JOURNAL OF POLITICAL DISCOURSE
ISSN Print: 2992-2763 – ISSN Online: 2992-4618 | Vol. 2, Issue 1, No. 2 / March 2024
https://www.jopd.com.ng

AN ANALYSIS OF SUSTAINABLE AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY IN NIGERIA.

Musa Mohammed Bello, Ph.D
General Studies Unit, Federal University of Technology, Babura.
musamohammedbello@gmail.com 08034522242

Jibrin Ubale Yahaya, Ph.D
Department of Political Science, National Open University of Nigeria, Abuja.
jibrinubaleyahaya@gmail.com 08035876786

Isyaku Adamu (Ph.D in view)
Yusuf Maitama Sule University, Kano State
Isyakuadamu73@gmail.com 08068075380

Abstract.
The traditional advantages of agriculture to any society have been the production of enough food and the eradication of extreme poverty. In the meantime, despite Nigeria's agrarian culture, food insecurity and poverty have recently drawn the attention of academics and decision-makers alike. In light of these circumstances, secondary data was gathered for this study. But this study looked at the relationship between food security, agriculture, and reducing poverty. Petroleum is considered a more viable resource for economic development, so the government has neglected the agricultural sector, leading to Nigeria's rapid rise as a major food importer as a result of the petroleum discovery activity. As a result of this policy makers action, the nation was quickly split into high- and low-income segments. A very small percentage of the population benefited from the wealth created by oil, but sadly, food insecurity was the result of the population's inability to pay the skyrocketing costs of imported foods. Even so, a significant proportion of Nigerians continue to work in agriculture, albeit in subsistence. The major issue of contention in our research is to identify underlying causes of food insecurity, its ramifications, and its potential solution to reverse the problems Nigeria faced—as well as the coping strategies employed to deal with the problems by putting policies in place intended to reduce poverty and hunger in Nigeria in particular and throughout Africa in general all have been highlighted in this paper. As a result, this study offers the policymakers of Nigeria and other African nations the following recommendations, when reducing poverty is the primary goal of the policymakers, agricultural value added and food production should be a crucial policy that cannot be compromised. Thus, whenever these policymakers wish to lower poverty, they should start implementing policies that will increase food production and agricultural value-added programs.

Keywords: Food Insecurity, Sustainable Development, Poverty and Unemployment.

Introduction

Nigeria is thought to need sustainable agriculture in order to ensure her food security. Agriculture is and will continue to be a significant and indispensable economic sector. As a source of foreign exchange earnings, the agricultural sector will be needed to provide more food to the expanding and increasingly affluent population both now and in the future. Despite having the largest economy and the largest population in Africa, the majority of Nigerians suffer from malnutrition. Reardon et al. (2009), referenced in Requier - Desjardins, 2013:114, state that agriculture and the agri-food industry are now highly integrated, forming a "global value chain." The flow of goods, expertise, and information between small-holder farmers and consumers is included in agriculture value chains. The statistical analysis of national accounts of 2014 as part of the 91% revision indicators, of the nation's 2013 GDP estimate was revised from $273 billion to $521 billion. This was the first significant update to Nigeria's GDP estimate in nearly 20 years, with 2010 serving as the new base year instead of 1990. The incorporation of small-business activity and rapidly expanding industries (like mobile telecoms, real estate, and the film industry) is one of the most notable improvements. Food exports make up only 5.3% of merchandise, whereas food imports rose from 19.9% in 2000 to 30.6% and 22.7% in 2011 and 2012, respectively (World Development Indicator, 2016).

According to Agabi (2013), emerging markets account for 98% of the 850 million hungry people globally. That is to say, sub-Saharan Africa had 237 million, while the Asia-Pacific region had the highest number at 528 million. A large percentage of the impoverished Nigerian population does not consume enough food or calories to survive, according to estimates from the National Bureau of Statistics from 2010, which put the country's population below 112 million. As a result, the World Development Report (2015) stated that the global economy was predicted to expand by 3% in 2015 as opposed to 2.6% in 2014. For example, developing economies increased to 32.9% in 2014 from 32.1% in 2013, but it was predicted that in 2014, they would have accounted for 4.4% of all economies. to increase by 4.8% as well in 2015. Although the prevalence of undernourishment has decreased by more than 3% in East Asia and by 1.7% in South Asia each year, there is still reason for concern as the total number of undernourished individuals has not decreased. The number of undernourished individuals was reported to have decreased from 37 million in the 1970s to 100 million in the 1980s, but only 3 million remained in the 1990s. The reason behind the millions of people who lack access to food is that food security is dependent on three factors: access to appropriate and sufficient food, stability in food availability, and good health. Only then can each consumer fully benefit from the full nutritional value of food that is both accessible and available (World Development Report, 2008).

