

# **Agribusiness Innovation in Nigeria: Issues, Opportunities and Options for Growth**

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## **Abstract**

This paper attempts to assess innovative approach to agribusiness in Nigeria while taking account of the major issues and attendant opportunities available in the sector with a view to redefining an attractive strategic option that will deliver the anticipated business environment conducive enough to sustain existing local players and enticing to a would-be foreign investor. The effort was made to review past policies, programmes and projects initiatives in the sector prior to Nigeria's independence in 1960 down to date and identifying the notable milestones achieved and those major setbacks that are responsible for its current state. In this respect, various secondary reference materials were the main source of data used for the study. SWOT analysis was used to evaluate and redefine an appropriate strategic direction needed for agribusiness to thrive. Also recognised was the effort of the present Government of Nigeria in achieving its four (4) major priority focus in areas such as food security, import substitution, job creation and economic diversification as clearly stipulated in the newly launched Agriculture Promotion Policy (APP) 2016-2020 document released by the Federal Ministry of Agriculture and Rural Development (FMARD). The paper revealed four (4) major strategic directions needed in the sector to catalyse its growth, ensure food security, encourage youth and women inclusiveness and handle post-harvest activities.

**Keywords: Agribusiness, Innovation, Nigeria, Agriculture, Policy**

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## 1.0 Introduction

Nigeria is the largest economy in West Africa and the second largest in Sub-Saharan Africa having a population of about 167 million people and a land area of 923,768 km<sup>2</sup> (AFDB, 2012). Despite this potential, Nigeria is not food secured. Nigeria once had a record of a performing Agricultural sector. Tracing it back to the era before the discovery of oil, the impact of Agriculture on Nigeria's economic performance was remarkable. However, the country imports about \$3 to \$5 billion worth of food annually, especially wheat, rice, fish and sundry items including fresh fruits (FMARD, 2016). One of the major contributory factors to this development is the high wastage level in production area which has reduced supply to processing factories which explains why the country will keep depending on importation. Meanwhile, the resultant effect of this is limited job growth along the agriculture value chain firms input production to market systems and continued use of limited foreign currency earning to import varieties of food qualities to meet local demand. FMARD (2016) report on gaps in Nigeria's demand and supply for key crops and activities indicates that there is a wide gap between the two variables. For instance, as at 2016, where local demand for rice was 6.3 million tons, the supply capacity was only 2.3 million tons; for oil palm, where the demand was 800 million tons, only 4.5 million tons capacity was locally available, also for demand for chicken which was put at 200 million birds, the supply could only provide 140 million birds for the growing local market.

There has been growing concern about this development considering the fact that Nigeria is richly endowed with Agricultural resources which are supported by various well-articulated sectoral policies and developmental programmes from international development agencies. Dating back to the pre-independence till 1970, the first, second and third National Developmental Plan for Nigeria were put in place to harness its huge potential in Agriculture. While Agriculture thrived at the regional level during the early 60s, after some self-inflicted local crisis during the late 60s, the country recorded low agricultural product which informed some flagship programs from successive military regimes who were the dominant pilot of the country's affair at those time. Programmes such as Operation Feed the Nations (1975-79), Green Revolution Plan Scheme (1980), Structural Adjustment Programme (1986) and the Agricultural Policy for Nigeria (1988-2000), which was the first National Agricultural policy for Nigeria. However, during the post 1999 era when Nigeria return to democracy, President Olusegun Obasanjo's government reformed the National Agricultural Policy and re-introduce it as The New Policy Thrust for Agriculture of 2002 which led to the launch of various economic development reform for Nigeria such as the National Economic Empowerment and Development Strategy (NEEDS) launched in 2004. There was a major turn by the Nigeria government commitment to agriculture in 2007 during the President Umar Musa Yar' Adua when he launched the Vision 2020 having a seven-point agenda for the country where it prioritised the issue of Food security and Agriculture among other sundry issues that were of major challenges to the development of Nigeria during this period. Historically, major focus on Agribusiness in Nigeria became distinct between 2010 -2015 through the Agricultural Transformation Agenda (ATA) initiative of President Goodluck Ebele Jonathan launched in 2010 which aimed to reform Nigeria's attention back to Agriculture. The ATA reform recorded unprecedented success in the history of Nigeria as never-seen initiatives were made. For instance, the set-up of the Growth Enhancement Scheme (GES) was put in place to register smallholder farmers and provide target input subsidies to them through the e-wallet platform. Also achieved was the restructuring of the fertiliser procurement system - a major challenge to farmers in the past. The latest policy development for the sector is the

Agriculture Promotion Policy (APP) for the year 2016-2020 which was launched on the 21<sup>st</sup> of June 2016 by the present President of Nigeria, Muhammadu Buhari. The APP has four (4) priority areas (Food security, import substitution, job creation and Economic Diversification); eleven (11) key objectives and three (3) thematic interventions to unlock the Agricultural potential of the country. This is the first time in the history of Nigeria that the issue of Agribusiness is clearly captured in its agricultural policy. The APP under theme 2 (Crowding in private investment), section 4.2.2 (Agribusiness Development) states the prevailing constraints and the policy thrust of the Government towards the development of Agribusiness in Nigeria.

