



Growing Nigeria: One Farm at a Time

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Abstract:

With millions of square miles of lush arable land and abundant supply of water, Nigeria has the potential to become Africa's leading bread baskets. And has no business in the importation of food produce. However, as economic development occurred due to crude oil discovery, the relative size of agriculture took a nose dive, and Nigeria began to depend on importation for staples food. This paper traces the development of Nigeria's economic policy regarding agriculture and the resulting changes. It discusses the impact of the Agricultural Transformation Agenda on employment creation and economic development. As a result of the active government promotion of the ATA, Nigeria has recorded impressive results – food production expended by additional 21million MT, food import declined by 38% from \$7.4billion in 2009 to \$4.04billion in 2013 and 3 million farm jobs were created. Thus, millions of farmers have now recognized that the status quo has changed, the shackle of fertilizer theft and corruption in the sector has been broken, the future is bright, and there is no reason why agriculture cannot overtake crude oil export, and become Nigeria's new black gold.

Keyword: Agricultural Transformation Agenda, Employment creation, Food security, Nigeria.

JEL Classification: Q01, Q12, Q14, Q18, Q28

1. Introduction

As economic development occurs, the relative size of the agricultural sector usually decreases (Lewis, 1954, 1955). Accordingly, Nigerian Gross Domestic Product (GDP) originating in the agricultural sector shrank from 65.7% in 1959 to 30.9% by 1976. The overall economic decline reversed this trend, and by 1988, 39.1% of GDP was derived from agricultural activity, owing to various economic, social and other environmental policies and interventions by government to restructure and stabilize the economy. Between 1983 and 1988, the contribution of the agricultural sector increased by 3.8% per annual, and the percentage of export value in agriculture grew from 3% in 1983 to 9% in 1988. Food production

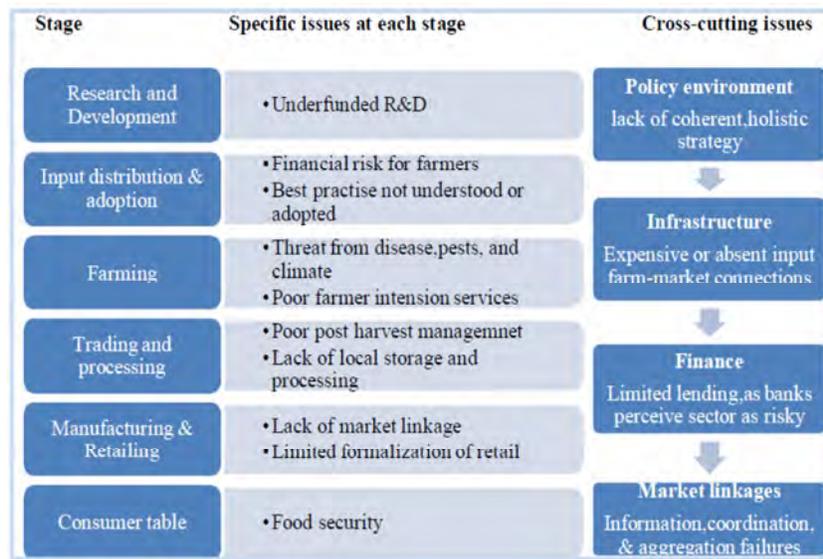
also increased rapidly during the 1980s, especially after exchange-rate reform restricted food imports in 1986 (Country Studies, 2014).

According to statistics from the United Nations Food and Agriculture Organization (FAO), by 1961 the country accounted for 42% of global trade in groundnut oil, 18% of cocoa and hosted 27% of the world's palm oil industry. The country was also self-sufficient in food production before the discovery of oil in 1956 (FMARD, 2014). After the discovery of crude, Nigeria began to lose its dominant position in exports of key crops such as cocoa, groundnuts, ground nut oil and palm oil. In the 1960s, Nigeria had over 60% of global palm oil exports, 30% of global ground nut exports, and 15% of



global cocoa exports. By the 2000s, Nigeria global share of exports of each of these crops was 5% or less (NIRSAL, 2011). Figure 1 present factor other than crude oil and the 40years of corruption in the agricultural sector that accounted for the decline in agriculture output.

