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Evaluating Food Crop Sector Performance in Nigeria (1999-2016)



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Abstract

This study evaluates the performance of food crop sector in Nigeria from 1999-2016. The statistics show that Nigerian is having food insecurity problem: - very low value of food production per capita; low and declining average dietary energy supply adequacy; very high variability in per capita food production and supply, and a high depth of food deficit that has been on the increase since 2006. The result also shows that agriculture's contribution to Nigerian GDP has consistently declined from 37.5 percent in 2002 to 21.2 percent in 2016, and that food crop production declined from over 34 percent of the GDP in 2002 to 18.6 percent in 2016. Due to this high depth of food deficit, over 14 million people in the country are undernourished, and this has been increasing geometrically since 2005. Also, more than six million of her under-five children are stunted, and the consumer price of foods has been high and rising. Compared to other countries, there has not been any significant improvement in reducing the depth of food deficit in the Nigeria.

Key Words: Agriculture, Food Security, Strength Weakness, Opportunities, Threats.

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1. Introduction

Availability and affordability of food should be one of the key objectives of any economy as survival of human beings, who in turn pilots every other aspect of the economy even in the face of increasing automation, depends on food availability. In fact, the continued well-being of human society significantly depends on availability and affordability of food for their consumption. Despondently, most developing countries have abundant and fertile arable land as well as a conducive environment for the production of foods, yet they rank lowest in food availability and affordability for their teeming population. Estimate from the Food and Agricultural Organisation (FAO) show that between 2014 and 2016, 780 million people, amounting to 98.1 percent of the hungry people in the World live in the developing countries that account for a substantial proportion of uncultivated arable land in the World. In fact, Africa alone has around 60 million hectares of uncultivated arable land, constituting about 60 percent of the global total (McKinsey Global Institute, 2010). Notwithstanding, the FAO (2015) estimates show that 233 million people in sub-Saharan Africa, constituting about 29.3 percent of the World's total were undernourished as of 2016.

In line with the above, Nigeria has around 80 million hectares of land suitable for agriculture (Finintell, 2013; Agba, 2012; Yakubu & Akanegbu, 2015). Still, the World Food Programme (2016) reports that Nigeria houses about 40 percent of the undernourished people in West Africa, has one-third of her children under five stunted, and alarming rates of both child and adult obesity. Also, 48.5 percent of her women of reproductive age being anaemic, and the largest rice importing country in Africa. The FAO reports that Nigeria is both Africa's leading consumer and importer of rice and as well, one of the largest rice importer in the world. For instance, in 2008, Nigeria produced about 2 million metric tons of milled rice and imported about 3 million metric tons, showing that the production is far from meeting the demand.

The poor state of food availability in Nigeria vis-a-vis its vast and geometrically growing population estimated at over 193 million people in 2016 (CBN, 2016), and projected to be the third most populated country in the world by 2050 calls for attention. In reaction, the past governments made agriculture the focal point in their manifestoes and consequently their policy framework. Some of these policies/programs include:

- the National Accelerated Food Production Programme (NAFPP) of 1972-1973,
- Operation Feed the Nation (OFN) of 1976-1979,
- Green Revolution Programme (GRP) of 1979-1983,
- the Structural Adjustment Program (SAP) of 1983, ○
- Go Back to Land Programme of 1983-1985,
- The restoration of the elements of NAFPP after the military coup in 1985,
- National Agricultural Policy (NAP),
- Rural Sector Strategy (RSS),

- The National Economic Empowerment and Development Strategy (NEEDS) of 2004, which disintegrated into SEEDS and LEEDS for the state and LGAs respectively,
- National Food Security Programme (NFSP) issued in August 2008, ○
- The Presidential Initiatives in 1999 for seven agricultural products, ○
- Vision 20-2020,
- the transformation agenda,
- The FADAMA programs,
- Operation Feed the Nation, and
- 2016-2025 Agricultural Sector Food Security and Nutrition Strategy.

Despite these series of policies and programs, and the employment of over 60 percent of the labour force in the agriculture sector in the country (IFAD, 2014), Nigeria was unable to meet the just elapsed Millennium Development Goal (MDG), which targeted 50 percent reduction of hunger in the country. The proportion of underweight under-five children only declined from 35.7 percent in 1990 to 25.5 percent in 2014, which is short of the MDG target of 17.85 percent by 7.6 percent (Nigeria Millennium Development Goal End Point Report, 2015). Data from the 2016 Central bank of Nigeria (CBN) Statistical Bulletin show that agriculture's contribution to Nigerian Gross Domestic Product (GDP) consistently declined from 37.5 percent of the GDP in 2002 to 21.2 percent in 2016. Similarly, food crop production declined from over 34 percent of the GDP in 2002 to 18.6 percent in 2016. The fact that overall agricultural contribution to GDP remains low while the agricultural product imports are on the high side suggest that Nigeria is yet to produce enough agricultural products for its large population.

Reports often blame these on the increasing lack of interest in agricultural sector since the discovery of crude oil in the 1970s. Before then, the agricultural sector employed over 70 percent of the labour force, produced more than enough food for the population, thereby guaranteeing food security to the average household. Then, export of cash crops earned between 65 and 70 percent of Nigeria's total foreign exchange and contributed over 60 percent of GDP. The dominant position of the agricultural sector within the period in the Nigerian economy was very apparent. However, since the discovery of oil in the 1970s, the contribution of agriculture to both GDP, government revenue and foreign exchange earnings have been declining grossly, while that of the oil sector has been increasing. Of late, the contribution of the oil sector to national revenue has remained above 70 percent and only dropped to 55 percent and 47.4 percent in 2015 and 2016 respectively due to the decline in the international oil price (Central Bank of Nigeria Statistical Bulletin, 2016).

The Sustainable Development Goals (SDG) targets zero hunger in the world and by implication, Nigeria in 2030. However, since Nigeria could not even meet the MDG target of reducing hunger by half, it is clear that if nothing is done, meeting the current SDG goal is an impossibility. There is, therefore, a clear need for series of efforts at the various level of the food production chain in other to make this impossibility possible. These would require precise knowledge of where the economy is, where we are going and the gap therein, by evaluating the performance of the various sections of the Agricultural sector and finding ways to improve them. To this effect, this study

analyses the performance of food crop sector in Nigeria to appreciate their status and find out their strength, weakness, the opportunities, and the threats therein.

2. History of Agricultural Performance in Nigeria.

Food crop production in Nigeria dates back to the dark ages when life was characterised by subsistence farming and hunting for survival. Then, farmers were mainly producing for their household consumption using the manual farming techniques. The colonial period, however, improved the agricultural system in the country by introducing mechanisation of food production, hybrid seedlings, the use of fertilisers, and research to improve food production. The Department of Botanical Research was the pioneer research institute, established in 1893 with its headquarters at Olokomeji (former Western Nigeria), followed by the creation of the Moor Plantation in Ibadan in 1905. The Moor Plantation later became the headquarters of the Department of Agriculture of Southern Nigeria in 1910, while the Department of Agriculture was established in the North in

1912. By 1921, a unified Department of Agriculture was formed in Nigeria, after the amalgamation of the North and the South (Kanu, 2013). The colonial era was characterised by the creation of irrigation schemes, agricultural skill centres, plantations, as well as an association of farmers that saw the production of cash crops that were geared for exports.