The objective of this paper is to assess the potentials of Agribusiness innovation in Nigeria particularly looking at the issues, opportunities and options that could facilitate growth and open up the sector for international investor's participation, increase export and reduce import index.

## **2.0 Agricultural sector in Nigeria**

In order to understand how the Agricultural sector works in Nigeria, this section looks at it from the dimension of its administrative structure and various policies, programs and projects that have characterised the sector dating back to the pre-independence era down to this present date.

### **2.1 Administrative structure**

In Nigeria, the Agricultural sector is being managed by the Federal Ministry of Agriculture and Rural Development (FMARD) which was established in 1966 with a mandate to regulate agricultural research, agriculture and natural resources, forestry and veterinary research across very states in Nigeria. The Ministry is also responsible for optimising agriculture and integrating rural development for the transformation of the Nigerian economy through implementing various policies and programs that will ensure food security and promote Nigeria's socio-economic development through food export in commercial quantity to the global community. This Ministry is very key to the development of Nigeria in terms of executing the agricultural transformation agenda set for the country, focus on agriculture as a business particularly on its value chains where Nigeria is seen to have comparative advantage, utilize the transformation of the agricultural sector so as to create jobs, wealth and food security. The Ministry is also to develop a strategic partnership with all the stakeholders-State and Local Government; Inter-Ministerial collaboration, private sector, farmer groups and civil society; and the youths and women- involved in Agriculture so as to stimulate investments capable of driving a market-led agricultural transformation. Specifically, for Agriculture to serve as the spring-board for attaining transformation in Nigeria, the Ministry adopts various policies and legislations in terms of Fiscal policies, Industrial policies, financial services policies and Agricultural policies and through an enabling legislation for prioritising domestic content for food production.

### **2.2 Review of Agricultural Initiatives in Nigeria Pre-Independence era to Date**

Agricultural policy is the combination of the outline and strategies designed to achieve overall agricultural development and growth. According to the Ministry of Agriculture Policy Guide (2004), Nigeria's agricultural policy is the synthesis of the framework and action plans of Government designed to achieve overall agricultural growth and development.

The Agricultural policy for Nigeria aims at the attainment of self-sustaining growth in all the subsector of agriculture and the structural transformation necessary for the overall socio-economic development of the country as well as the improvement in the quality of life of Nigerians. Since Independence, the Nigerian government has made several developmental efforts aimed at improving the performance of the agricultural sector through designing and implementing various Agricultural initiatives. The agricultural policies, programs and project initiated in Nigeria since before and after independence is presented in Annex 1.

### 3.0 Concept of Agribusiness

Away from the common traditional system of practice, Agriculture has evolved into Agribusiness and has become a vast and complex system that reaches far beyond the farm to induce all those who are involved in bringing food and fibre to consumers. Agribusiness is defined as the various businesses that are connected with producing, preparing and selling farm products. The term agribusiness was first introduced by Davis and Goldberg in 1957. It represents three part system made up of, *the Agricultural input sector, the Production sector and the Processing-manufacturing sector*. Agribusiness includes all stakeholders involved in the value chain which includes the farmer, the agriculture extension workers, institutions and firms that provide the inputs and manufacture food products, logistics services to the market and end consumer. This captures the full meaning of the term “Agribusiness”. It is important to visualise these sectors as interrelated parts of a system in which the success of each part depends heavily on the functioning of the other two.

Today, Agribusiness system has undergone a rapid transformation as new industries have evolved and traditional farming operations have grown larger and more specialised. The transformation did not happen overnight but came slowly as a response to a variety of forces. Knowing something about how agribusiness came about makes it easier to understand how this system operates today and how it is likely to change in the future.

### 3.1 Contextual classification of Agribusiness

As a complex system, Agribusiness comprises the input sector, production sector, processing manufacturing sector and transport and marketing sector. According to Chandrasekan et al., (2010), it is directly related to industry, commerce and trade. The industry is concerned with the production of commodities and materials while commerce & trade are concerned with their distribution. Industry can be Extractive, Genetic or manufacturing-based while commerce can be grouped on the basis of volume (*wholesale trade and retail trade*), basis of coverage (*regional trade or national trade*). As a social institution, Agribusiness existence is dependent upon its harmonious relationship with various segments of the society. The process of evolving a mutual relationship between agribusiness farms and various interest groups begins with acknowledging the existence of the responsibilities of the manager. These responsibilities are towards consumers, suppliers, distributors, workers, financiers, government and the society. Yumkella et al, (2011) further classified it into four main sub-classes ***Agricultural input industry***: concerned with factors responsible for an improved productivity in the sector such as machineries, equipment and tools, inputs (fertilizer, pesticides & insecticides, etc.); ***Agro-industry products***: concerned with agricultural products including food and beverages, leather products, wood, textile etc., ***Equipment for processing***: machinery, tools storage facilities, cooling technology and spare parts; ***Financing, Marketing distribution and other services firms***: Storage, transport, ICTs, packaging materials and design, etc.

