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## An Appraisal of Agricultural Reforms and Farmers' Productivity in Nigeria, 2014- 2022

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### ABSTRACT

An agricultural reform is rapidly becoming a topic of great attention in Nigeria due to the obvious challenges of diversification of the economy. Driven by fundamental economic forces, agricultural reform is a must for Nigeria and the need to develop the agricultural sector. The quest to achieve the needed goals and objectives in the agricultural sector, reforms are been carried out in strategic areas at different time to improve the sector. Despite all the efforts of government policies and programmes, the impacts are still not felt by the farmers. Specifically, the study sought to understand the reforms that have taken place in the past and how it has impacted on the agricultural sector. Corn Law was adopted and reviewed to explain the subject matter. The study adopted content analysis in its approach to the study. The analysis is synthesized through scholarly works from textbooks, published journals, seminar papers, reports of organisations, magazines and the internet. The study recommended that the reforms in the agricultural sector of the economy should be guided by adequate and precise vision, concise implementation strategy and comprehensive "political will" to ensure that the reforms in the sector have a positive impact on the farmers' productivity.

**Keywords:** Agriculture, Reform, farmer, productivity, Policy

### Introduction

Over the years, agriculture played a progressive role in serving as the major source of livelihood to the country's population (Metz, 1991). Before the colonial masters arrived on Nigeria soil, our forefathers engaged primarily in farming as a major occupation and means of sustenance using crude farm implements and despite the crude implements used, enough food was produced to feed self and cash crops were produced and the barter system was adopted for trade across the Sahara and the Atlantic Ocean (Ake, 1981).

Fundamentally, the British colonial policies and practices on agriculture were directed at organizing and using all able men and material resources in Nigeria in the

production and export of cash crops needed to fuel the industries abroad and thereby forcing peasant farmers to abandon food crop production and focus on cash crops (Aghahowa & Ukpebor, 1999). Despite huge potentials and opportunities lying fallow for the sector to thrive, there has always been a backdrop in the production capacity and this has led to food import dependency and less exportable commodities in Nigeria. Therefore, revitalizing the sector needs novel reforms to avert the flaws experienced over decades now which have impeded the sector productivity greatness.

Over the years, it was adjudged that several reforms, policies and programmes have been initiated by the Nigeria government under the Federal Ministry of

Agriculture and Rural Development, and other stakeholders such as the World Bank, United Nations Food Agricultural Organization (UN, FAO), Central Bank of Nigeria (CBN), International Development Bank (IDB), Agricultural Development Bank (ADB), Melinda and Bill Gates Foundation, Ford Foundation and Agro-Nigeria; to bring a paradigm shift to agricultural activities and practices to enhance agricultural outputs and also improve farmers' productivity, alleviate rural poverty and strengthen economic development.

Agricultural (agrarian) reform has a major role in economic development which has been contentious in the Third World Countries (TWC) like Nigeria, policies change occurs at closer intervals as the society encompasses the political, social, and economic systems evolves. Nigeria is anticipating a positive change in the agricultural sector to ascertain food security and as well better the income of farmers and also make farming a prolific and lucrative career. In Nigeria today, farming remains the source of employment of the adult population; its productivity is the most important single sector enhancing the standard of living in both the rural and urban centers (Olatunji, 2002). Change is a major part of our lives and is applicable where desire results are not achieved, the theory could apply to industries, technology, or various sectors such as transport, education, health, agriculture, or social policies to mention a few. Greek Socratic Philosopher Heraclitus (500BC), who expanded a physical theory of matter and the physical world took the ideas further and he stated in his famous assertion that "life is in a state of flux (PantaRhei)" meaning everything and all things change.

Nigeria has had several agricultural policies and programmes to ensure food security and economic gains (FAO, 2015). Highlights of some past and present agricultural policies and programmes include the Farm Settlement Scheme (FSS), Operation Feed the Nation (OFN), Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), National Economic Empowerment and Development Strategy (NEEDS), National Poverty

Eradication Programme (NAPEP), Seven Point Agenda, Agricultural Transformation Agenda (ATA) and Agricultural Promotion Policy (APP).

These laudable intervention policies and programmes despite the various reforms in the sector both past and present approaches have not yielded desirable and measurable performances and results rather reflect total records of failures (Ahmed & Singh, 2003). The failure of quite a good number of agricultural reforms in Nigeria is linked to two main factors which are bad governance and lack of political will among our leaders resulting from the wrong people being nominated to stand in the helm of affairs of the country (Young, 1999). Some social science scholars have attributed failures in governance and administration as the inability of the government to properly nurture the policy implementation and assessment of the development programmes (Bowles, et al, 2006).

The aforementioned factors are mitigating features on the attainment of the set-out aims and objectives of these programmes. Agricultural programmes such as the Fadama III programme, Agricultural Transformation Agenda (ATA), Agricultural Promotion Policy (APP) are supposed to provide worrisome answers to farmers' questions in the States of the Federation. The Fadama III is saddled with responsibilities of ensuring food security, alleviating the income of farmers, and provides post-harvest facilities but the programme was constrained by lack of post-harvest technologies and poor handling of gadgets, inadequate road network, and ill-bureaucratic process.

The ATA is expected to bring a paradigm shift to the agriculture sector across the 36 States in Nigeria and the FCT to increase domestic food production, create employment for youths, reduction of dependence on food import, and expand value addition to locally produced agricultural products through de-regulation, attractive financing, concentrated infrastructure investment and competitive policies such as the Staple Crops Production Zones (SCPZs); Growth Empowerment Support Scheme, Youth Employment in Agriculture

Programme (YEAP); Youth Enterprise with Innovation in Nigeria (YOUWIN). The programme intended to achieve all these via the African Union's Comprehensive Africa Agricultural Development Programme (CAADP) process.

The APP is currently on the trot, it focuses on solving core issues surrounding limited food production and quality delivery standard. It also tends to enhance economic growth and security; factoring climatic change and environmental sustainability; prioritizing crop and value chain approach through the presidential initiative to make fertilizer available to farmers at a subsidized price; the Anchor Borrowers' Programme (ABP) to grant loans to Smallholder Farmers; export drive policy to encourage the production of varieties of crops for export; the New National Agriculture Investment Plan (NAIP) which will hold a medium-term sector strategy and expenditure plan. This is to encourage massive investment in the sector to enhance food production. All these policies tend to achieve their objective and objectives via the CAADP process which mandates African countries to commit 10% of their annual budget to agriculture.