Figure 1: Major challenges hindering Nigerian agriculture sector



With Nigeria's total land area of 92.3 million hectares and a cultivable area estimated at 84 million hectares, which is 91% of the total area and forests account for 13% of the land area. Most of the country's land area is fertile and conducive for growing a wide range of crops and raising livestock. With these millions of square miles of lush arable land and abundant supply of water, Nigeria has the potential to become one of Africa's leading bread baskets. According to former President Goodluck Jonathan, "Nigeria can no longer continue to be a sleeping giant. We have to wake up, and if we wake up, we must begin to do things differently". In the spirit of this declaration, his goal was to do things differently, and to root out 40

years of corruption that have eaten into the fabric of the system and deprived millions of Nigerian farmers of an opportunity to make a decent living. With agriculture in decline and explosive population growth, Nigeria became a net importer of food items. It is for this reason that in 2011, former President Jonathan made Nigeria's Agricultural Transformation Agenda (ATA) a centerpiece of his reform program.

This study identifies and outlines the evolution of agricultural policies in Nigeria from 1960 to the 2015, and pay major emphasis on the impact of the Agricultural Transformation Agenda on employment creation and economic development.



2. Nigeria's Agricultural Policies

The agricultural history of Nigeria is entangled with its political history. Agricultural policies after the independent can be segmented into four main phases: the first from 1960 to 1969 immediately after independence with import substitution-based industrialization. The post-independent were characterized by strong public intervention in agriculture, with development plans and guidelines established at the federal level and implemented in the states. The government's priority was to boost domestic food production, particularly of cash crops. In the midst of a number of objectives, it underscored the introduction of more modern agricultural methods through farm settlements, co-operative plantations, supply of improved farm implements (e.g. hydraulic hand presses for oil palm processing) and a greatly expanded agricultural extension service.

The second was from 1970 to 1979 during the period of the oil boom. Some of the specialized development schemes initiated or implemented during this period were Farm Settlement Schemes; and National Accelerated Food Production Program (NAFPP), launched in 1972. A number of agricultural development intervention experiments, notably Operation Feed the Nation, launched in 1976 as a result of the chronic inability of the agricultural sector to satisfy the food needs of the country. It was sought to increase local food production and thereby reduce imports. Due to the failure of various development strategies to achieve the desire goal, the

government took a step further to establish eleven River Basin and Rural Development Authorities (RBRDA) in 1976. The establishment of the Basins charged them to enhance: i.) increase in production of food and other raw materials to meet the country's growing population and expanding industries and to attain self-sufficiency in food production; ii.) And the expansion of employment opportunities at the rural levels with the need to develop underground water for domestic use (FRN, 6th June 1976). However, RBRDA was also beset by problems due to unnecessary political interference and managerial problems resulting from socioeconomic cleavages which have permeated the nation's socio-political, economic and cultural institutions.

The third phase was from 1980 to the late 1990s, with Green Revolution Program, inaugurated in 1980; Better Life Program (BLP) for rural women in 1987 and the World Bank-funded Agricultural Development Projects. In this period it became apparent that the agricultural sector could no longer meet domestic food requirements, supply raw materials for industry and earn enough foreign exchange through exports, owing to various economic, social and other environmental problems. Therefore, the federal government, proposed a program of economic recovery in the 1986 budget, which was revised into a more comprehensive Structural Adjustment Program (SAP) by the second half of 1986 (Onoja & Agumagu, 2009). Among the major objectives of SAP were to restructure and diversify the productive base of the economy in order to reduce dependence on the crude oil sector and on imports, and to lessen the dominance of unproductive investments in the public



sector (Talabi & Onsanya, 2008). In the period of 1980s, the government resorted to short-term stabilization measures that were implemented essentially through administrative controls including import controls, exchange restrictions on the current account, significant increases in import tariffs, and ceilings on central bank foreign exchange disbursements. In addition to this, there were administrative controls which include restricted foreign borrowing by state and local governments, lowering of the ceilings on bank credit, and raised bank lending rates (NSSP, February 2010).