### 3.2 Perspectives on Agribusiness: *Global*

Perspectives on the nature and performance of agribusiness incubators across selected regions as provided in a various separate country study report of International Bank for Reconstruction and Development (Infodev) reports of 2014 are presented as follows:

***Brazil - CENTEV/UFV Technology Incubator:*** This Centre was established with an initial investment of about USD\$8 Million largely from the government of the State of Minas Gerais. To support its expansion, the government also invested USD\$6 Million in constructing the incubator's space, a 1000m<sup>2</sup> building specially designed for business incubation activities.

***Chile – Fundacion Chile Incubator:*** It was created in 1976 as a non-profit governed jointly by the Chilean Government and a large American conglomerate. It has proactively introduced technology innovation and developed companies in target industries including agribusiness, marine resources, forestry, environment and chemical metrology human capital and information and communication technologies. It has succeeded in introducing a new method for packaging beef that enable's ranchers to export it more easily. Also, introduced raspberries, blueberries, oysters and Salmon farming for profitable oversea markets.

***India – ICRISAT Agribusiness Incubator:*** The incubator which is sited in the state of Andhra Pradesh in India, is a result of a partnership between the Indian government and an international Crop-research organisation that is a member of CGIAR - a global partnership of organisations seeking a food-secure future. It was created with an initial funding of about \$500,000 from India's Department of Science and Technology (DST) with a staff of three – *a manager, Secretary and Assistant*. The incubator now operates independent of its founders, the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) and the India government's DST. Having attained a developed status, the incubator has now become an incubator of incubators and is now assisting African Incubators on how to adopt its model.

***Malaysia – Life Science Capital Fund (MLSCF):*** Founded in 2006, MLSCF is a venture capital fund based in Kuala Lumpur, Malaysia. It specialises in early-stage investments in companies that apply advanced technology in the area of agriculture, industrial chemistry and healthcare. MLSCF manages \$150 million capital on a Public-Private arrangement co-managed from two organisations, The ***Malaysian Technology Development Corporation (MTDC)*** which is a government organisation; and ***Burrill & Company***, a San Francisco-based merchant Bank in The United States. It operates on the concept it tagged "Science without borders" through a process of open innovation which has facilitated the transfer of world-class biotechnology into Malaysia and now exporting the technologies to other less-developing countries.

***Mexico – Fundacion Jalisco Incubator:*** The incubator was created through a constitutional act in 2006 but started operation in 2007. After hearing of the success of the Foundation Incubation in Chile, the Governor of Mexico State of Jalisco sought to recreate same in his State, Jalisco. The incubator which relies on a combination of state funding and private investment seeks to import successful business models to small farmers in Jalisco. Hence, it imported high-yielding blueberry plants from U.S and a started a nursery in Jalisco from where it was able to produce more blueberry plants and gave the plants to its local farmers who are capable of growing them successfully. Now the State sells its blueberry produces throughout Mexico, and overseas majorly U.S and U.K.

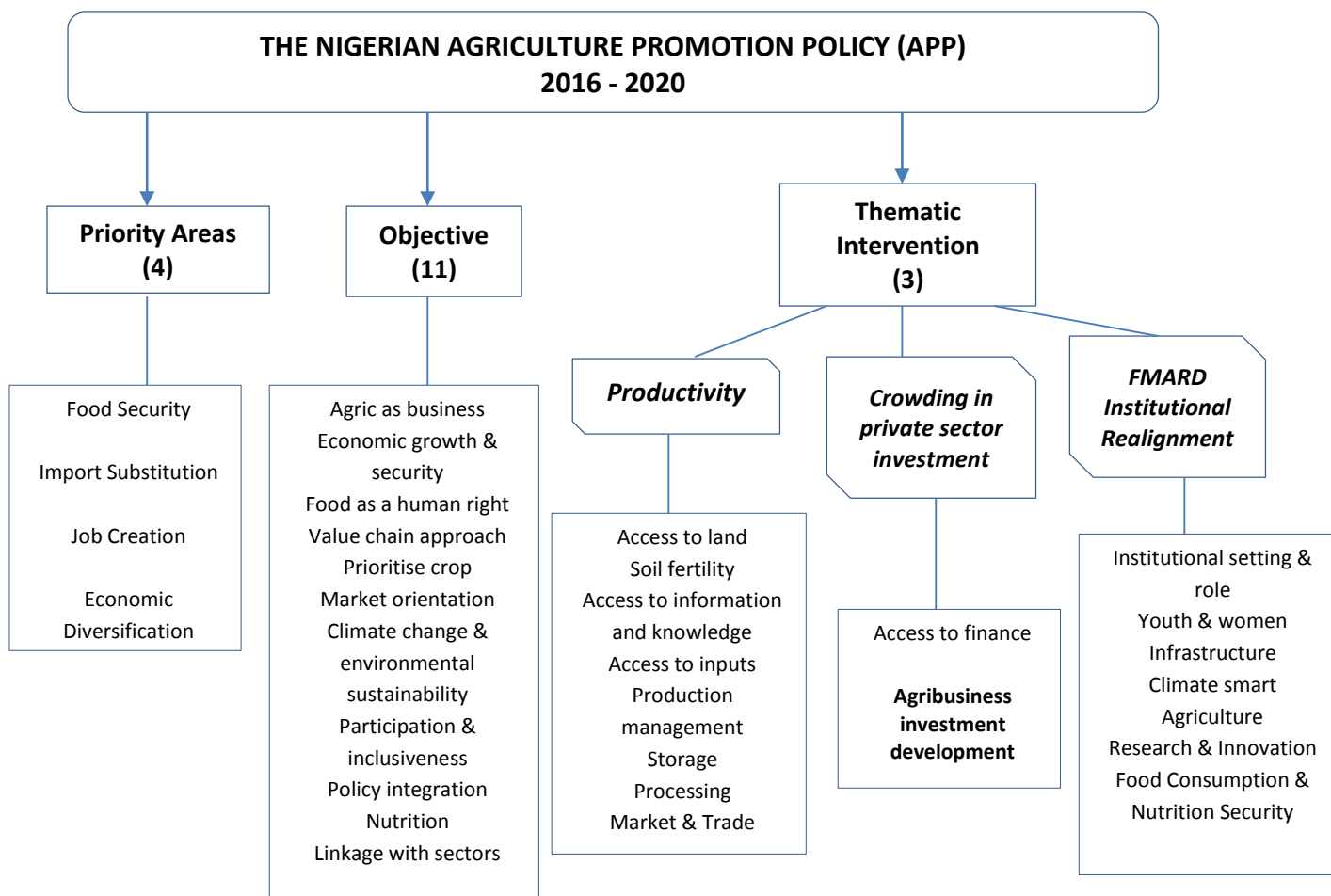
**Mozambique - TechnoServe Mozambique (TnsMz):** TnsMz is a financially autonomous division of Technoserve Group (TnsGp), a non-profit Corporation specialised in agribusiness development worldwide. It is not a traditional incubator as it offers no centralised facilities for practising and retaining business skills, but rather serves its clients where they do business especially in the rural areas where crops and animals grow. Its program is designed to stimulate investment, job creation and local economic activity within the agribusiness sector; provide incentives in the form of grants or matching grants to change behaviour and to introduce new technologies within farm-to-market chains. It has pioneered “best practices” template with successes in cashew, banana, and poultry industries in the country.