Land reform is an agrarian reformation that has a broad meaning; it involves the changing of laws regulations or customs regarding land ownership. It may consist of a government-initiated property distribution policy and land ownership or transfer. This can be divided into tenure reform, land restitution, and land distribution. Historically, in many parts of Nigeria, lands are owned and controlled by individuals under the Land Tenure System (LTS). The Land Reform Act has helped to alleviate conflicting land laws of the States and rural areas in Nigeria, but up to date the contentious issue of land conflict and acquisition has not been completely solved.

The failure of the Land Reform Act had led to the loss of one hundred billion dollars due to unused government-owned land assets (FMARD, 2008). Changes in land laws and reforms will improve economic growth through the allocations of land to commercial farmers and other large-scale business entrepreneurs in the private sector

(NewsWatch, 2008). This aimed at boosting agriculture and wealth creation. President Umaru Musa Yar'Adua wished to address the issue surrounding land use by very unfortunate this goal was not actualized due to his demise.

On the same note, President Buhari in his attempt to reform the Grazing Reserve Law in 2018, to alleviate farmers and herders clash in Nigeria. In this context initiated a ranching system called Rural Grazing Area (RUGA), the project has not been accepted by some States in the federation due to some controversies; meanwhile, the project has been suspended.

The farmers in the FCT between 2014-2019 are at present constrained of farm inputs; highly characterized poor financial status quo and limited arable land to mention but a few. For more productivity in the agricultural sector and efficient economic growth, Nigeria could harness the revenue from crude oil which is currently the major commodity of international value to diversify the economy to make other sectors viable. Presently, the demand for food and other agricultural product is at increase and the population growing as each day passes; it is very imperative to match the population and food supply and income at a laudable comparative match. The quest to achieve these aims is readily available if only the government of today will be zealous in accomplishing these goals.

## Objectives of the Study

The primary goal of this study is to determine whether the agricultural reform has succeeded in enhancing farmers' productivity in Nigeria.

## Methodology

The study employed documentary research. The study relied solely on secondary sources of data which were analyzed using content analysis. The secondary source of data was generated from published and unpublished materials including the internet.

## Theoretical Framework

The study is anchored on Corn Law which was propounded by John Stuart Mill in the 1800s. the Corn Law is the Mills Pamphlet; one sign of the structural changes is complex and is related to the British economy which was associated with the industrial revolution towards the 18<sup>th</sup> century. Britain became a net importer of corn in contrast to her net exporter. "Another domestic agriculture had expanded through an enclosure, cultivation of wasteland and improvement of farming methods; yet the expansion was not sufficient to keep pace with the growth of population and the manufacturing sector. The insufficient output to the growing population as a result of poor harvest and hindrance of foreign supplies during the Napoleonic war.

The Corn Law was a trade law designated to protect cereals producers in Britain and Ireland against competition from less expensive imports in the early to mid-18<sup>th</sup> century. The law was to ensure that British landowners reap all the financial profit for farming, the Corn Laws imposed steep (high) import duties making it too exorbitant to import such grains from other countries even when the demand is high in Britain and Ireland. Corn in this context included any grain that requires grinding such as wheat; the law was called the Importation Act of 1815. The Corn Law enhanced the profit and political power associated with land ownership. The abolition of this law significantly enhanced free trade in Britain (Garegnani, 1992).

The Corn Law in Nigeria context; to "improve farmers' productivity" simply entails matching the robust population and food productivity through various agricultural reforms and policies with the private sector both local and foreign investors to have passion for Nigeria market. The government must be in line with the diversification to strengthen the capacity of the indigenous player who is willing to build Nigeria's agricultural market and create more jobs.

The ATA Wheat Flour Substitute Policy supports alternating wheat with High-Quality Cassava Flour (HQCF) to produce

bread became imperative to order to reduce the importation of foreign wheat in the country. The HQCF can be used to replace flour which can be further processed into noodles or pastry products aside from bread. The policy has saved costs for the bakers; this will in turn reduce the purchasing price for these products.

In an attempt to ensure strict and effective implementation, legislative support for this policy with the theme "Cassava Bill" was sent to the National Assembly in 2014; stipulating that bread produced in Nigeria must have at least 20% of cassava flour against 10% bidding in 2005. Some corporate bakers in Nigeria including Plateau State adopted the policy. The bill was basically to reduce wheat grain importation and encourage the use of cassava as a close substitute; thus maintain the specified nutritional value to the consumers. This single policy has increased farmers' motivation to plant cassava to meet the demands of the staple crop and its economic value. Disagreement on selling price between farmers and buyers has pushed many farmers out of business as such cassava flour seems to be more expensive than wheat flour. The bakers and consumers will opt for wheat flour which is cheaper than cassava in their production process to maximize gains. For the policy to be effective it is obvious that the production side and the demand side be in a parallel line.

The CBN monetary policy to access loan and foreign exchange in the forex market to import commodities such as rice, tin tomatoes, vegetable oil, processed meat, fish and fruits which ordinarily could be produced domestically are not eligible for these services. This monetary policy can be closely evaluated by the "Corn Law". This strict policy is to encourage domestic producers (farmers) and strengthen the Nigerian local markets.

In response to the rice revolution, FMARD claimed that the country has indeed attended self-sufficiency. It asserted that the production capacity of rice has reached 15 million MT and the countries consumption capacity is 6.7 million MT. This would translate to major savings for Nigeria;



boycott rice importation and export surplus by the year 2019 (Punch Newspaper, 2018). The ABP (Green Alternative) founded under the APP had a funding base of N220 billion with stakeholders in the area of input, fertilizer supply (CBN, 2015). The ABP is a strong advocate of the rice revolution that took place in Edo State and other States known for massive rice production such as in Ekiti State called Igbemo rice, Ogun State; Ofada rice and Lake rice which is a partnership between Lagos and Kebbi State; the Ebonyi State is believed to take a lead in rice production, produces Abakaliki rice. While in the north, States like Kano has also recorded an increase in rice production. The programme and policies enhanced the country to attain self-sufficiency in rice and cassava staple food crops.