After colonisation, farming was more organised and specialised across regions as the North was known for the production of groundnuts and cotton, the West produced cocoa, the Mid-West produced rubber, palm oil, palm kernel, and timber, and the East produced palm oil and timber. Nigeria was, therefore, a major exporter of these products that earned her foreign currency that was used in building schools, hospitals and managing the economy at large. In fact, in the 1970s Nigeria recorded over 50 percent of the country's total export earnings from the agricultural sector, which also accounted for about 50 percent of the GDP and employed about 72 percent of the labour force (CBN, 2000).

Then what many people refer to as the 'resource curse' or 'cursed blessing' hit Nigeria in the 1970s when the instability in the Persian Gulf metamorphosed into an increase in Nigeria's export quota of crude oil. The increased quoter coupled with the four-fold rise in the per barrel price of crude oil increased the export earnings of the country significantly (Fasanya, Onakoya & Adabanija, 2013). The significant increase in export earning was the beginning of a boom period for Nigeria as the oil sector contributed about 80 percent of the government revenue and accounted for over 90 percent of the country's annual export earnings for about three decades (CBN, 2000).

This discovery attracted investors to the oil sector, relegating the once buoyant agricultural sector. In fact, the proportion of crop production to GDP dropped from about 52 percent in 1961 to about 15.1 percent in 1974 and 11.96 percent in 1979 before it slowly recovered to 17 percent in 2000 and then 20.7 percent in 2015. The current statistics suggest that to record 52 percent proportion of crop production to GDP today will be 'a long shot', especially as long as the crude oil keeps generating income for the economy. The 2015-2017 economic crises that hit the Nigerian economy

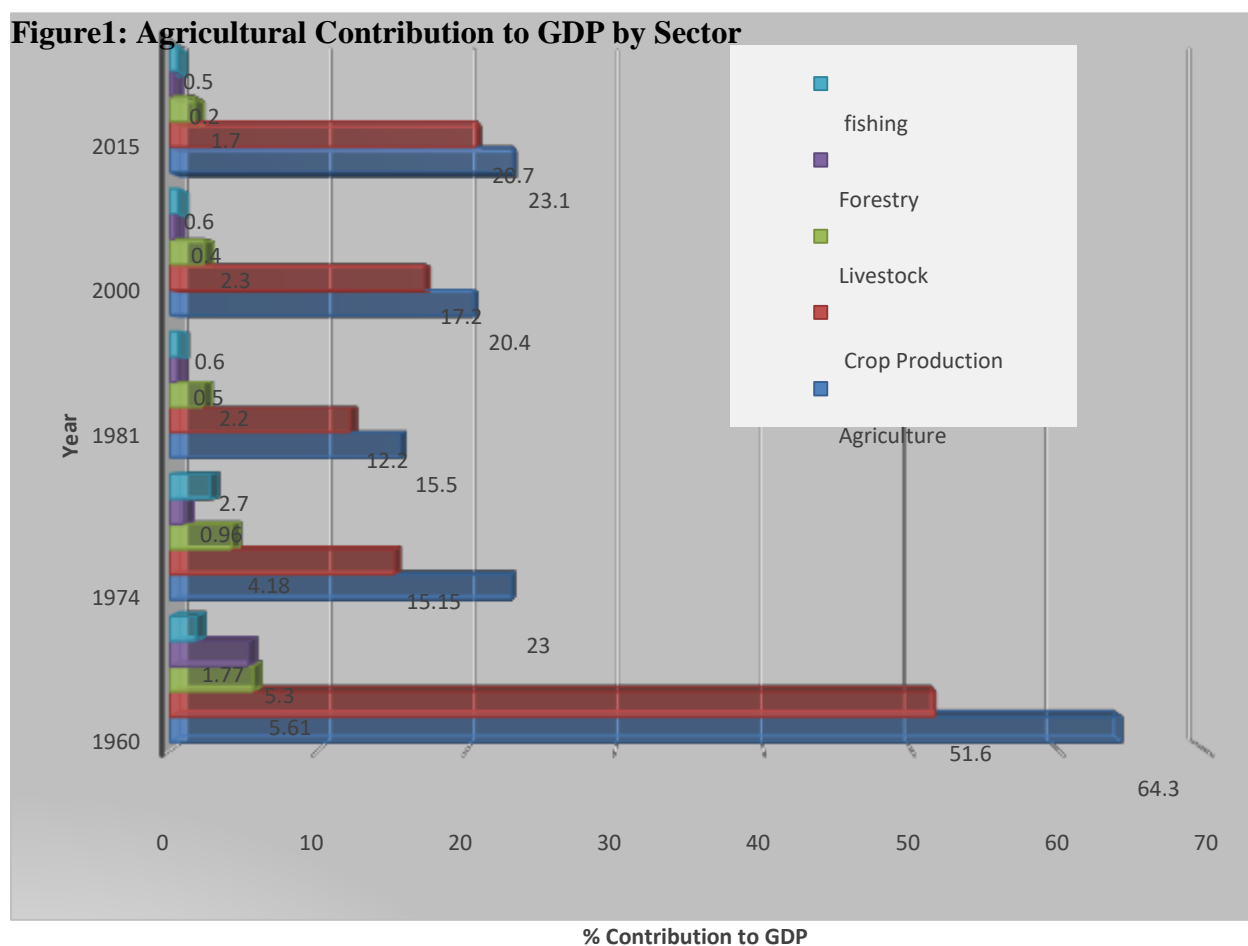
again highlighted the need to diversify the economy especially by diversifying foreign earnings as was done in the post-colonial era.

3. Food Crop Sector Contribution to GDP

The performance of agriculture in general and crop production in particular, as a contributor to GDP, remains a shadow of its 1960 glory. Figure 1 below shows that the agricultural sector contributed about 64.3 percent of the GDP in 1960, but later dropped significantly to 23 percent and 15.5 percent in 1974 and 1981 respectively. However, it increased by five percentage points to

20.4 percent in 2000 and then to 23.1 percent in 2015. The huge difference between the 1960s and post crude oil discovery (1970s) is obvious. It is worth noting, however, that, of all the subsectors under agriculture, crop production contributed the most to GDP. In fact, it accounted for 80.2 percent of the agricultural sector’s 64.3 percent contribution to GDP in 1960, 65.19 percent in 1974, 78.7 in 1981, 84.3 percent in 2000, and 89.6 percent in 2015. These buttress the fact that crop production is a vital component of agriculture and its contribution to GDP in Nigeria.