**South Africa – Timbali Technology Incubator:** is a not-for-profit company in South Africa founded in 2003 by CEO and co-founder Louise de Klerk to help rural farmers whose livelihood has been undercut by high-value large farmers. Basically funded by the South African Development of Trade and Industry’s Small Enterprise Development Agency (SEDA). Since inception, it has dispersed two grants totalling R20, 000,000.

**Uganda – Uganda Industrial Research Institute (UIRI):** It is the Uganda government-led Agency for Industrialization and technological innovations as a traditional incubator established by the Act of Uganda Parliament in 2002. Majorly collaborate with other regional business incubator models. It has made a significant impact by locating value-added processing systems from its Kampala Headquarters into farmer communities.

### **3.3 Agribusiness Innovation in Nigeria: Recent effort from Nigerian Government**

Not until between the year 2010 – 2011, there has been no significant effort from the government towards exploring Agribusiness development as a means to boost the agricultural performance of the country and invite foreign investment. Noting this gap, President Goodluck Jonathan’s administration, in 2010, in an effort to revamp the agricultural sector, implemented a 5-year strategic plan 2010-2015 tagged the **Agricultural Transformation Agenda (ATA)** aimed to refocus Nigeria’s attention back to Agriculture. ATA as a strategy, was to address two major challenges that have continued to slow-pace growth and performance of the sector. First, it recognised its inability to meet domestic food market requirement and secondly, its inability to export at the quality level required for market success. Through a well-planned strategy, some of the objectives of ATA were achieved specifically in six (6) areas such as *Input supply, finance, infrastructure & logistics, production, market access and institutional reform* (FMARD, 2016). Despite this tremendous success, some gaps were established after 2015. These gaps were identified by the current administration of President Muhammadu Buhari, which led to the launch of another 4-year strategic framework tagged The Agriculture Promotion Policy (APP). APP will span between 2016-2020 with priority in four major areas (Food security, Import Substitution, Job Creation and Economic Diversification); eleven (11) key objectives and three basic key thematic intervention areas (Productivity enhancements, Crowding in Private sector investment and FMARD Institutional Realignment). Figure 1 below provides an overview of APP.



**Figure 1: Overview of APP 2016 - 2020**  
(Source: Author, 2017)

### 3.4 Perspective on Agribusiness: Nigeria

Agribusiness incubation in Nigeria can be defined into two major categories: Government-Driven and Privately-operated.

#### A. Government-Driven:

- i. **Business Incubation Platform (BIP):** This facility is housed in the International Institute for Tropical Agriculture (IITA) Ibadan, Oyo State in the Western part of Nigeria. The mode of operation of BIP is similar to how the chicken egg is incubated. It conceives ideas and needed technologies to drive or transform the sector (Egg), it then provides a favourable condition for their development (Incubation), and then hatch these ideas for the world to use and derive benefit from. The BIP strategy is to support IITA's strategic goals and accelerate the commercial development of IITA's proven and profitable Research for Development (R4D) technologies. It operates on a two-prong commercial development avenue focus where IITA's scientists create Innovative products with the potential for commercialization, and then Initiate & build a network of public and private

sector partners that will support the activities of small to medium-scale agribusiness entrepreneurs, initially within Nigeria and later on, elsewhere.