The major policy thrust of SAP was redirection from inward-looking import substitution strategy to outward looking export promotion strategy and the final policy instrument was the exchange rate (Williamson, 1995). SAP by its nature is inflationary because it increases the amount of the domestic currency required in exchange for a unit quantity of local goods and imports (Ogbonna, 2012) and it is based on the fallacy that capital is the primary basis of economic growth, which by extension implies that the mere establishment of banks in an artisan economy automatically transforms it into a monetized and advanced economy (Ogbimi, 2001).

The fourth phase is the launch of NEEDS. In 2001, the federal government launched a new national agriculture policy (National Economic Empowerment and Development Strategy) that was not very different from the one adopted in 1988 but include new strategies among which are creating a more conducive macroeconomic environment to stimulate greater private sector investment in agriculture; rationalizing the roles of the tiers of government and the private

sector in their efforts to stimulate agricultural growth; to increase budgetary allocation and other fiscal incentives that promote the developmental, supportive, and service-oriented activities needed to enhance agricultural productivity and market opportunities; and rectifying import tariff anomalies with respect to agricultural products and promoting the increased use of machinery and inputs through favorable tariff policies. NEEDS II 2008-2011 emphasizing economic development driven by the private sector, and the "7-point Agenda". The framework is to guide economic reform that was adopted in May 2007, which was a medium-term policy documents intended to help the country achieve the Millennium Development Goals for 2015 and its own "Vision 20:2020". Vision 20:2020 aims to make Nigeria one of the top twenty economies in the world by the year 2020. For agriculture, this means increasing current domestic production six folds; but with agriculture already in decline couple with explosive population growth, hence making Nigeria a net importer of food items. It is for this reason that in 2011, former President Jonathan made Nigeria's Agricultural Transformation Agenda a centerpiece of his reform program.

3. Agricultural Transformation Agenda

To assure food and nutritional security, eradicate rural poverty and create social stability, policies and institutions are needed to enhance the ability of individuals, households and production systems to recover from the impact of shocks and stresses on the agriculture sector induced by the changing climate. The federal government determines that



the long-term solution to food insecurity is to raise agricultural productivity and boost food production. Hence, Nigeria embarked on a major transformation of its agriculture sector with the launch of the ATA in 2011 that is anchored in the philosophy of treating agriculture as a business rather than a development program. In order to achieve the ATA, there is a need to take a value chain perspective and a paradigm shift by empowering the private sector to be the engine of growth. The goal of the agenda was to add 20 million metric tons (MT) of food to the domestic food supply and to create 3.5 million jobs by 2015. Drive import substitution by accelerating the production of local food staples, to reduce dependence on food imports and turn Nigeria into a net exporter of food. To this end, the Federal Ministry of Agriculture and Rural Development (FMARD) have introduced several major innovations as part of the on-going fundamental restructuring of the agricultural landscape in Nigeria.

To assure increased agricultural productivity, it is critical that farmers get access to affordable agricultural inputs. Thus, the first ever database of farmers in the country was launched as a basis for the efficient and effective distribution of subsidized seeds and fertilizers through e-wallet – a system that uses mobile phones since 2012 as part of the Growth Enhancement Scheme (GES). The agricultural revolution is also being complemented with a financial revolution. To reduce some of the risks borne by farmers, the focus is currently on developing mechanisms for establishing weather index-based insurance schemes for farmers (FMARD, 2014).

Even though rice is a staple Nigerian diet that grows abundantly in all the six Geopolitical zones of the federation, the demand for polished stone free and odorless product has made Nigeria the world 2nd importer of rice after China (Statista, 2015). The estimated rice demand in Nigeria varies depending on the sources of statistic. A research conducted by (Nzeka, 2014) revealed that Nigeria consumes 6.5 million MT of rice yearly of which 40% are produced locally. Other sources estimated rice demand at 5.7 to 6.1 million MT per year (Index Mundi, 2015). According to Dr. Akinwumi Adesina the former Minister of Agriculture and Rural Development, Nigeria “spent ₦365 billion (\$2.32 billion) every year importing rice” of approximately 2 million MT. If this trend should continue, Nigeria will have to spend \$35 billion importing rice by the year 2050. This is why the former President Jonathan decided that Nigeria must launch a rice transformation agenda to make Nigeria sufficient in rice by the year 2015.