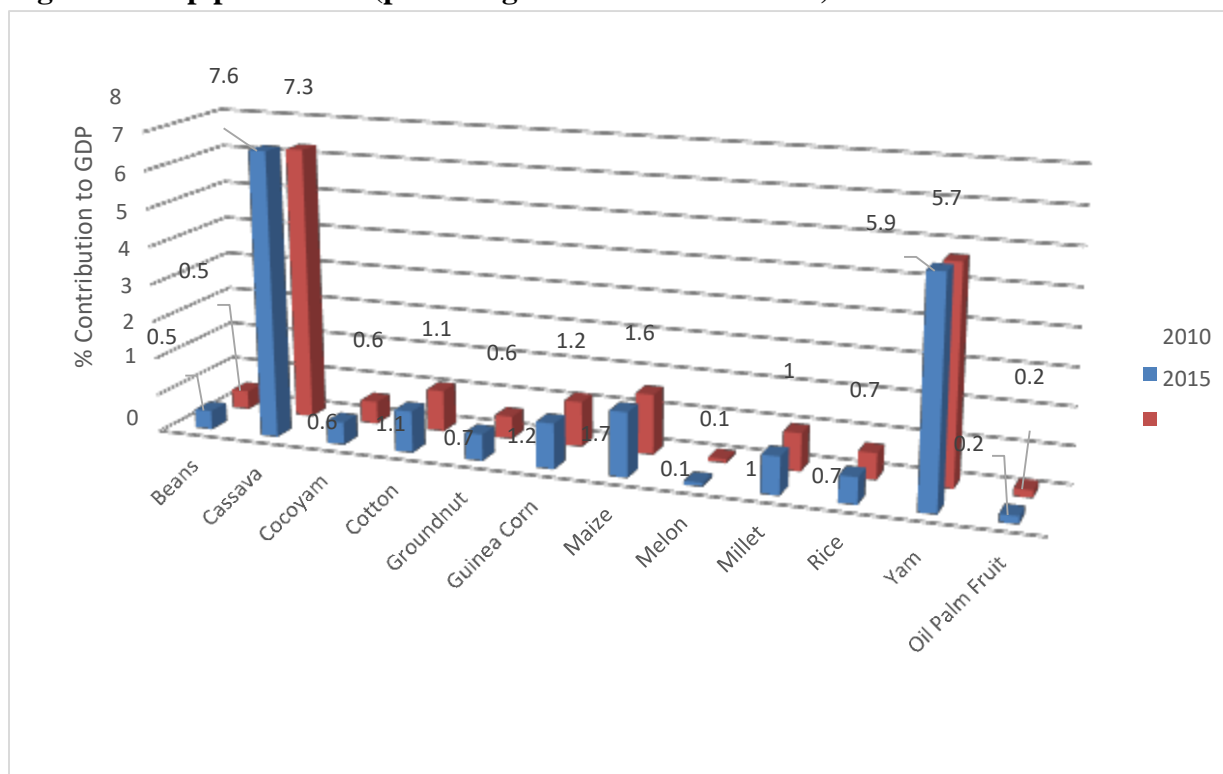
Figure1: Agricultural Contribution to GDP by Sector



To gain more insight into the crop sector performance over the years, Figure 2 below contains the contribution of individual crop production to Nigerian’s GDP in 2010 and 2015. It shows that in

both 2010 and 2015, cassava and yam contributed most to GDP relative to other crops. Individually, cassava contributed 7.6 and 7.3 percent to the GDP in 2010 and 2015 respectively, while yam contributed 5.9 and 5.7 percent to the GDP in 2010 and 2015 respectively. Outside these two crops, the contribution of the rest of the food crops to GDP remains below 2 percent in both 2010 and 2015. Worthy of note is that none of the crops had its contribution to GDP increased between 2010 and 2015. Instead, most of them had a decline in their contribution to GDP within the period.

Figure2: Crop production (percentage contribution to GDP)



Own Computation with data from the FAO Statistics

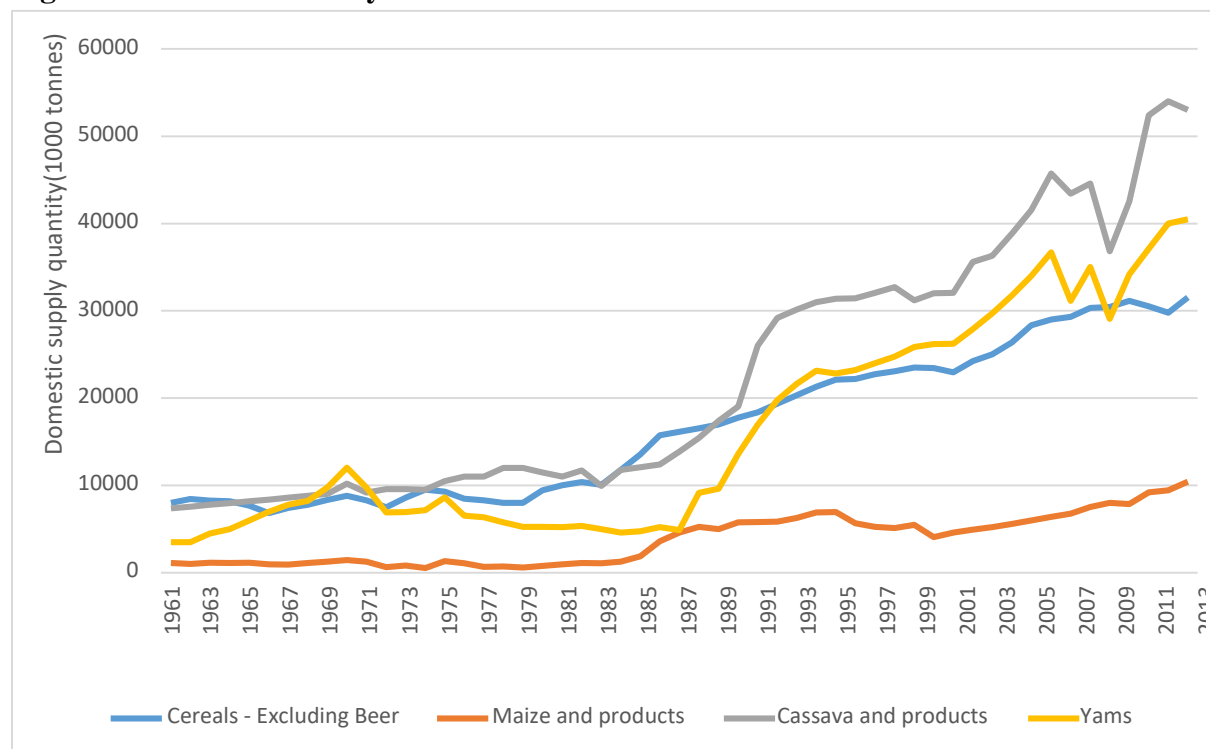
4. Food Security in Nigeria

According to FAO (1996), food security exists in a place when all the inhabitants, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life at all times. Also, they have identified several indicators for food security across countries/regions. Some of these include food availability, per capita food production, and supply, percentage of under-five who are underweight, percentage of under-five who are stunted, domestic food price volatility, political stability, and absence of violence as well as domestic food price index.

Available statistics show that based on these indicators, Nigerian is having food insecurity problem. Figure 3 below contains the gross domestic food supply in the country from 1961 to