Through the ATA and APP, rice, wheat and other staple food have improved. The major constraints in the domestic market are basically on the illicit activities of smugglers and the importation of food items such as rice and this has threatened their investment efforts. To curb this menace, the Federal Government of Nigeria has placed a ban on rice importation to protect the domestic producers/farmers to enhance economic gain. The zero tolerance to rice importation has collapsed the rice market with countries with close borders with Nigeria. Also, there is a strong economic sanction for aiding and abetting the smuggling of rice into the country (Guardian Newspaper, 2016).

All these were often backed by the statement of policy position of development plan and production of the direction of growth. Also, their argument with the issue of vested interest was not sufficiently balanced as most of their contribution posed both explicit and implicit facts in the agrarian, commercial, or newly emerging industry sector. The central argument of the theories of the classical school was dominantly on the dynamic of economic growth; reacting against mercantilism. Classical theorists also emphasized economic freedom, the theorist stressed ideas such as laissez-faire and fair competition (Remi & Francis, 1999).

## Conceptual Review

### (a) Agriculture

In relation to crop farming and livestock farming, the term “agriculture” may be defined as “the art and science of growing plants and other crops and the raising of animals for food and human needs or economic gain (Alan, 2009; Jasper & Carol, 2000). Agriculture is described as both an art and science because it needs skills that are founded on scientifically verified facts. The words “growing and raising” are descriptive of enterprise, activity or practice. Agriculture has two main decisions; food and cash crop production; and its ultimate purpose is for food production and other human needs such as clothing, medicine, tools, artistic display and dwelling or economic gain or profit (Babara & Antoinette, 2002).

The science of agriculture is dynamic because it includes livestock and aquatic farming like fisheries, forestry reserve and other activities. Nations depend on agriculture not only for food but for national and personal income and raw materials for industry. International trade in agriculture is of global concern and it is regulated by the World Trade Organization (WTO). And the Food and Agricultural Organization (FAO, 2008) is mainly shouldered with the obligation to eliminate hunger on a world scale.

With the emphasis on cash crop production by the colonial agricultural policy, land hitherto used for food cultivation was diverted to cash crop production. This shifted the attention and expertise of farmers from food crops to cash crop production. The Nigerian economic landscape became dominated by the groundnut pyramids in Northern Nigeria; cocoa warehouses in the west and palm produce supplies in the Eastern region. These features were detrimental to the production of adequate quantities of staple crops like rice, maize and cassava which should be the interest of the people (Yayock, 1986). The Nigerian colonial economy depended on three major cash crops; they were cocoa, palm produce and groundnuts. These accounted for about 70% of Nigeria's total export in colonial times

(Ahazuem & Falola, 1987) and these farm produces were exported to Britain and other European countries under trade terms decided by the colonial authorities; though exploitative in nature and unequal trade practice.

The British colonial policies and practices on agriculture were directed at organizing and using all able men and material resources in Nigeria in the production and export of cash crops needed to fuel the industries abroad and thereby forcing peasant farmers to abandon food crop production and focus on cash crops (Ake, 1981). The diverted attention amid the pre-colonial and colonial enclaves had disarticulated the core value of Nigeria's traditional society of farming staple food crops for cash crop production solely for export earnings with strict trade policies. The trade policies and conditions that ushered Nigeria into the world market were not favourable. The "core" countries are producers of finished goods and the LDC, producers of primary commodities to support their production chain. These products are returned to the LDC as finished goods at an exorbitant price(s). The incorporation of Nigeria into the international market by the First World War wholly an unequal relationship because these policies are not supporting the economic growth and development of LDC like Nigeria (AGhahowa & Ukpebor, 1999). Practically, the prices and exchange rate of these commodities are determined by the developed nations (Ake, 1981). This could be referred to as total exploitation of strength and resources. The palm fruits produced in the Eastern region were about 66,000 tons in 1901 rose to 272,000 tons in 1921 and 497,000 tons in 1951; palm oil alone fetched £1,305,828 and 97,000 tons of cocoa valued at £1,305,828 were exported. In the mid-1960s the promotion and export of these cash crops began to move Nigeria from self-sufficiency in basic food production to import dependency (Falola, 2007). This could be as a result of neglect to the sector and not undermining other crucial factors which are determinants of the decline in productivity.

## (b) What is a Reform?

Reform is derived from the Latin word "*Reformo*" which means the improvement or amendment of what is wrong or unsatisfactory (dictationary.reference.com.). It also implies redressing limitations or issues without disarticulating the fundamental of the system. The use of this word emerges in the 18<sup>th</sup> century and it is believed to originate from Christopher Wyvill's Association Movement with identified "Parliamentary Reform" as its primary aim. Reform is generally distinguished from revolution, the latter means basic or radical change while reform simply implies fine turning or redressing serious issues/wrong without altering the fundamental of the system (Joanna, 2003).

The word is usually adopted to make an improvement and permutation on one's behaviour or structure. Reforms seek to improve the system and never to over-throw it in totality or completely. Developing countries such as Nigeria do always carry out a wide range of reforms to improve the living standard of the people, often with supports from World Bank, International Financial Institutions and Aid Agencies. This includes reforms on micro and macro-economic policies, civil service, agricultural or religious reforms (Harrington, 1986).

Reforms intend to examine and analyze or diagnose a particular issue currently facing an economy; and also seek to examine if a country pursues the right reform; how do sectors formulate and implement these reforms appropriately and what are the strategies to execute the reforms. The reformer of the reforms is usually termed as technocrats that can design and initiate a policy that a positively driven; the reformer is much concerned about accelerating economic growth in the designated sector which should be felt by the man. Among these sectors are agriculture, solid minerals, manufacturing, real estate and construction (Okonjo-Iweala, 2012).