In the recent decade, local producers of rice have seen their product shed window. The absent of a value chain has allowed large foreign mills to take advantage of the situation at the expense of local farmers. To ensure that farmers can access fertilizers and quality high yield seed, the administration had to tackle four decades of corrupt system. To ensure that fertilizer and seed get to the length and breadth of the country, the federal government developed the GES that uses an electronic wallet. GES allow farmers to purchase seeds, fertilizers and other inputs directly from suppliers at a government subsidized rate. Each farmer receives one free 50kg of improve Faro 44 and 52 rice seeds and 3 bags of fertilizers



at a 50% subsidies. Following the devastating flood of 2012, the federal government made the accelerating cultivation of dry season rice a priority. With input from the federal government, thousands of farmers have been given lands to cultivate dry season rice. With an average yield of 4 tone per hectares, an estimated of 264,000 hectares help

produce a record breaking 1.1 million tons of paddy rice just in the dry season of 2013. Nigeria went from a production of 4.57 million MT of rice as at 2011 to 10.7 million MT by August 2014, translating to an increase of 134% in less than 3 years (FMARD, 2014). Figure 2A, B and C shows the output growth trend of rice, maize and soybean.

Figure 2: Production of selected staples food in million metric tons

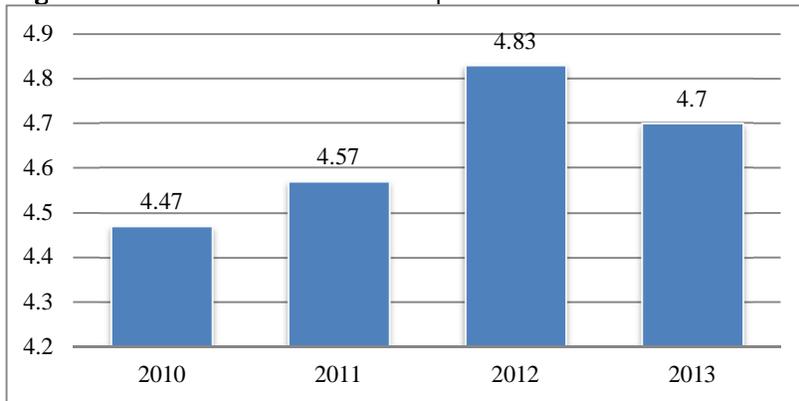


Figure 2A: Rice

Data source: (FAOSTAT, 2015)