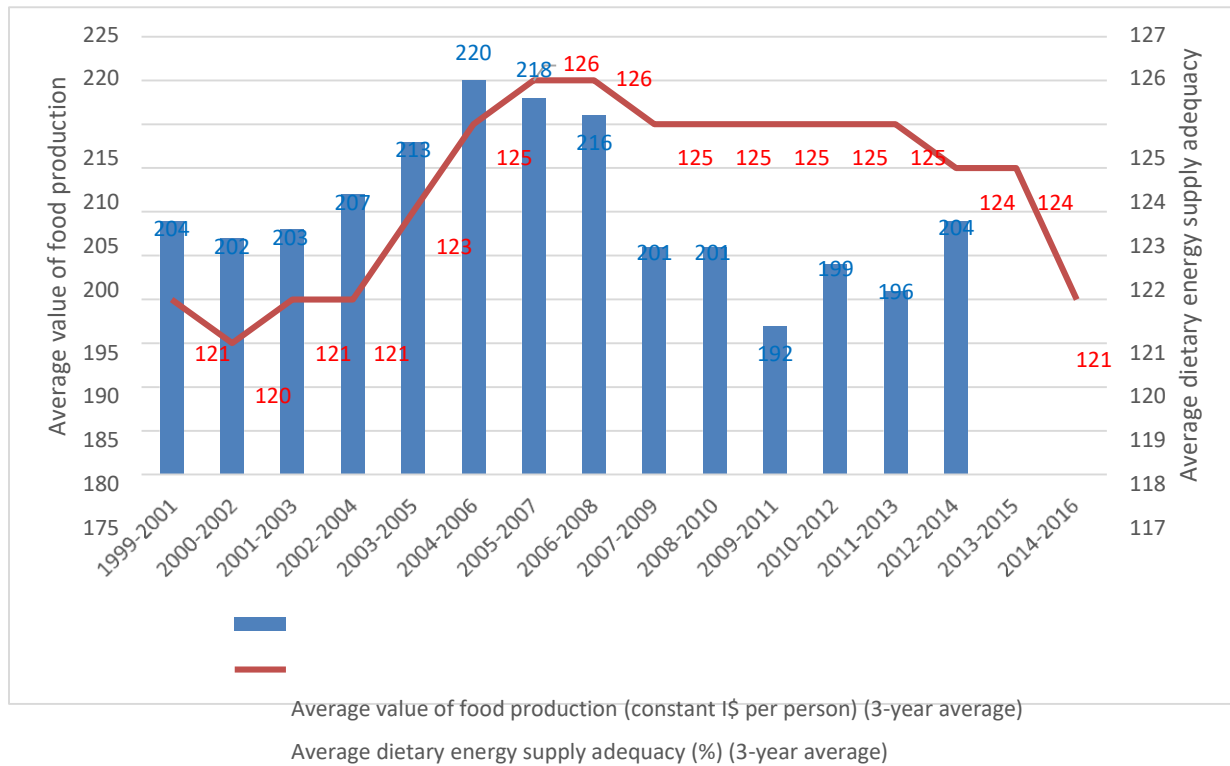
2013. It shows that there has been an increase in the quantity of the domestic supply of the different types of food, with cassava and products taking the lead since 1962 and maize and products being the least.

Figure 3: Food Availability



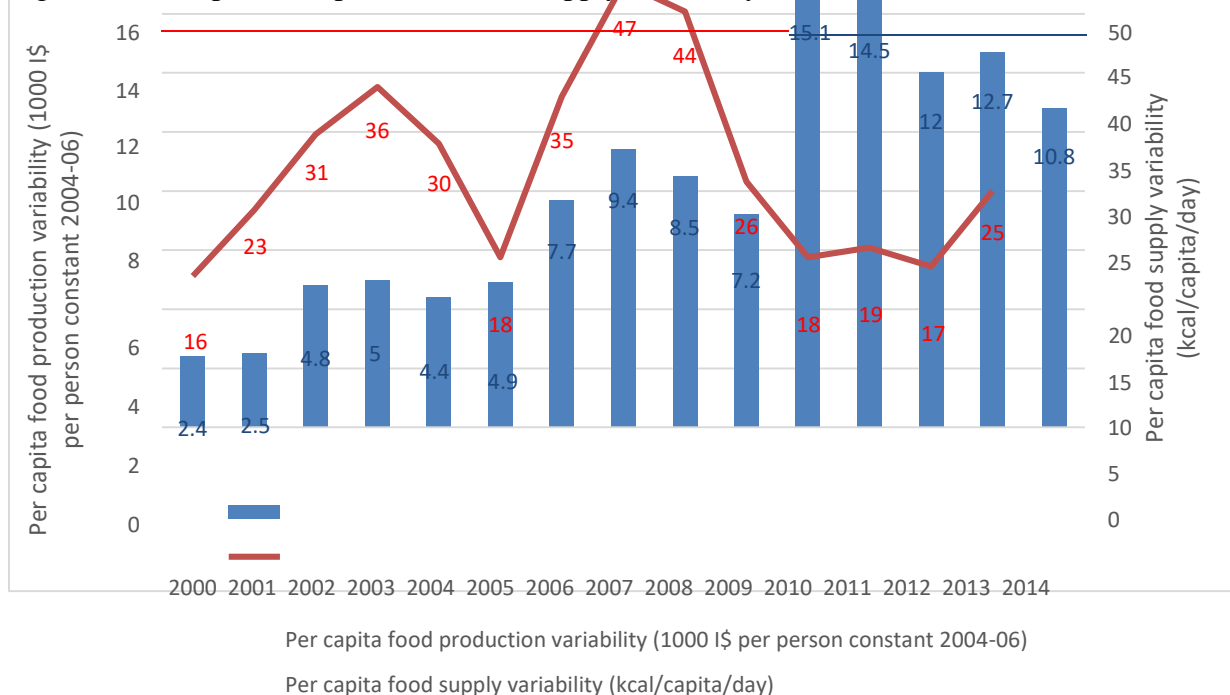
Though the above information indicated that there had been a consistent increase in the domestic supply of various types of food crops, it may not capture the real situation, as they have not been compared to the increase in the number of people that will consume the food. To avoid this problem, Figures 4, 5, and six below contain the per capita information on food production and supply. Figure 4 shows a three-year average of the value of food production per capita in the country. Between 1999 and 2001, the value stood at US\$204 per capita. This value decreased slightly to 202 between 200 and 2002 before increasing to its highest value of US\$220 per capita within 2004 -2006. From 2006, the value decreased again to US\$192 per capita, which is the lowest value since 1999 and gradually increased back to US\$204 per capita within 2012-2014. What this indicates is that the per capita value of food production in Nigeria is currently at its 1999 value. The right column of the same figure 4 contains the average dietary energy supply adequacy. It follows the same trend as the food production, increased to its highest value within 2006 and 2008, and has been declining since then. As of 2016, it had declined back to its 2000 value, an indication that there has been no significant and sustained improvement in both the value of food production per capita and the dietary energy supply in the country since 1999 despite the exponential increase in the population.

Figure 4: Average food production and dietary supply



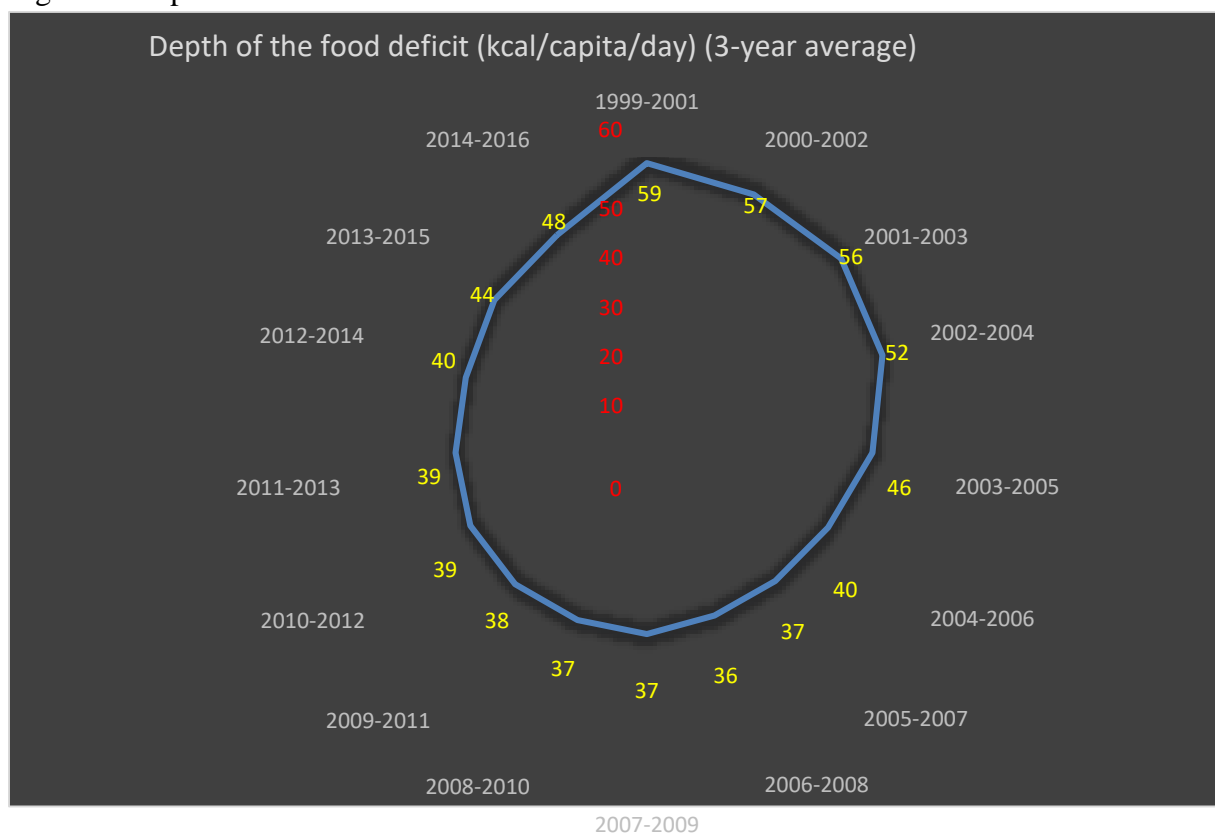
More so, Figure 5 below shows the rate of variability in per capita food production and supply in the country from the year 2000 to 2014. It reveals a very high level of variability and thus unpredictability in both per capita food production and supply in the country.