Reforms in different sectors of the economy should be guided by a vision, a concise implementation strategy and a matrix of measurable results. These mentioned

features are what constitute a package that can be sold to the public and could be used to guide implementation efforts. Reforms are always difficult as such it requires a “political will and social impact”. Okonjo-Iweala (2012) also opined that the NEEDS document has played a vital role in Nigeria’s reform. Reform is a complex concept in which politics and economics complement each other; therefore, the idea of the two been separated is untenable. First, the reformers have a plan or strategy for engaging politicians and lawmakers in the rationale for formulating reforms and concurring to the idea; this role is very consequential because reforms must be under-printed and locked in by legislation to avert reversal. Engaging the civil society and the public is vital to foster understanding of the reform as well support reform-minded and the minded lawmakers will hold the government accountable (Okonjo, et al, 2007).

Aside from the oil industry, the agriculture sector is one that can be a source of growth and provide the solution to the diversification challenge. Over time, several reforms had taken place to enhance Nigeria’s huge domestic market and potential for export. Before the emergence of oil in the 1960s, agricultural products had accounted for about 40 percent of the Gross Domestic Product (GDP). The sector has been one of the fastest-growing non-oil sectors in the economy. Despite its huge impact in ensuring food security, Nigeria still spends about US\$10 billion a year on food importation (CBN, 2016).

Sequel to the review of what reforms entail, agricultural reform is also referred to as “agrarian reform”, it is the moment of developmental changes in the agriculture sector. Over times, lots of policies have been formulated to foster development and societal structures by restructuring the existing structures to improve farming activities in the agricultural sector.

To achieve the desired change, the state provides support services to boost production (Jacobs, 2010). It was defined by Wikipedia as the modification and redirection of the whole system of agriculture. It is also

concerned with the relation between production and distribution of land among farmers; which include land reform measures, agricultural commodity marketing, and pricing policy, agricultural extension and technology transfer policy, input subsidy policy on fertilizer, and agriculture mechanization policy to mention but a few.

The agricultural reforms aimed to empower poor peasant farmers and transform the agrarian and class structure of rural society by improving the lives of the designated populace. Some scholars argued that agrarian reform is therefore a revolutionary political concept rather than a reformist one. Solon Barraclough (1991:102) wrote:

It implies changes in power relationships towards greater participation of the rural poor in decision-making at all levels and especially in decisions directly affecting their livelihoods. In other words, it has a revolutionary implication.

Nigeria’s agriculture sector has experienced reversals or changes in a primordial way to a modernized approach of handling farming activities. It has experienced a drastic modification from the primitive, agrarian, traditional society to a mechanized and wide range of technological advancement and insight. The exploitation of vast land by embracing mechanization and commercial agriculture had foster development gains in the sector (Okonjo, 2012).

The Agricultural Transformation Agenda has ushered several reforms in the agricultural sector, these include commercial fund reform, the input sector reforms on fertilizer and seeds; the reform in ICT (accessing of farm inputs via e-wallet through the use of mobile phones); the Wheat Import Substitution Policy and the Commodity Marketing Corporation Policy. The APP under the Buhari administration introduced a fertilizer subsidy policy reform through the Presidential Fertilizer Initiative, the Export Drive Policy; the Comprehensive Africa Agriculture Development Programme (CAADP), and the land reforms/grazing law suspended for now. These reforms were

designed and structured to handle programmes with challenging themes and thrusts; but to date and the impacts were not felt (Amalu, 1998).

### (c) Productivity

Productivity is an average measure of the efficiency of production (Business Dictionary). It can be expressed as the ratio of output to inputs used in the production process; that is output per unit of input. This explains the relationship between the output of goods and services and inputs of resources both human and non-human used in the course of production.

Centre for the Study of Living Standard (2008) asserted that productivity is determined by a number of factors including the quality and availability of natural resources, industrial structure, capital accumulation, the rate of technological progress and quality of human and non-human resources within man disposal.

According to Rogers (1998), productivity is the ratio of outputs to inputs for a specific production procedure. When all outputs and inputs are included in the productivity measure it is called total productivity. Outputs and inputs are defined in the total productivity measure as their economic values. The value of outputs minus the value of inputs is a measure of the income generated in a production process. It is a measure of total efficiency of a production process and as such the objective to be maximized in the production process (Kaliski, 2001).

Productivity may also be defined as an index that measures output which is goods and services relative to the inputs such as labour, capital, materials, and energy used to produce the output. Productivity measures that use one or more inputs or factors, but not all factors are called partial productivities. At the company level, typical partial productivity measures are such things as worker hours, materials or energy per unit of production (Sickles, 2019).

Productivity is also a scientific concept and hence can be logically defined and empirically observed. It can also be measured

in quantitative terms, which qualifies it as a variable. Therefore, it can be defined and measured in absolute or relative terms. However, an absolute definition of productivity is not very useful; it is much more useful as a concept dealing with relative productivity or as a productivity factor. Productivity is useful as a relative measure of the actual output of production compared to the actual input of resources, measured across time or against common entities.

Productivity could also be defined as an overall measure of the ability to produce a good or service. More specifically, productivity is the measure of how specified resources are managed to accomplish timely objectives as stated in terms of quantity and quality. Productivity is also a crucial factor in the production performance of firms and nations; increasing national productivity can raise living standards because more real income improves people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental programmes. Productivity growth also helps businesses to be more profitable (Bureau of Labour Statistics, 2017).

Productivity is an objective concept that can be measured, ideally against a universal standard. As such, organizations or individuals can monitor productivity for strategic reasons such as corporate planning, organizations improvement or comparison to competitors. It can also be used for tactical reasons such as project control of controlling performance to budget (Pooja & Col. Sachin, 2015). Despite the oil boom, agriculture remains of the Nigeria's economy and provides one of the basic needs (food) for most Nigerians. The country is one of the largest producers of rice in Africa; at the same time, a major importer of rice in the international market. This staple crop not only feeds her citizenry but also provides income gains for the farmers and the nation respectively. In the case of rice production, FMARD stated that Nigeria produced approximately 2 million MT or milled rice and imported 3 million MT; including the estimated 800,000 MT that was suspected to be smuggled illegally on annual basis. Notably, Nigeria is also the world's largest



producer of cassava under the ATA, the government of Nigeria has expressed its determination to enhance cassava production to which could be a close substitute to excessive demand for wheat. Nigeria also has an applaudable productive capacity on the production of other staple food crops, fisheries and livestock; all these have implicitly contributed to the nation's GDP (CBN, 2015).