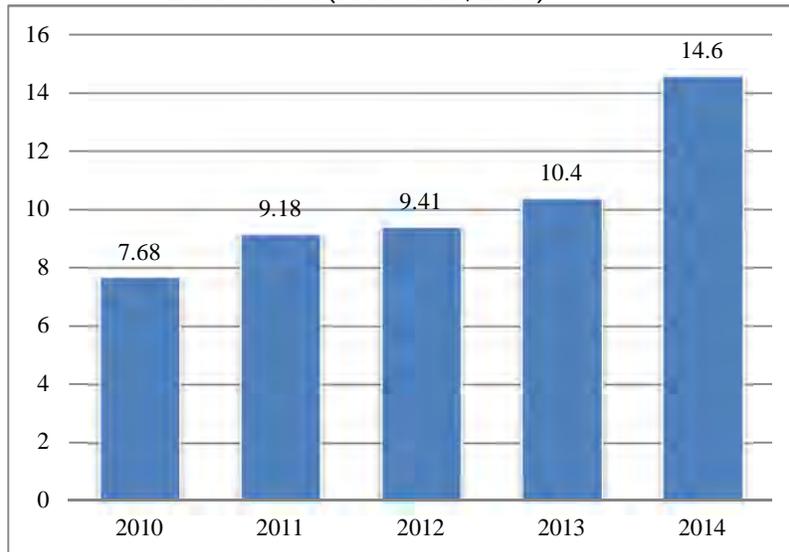
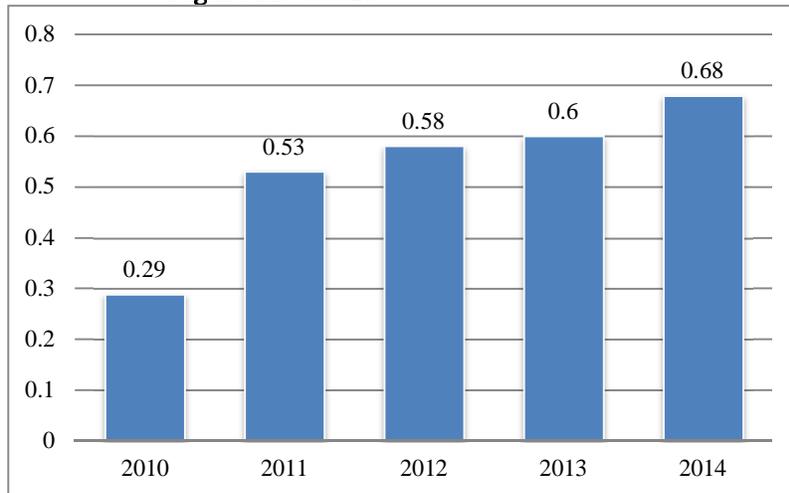




Figure 2B: Maize



Data source: * (FMARD, 2014)** (FAOSTAT, 2015)

The government also develops and distributed 3.5 million of high yield cocoa pod that gives 5 times what farmers were getting and mature in 2.5 years instead of 5 years. This resulted in export amounted to \$900 million in 2012, \$1.2 billion in 2013 and \$1.4 billion in 2014. Ninety percent of energy food in Africa is imported but all Nigeria has to do is not far away. Sani Dangote invested \$50 million to setup the Africa's largest high energy food plant that will process sorghum, maize and soybean into high energy food. In the 1960s, Nigeria use to be the largest export of oil palm before losing the glory to Malaysia and Indonesia. Government is now providing 9 million sprouted seedlings which will

mature in 1.5 – 2 years to farmers. This investment is already yielding result. Okomu oil palm invested \$16 million on new mill expanding cultivation by 12,000 hectares and planned investment up to \$87 million in 5 years on land and processing facilities in Edo state. PZ Wilmar is also investing \$650 million on a 50,000 hectares plantation. In the fish sector, Artisanal fish production rose by 43% from 292,000MT in 2011 to 418,537MT in 2014 and farmed fish from aquaculture production rose by 26% from 221,000MT in 2011 to 278,786MT (Adesina, 2014). Figure 3 reveal Nigeria's most produced commodities in 2010 – 2013.

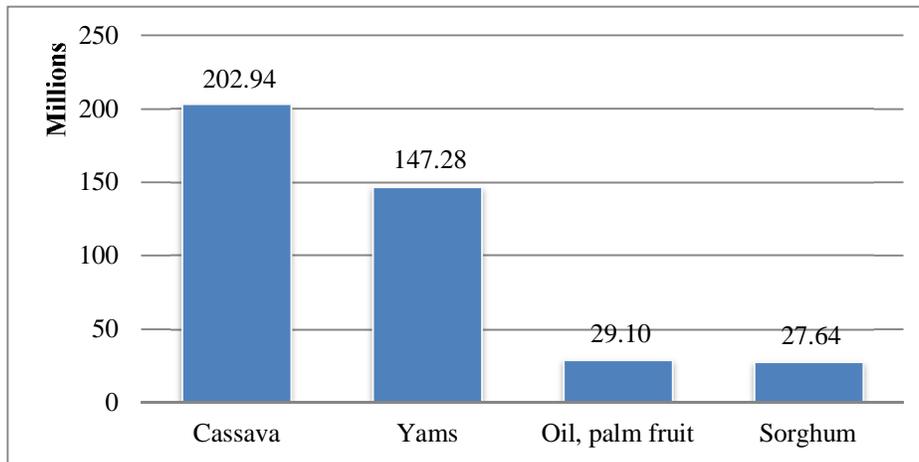


Figure 3: Nigeria's most produced commodities in million metric tons (2010 – 2013)
 Data sources: (FAOSTAT, 2015)

Figure 4 show the impact in term of money that is added to the economy through the ATA as of November 2014. Note that the value was converted from naira to dollar at a yearly average exchange rate of N157.3 according to data available at the Central Bank of Nigeria (CBN).