But Nigerian farmers now face higher production costs as a result of the Naira over 80% depreciation, rising fuel prices, and an acceleration of the market price increases for agricultural inputs.

Bonat, in 2015. Remarkably, the federal government has only given agriculture 2% of the 2016 capital budget, according to the Agricultural Promotion Policy [APP] (2016 - 2020). The Nigerian government has allocated the least amount to the agricultural sector since the 1990s. Thus, this paper's goal is to examine agricultural sustainability in order to improve Nigeria's food security. The study does this by examining the agricultural sector as a vital component of the nation's food security, clearly illustrating the meaning of food security in the Nigerian context, and emphasizing the importance of agriculture's sustainability in enhancing food security in Nigeria.

Statement of Problem

Since Nigeria gained its independence on 1st October 1960, agriculture has played a significant role in the country's economy. Commercial operations have transformed the agriculture sector, moving it from the small to the medium and large market levels. While rice, cassava, yams, maize, sorghum, and millet are important staple foods, the main cash crops are cocoa, oil palm, and rubber. The common occupations are wood production, raising livestock (goats, sheep, cattle, and poultry), and artisanal fishing. Nearly 70% of Nigeria's workforce is employed in agriculture, which continues to be the main non-oil contributor to the country's economy, making up 41.84% of GDP in 2009. There are roughly 14 million small-scale subsistence farmers worldwide, and their average farm size is one hectare in Nigeria's south and 3 hectares in its north. Agriculture's inevitable role in Nigeria's economy cannot be overstated, even though the Federal Government has ignored the sector since the commercial quantity of petroleum resource was discovered in 19 (Simon, 2012).

Over 70% of Nigeria's economically active population works in agriculture, demonstrating the country's extreme agrarian nature. There are differences in the types of crops that are grown in different parts of the nation based on the soil and climate. However, as a result of the subsequent industrialization and frequent oil spills brought on by the discovery of oil in the majority of the country's south-south region, agricultural activities have been severely restricted. Also, during the rainy season, harsh weather like flooding and draughts can occasionally disrupt agricultural operations in the north. Over time, the conditions for agriculture have been comparatively balanced in the south-west and south-east; however, these two regions have also possessed the greatest level of education in the nation and, for the most part, look for work outside of agriculture.

Conceptualization

Food Security

Food security is a complex concept with many facets. The term "food security" has been defined in a number of ways by various academics, but the most widely accepted definition states that it occurs when all people have physical and financial access to enough safe, nourishing food at all times to

meet their dietary needs and preferences for an active and healthy life (Food and Agricultural Organization [FAO], 1996). In actuality, agricultural output, food aid and imports, job opportunities, income generation, and resource allocation all affect food security.

In light of this, Ojo & Adebayo (2012) view food as both a necessary component of life and a tool of national power. When everyone has access to enough food that is affordable, safe, and healthy as well as culturally appropriate, satisfies specific dietary needs, is obtained in a dignified manner, and is produced in a way that is both socially and environmentally just, then there is food security. Food security affects people in society as a whole and is a much bigger issue than poverty alone (FAO, 2001). It involves the entire food system. As per the World Bank report of 2007, millions of people worldwide, especially the poorest who already reside in nations where acute and chronic malnutrition is a problem, are at risk due to the global food security crisis.

Equitable distribution of resources and market access are prerequisites for food security. This can occur in families, among people, in communities, and whenever there are good options and chances to act and make decisions. Dietary habits have been changing in many countries, with a decrease in the consumption of cereals and other basic foods and an increase in the consumption of meat, dairy products, and processed foods. The production, processing, and marketing techniques for food are also evolving quickly, and there has been a significant increase in the number of raw materials and processed food traded internationally. In terms of food availability, access, and nutritional well-being, the world population growth and urbanization are major concerns. This implies that more food, goods, services, and job opportunities will be needed to accommodate the growing population.

Hossain, Naher, and Shubaddin (2005) assert that there are two ways to look at the idea of food security: from a national perspective as well as an individual one. Food security at the national level refers to the availability of food to meet domestic demand until supplies are replenished through imports or harvests. On a personal level, it indicates that every member of the community has access to the food they require, whether it comes from government, markets, or their own production. Although food security is commonly perceived to have two dimensions—spatial and temporal—it actually has three, with gender being the most neglected of the three. Determining how different people have access to resources and benefits is essential, and making sure that access and distribution are fair improves food security. For example, women in developing despite major social, cultural, and economic barriers, countries contribute significantly to food production, nutritional security, and affordable access to food.

Food security is determined by a number of cultural and social factors, according to Molnar (1999), cited in Isa (2014). For instance, a person's access to formal education and other types of human capital relates culture to food security. It follows that a person's social structure has an impact on food security because human capital, such as education, becomes less useful for increasing distribution and productivity than other institutional supports, such as transportation and technical assistance for industries.