So far, BIP has been able to incubate some Agribusiness Start-ups in its facility. Some of them are:

**GoSeed:** This start-up's business operation strategy is charged with the production and marketing of quality breeder and foundation seeds/planting materials.

**Nodumax:** Provides solution for an improved legumes production. The Nedumax legume inoculant is a product that contains Nitrogen-fixing rhizobia to colonise roots of soybeans and transform the crop into what is termed "Biological Factory".

**Aflasafe™:** Produce biological control solution that drastically reduces aflatoxin contamination in maize and groundnut. In 2014, the start-up received a seed grant approval from African Union Commission (AUC) and the UNDP to establish the incubation centre in Nigeria. It also made significant progress in Nigeria on the registration, manufacture and commercialization of Aflasafe™, an effective technology for Aflatoxin mitigation in Africa.

#### ***B. Private Driven:***

Unlike what is obtainable in the Information and Telecommunication Sector where the number of Tech Start-ups is much, enjoying support and recognition from Government, there are few privately-operated Agribusiness incubation with start-ups providing a various solution for the sector. Some of the players in this sector include;

**Agribusiness Incubation Centre (AIC):** The Centre was founded by Premier Agricultural Development Limited (PAD) in 2012 as a hybrid organisation. It is currently in its growth stage. Basically, PAD conducts its business activities at AIC producing and processing agro-products and providing services all for a fee. It has been able to record remarkable recognition for its unparalleled service. Awards received include; The Federal Government of Nigeria's Youth Enterprise with Innovation in Nigeria (YouWIN) Grant Award in 2012; Batadon community Honours recognition for contribution to community development award; Building Entrepreneurs Today-3 (BET-3) award by Diamond Bank PLC and EDC/Pan Atlantic University.

**AgroHub Agribusiness Incubation Centre:** An initiative of AgroinfoTech Africa, an information and communication Technology company founded with a primary purpose of adding value to agriculture and agribusiness in Africa using new technologies. The centre is driven by a Public-Private partnership arrangement. Its focuses on Research, Technology and Entrepreneurship where it operates through incubating in-house ideas and embrace disruptive innovations in agriculture that can transform Agribusiness in Africa.

## **4.0 Discussion**

The APP 2016 -2020 strategic plan identified the need to attract private sector investment to develop agribusiness in Nigeria. This was captured in detail under the theme 2 (crowding in private investment) section 4.2.2 (Agribusiness Development) of the policy where it was specific on the major prevailing constraints and thrust for its effective impact. However, for this to be successful, there must be an effective institutional framework that will guide the



investment direction into the country in the area of Agribusiness. For a foreign investor to take the leap into investing in this sector is a function of weighing the business environment where the Agricultural practice is played in Nigeria. The competitive capacity of such market rest upon identifying the issues or challenges hampering the growth of the sector and how they are managed through effective policies from the government, available opportunities and a clear sustainability potential existing in such market. Hence, this discussion dissects these three key issues within the Nigerian Agribusiness context.

#### **4.1 Issues**

Available statistics from the FMARD as an outcome of two surveys conducted in 2013, identified the major issues that exist within Nigeria's agribusiness environment while also presenting them according to their perceived ranking level as; Lack of government coordination (100%), inconsistencies in policy, regulatory, laws, taxes and administrative practices (94%), lack of security of raw material supplies to food processors (75%), lack of human capital (50%). Further analysis (FMARD, 2016) revealed the major constraints to be: Absence of appropriate and adaptive processing technology at small scale level; Absence of rural infrastructure to support rural primary processing; Inadequate capacity for processing or crude processing methods; Lack of quality control and standard; Low private sector investment in agriculture/agro-processing; Absence of low cost, market-oriented research prototyping; Inaccessibility and high cost of fund for agro-processing; Low level of capacity of local fabricators; Poor quality of information and irregular dissemination impedes investors' abilities to properly plan investments; No single point of contact: Investors do not know how to find available services and are compelled to interact with resources across multiple MDAs to achieve their objectives; Ill-timed service delivery: Delivery of Government service are frequently delayed, while contracts and MoUs with MDAs and State Governments can go unfulfilled. These issues calls for government intervention in the sector by addressing focal issues pertaining to policy framework for sector, more political commitment, adoption and utilization of latest agricultural technology, tackle infrastructural deficit, improve financial support and reduce associated risks, reformation and realignment of institutions connected to the agriculture sector so as to be more agribusiness-oriented.