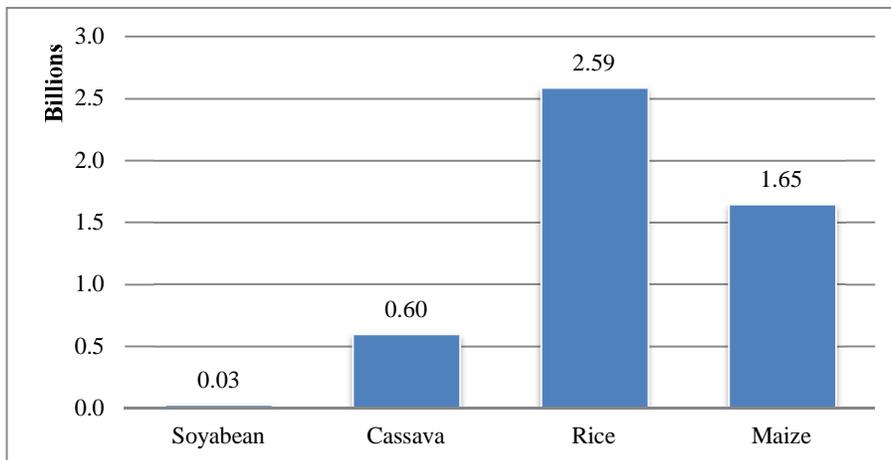


Figure 4: Agricultural Transformation Agenda value added in US Dollar
 Data source: * (FMARD, 2014)** (CBN, 2014)

In order to reduce Nigeria's import bill and create market for local goods, Nigeria must add value to it produce. Therefore, there is nothing like a low value crop. This is why Nigeria has embarked on a

major effort to use cassava flour to substitute for wheat flour in bread and confectionaries. As of January 2015, 35 bakeries have shifted to the use of composite cassava and wheat flour,



including the largest supermarket chain in Africa (Shoprite) and SPAR. By substituting 20% cassava flour, Nigeria saves over \$1billion annually and unlock new economic opportunities for cassava farmer and processors. At the inception of the cassava transformation agenda, FMARD's target was to start with 950,000MT of dry cassava chips export to China by 2015. As of 2013, the ministry has secured an export contract of 3.2 million MT export. In term of revenue with this contract; Nigerian farmers are expected to get \$802 million as they meet that demand (Adesina, 2014).

This opportunity of input substitution did not stop there; Nestle is now using millet to produce top-end breakfast cereals while breweries are using sorghum to replace malt. For those that like drinking beer, cassava beer has been made popular by SAB Miller in Ghana and Mozambique. Therefore, we must unlock new sources of financing for agriculture.

4. Investment: Tackling the Challenge Head-On

With rapid economic growth through the ATA, a pool of fund in the private sector is expending and public sector pension funds, sovereign wealth fund, equity and bonds market, all offers great opportunities to deploy finances for the development of agriculture. Thus, Nigeria must invest in things of agricultural development to achieve the goal of been a global powerhouse of agriculture. In the light of that, it is necessary for government to enable the private sector to drive mechanization of agriculture. In August 2014, FMARD launched the National Agricultural Equipment Hiring Enterprise (AEHE)

program by the private sector; while the federal government provided additional \$340 million through the CBN to support the mechanization program for farmers to key into modern day mechanized farming. The government put in place 1,200 AEHE all across the country. This is translated into 6,000 units of tractors and implement, 15,000 units of power tippers, 20,000 planting and post-harvest equipment among others, in order to mechanize 4 million hectares of land, add additional 20 million MT of food supply and create 200,000 of direct and indirect jobs. As of March 2015, there are 33 silos storage network across the country with a total capacity of 1.3 million MT. In term of warehouses, the government started with 9 warehouses with Blumberg grains' investment of \$250 million to make Nigeria the hub for the manufacturing of warehouses in west and central Africa.