Similar to this, Nigeria's Agriculture Promotion Policy (APP) is based on the following tenets: economic diversification, job creation, import substitution, and food security. Many of these stems from the Agricultural Transformation Agenda (ATA), which was created in response to the strong desire for stable policy. For agriculture's sustainability in Because it emphasizes policy tools on a government-enabled, private sector-led engagement as the primary growth driver of the sector, Nigerian agriculture is viewed as a business (agric-business). This fundamental idea was stated in the ATA and continues to be the cornerstone of Nigeria's agricultural policies. One is said to have a human right to food. Agricultural development is centered on the government's social responsibility concerning food security, social security, and equity. It also requires the government to acknowledge, safeguard, and ensure that people have an irreducible minimum degree of freedom from hunger and malnutrition (Agriculture Promotion Policy, 2016 - 2020).

Agriculture in Nigeria and Sustainable Food Security

Nigeria had historically relied heavily on agricultural output to generate income before beginning to explore for oil in the 1970s. The country's primary source of income, agriculture, was neglected as a result of the oil boom, particularly in the non-oil sector. Worst of all, research and development in the

agricultural sector slowed down, and farmers' needs were neglected. The attention paid to agriculture drastically decreased. Production of food was halted in the aftermath. However, policy changes that supported better local food production through increased incentives for local farmers were also disregarded. Land agents made it too difficult to support urban, community, and even home gardening, so these practices were discontinued for individuals to have access to land for both construction and agricultural productivity (Metu, Okeyika & Maduka, 2016).

Traditional subsistence farming is the predominant farming system in Nigeria. Low agricultural inputs, small farm holdings, limited access to credit facilities, and the use of basic farm tools are characteristics of this system. Additional factors include inadequate storage facilities, unstable post-harvest product markets, and middlemen's exploitation of farmers. Nigeria still lags behind other nations, especially those in Europe and Asia, in terms of technology. Farmers lack access to modern communication systems that would enable them to learn about new technologies because of poverty and illiteracy. Furthermore, there aren't many extension agents to teach farmers how to use new technologies. As a result, Nigeria continues to receive little funding for agricultural research, and food crops are frequently imported into local farmers' productivity is severely impacted by the nation since small farmers are unable to compete with imports of crops (Metu, Okeyika & Maduka, 2016).

Due to a faster rate of population growth than agricultural productivity growth, the supply and demand of food are not keeping up. Furthermore, the large population keeps driving some young people to cities in quest of white-collar jobs that don't exist. It is challenging for the nation to have food security because of this young rural-urban drift. Nigeria's food supply is impacted by environmental problems such as drought, flooding, and desertification. Climate change also has an impact on the food supply because it can lead to issues with food utilization, price fluctuations, farmland loss, an increase in food-borne illnesses, and other problems (Green Climate Fund, 2016 cited in Metu, Okeyika & Maduka, 2016). Deforestation and flooding cause environmental degradation with far-reaching negative effects for food production. For example, in 2012, unusual rainfall brought on by extreme weather struck Nigeria, resulting in severe flooding that destroyed agricultural crops, livestock, and human lives. Metu, Kalu, and Ezenekwe (2015) estimated that the country's GDP was lost to the tune of approximately N2.6 trillion.

Nigeria's economy has been expanding at one of the fastest rates in sub-Saharan Africa over the years, averaging 6% yearly growth between 2001 and 2008. The nation had achieved unparalleled macroeconomic stability prior to the global economic downturn, which started to have a significant impact on the economy (United Nations Development Programme [UNDP], Nigerian Human Development Report, 2008 - 2009). In fact, feeding the world's population—especially in developing nations like Nigeria—is one of the biggest challenges of the modern era. For instance, over 65% of Nigeria's workforce is employed in agriculture, which accounts for approximately 42% of the nation's GDP; nevertheless, the nation's food security needs to be sustained. The reason is that the agricultural sector in Nigeria faces many obstacles and is also marked by low production, wasteful, outdated equipment and facilities (UNDP Nigerian Human Development Report, 2008 - 2009).

Furthermore, of Nigeria's total land area of 92.377 million hectares, about 66% is suitable for agricultural production; sadly, half of that is not farmed. Natural farm produce has been stunted by technological shortcomings in standardization and quality control, making it unable to compete on both domestic and international markets (Information Section, 2009). According to Ababi (2013), a study carried out by the National Insurance Commission (NAICOM) indicates that approximately 75 million Nigerians require micro-insurance, with the majority of these individuals being farmers. For Nigerian farmers to maintain food security, micro-insurance must therefore be a requirement.