#### **4.2 Opportunities**

The African Development Bank report of December 2012, in its Country Strategy paper assessing the Agricultural ecosystem of Nigeria and potential for growth between 2012-2016, identified some opportunities within the sector to include;

- i. Potential to become a major player in the global economy
- ii. Abundant natural resource endowments for agro-allied input production e.g fertiliser
- iii. Agricultural and manufacturing potential
- iv. Rapid urbanisation which represents an opportunity for diversifying income and economic growth
- v. Regional integration: Nigeria is a regional power in West Africa whose economy represents about 55% of West Africa's GDP, and its population of about 167 million provides the largest market in Africa.
- vi. Abundant Human resources and professionals

### 4.3 Options for growth

According to Nicole (2016), SWOT analysis is an analytical framework that can serve as a precursor to any sort of a firm’s action, such as exploring new initiatives, making decisions about new policies, identifying possible areas for change, or refining and redirecting efforts. The method was created in the 1960s by business gurus Edmund P. Learned, C. Roland Christensen, Kenneth Andrews and William D. Book in their book “Business Policy, Text and Cases”. Hence, SWOT analysis is often used during strategic planning. A detailed Strength, Weakness, Opportunity and Threat (SWOT) analysis of the Nigeria agricultural ecosystem will provide potential options for growth that are critical to the success of sustainability of the sector. SWOT matrix on the Nigerian Agricultural sector was derived from various reports (AFDB, 2012; FMARD,2010; Aderibigbe, 2014; Uche, 2011; Iwuchukwu and Igbokwe, 2012) conducted by scholars and expressed in Table 1.

**Table 1: SWOT Analysis of the Nigerian Agricultural Sector**

	<p><b><u>Strength (S)</u></b>  <i>S<sub>1</sub>-Abundant Human Resources</i>  <i>S<sub>2</sub>- Most preferred destination in Africa</i>  <i>S<sub>3</sub>-Second largest economy in Africa</i></p>	<p><b><u>Weakness (w)</u></b>  <i>W<sub>1</sub>-Weak business environment and competitiveness</i>  <i>W<sub>2</sub>-low productivity</i>  <i>W<sub>3</sub>-Post-harvest loss</i></p>
<p><b><u>Opportunities (O)</u></b>  <i>O<sub>1</sub>-High potential for major player in global economy</i>  <i>O<sub>2</sub>-abundant agro-allied resources</i>  <i>O<sub>3</sub>-Strong potential for Agricultural base</i>  <i>O<sub>4</sub>-Increasing population and urbanisation</i></p>	<p><b><u>Strategic Decision</u></b>   <i>How do we capture markets (local and international) utilising available resources that are in abundance?</i></p>	<p><b><u>Strategic Decision</u></b>   <i>How do we increase agricultural production to meet demand?</i></p>
<p><b><u>Threats (T)</u></b>  <i>T<sub>1</sub>-Political Instability</i>  <i>T<sub>2</sub>-Infrastructural Deficit</i>  <i>T<sub>3</sub>-Corruption and resource mismanagement</i>  <i>T<sub>4</sub>-weak public finance management</i>  <i>T<sub>5</sub>-Insecurity</i></p>	<p><b><u>Strategic Decision</u></b>   <i>How do we establish institutional trust and effective management of the fund to attract foreign investors?</i></p>	<p><b><u>Strategic Decision</u></b>   <i>What innovative approach can be adopted to boost productivity amidst prevailing challenges?</i></p>

(Source: Author, 2017)

From the SWOT Analysis conducted on Nigeria Agricultural sectors as shown in the above Table 1, four key strategic questions were raised which are key to the success of Agribusiness in Nigeria. They are:

1. *How do we capture markets (local and international) utilising available resources that are in abundance?*
2. *How do we increase agricultural production to meet demand?*
3. *How do we establish institutional trust and effective management of the fund to attract foreign investors?*
4. *What innovative approach can be adopted to boost productivity amidst prevailing challenges?*

Based on these four strategic decision questions, as an options for growth in the sector Government needs to consider promoting more investment in the sector ensuring that they are properly managed and targeted in line with projects and programmes that will promote the conducive environment for investments from the private sector; increase financial support for agricultural developmental initiatives both at the federal and state level that will attract participation from youths and women in the society, thereby reducing unemployment, poverty and creating wealth; encourage innovation for productive research activities in the country. The post-harvest handling of agricultural produce is an important component of value chain development, and a catalyst for progressive and sustainable expansion of agribusiness, investment and agro-processing activities, thereby eradicating waste and ensuring import substitution, food security, wealth creation, employment generation, human capital development and security of human life and property.

## **5.0 Conclusion**

From the foregoing, it can be seen that the potential for deriving greater performance in the Agricultural sector in Nigeria is high. With proper implementation of the current Agriculture Promotion Policy 2016-2020 strategy, adopting an innovative approach towards agribusiness development will raise the performance of Agriculture from its current 23% share of GDP as at 2016, improve production activity mix of the sector, and also increase the share of non-export earnings above 75%. This will definitely meet the targets of the APP regarding food security, import substitution, job creation and economic diversification.