It has become a must for Nigeria to leverage these sources of finance from private sector to provide long term financing for agriculture. To do this, there must be a de-risking of the financial value chain. In that end, the federal government designed the risk sharing facility for the CBN to leverage \$3.5 billion of lending from the balance sheet of banks for the agriculture value chain. Figure 5 revealed banks' lending under the GES scheme in dollars from the year 2012 to 2014 with 0% default rate. Through the FMARD facility with the CBN called NIRSAL (Nigeria Incentive Based Risk Sharing for Agricultural Lending) which allows banks to reduce their risk; seed companies got bank lending of \$10 million in 2012 and \$53 million in 2013. Fertilizer and Agro dealers in rural area got \$100 million in 2012 and \$500 million in 2014.

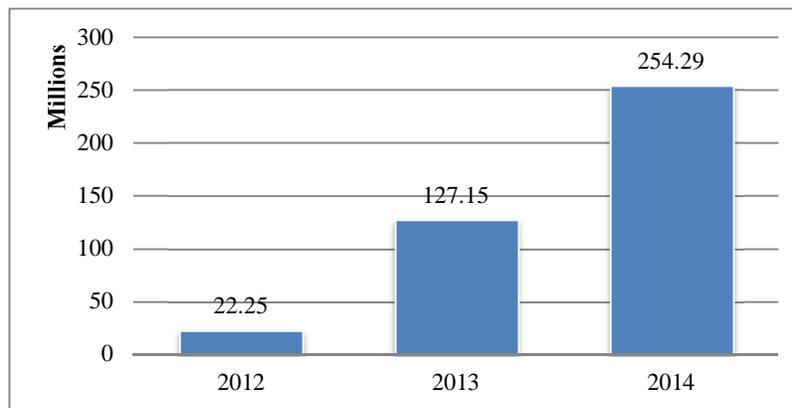


Figure 5: GES Bank Lending in Dollar
Data source: *FMARD 2014**CBN 2014

In order to reduce youth unemployment in the country, former President Jonathan explained the need to raise a new cadre of young farmers and agribusiness leaders called Nagropreneurs. According to him, "There is the need to change the mind-set of our young graduates". Thus, to create decent rural employment for young women and men between the ages of 18-35 years along area-based priority value chains. Dr. Adesina stated that the need to develop future millionaires in the agricultural sector has necessitated the Youth Employment in Agricultural Program (YEAP) which will create about 750,000 young commercial farmers in 5 years. The program will tackle key constraints to youth participation including land access, skills, finance, mechanization and business development with an estimated cost of ₦37 billion (\$238.2 million) over the 5 years period (FMARD, 2014).

The Federal government also launched a facility called Fund for Financing Agriculture in Nigeria (FAFIN). A \$100 million fund capitalized initially by the

public sector with \$33 million, and KfW the largest development bank in the world later scaled it up with an investment of €30 million and another \$10 million from the Nigerian Sovereign Wealth Investment Fund. FAFIN is the first-ever private equity fund for agriculture in the history of Nigeria. It is an innovative agriculture focused investment fund that aims to transform the landscape of private sector agricultural finance in Nigeria. FAFIN seek to provide commercial returns for investors, while catalyzing agriculture led inclusive economic growth in Nigeria, by increasing the amount of commercial capital available for agricultural enterprises (SAHEL Capital, 2013).