For most key crops, Nigeria's share of global production has remained low over the past four decades. Specifically, the country's share of global production for oil palm, cocoa and groundnuts has declined as a result of the slow adoption of efficient production processes. A combination of rural poverty, increasing rural-urban migration and land degradation, outdated Land Use Act, bias and short duration of policies, poor access to farm inputs and finance to mention but a few; have kept production at a subsistence level.

In Nigeria, across most key crops, the rate of consumption has outstripped

production. The deficit has been met largely by importation making the country a net importer, a trend evident since 1975 on average between 2011 and 2015, N1.4 trillion has been spent on food imports with wheat, milk, rice, sugar and malt extract constituting the bulk of Nigeria's food import bill. Consequently, Nigeria is vulnerable to changes in the global agro-commodity prices with a significant impact on inflation and foreign reserves (CBN, 2016). Between 2011 and 2015, agro-processed exports declined by 41% to NGN143 billion. These exports accounted for an estimated 20% of Nigeria's non-oil exports in 2015 were mainly leader and processed skin, alcoholic and non-alcoholic beverages, tobacco and cocoa derivatives (CBN, 2017). According to the FAO (2015), Nigeria is estimated to have cost the US\$10 billion in annual exports of agriculture and agro-processed commodities including groundnut, palm oil, cocoa and cotton as a result of the decline in production of these commodities.

## Empirical Review

Agricultural policy is the combination of the outline and strategies designed to achieve overall agricultural development and growth. Agricultural development refers to the process of making fuller and more rational the use of agricultural resources of a country, with a special reference to improving the efficiency of agriculture and the living standards of the agricultural population.

Agricultural policies and programmes can be evaluated by their ability to promote not only agricultural development but also overall economic growth, the capacity to bring about structural transformations, and their poverty-reducing impacts. Farmers are generally confronted with many risks and uncertainties ranging from weather, drought, floods, fire, diseases and pests, unstable market conditions, falling product prices and constant increase in the prices of production inputs among others. These risks in the production and socio-economic environment in which farmers operate make it very

essential to make deliberate developmental efforts to prevent agricultural productivity from declining or remaining static and promote agricultural development in general (FMARD, 2014).

The Nigerian government has made several developmental efforts aimed at improving the performance of the agricultural sector. The national policy on agriculture is a policy document that identifies the ultimate goal of Nigerian Agricultural Policy from the nation's independence in 1960 till date as the attainment of self-sustaining growth in all the sub-sectors of agriculture as well as the realization of the structural transformations necessary for the overall socio-economic development of the rural areas.

The negligence in the agriculture sector over time could be accredited to mismanagement, inconsistent and poorly conceived government policies, lack of cogent incentive to farmers, inadequate basic infrastructure and lots of bureaucratic bottlenecks in executing past policies and

programmes (Brown, 2014). To curb and checkmate the cited shortcomings in response to the modern economic indices, the Nigerian agricultural reforms have undergone metamorphosis at several stages of the country's development starting from the colonial era to the post-colonial enclave with several developmental plans (Egwu & Akubilo, 2007).

To modernize agriculture, the Federal Ministry of Agriculture and Rural Development (FMARD) and concerned stakeholders have initiated some vital reforms to boost agricultural output and as well improve farmers' income; the said goal can be much improved by the function of demand and supply of agricultural products in the market place.

In the post-colonial era, the country had a policy based on surplus extraction; which was later transformed to an export led policy to support the export of cash crops which was the country's mainstay before the emergence of black gold at Olibiri (Bayelsa State) in 1959. Amid this epoch, the western region exported cocoa. The north exported groundnut, the fallout of its abundance was referred to as the pyramid of groundnut and the south/east region oil palm (Kwanchie, et al, 1998).

Some copious agricultural policies and programmes that have taken place since independence include, Farm Settlement Scheme (FSS), National Accelerated Food Production Programme (NAFPP), Operation Feed the Nation (OFN), River Basin Development Authorities (RBDA), Agricultural Development Project (ADP), Green Revolution (GR), National Special Programme for Food Security (NSPFS), Fadama Programme, National Economic Empowerment and Development Strategy (NEEDS), the Seven Point Agenda, Agricultural Transformation Agenda (ATA) and Agriculture Promotion Policy (APP) (Sanyal & Babu, 2010). The historical antecedent of agricultural development has it that several developmental plans have been designed ranging from long, medium or short terms plans. These plans are embedded with different policies and programmes; which aim at achieving the goal of improving

agricultural productivity to meet the need of the nation and her citizenry.

In a broader view, the objectives of the new agricultural policy are very similar to those of the old one. They include: (i) the achievement of self-sufficiency in basic food supply and the attainment of food security; (ii) increased production of agricultural raw materials for industries; (iii) increased production and processing of export crops, using improved production and processing technologies; (iv) generating gainful employment; (v) rational utilization of agricultural resources, improved protection of agricultural land resources from drought, desert encroachment, soil erosion and flood, and the general preservation of the environment for the sustainability of agricultural production; (vi) promotion of the increased application of modern technology to agricultural production; and (vii) improvement in the quality of life of rural dwellers.

The key features of the new policy are as follows: evolution of strategies that will ensure self-sufficiency and improvement in the level of technical and economic efficiency in food production. This is to be achieved through: (i) the introduction and adoption of improved seeds and seed stock; (ii) adoption of improved husbandry and appropriate machinery and equipment; (iii) efficient utilization of resources; (iv) encouragement of ecological specialization; and (v) recognition of the roles and potentials of small-scale farmers as the major producers of food in the country; (vi) reduction of risks and uncertainties in agriculture, to be achieved through the introduction of a more comprehensive agricultural insurance scheme to reduce the natural hazard factors militating against agricultural production and security of investment; (vii) a nationwide unified and all-inclusive extension delivery system under the Agricultural Development Programmes (ADPs); (viii) active promotion of agro-allied industry to strengthen the linkage effect of agriculture on the economy; (ix) provision of such facilities and incentives as rural infrastructure, rural banking, primary health care, cottage industries among others to encourage agricultural and rural development and attract youths including school leavers to go back to the land (CBN, 2008).

