	701.05	87.21	13.60	1.67	194	
2001	1,018. 02	126.67	64.94	8.07	6.38	
2002	1,018. 15	126.67	44.80	5.57	4.40	
2003	1,223.2	134.64	16.0	1.89	1.31	
2004	1,462.0	152.11	50.0	6.12	3.42	
2005	1,840.7	174.16	76.7	7.71	4.17	
2006	1,942.6	181.04	107.4	9.98	5.53	
2007	2,348.6	186.44	164.3	12.96	7.01	
2008	1423.5	185.76	141.2	13.01	6.90	
2009	1494.9	188.34	166.9	13.30	7.05	
2010	4079.3	189.86	315.8	13.45	7.35	

Source: CBN Statistical Bulletin and Annual Reports, Various issues conversion is in 1990 constant Factor.

Table 3: Index of Agricultural production by type of activity (1990=100) in million MT.

Subsector	2003	2004	2005	2006	2007	2008	2009	2010
Crops	159.8	169.9	181.5	195.3	208.4	211.6	209.2	215.4
(a)Staples	175.9	186.9	199.5	215.0	229.5	231.6	230.6	233.6
(b)Other	76.5	82.2	88.6	93.3	98.9	97.6	98.7	98.9
crops	225.5	238.0	250.0	265.0	279.7	282.7	281.8	293.7
Livestock	160.5	172.1	182.1	190.7	201.8	201.8	203.4	211.5
Fishing	123.1	125.7	132.6	134.8	138.2	138.2	138.3	137.6
Forestry	165.4	175.5	186.9	200.1	212.8	213.6	213.9	215.4
Aggregate								

Source: CBN Annual Report & Statement of Accounts, 2010 and National Bureau of statistics, 2010 Review.

As shown in table 2, recent public sector (Federal Government) budgetary provision for agriculture has been on the increase as the overall budget increases: in the context of overall budgetary provisions, it could be easily observed that the share of agriculture in the national annual budgets remained very low, merely increasing from 1.3% in 2003 to a 7.0% in 2007. Though showing some increase, it could also be observed that capital budget for agriculture remained low. This one of the reasons for the slow pace in growth of productivity as shown on table 3.

Some empirical support exist on the state of Nigeria's food insecurity. Ojo and Adebayo (2012), carried out an overview of food security in Nigeria. The paper noted that, "much still needs to be done if the crisis in the agricultural sector will not escalate".

Research Question Two (2): To what extent has agriculture enhanced the purchasing power of the average Nigerian for the purpose of accessibility in the context of food security?

In the context of food security for sustainable development, availability is only a necessary but not sufficient condition. Thus, whereas food security in its most basic form is defined as, "the access inadequate quantity, to all people to the food needed for a healthy life at all times" (FAO and WHO, 1992 cited in Eide, 1993), it is implied that,

Food must be available to the people to an extent that will meet some acceptable level of nutritional standards in terms of calorie, protein and minerals which the body needs; the possession of the means by the people to acquire (access) and reasonable to continuity and consistency in its supply (Davies, 2009).

It is saddening to observe that, gone are the days when, "agriculture dominated Nigeria's economy contributing 63.49 percent to Gross Domestic product in 1960 (CBN, 1980) and was the major source of funds for implementing the first National Development Plan, 1962-1968". Within a decade up to 1981 however, agricultural output in Nigeria declined and the nation

began to import major staple foods such as rice, wheat, sugar, and fish to augment local supplies. Since then, Nigeria has been spending substantial amount of its foreign reserves to import major stapple food items. Adeshina (2012), reveals that the nation spent "over 1.3 trillion naira in 2010 alone on imports of wheat, rice, sugar and fish". Consequently prices of these staples sky rocked beyond the reach of the average Nigerian. This translated to increased hunger for both the urban and the rural poor. Government policies initiated to redress the situation "failed due to policy inconsistencies and corruption" (Ifeanacho, 2009)

A few years ago, Obansanjo introduced the cassava project as a prominent agricultural programme in 2004-2005; President Yar Adua'7 point agenda also emphasized food security, while Goodluck Jonathan (Nigeria's immediate past president) initiated agricultural transformation programme. Dada (2011) observes that, "despite all these efforts, agriculture has failed to keep pace with Nigeria's rapid population growth. Over 53 million (about 30 percent) of Nigerians remain undernourished and the majority (65 percent) remain food insecure". Again, "the poverty statistics show that about 72 percent of Nigerians (118.2 million people) are poor" (Nwankpa, 2015).