Dominion Rice and Integrated Farms Limited, an Oklahoma based farming company that produces rice in Kenya, invested \$40 million to start a rice farm in Nigeria that would be Africa's biggest with production at 300,000MT a year. This will reduce Nigeria's rice imports by 15% and cut rice costs by ₦54 billion (\$342 million) a year. Olam International Limited, a leading agri-business



operating across the value chain in 65 countries, invested \$125 million in a commercial rice farm in Nasarawa State on 6,000 hectare of Greenfield irrigated and mechanized paddy rice farm, and a processing facility for milling 210,000MT of rice per annum, making it the current largest in Africa (Norbrook, 2014).Olam in Nigeria employs over 2,500 direct employees, 6,000 contract workers and sources from over 500,000 Nigerian rice, cocoa, cashew, sesame and cotton farmers (Olam International, 2014). Commodity trader Cargill, the world's 2nd largest food producer invested \$100 million on 30,000 hectares and a 15,000 hectares cassava-processing project in Kogi State.

The indigenous investors are not left behind, according to Dr. Adesina, Dangote Group has invested \$2.3 billion into agricultural produce, and another \$1billion into commercial rice production and milling. The Group has acquired approximately 150,000 hectares of farmland in five states – Edo, Jigawa, Kebbi, Kwara and Niger, which will be used for the commercial production of rice paddy. With this investment, the company plan to set-up two rice mills with an installed capacity of 240,000 metric tons of rice per day. According to Aliko Dangote “With this installed capacity, the project will become the largest integrated rice mill in Africa”, and it is expected to create at least 8,000 new jobs. Meanwhile, another \$30 million is also invested in a tomato paste factory in Kano State. And another tycoon, Tony Elumelu, has diversified into agriculture with a juice-processing plant in Makurdi through the Transcorp subsidiary Teragro (Norbrook, 2014).

5. Conclusion

The federal government's plan is to use agriculture to accelerate economic growth. The plan is to grow food, create jobs, and create wealth. No doubt, agriculture has shown to be a viable source of employment, and central to Nigeria's economy, accounted for 51% of job creation between 2001- 2007. It also account for 42% of GDP and providing 60% of employment as of the year 2010 (CBN, 2012). The current agricultural revolution is also attracting major international and local investors and partners. Since the launch of ATA in 2011, Nigeria has recorded impressive results – food production expended by additional 21million MT, food import declined by 38% from ₦1.1trillion (\$7.4billion) in 2009 to ₦635billion (\$4.04billion) in 2013 and 3million farm jobs were created (FMARD, 2014). The implementation of the ATA across the food value chain which include rice, maize, sorghum, wheat, soya beans and cassava from 2011 - 2014 has generated ₦777 billion (\$4.94 million) to the Nigerian economy.

In order to foster sustainable economic growth, government needs not to relent in its effort to transform the agriculture sector further but take advantage of the support from the private sector. Couple with the de-risking of agriculture finance value chain, there should be a building up of long-term capacity and institutionalizing incentives for agriculture lending. There is a need to police the borders effectively in preventing saboteurs from smuggling foreign produce into the country, and strongly promote made in Nigeria goods while emphasizing quality in local project. The judicial sector need to be strengthen so that corrupt political elites working hand-in-hand with greedy



business people and unscrupulous investors that are putting private gain before the welfare of citizens and the economic development of the country are decisively dealt with. It is also crucial to create market access for finished goods by improving public infrastructures, such as irrigation, storage facilities and the repair and extension of roads and train tracks linking rural to the urban areas, along with co-operatives and efficiently sourced inputs.

As Nigeria continue in its ATA, millions of farmers will recognize that the status quo has changed, the shackle of fertilizer theft has been broken, the future is bright, and there is no reason why agriculture cannot overtake crude oil export, and become Nigeria's new black gold.

Notes:

AEHE – Agricultural Equipment Hiring Enterprise

ATA – Agricultural Transformation Agenda

CBN – Central Bank of Nigeria

FAFIN – Fund for Financing Agriculture in Nigeria

FMARD – Federal Ministry of Agriculture and Rural Development

FAO – Food and Agriculture Organization

GDP – Gross Domestic Product

GES – Growth Enhancement Scheme

MT – Metric Tons

NEEDS – National Economic Empowerment and Development Strategy

NIRSAL – Nigeria Incentive Based Risk Sharing for Agricultural Lending

YEAP – Youth Employment in Agricultural Program

RBRDA – River Basin and Rural Development Authorities

SAP – Structural Adjustment Program

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