To fast-track the transformation of the agricultural sector, the Federal Government in collaboration with the World Bank has established the Commercial Agriculture Development Programme (CADP). The programme which has five States (Cross River, Enugu, Kaduna, Kano and Lagos) participating in the first phase, aims at strengthening agricultural production systems for targeted value chains and facilitate access to markets. The programme had a cost implication of US\$185 million with the World Bank providing US\$150 million while the Federal and the participating State Governments would provide the balance of US\$35 million (CBN, 2008). Concerning input supply and distribution, only three key inputs have received attention namely fertilizer, improved seeds and agrochemicals.

The Federal Government of Nigeria under the Federal Market Stabilization Programme, procured fertilizer for sale to States at a subsidy of 25 percent. State Governments typically institute additional subsidies on fertilizer. Under the current marketing structure, companies make bids to the Federal Government to import and distribute subsidized fertilizer and seeds. The seed sector is also a key component of the crops sub-sector. Most farmers in Nigeria depend on self-saved seeds. There is a thriving market in locally saved seeds by farmers which is very crude. The National Seed Policy provided coordination, monitoring and implementation of quality control in the national seed system by the National Seed Service (NSS) piloted by the Federal Ministry of Agriculture and Rural Development. The National Seed Policy makes provision for the withdrawal of public sector agencies in favour of the private sector in key areas of the seed industry.

Another important segment was crop protection; the use of chemicals to protect crop plants in the field and post-harvest is still very low among Nigerian farmers. Herein, the Federal Government's policy is to encourage the establishment of manufacturing plants to make agrochemicals in Nigeria. But so far, there are no manufacturers of agrochemicals; instead, the companies that operate in Nigeria do only reformulation and packagings, relying on their parent companies that operate in

Nigeria do only reformulation and packaging, relying on their parent companies abroad to do the basic manufacturing. Notably, 50 percent subsidy is used to support machinery ownership in this sector. The Olusegun Obasanjo administration initiated the first phase of the National Special Programme for Food Security (NSPFS) in 2002. Nigeria's key policy thrusts for agriculture is food security; under this scheme the following objectives were consequential: (i) modernize production and create an agricultural sector that is responsive to the demands and realities of the Nigerian economy to create more agricultural employment opportunities, which increased the income of farmers and rural dwellers; (ii) reverse the trend in the import of food which stood at 14.5% of total imports at the end of 2001 through a progressive programme for agricultural expansion; (iii) strive towards food security and food surplus that could be exported; (iv) invest in improving the quality of the environment to increase crop yields (CBN, 2016).

More so, in response to achieve food security the Second National Special Programme for Food Security (NSPFS-2) was introduced in 2008 to combat the global food crisis and with a vision to ensure sustainability, access, availability and affordability of quality food to her citizenries. The programmer's vision is to eventually become a significant net provider of food to the global community and for the next four years (2008-2011), the Federal Government set aside N200 billion which is about US\$1.7 billion for the development of the programme.

The short-term goals of the programme are to significantly improve the country's agricultural productivity. In the medium term, the aim is to expand and improve large-scale production, improve storage as well as processing capacity and establish the required infrastructure. The long-term objective is to derive over 50 percent of the nation's foreign exchange through agricultural exports (CBN, 2008). Several agricultural initiatives are implemented under the NSPFS which included a significant increase in the quantities of assorted fertilizers distributed nationwide, the rehabilitation and expansion

of existing irrigation schemes as well as the retention of the policy of zero tariffs on imported agrochemicals (CBN, 2008).

Apart from the agricultural sector-wide policies and programmes, several single crop programmes were initiated to improve agricultural production and productivity in Nigeria in general and some strategic crops in particular. For instance, the Olusegun Obasanjo administration added some impetus to the global efforts in the development of cassava by putting up 'Presidential Committee on Cassava for Exports', with the mandate to ensure that the country becomes the world acknowledged cassava-exporting nation.

The presidential initiative on cassava production and export is therefore intended to raise the production level of cassava to 150 million MT by the end of the year 2010. The programme is also expected to assist the country to realize an income from the sale of dry cassava products such as starch, cassava chips, adhesives and other derivatives (Abdullahi, 2003; Umeh & Asogwa, 2005; ICARRD, 2006). Currently, Nigeria has replaced Brazil as the world's largest producer of cassava (Neweke, 2004).

There is also the Presidential Initiative on increased Rice Production designed to reverse the rising import bill which stood at N96.012 billion in 2002 to meet domestic demand by 2006 and export by end of 2007. By 2007, it has a target that 3 million hectares of land would be put under cultivation to produce about 15 million tons of paddy or 9 million tons of milled rice. To achieve this goal, the government embarked on procurement and distribution of 81,505 R-Boxes to the 36 States and Federal Capital Territory (FCT) at 50 percent subsidy (World Bank, 2013). The R-Box contains rice seeds, agrochemicals and extension messages to farmers on its applications. The package is required to cultivate one-quarter of a hectare of rice. Similarly, 250 units of Knapsack Sprayers have been distributed to farmers based on needs.

Further, in the realization that maize is among the most important crops in Nigeria but poor seed supply, inefficient marketing system and low investment in research are

among the factors that have limited production, the Federal Government still under the leadership of President Olusegun Obasanjo initiated a programme to double maize production in the country both for national consumption and international export through the promotion of improved agricultural technologies (USAID, 2006). The doubling maize programme began in 2006 and was funded by the Federal Ministry of Agriculture and Rural Development. Partners include IITA, the Institute of Agricultural Research and Training, National Rice/Maize Centre, National Accelerated Food Production Programme, Institute for Agricultural Research, National Cereals Research Institute, the University of Ilorin and the National Agricultural Extension and Research Liaison Services. The target is to raise the production of maize from the current 8 million tons to 20 million tons and productivity from about 1.5 tons per hectare to 4.2 tons per hectare and improve the economic efficiency of smallholder maize farmers.