Figure 5: Per capita food production and supply variability



Given the information in Figures 4 and 5, one suspects a high level of food deficits in the country. Figure 6 below plots a three-year average of food deficit in kcal per capita per day in the country from 1999 to 2016. It shows that food deficit was at its peak between 1999 and 2001. Then, the country was having an average food deficit of 59kcal/capita/day. It decreased gradually from this high value to its lowest value of 36kcal/capita/day between 2006 and 2008, before increasing gradually again to its 2016 value of 48kcal/capita/day.

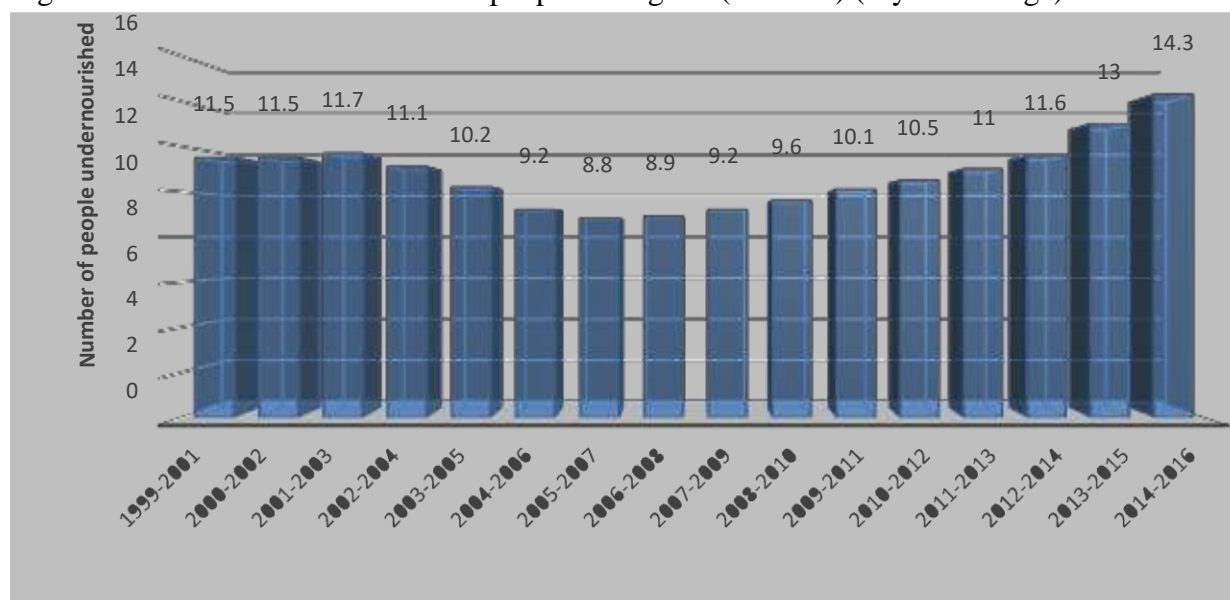
Figure 6: Depth of food deficit



With the high level of food deficit in the country as shown in Figure 6 above, so many are bound to be undernourished. Figure 7 below shows a three-year average of the number of undernourished people (in millions) in the country. In line with the food deficit, the number was high between 1999 and 2001 when around 11.5 million Nigerians were undernourished, but decreased to its lowest value of 8.8 million between 2005 and 2007 and increased geometrically again to its all-time high average value of 14.3 million between 2014 and 2016.

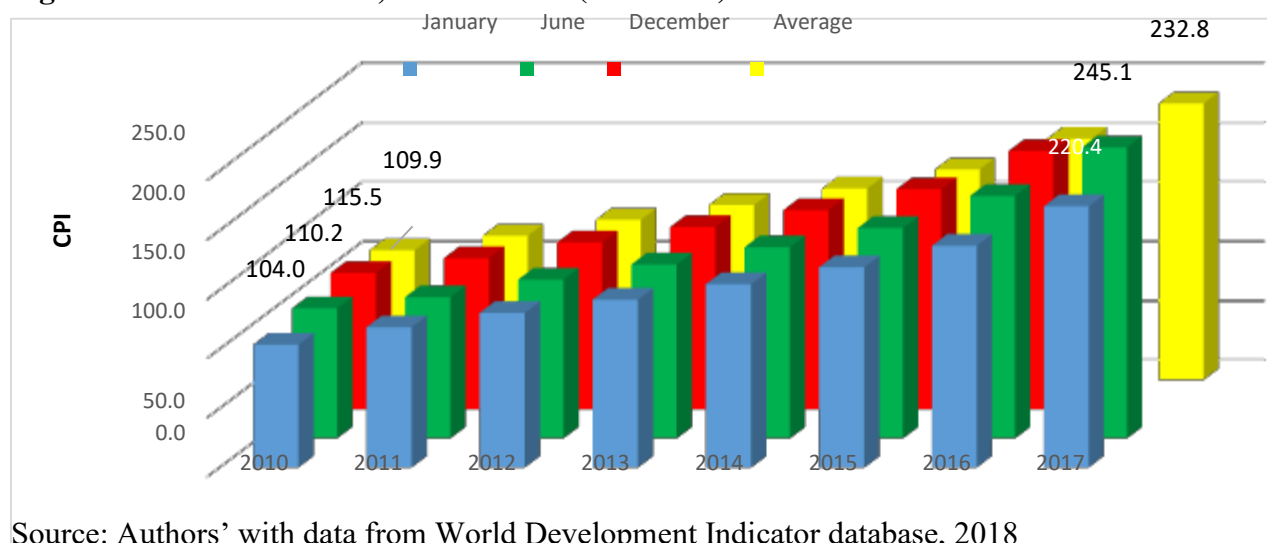
According to United Nations Children's Fund (UNICEF), over six million out of the 22.2 million under-five children in Nigeria are stunted due to malnutrition, while about 60 out of every 100 face the risk of poor development as a result of lack of early childhood development support.