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**APPENDIX 1: SOME AGRICULTURAL DEVELOPMENT INITIATIVES AND POLICIES IN NIGERIA (PRE-INDEPENDENCE TO DATE)**

<b>S/No</b>	<b>Period</b>	<b>Policy</b>	<b>Aims and Objective</b>	<b>Focused Area</b>	<b>Strategy</b>	<b>Impact</b>
1	Pre 1970	First National Development Plan  1962 - 1968	To explore the abundant natural resources for improvement of the living standards of the Nigerian People	Infrastructural development	Designed such that regional governments also implement their own developmental plans to support the Federal Government	By the end of the 1960s, Nigerian Agricultural economy was not growing as expected. There was declining export of crop products and mild food shortages. Reason attributed to the Nigerian civil war
2.	1970 – 1985  Post-Civil war era.	Second National Development Plan 1970 – 1974	To restore the economy damaged by the Civil war	Crop production	Government rely on food import than strengthen local production	Witnessed massive government involvement in all facet of agriculture production. It also witnessed an unprecedented deluge of agric policies, programs, projects and institutions.
		Third National Development Plan  National Accelerated Food Production Project (NAFPP) – 1974	To increase the production of rice, maize, millet, sorghum, cassava and wheat.	Crop production	Supply of improved seeds, chemical fertilisers and pesticides, education of farmers, the sale of agricultural products and stock management and processing. Build Agro Services Centres (ASCs) all around the country for effective service delivery to the public.	The ASCs failed to provide Agricultural inputs at the right time (Ogen, 2007)
	1970 – 1985	Agricultural Development Project (ADP) 1975	To help organise farmers into more productive Agriculture through provision of Agricultural inputs	Agricultural inputs such as: Construction of Agricultural roads, building of small-scale dams and setting up of Agro Service Centre	Set up facilities in all states across Nigeria	Over 470 ASCs were established all over Nigeria at the end of 1985 (Ogen, 2002)
		Operation Feed the Nation	To build a stable and self-	Food production	Utilise all available	Increase food production to

		(OFN) Launched on 21 May 1976	sufficient socio-economic system through everybody's participation.		piece of land in urban, sub-urban and rural areas for farming. Distribution of fertilisers and improved breeds did by all (farmers, citizens, military men, civil servants)	sufficient level to feed growing population and lower import dependency ratio.
	1976	River Basin Development Authorities (RBDAs)	To boost economic potentials of water bodies like irrigation, fishery, hydroelectric power generation, domestic water supply. Production and rural infrastructural development	Water Supply	Established eleven RBDAs through River Basin Development Decree 25 of 1976 (Ayoola, 2001)	A number of authorities grew out of proportion and the operations of some suffered from intensive political interference. Substantial public funds were wasted to streamline sizes and functions of RBDAs through the disposal of their non-water assets. (Iwuchukwu and Igbokwe, 2012)
4.	1979 Change to Democratic Government	Fourth National Development Plan 1981 -1985  Green Revolution Plan (GRP) Scheme 1980	To achieve self-sufficiency in food production by 1985 when the 4 <sup>th</sup> ends	Comprehensive development of rural areas through; Building food processing firms, develop rural roads, provide houses, improved education and health facilities, installation of water and electricity.	Avoid dependence on developed countries for manpower and technology	Failed in developing Agriculture sector. The GRP scheme led to an increase of inequality in the rural areas where land owners became richer to the disadvantage of the poor farmers
5	1986 – 1999	Structural Adjustment Program (SAP) July 1986 This was a mix of demand-side policies, supply-side policies and other policies to improve competitiveness	To correct existing price distortions in the economy and structural imbalances, promote non-price factors, encourage local production and protect agricultural and local industries from unfair international competition.	Local Agric production industries	Abolition of a marketing board for scheduled crops. Ban on food imports e.g livestock, product, rice, maize, wheat, vegetable oil, etc. substantial cut in agricultural input	Privatisation and commercialisation of public-owned agricultural enterprises.  Establishment of rural agriculture development institutions such as: Directorate of Food, Roads

					subsidy	and Rural Infrastructure (DFRRI), National Directorate of Employment (NDE), and re-organisation of some existing institutions like the River Basin Development Authorities (FMARD, 2001)
6	1986 – 1999	First National Agriculture Policy  “Agricultural Policy of Nigeria” 1988 – 2000	Seven broad objectives; <ul style="list-style-type: none"> <li>▪ Attainment of self-sufficiency in basic food commodities</li> <li>▪ Increase in production of agricultural raw materials</li> <li>▪ Increase in production and processing of exportable commodities</li> <li>▪ Modernization of agricultural system with improved technology and management</li> <li>▪ Creation of more agricultural and rural employment opportunities</li> <li>▪ Protection and improvement of agricultural land resources and environment</li> <li>▪ Establishment of appropriate institutions and creation of administrative organs.</li> </ul>	Food production		<ul style="list-style-type: none"> <li>▪ Profitability of the agriculture system and farmer welfare.</li> <li>▪ Led to sub-sectoral policy formulation such as; <ul style="list-style-type: none"> <li>i. Land resource policy</li> <li>ii. Natural agricultural mechanisation policy</li> <li>iii. National cooperative development policy</li> <li>iv. National seed policy</li> <li>v. National policy on integrated rural development</li> <li>vi. Institutional arrangements of the Agricultural Ministry (FMARD, 2001)</li> </ul> </li> </ul>
7	29 <sup>th</sup> May 1999 to Date  Return to Democratic Government	National Economic Empowerment and Development Strategy (NEEDS) 2000	To implement integrated rural development program to stem rural-urban migration through provision of help to Agriculture, Industry, small and medium scale	Poverty eradication, employment generation, wealth creation and value orientation	Offer farmers improved irrigation machinery and crop varieties which would help boost agricultural productivity. Private sector	Brought about cordial relationship between Federal Government and State level planning