At the inception of his administration in 2007, President Umaru Musa Yar'Adua embarked on a Seven-Point Agenda so that the nation can move forward and be among the 20 largest economies by the year 2020. Briefly, the Seven-Point Agenda include Energy and Power, Food Security and Agriculture, Wealth Creation, Education, Land Reforms, Mass Transit and the Niger Delta issue. The broad-policy objectives of both Vision 2020 and the Seven-Point Agenda are the sustenance of rapid broad-based GDP growth, poverty reduction, employment generation, macroeconomic stability and economic diversification. The administration imbibed the ideas of the Obasanjo administration and carved out her policy thrusts to stimulate agriculture and food security within the Seven-Point Agenda. The Seven-Point Agenda by Late Umaru Musa Yar'Adua in 2007 was geared towards achieving seven key objectives to attain development and growth. In the Seven Agenda, only three correlates the activities in the agricultural sector; these are transport, food security and land reform.

For instance, in Plateau State, a pretty good percentage of land is suitable for farming activities but its sustainability is



hampered by ambiguous land administration and regulation. The power of revocation vested in the Minister poses a threat to the security of tenure on agricultural land. In the big urban center, the acquisition of a large vast of land for an agricultural commercial is problematic because land that was meant to serve this purpose is allocated for housing and estate development and urbanization. On this note, the then President formed a Presidential Technical Committee on Land Reform to revisit the Land Use Act of 1978 and make a change that supported arable lands available for farmers in commercial preference. This is intended to address the contentious issue of land ownership in Nigeria to foster rapid agrarian transformation.

The ATA has this perception of bringing a paradigm shift to agricultural activates and as well planning. The vision of the ATA is to achieve a hunger-free nation by adopting all possible measures to ensure food and nutritional security by increasing domestic food production by 20 million MT and make Nigeria self-sufficient in rice production by 2015 and also ensure that Nigeria shifts from being a net importer of food to a net exporter of food which provided more than 2 billion dollars of additional income for Nigeria farmers; generate 3.5 million jobs in the agriculture sector and transform Nigeria into a global food market. Looking in-depth, most of the visions of the ATA were a continuation of the prospects, mission and statements of the NSPFS I and II amid Obasanjo's administration.

### **Impacts of Agricultural Reforms**

Okonjo-Iweala (2012) pointed out that the reformation process and the reform itself benefit some people make some people worse-off. Every evolutionary change has its "pros and cons". Below are some of the impact values of reforms. Positive impacts:

#### **(a) Fertilizer Availability**

The Nigerian fertilizer market is dominated by imports; the total public spending on fertilizer subsidies by Federal and State Governments under the GESS increased from N13.30 billion (US\$84.44 million) in 2012 to N82.38 billion (US\$519.57 million) in

2014 (CBN, 2016). The GESS has made a recommendable success in reforming fertilizer distribution across the country. The availability of natural gas in Nigeria has attracted a growing number of investors in domestic fertilizer production and this has enhanced productivity. The GESS programme displaced the old system of fertilizer distribution via the Electronic Wallet System developed using a mobile phone to deliver seeds at no cost and a 50% subsidy for fertilizer without any intermediaries or politicization of subsidized farm inputs. The scheme has helped over 6 million farmers between the 2012/2013 dry season and 2013 wet season to redeem 567,302 metric tons of fertilizer, 21,356 metric tons of maize seeds, 38,207 metric tons of rice seeds, 480 metric tons of sorghum seed, over 6 million sprouted cocoa seedling and 59 million stems of improved cassava varieties (FMARD, 2014). Among the 36 States of the Federation, the FCT is a beneficiary of this scheme.

#### **(b) Increase in Food Production**

Food production from these inputs for both years exceeded 15.5 million metric tons of additional food produced. In 2012, 267,491 rice farmers in ten lending rice-producing states also participated in dry season farming receiving 50kg of seeds, two bags of NPK (15-15-15) fertilizers and one big bag of urea free of charge. By 2013 to 2015, the number had tripled to 813,295 in 24 States participating in the dry season rice farming. In both years an estimated 60.266 metric tons of seeds were redeemed and produced and an additional 4.37 million metric tons of rice paddy (CBN, 2016). This very performance gave credence to the Agricultural sector of achieving the Sustainable Development Goals of having the number of hungry people two years ahead of the deadline but the goal has not been achieved. The result of ATA in the first two years is overwhelming within 90 days of the appointment of the Minister of Agriculture, Dr. Adesina Akinwumi, direct procurement and distribution of fertilizers and seeds allocated to contractors were eliminated, ending four decades of endemic corruption in the fertilizer sector. The programme has also done well in the coalition of the first national farmers' database (FMARD, 2014).

Furthermore, it enhanced food security which is the backbone of our economic system. To achieve the goal of strengthening food security and encourage domestic rice producers, the government initiated a major policy reform by increasing tariffs on imported brown and milled rice and raising incentives for domestic milling of locally produce rice paddy. The altitude polarization of local rice over imported milled rice was embarking upon; before the launch of the rice transformation agenda, there were not up to three integrated rice mills operating in Nigeria. Due to the rice policy and sensitization efforts, more than fourteen (14) more integrated mills were incorporated in the milling industry under the private sector arrangement (CBN, 2016). The agricultural reforms from 2006 – 2019 have contributed immensely to the reduction in food imports from 14.5% to 5% of total imports (CBN, 2016).

The cassava revolution policy also helped to drive down the import bill on wheat and as well raised the income from value addition and import substitution across the federation and the FCT. The policy has made Nigeria attain the height of the largest producer of cassava in the world with a total production capacity of 36.8 million metric tons in 2009. More so, reforms in the financial sector also provide funds and support to farmers through the Bank of Industries, mechanization supports for 29,500 existing farmers across the federation and an upgraded capacity of 35 existing small HQCF mills from 1 metric ton/day to 3 metric tons (FAO, 2013). The cassava policy has called for wheat flour to be partially substituted with the High-Quality Cassava Flour (HQCF) which Nigeria produces in abundance; some bakeries located in the FCT could benefit from the food value chain. Also, Nigeria is the largest importer of wheat flour in the world from the USA, this accounts for over 90% of all wheat imports with an import bill of over NGN635 billion annually (CBN, 2016). Presidential Initiatives on specific agricultural commodities such as cassava, rice and wheat have aid to improve the productivity of these staple food crops (Adesina, 2014).