Figure 7: Number of undernourished people in Nigeria (millions) (3-year average)



Another indicator of food security as indicated by the Food and Agricultural Organisation is the consumer price of foods. The prices of food show its affordability to the average citizen in the country. The high the price, the less affordable are foodstuffs and vice-versa. The value contained in Figure 8 below shows that there has been a consistent increase in the value of consumer price indices for food in Nigeria from 2010 to 2017, and an upward trend from January to December each year. The average food price indices in the country increased from 109.9 in 2010 to 232.8 in 2017, more than a double fold increase within a space of seven years. The above-consisted increase in the food price indices in the country is a confirmation that food production and supply in the country has not been keeping pace with food demand in the country.

Figure 8: Consumer Prices, Food Indices (2010=100)

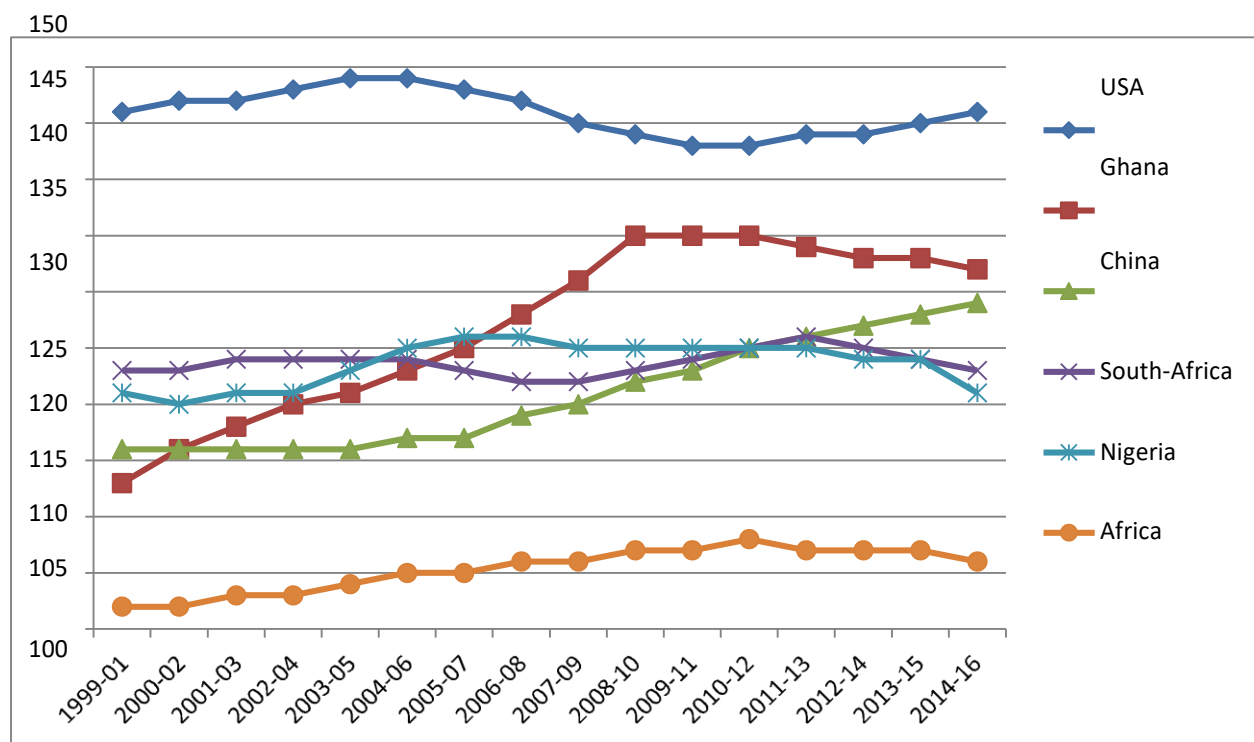


Source: Authors' with data from World Development Indicator database, 2018

5. Regional/Country Comparisons on Food Security Indicators

The study further compares some Nigeria's food security indicators with that of other countries and regions. As shown in Figure 9 below, Nigeria's average dietary energy supply adequacy has been all-time higher than the average of the African countries, but far below that of the USA.

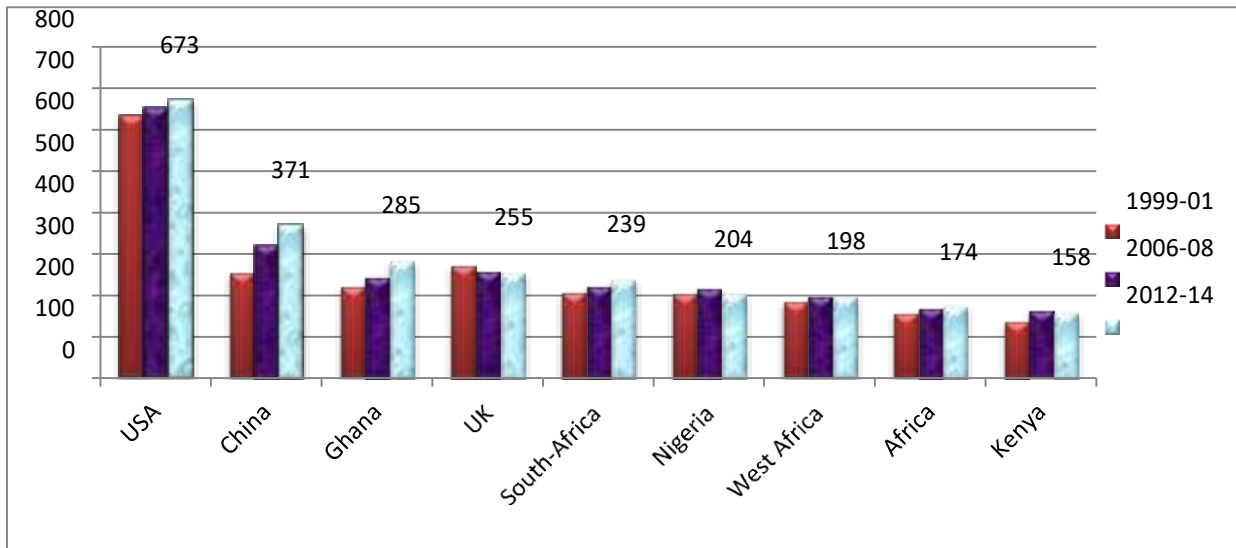
Figure 9: Average dietary energy supply adequacy (Percent) (3-year average)



More so, the performance of the Nigerian average dietary energy supply adequacy over time has not been impressive. As at 1999-2001 period, the Nigerian average dietary energy supply adequacy was higher than that of China and Ghana, but while the other two countries had a consistent increase in their value, Nigeria's own has been declining since 2005, making it be far below that of Ghana and China as at 2014-2016 period.