	Led by President Olusegun Obasanjo		enterprises and oil and gas		involvement with specific role enumerated Ensure state-level participation through establishment of the State Economic Empowerment and Development Strategy (SEEDs)	
		The New Policy Thrust for Agriculture of 2002 Review of 1988 Agriculture Policy in 2001	To Achieve self-sufficiency in basic food supply & food security. Increase production of raw materials for industries Increase production & processing of export crops Generate gainful employment Rational utilisation of agricultural resources and its protection Promote increased application of modern agriculture production technologies Improve the quality of life of rural dwellers	Food production	Introduction and adoption of improved seeds & seed stock Adoption of improved husbandry and appropriate machinery equipment Efficient utilisation of resources Small-scale farmer's role recognition Encouragement of ecological specialisation Reduce risks & uncertainties in Agriculture All-inclusive extension delivery system Promotion of Agro-allied industries	Led to the launch of an economic development reform in Nigeria.
	2002	National Special Programme for Food Security (NSPFS) January 2002	To assist farmers in increasing their output, productivity and income Strengthen research effectiveness	Food production and rural poverty	To be implemented in all the 36 states of Nigeria in line with the project objectives	There were setbacks to success of the program as; <ul style="list-style-type: none"> <li>▪ Inability of beneficiaries to repay their loans on time</li> </ul>

			Support government effort towards promotion of simple technologies for self-sufficiency			<ul style="list-style-type: none"> <li>▪ Difficulty in integrating technology into existing system</li> <li>▪ Insufficient knowledge of credit use</li> <li>▪ Poor extension agent-farmer contact</li> <li>▪ Lack of storage facilities and high cost of farm input</li> </ul>
8	2007 President Umar Shehu Yar'Adua	Vision 2020 launched with a 7-point Agenda areas <ol style="list-style-type: none"> <li>1. Energy and Power</li> <li>2. Food security and Agriculture</li> <li>3. Wealth Creation</li> <li>4. Education</li> <li>5. Land Reforms</li> <li>6. Mass Transit</li> <li>7. Niger Delta Issue</li> </ol>	The food security and Agriculture in the Agenda aims to Create conducive Macro-environment to stimulate private sector investment in Agriculture Rationalise roles of the tiers of Government to promote and support growth stimulating activities Reorganise the institutional framework for government intervention in the sector	Agriculture Production System	Articulate and implement integrated rural development Increase agricultural production through increased budgetary allocation	
	2008	National Food Security Programme (NPFS) for (2010 – 2020) Launched on August 25, 2010	To Ensure sustainable access, availability and affordability of quality food to all Nigerians	Food Production	Federal Government & World Bank established commercial Agriculture Development Programme (CADP)	Under the NPFS various agricultural initiatives were implemented resulting in Significant increase in the quality of assorted fertiliser distribution nation-wide Rehabilitation & expansion of existing irrigation scheme Retention of Zero tariffs on imported agro-chemical policy (CBN, 2008)
9	2010 – 2015	Agricultural Transformation Agenda (ATA)	To re-engage key stakeholders in Nigeria Agricultural sector in order to shift focus towards how	Agribusiness		<ul style="list-style-type: none"> <li>▪ Set-up the Growth Enhancement Scheme (GES) to register smallholder farmers and provide target</li> </ul>

			a self-sustaining agribusiness focused economy can be built			input subsidies (E-wallet) <ul style="list-style-type: none"> <li>▪ Improved access to inputs such as fertiliser and seeds by farmers</li> <li>▪ Revival and partial N15 billion recapitalization of Bank of Agriculture</li> <li>▪ Engagement with commercial Banks to finance GES and boost lending to agriculture from less than 1% to 6% of all credit by 2015</li> <li>▪ Creation of special funds to support farmers e.g N10 billion cassava fund</li> <li>▪ Concession of federal warehouses and storage assets</li> <li>▪ Introduction of higher yielding crop varieties e.g cocoa, rice (Faro 42 and 44)</li> <li>▪ Re-establishment of select commodity market boards e.g cocoa market corporation</li> <li>▪ Reform of the Agricultural Research council of Nigeria (ARCN) (FMARD, 2016)</li> </ul>
10	2016 -2020	<b>The Agricultural Promotion Policy (APP)</b> Launched 21 June 2016	<ul style="list-style-type: none"> <li>▪ Agriculture as a business</li> <li>▪ Agriculture as key to long-term economic growth &amp; security</li> <li>▪ Food as a human right</li> <li>▪ Value chain</li> </ul>	Food security  Import substitution  Job Creation  Economic Diversification	Productivity enhancements  Crowding in private sector investment  FMARD institutional realignment	

			<p>approach</p> <ul style="list-style-type: none"> <li>▪ Prioritise crops</li> <li>▪ Market orientation</li> </ul> <p>orientation</p> <ul style="list-style-type: none"> <li>▪ Factoring climate change &amp; environmental sustainability</li> <li>▪ Participation and inclusiveness</li> <li>▪ Policy integrity</li> <li>▪ Nutrition-sensitive agriculture</li> <li>▪ Agriculture's linkage with other sectors</li> </ul>			
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