The index of agricultural productivity as presented on table 3, confirms the slow process of growth and subsequent decline in agricultural productivity which led to short fall in supply of major staple food items. This has translated to high prices, hunger and malnutrition of many Nigerians which indicates limited access to food-a major sign of food insecurity.

Empirical support for the failure of agriculture to guarantee accessibility and food security in Nigeria is found in the study by Ojeka, Effiong and Eko (2016) in their study titled, "constraints to agricultural development in Nigeria". The study reveals that, "rainfall, exchange rate and food export are the most significant positive determinants of agricultural output in Nigeria. It further identifies food imports, diversion of funds meant for agricultural purposes and low technology diffusion in agriculture are among the factors identified as constraints to agricultural development in Nigeria.

Findings

In its analyses, this study reveals the following:

- 1. In the 40s and 50s, agriculture in Nigeria was so productive that the nation was able to feed her citizens and at the same time export surplus food items.
- 2. Each region of the country specialized and was known for a particular major stapple.
- 3. The discovery, exploration and exploitation of oil led to the neglect of the Nigeria's agriculture sector.
- 4. The neglect of the agriculture sector resulted in the rise in price of rice, by 100% in 2006 which put the stapple beyond the reach of the average Nigerian. Hence, its access to rice was highly limited.
- 5. As at 2006, rice requirement for Nigeria was estimated at 2.5 million metric tonnes annually whereas local production was less than one million metric tonnes.
- 6. Nigerian renouned agricultural economist, Idachaba, lamented the situation where by 2009, Nigeria had become the largest food importer in sub-Saharan Africa.

- 7. The budgetary allocation to agriculture has remained paltry, falling short of the recommendations of the Maputo resolution of 10% of the national budget.
- 8. The slow pace of the growth of the agriculture sector is the result of the neglect and poor budgetary allocations to the sector.
- 9. Inspite of efforts by successive Nigerian governments, the agricultural sector has failed to keep pace with the population growth in the country.
- 10. Over 53 million Nigerians (30%) are malnourished while about 72% remain poor.
- 11. This study revealed that among the major hindrances to development of the Nigerian agriculture are food imports, diversion of funds meant for the sector, and low technology
- 12. The agriculture sector has failed to ensure food security for the Nigerian population. It has failed to enhance availability and accessibility of food to the people, hence, the country remains clearly food insecure.

Conclusion

Gone are the good old days when the world's most populous black nation could lay claim to a good measure of food security. That was in the forties, fifties and sixties when the nation's agricultural sector, given the level of technology and land mass, could support food supply and accessibility pacing up with the population increase. The average Nigerian could afford good food at the prevailing prices, the fact that food exports were common notwithstanding. Today, food supply has fallen short of demand as the agricultural system failed to develop alongside population growth given its obsolete technology. Poor funding, corruption, policy inconsistencies, etc have been given as some of the reasons for this ugly development. However, the result is that food is available in limited quantity and variety, but also beyond the reach of the common man. Less than 50% of the land is cultivated, fertilizer and other inputs are in short supply and malnourishment and deaths are of common place. Thus, the country's quest for sustainable agriculture, food security and sustainable development is far from being realized.

Recommendations

Against the backdrop of the findings in this study, the following recommendations suffice;

- 1. The 'Dutch Disease' is coming to stay with Nigerians. The only way to curb this disease is by laying emphasis on diversifying the economy. Efforts at such diversification should be pursued with renewed vigor.
- 2. The Federal government must stop paying lip service to mechanization of the agricultural sector. This is the only way to boost productivity and enhance abundance in terms of supply and accessibility in the context of food security.
- 3. Budgetary allocation to agriculture should receive the required boost to conform with the Maputo 10% declaration.
- 4. The anti-corruption campaign must focus on the agricultural sector. This will eschew diversion of funds meant for the sector.
- 5. The regions of the country fall under different climatic conditions which favour the production of various staple crops. Regions should be encouraged to return to the good old days when they specialized in the production of those crops in which they enjoyed comparative advantage over others.

- 6. The effectiveness of any measure to enhance the performance of any sector begins with policy formulation. Government should revisit the existing policies on agriculture with a view to making them more articulate and functional.
- 7. Farm inputs must receive the required boost.

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