The average value of food production is another food security indicator used for the comparison. The statistics as contained in Figure 10 below show that the average value of food production measured in constant price is US\$204 per person between 199 and 2014. While this is higher than the average of the African countries, which is US\$198 per person, it is far below that of South Africa, United Kingdom, Ghana, China and the USA

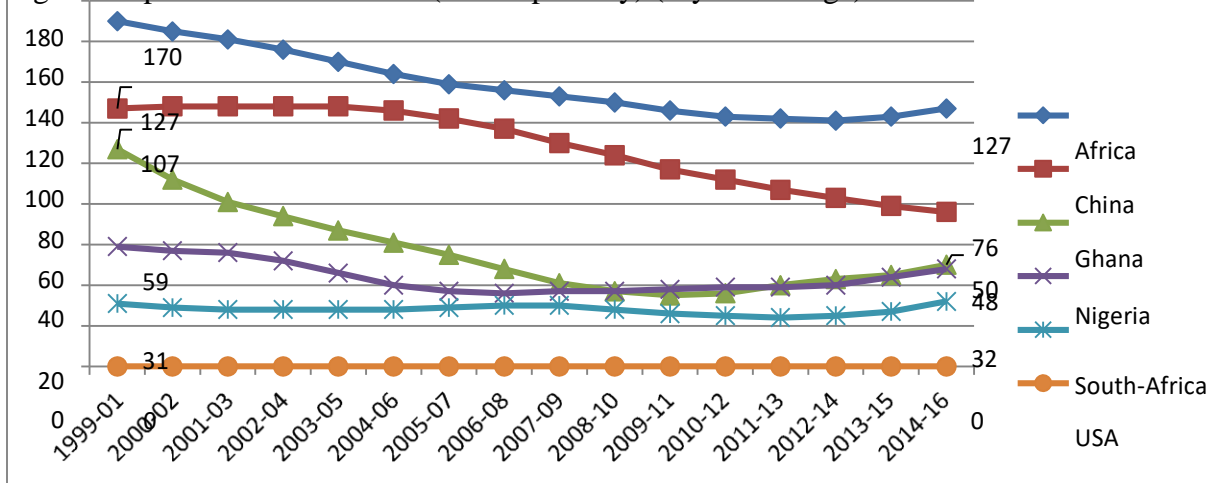
Figure 10: Average value of food production (constant 1\$ per person) (3-year average)



Again, the study used another critical indicator of food security, depth of food deficit to compare the performance of food crop performance in Nigeria and other countries. The information as contained in Figure 11 below indicates that just like in other indicators, the Nigerian economy is not where it ought to be given the vast land, population, and different climatic and environmental condition suitable for cultivation of different food crops. The statistics indicated that although the depth of food deficit in the country was significantly below that of Ghana, China, and that of the average of the African countries as at 1999-2001, there has been no improvement since then, whereas significant improvements are noticed in other countries. While there were 53.2 percent,

40.2 percent, 25.3 percent decrease in the depth of food deficit in Ghana, China, and the average for the African Countries, respectively from 1999 to 2014, there was only 18.6 percent decrease in Nigeria.

Fig 11: Depth of the food deficit (kcal/capita/day) (3-year average)

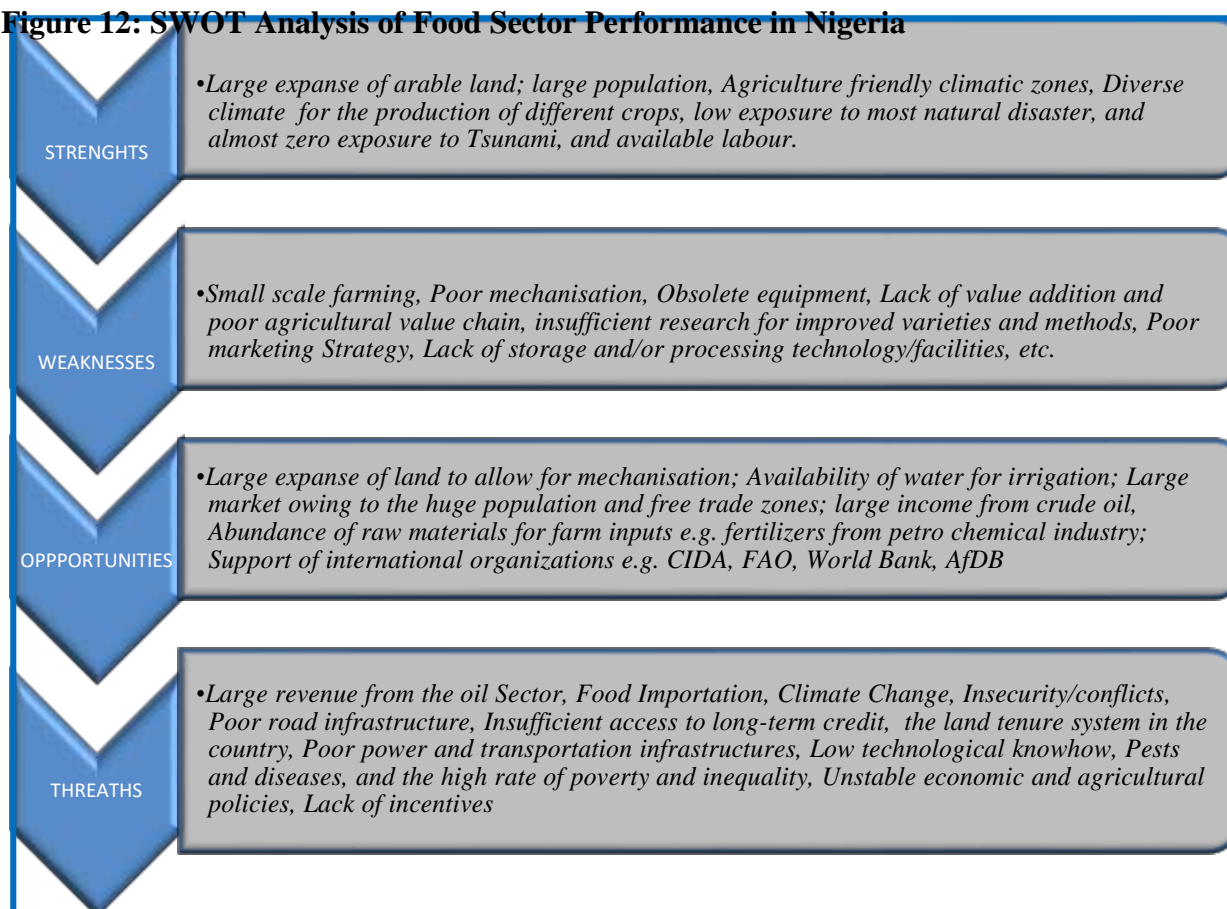


6. SWOT Analysis of Food Sector Performance in Nigeria

Given the above statistical evaluation of the food sector performance in Nigeria, the study further carried out a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of the sector. The SWOT analyses give a comprehensive résumé of the nature of food sector development and performance in Nigeria. The SWOT analysis is as depicted in Figure 12 below.

Strengths: The strengths of the Nigerian economy in producing food crops, primarily dwells on her vast expanse of land that amounts to about 91 million hectares with around 80 million suitable for agriculture and 37.3 million hectares considered to be arable land as at 2015, thereby providing enough room for the cultivation of food crops.

Figure 12: SWOT Analysis of Food Sector Performance in Nigeria



Again, the massive population of Nigeria provides readily available labour for food crop production for the nation. Geographically, Nigeria' location gives her an excellent climate for the cultivation of different crops at different seasons. The wet season in Nigeria spans for over six months in most areas, which gives room for the cultivation of a variety of food crops such as maize, cassava, rice, yam, fruit crops in most areas (Nuga and Asimiea, 2015). Also, the country has low exposure to most natural disasters like earthquake and almost zero exposure others like Tsunamis

(ocean waves) or avalanches (large ice block melting). Though we cannot completely rule out the possibility of these natural disasters happening in the future due to the changes in the climate, so far none has been recorded. These natural disasters are known to wreck farmlands, destroying crops and vegetation. For example, the December 26, 2004, tsunami in Thailand, Sri Lanka, India, Maldives, and Indonesia damaged at least 116,000 acres of land; flooding the land with toxic salt thereby rendering the land sterile (Grossman, 2005).