In the country, the ATA has enhanced the production of groundnuts, soya-beans, cowpeas, chickpeas, pigeon peas and other legumes which are protein-rich food sources and ingredients with sorghum being a high energy food. In Bwari and Kuje Area Councils, each farmer gets 5kg of seeds and two bags of fertilizer per hectare of land; this has improved the production capacity tremendously (FMARD, 2014).

### (c) Infrastructural Development

Notably in 2011, the reform have supported the award, construction and completion of nine (9) farmers markets in 8 States including FCT in places like Giri, Dafara and Kuje within the Area Councils (FMARD, 2014). The agro-input had increased the number of seed companies for eleven (11) at the start to seventy-seven (77) to provide improved seeds growing three folds from 400,000 hectares in 2010 to four (4) million hectares or more progressively to enhance productivity (FMARD, 2014).

According to the National Survey of Exportable Agricultural Commodities in Nigeria, the FCT is taking a lead in the production of cassava of 607.36 metric tons by cultivating an estimated area of 128.49 hectares of land. The second staple food crop is rice; it's about 415 metric tons by engaging the production area of 202.23 hectares. And the maize cereal crop was recorded as the third-best which amounted to 360.47 metric tons annually in the Federal Capital Territory (CBN, 2017).

### (d) Modernization of Farming Methods

Most importantly, modernization of some aspects of agriculture cannot be over-emphasized. Agricultural activities such as production, processing, distribution, storage and marketing were transformed. Thus, these reforms were necessary to suit the global trend of agricultural activities and production cum increase the quality of agricultural-related raw materials production for Nigeria's domestic/infant and medium scale industries; it has also lessened the importation quota of such materials to reduce the cost of production in the local industries (Ego, 2008). The establishment of vital institutions

such as financial institutions and administrative organs were as well initiated to provide governance, aid and support to facilitate the realization of all potentials in agriculture and attain modernity.

## Challenges of Agricultural Policies and Programmes

The literature of different agricultural policies and programmes had reviewed that these programmes made some laudable impacts and improved the lives of many Nigerians including farmers; but the programmes could not be sustained due to a lack of “political will” (Obadan, 2001). These were also some constraints identified from the deductions carried out. These include:

- (a) **Weak Agricultural Policies:** Some of the agricultural policies were so cumbersome; it encompasses lots of issues, aims and objectives. A policy ought to have a specific strategy, targets and goals geared towards the accomplishment of the said goals. The ambiguity of some of these policies made it lost focus. For instance, in some regimes, quite a lot of agricultural policies are initiated. At the tail end, there could be a clash of goals; these make the implementation and monitoring too cumbersome. This led to the failure of these programmes. Aku, et al (1997) opined that there is a general loss of confidence in a society stricken by poverty and these renders government policies ineffective.
- (b) **Role Conflicts between different Programmes and Policies:** Due to unspecified goals, mission and statements, some agricultural programmes and policies in the past had encountered jammed-up in policy thrusts in which the achievement and impacts were at a crossroad of who gains the glory; for example ATA and APP (Ayoola, 2001).
- (c) **The Short Duration of Agricultural Policies and Programmes:** Lack of continuity of existing programmes by new administration contributed to the non-actualization of the set-out goals and objectives. For example, the dates on the literature show that the ATA was initiated at a close interval with APP. These resulted in impromptu changes due to its short durations which in turn retarded the developmental process of the projects.

(d) **Bias and Partial Objectives:** Most of these programmes and policies focused mainly on enhancing productivity on crop and animal farming instead of diversifying other sectors like agro-processing, manufacturing and services. Placing food security as a top priority has subjected the nation to chronic poverty and stagnation. Policies should aim at pulling human resources towards developing tourism, recreational centres, environmental services and preservation which commands a productive link involving agro-industrial operations, well-structured system distribution, communication and packaging. These in turn provide more employment opportunities and improve farmers' income in the agricultural sector.

(e) **Delayed Disbursement, Embezzlement and Lack of Funds:** Government needs to allocate funds to pursue the goals of these policies and programmes to an expected end. The study showed that lack of funds delayed the implementation of most projects, even up to date and constant withdrawal of funds from these policies and programmes due to change of power and administration (political interference) contributed to the failures of these programmes.

(f) **Inadequate Technical Advisory/Extension Services:** Inadequate provision of extension services to assist skill acquisition and access proper sensitization by the small-scale farmers on novel methods of farming/technology had contributed to the failure of the agriculture policies and programmes. For example, inadequate sensitization and orientation had left several doubts and polar attitudes on the acceptance of Genetic Modified Organisms (GMOs) biotechnology to farmers. Nigeria could have excelled in agricultural production if it had ploughed enough capital into technical advisory services to boost production (FAO, 2004).

(g) **Harnessing the Regional and National Policies and Programmes:** There was a need for compatibility of two policies in the respect of the areas of engagement. Some of these policies were formed using the Selective Approach Method in which the policy took effect on a particular area with the motive of having a multiplier effect to other areas in the mere future or due time. Therefore, for consistency, the regional and national policies must work in harmony to ensure success.

**(h)Lack of Adequate Monitoring and Evaluation:** Evaluation is done to determine achievement of rural development programme through the set-out goals, this was to improve the implementation and efficiency of the programme where and when necessary.

## Conclusion

In conclusion, the numerous reforms in agricultural activities had allowed farmers to transform from subsistence to modernized and mechanized form of agriculture as well as invest in the different stakeholders to ensure food security.

Fundamentally, it is an understatement to say that the previous reforms have not impacted the agricultural sector; it is just that the yearnings and aspirations of the farmers have not been adequately heard and met.

## Recommendations

The study recommends the followings:

- (a) It is recommended that, the reforms in the agricultural sector of the economy should be guided by adequate and precise vision, concise implementation strategy and a comprehensive “political will” to ensure that the reforms in the agricultural sector have a positive impact on the productivity of the farmers.
- (b) Government at all levels should ensure that there is improvement in the budgetary allocation giving to the agricultural sector.
- (c) It is also recommended that the Nigerian farmers should be knowledgeable about the happenings in the agricultural sector in terms of marketing information. This will reduce the problem of market and production risk.

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