Weaknesses: Notwithstanding the series of the strengths in the agricultural sector in general and food crop production in particular in the country, weaknesses abound, and have mainly been publicised in the literature. Some of them include small-scale farming, poor mechanisation, obsolete equipment, lack of value addition and poor agricultural value chain, insufficient research for improved varieties and methods, poor marketing strategy, lack of storage and processing technology/facilities. Although the intensity of these weaknesses varies across regions, they cut across all the agro-ecological zones in the country. Generally, it has been observed that most farmers in the country operate a small-scale farming mainly for subsistence and small sales in the local markets. This low scale farming, in turn, leads to low mechanisation and the use of crude implements, which are also severe weaknesses of the agriculture productivity in the country in general and food crop production in particular. Similarly, storage/processing facilities are inadequate and insufficient to meet the demand nationwide, and this leads to seasonality in the consumption of food crops in Nigeria.

Opportunities: There, however, exists several opportunities to stimulate investment in food crop production in Nigeria. These include but not limited to a vast expanse of land to allow for mechanisation, availability of water for irrigation, large market owing to the large population and free trade zones. Others are an abundance of raw materials for farm inputs like fertilisers from the petrochemical industry, substantial income from crude oil, and supports from the international organisations.

As stated at the beginning, Nigeria is the largest country in Africa with a vast amount of unutilized arable land. With appropriate policy on the existing land tenure system, this can be a very great opportunity for mechanised farming as farmers can have access to massive hectares that are together. Again, the vast population in Nigeria is a ready market for any intending investor in food crop production and any amount of output. In addition to the immediate demand for the products, it will also likely ensure a stable supply of labour and a reduced labour cost. Beyond the immediate Nigerian market, the West African sub-region is a free trade zone for member states, making the market even more massive. A significant amount of income from crude oil could be utilised to support investments and research that would boost the production of food crops to feed the nation. Also, several international organisations inject a considerable amount of funds to support food production in Africa, to eradicate hunger and poverty as upheld by the SDG. It is, therefore, going to be a boost for investors. Furthermore, Akpan, Ikon, Chukwunonye & Nneka (2016) posit that the macroeconomic environment in Nigeria favours the growth of food crop production.

Threats: Despite the myriads of strength and opportunities facing crop production in the country, there is still insufficient food supply due to several factors that threaten agricultural productivity in the country. These as listed in Figure 12 above includes substantial revenue from the oil Sector; food importation; climate change; insecurity/conflicts, poor road infrastructure; insufficient access to long-term credit, the land tenure system in the country, poor power and transportation infrastructures, and Low technological know-how. Others are pests and diseases, high rate of poverty and inequality in the country, unstable economic and agricultural policies, and lack of incentives.

The literature has linked the decrease in agricultural productivity and contribution to GDP to the advent of crude oil as the primary source of revenue to the country. Though this can also be an opportunity as explained above, the practical thing is that the country ignored the agricultural sector and became a mono sector economy that depends heavily on oil. Moreover, the substantial revenue from oil increased the income on the country and as usual, increased their demand for imported foods, which tends to outcompete even the little domestically produced ones given the consumers' preference. Another major threat to food crop production in Nigeria is the climate change and lack of policies to adapt to and or mitigate it. Nigeria is currently experiencing increased sunshine in the North causing droughts and increased rainfall in the south causing floods, which is a changing dynamics for farmers, preventing proper planning. The changing climate in the North has forced herdsmen to move their cattle down south in search of pasture, and this has caused several conflicts with farmers down south leading to the wide-scale destruction of farmlands, crops, storerooms and others. Other looming threats are the Boko Haram attacks that have left the expanse of land desolate for fear of the brutal terrorist attack. Conflicts according to the 2018 Global Report on food crisis will remain a primary driver of food insecurity in major emerging countries particularly in Africa, Nigeria Inclusive.

Another critical threat to food crop production in Nigeria is poverty and lack of access to finance. Statistics (NBS) from the Nigerian Bureau of Statistics (NBS) shows that the proportion of people living in extreme poverty increased from 51.6 percent in 2004 to 61.2 percent in 2010 while inequality was 42.97 percent in 2009. The colossal poverty and inequality rates imply that such proportion of the population cannot gainfully invest in sustainable food crop production except with financial assistance, which is constrained by high-interest rates and tall-order collateral requirements that are not within reach of the poor farmers.

7. Summary and Conclusions

Nigeria with around 80 million hectares of land suitable for agriculture still houses about 40 percent of the undernourished people in West Africa, has one-third of her under-five children stunted, and increased rates of both child and adult obesity. Also, 48.5 percent of her women of reproductive age are anaemic, and Nigeria is the largest rice importing country in Africa. This miserable state of food availability in Nigeria vis-a-vis its massive and geometrically growing population estimated at over 193 million people in 2016 and projected to be the third most populated country in the world by 2050, calls for attention. This study, therefore, evaluates the performance of food crop sector in Nigeria using a descriptive analysis of the Food and Agriculture Organisation identified food security indicators and conducted a SWOT analysis for the sector.

Available statistics show that Nigerian is having food insecurity problem: meagre food production per capita; low average dietary energy supply adequacy that has been declining since 2013; very high variability in per capita food production and supply; and a high level of food deficits that has been on the increase since 2006. Due to these food deficits, over six million children in Nigeria under the age of five are stunted due to malnutrition, and the consumer price of foods has been high and increasing.

Compared to other African countries, Nigeria's average dietary energy supply adequacy has been a little higher than the average of the African countries, but unlike that of other countries, the value for Nigeria has been declining since 2005, making it be far below that of Ghana and China as at 2016. The statistics indicate that although the depth of food deficit in the country was significantly below that of Ghana, China, and that of the average of the African countries as at 1999, there has been no improvement since then. Whereas there was 53.2, 40.2, and 25.3 percentage decreases in the depth of food deficit in Ghana, China, and the average for the African countries, respectively from 1999 to 2014, there was only 18.6 percentage decrease in Nigeria.

The SWOT analyses in the study show that the strengths of food crop production in Nigeria are the vast expanse of arable land; large population, agriculture-friendly climatic zones, a diverse climate for the production of different crops, low exposure to most natural disaster, and almost zero exposure to tsunamis, and available labour. Some of the weaknesses include small-scale farming, poor mechanisation, obsolete equipment, lack of value addition and poor agricultural value chain, insufficient research for improved varieties and methods, poor marketing strategy, lack of storage and processing technology/facilities. The opportunities therein include a vast expanse of land, availability of water for irrigation, large market, substantial income from crude oil, an abundance of raw materials, and support of international organisations. On the other hand, the threats include significant revenue from the crude oil, food importation, climate change, insecurity/conflicts, weak infrastructures, inadequate access to long-term credit, and the land tenure system in the country. Others include poor power and transportation infrastructures, low

technological know-how, pests and diseases, high rate of poverty and inequality, unstable economic and agricultural policies, and lack of incentives.

An interesting finding from the SWOT analysis is that the significant revenue from crude oil exportation can be both a threat and opportunity for food security in the country. It is now a threat because the earning from crude oil are used to finance food importation, outcompeting the domestically produced ones, but can turn into an opportunity if it is used to subsidise local food production as has been done in some other oil exporting countries. It is, therefore, the recommendation of this paper that all concerned should intensify effort to use the substantial revenue from crude oil to finance local food production through the importation of machines for mechanisation for rentals to the farmers, construction of irrigation facilities, and give loan at an affordable rate to farmers in the country.

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