If the people of Nigeria are not ensured food security, the nation is on the verge of collapse. "Many Nigerian farmers toil all the days of their lives to earn a living and feed the nation, but their standard of living is still very poor," claims Ahmed (2011:29). Notwithstanding the farmers' efforts to achieve effective food security, Kantiok (2013) notes that Nigeria cannot be considered among the world's poorest nations, with nearly 70% of its people living below the poverty line and subsisting on less than $2 per day. According to Dorayi (2013), Nigeria's population was estimated to be 180 million in 2013, or 3.16% of the total yearly growth calculated from the 140 million census data from 2006. But

while Nigeria's population was only 56 million in 1963, it is predicted to reach 280 million in 2015—double the number reported in the 2006 census—by the time of the next census. Nonetheless, according to Adeolu & Taiwo (2004), the Food and Agricultural Organization (FAO) has continuously included Nigeria in the list of nations that, in theory, cannot meet their food needs through rain-fed agriculture because of low input levels. Actually, the government of Nigeria has decided to invest heavily in small-holder irrigation due to the disastrous effects of desertification and drought on the country's dry sub-humid and semi-arid agro-ecological zones.

In the dry sub-humid and semi-arid agro-ecological zones of Nigeria, the rapidly increasing demand for food has been compared to patterns of rainfall, accompanied by seasonal variations, unpredictability, and unreliability. These have made it necessary to add irrigation to rain-fed agriculture. At all levels of government, a number of programs and policies have been implemented with the aim of increasing food production and decreasing food imports. First, in the early 1970s, River Basin Development Authorities (RBDAs) were established, and by the late 1980s, small-scale irrigation system development in Fadama land areas had started. The "National Fadama Development Project" was a new initiative launched in 1993 by the Federal Government of Nigeria, State Governments, and the World Bank. Numerous arguments have been made. The Nigerian government's current investment in the highly acclaimed small-scale or small-holder irrigation practices (Fadama) is an effort in this direction due to the country's rapidly increasing food demand, seasonal variations, unpredictability, and need to supplement rain-fed agriculture with irrigation (Kudi, Usman, Akpoko & Banta, 2008).

Food Security: The Situation in Nigeria

Concerns regarding the impending threat of a food crisis have been raised in many nations, including Nigeria. Over the past few decades, the Food and Agricultural Organization, among others, has consistently voiced concerns about the global food crisis. Therefore, the primary objective of food security is for people to always be able to access enough food and use it to meet their body's needs. One of the Federal Government of Nigeria's main concerns is food security. The population and food demand are growing at the same rate, but due to dietary changes made in cities, such as the rise in the consumption of rice and wheat among the cereals); food imports would have to be used to meet a portion of the demand. assuming that each person needs roughly 2,200 calories per day to meet their basic nutritional needs, after accounting for waste and the conversion of grain into protein. Additionally, it has been noted that a typical Nigerian family of five needs roughly one tonne of grain annually to meet their basic needs (International Food Policy Research Institute [IFPRI], 2005).

Cereals and tubers, which include rice, maize, guinea corn, millet, sorghum, yam, and cassava, are the most essential parts of a country's food basket. For example, rain-fed crops like millet, sorghum, and maize are subject to significant annual fluctuations in production (IFPRI, 2005). Nigerian farmers cultivate rice on more than 70% of their irrigated farmlands. However, because the Fadama scheme's operation is reliant on both the amount of precipitation and floods in the region, its production is also subject to fluctuations. According to World Bank projections, for example, there was a 2.5% global increase in demand for all types of cereals between 1990 and 2000. For Nigeria, these numbers are a little conservative and it was projected that between 1990 and 2000, the demand for cereals—especially rice—rose to roughly 3.5%, but between 2000 and 2025, it fell to roughly 2.5% (IFPRI, 2005).

Therefore, there are four main sources of food for humans: water, agricultural crops, livestock, and fisheries. In essence, population size, dietary preferences, and daily calorie intake per capita all influence the demand for food. However, other factors such as the balance of food imports and exports determine a country's food requirements. This food requirement can be produced in three main ways: rain-fed agriculture, irrigated agriculture, and food imports. Water is the most crucial factor in all situations when it comes to boosting food production and rural development in Nigeria.

Global attention has recently been drawn to issues of food security and poverty reduction. This is a reaction to the growing food threats indicated by the fact that more than 70% of people live on less than $1 USD per day. It was estimated that roughly 22 million people needed to attain food security annually in order to meet the millennium development goal of halving the percentage of hungry

people by 2015 (IFPRI, 2005). Reducing hunger and poverty depends on achieving this goal (FAO, 2005). Among other things, the persistent poverty rate has contributed to low agricultural productivity and low farmer productivity. But in the end, this has reduced their conventional contribution to economic growth.

Threat Regarding Food Insecurity

Nigeria is the largest oil exporter on the continent and possesses the largest natural gas reserves in Africa. Nigeria's abundance of resources has allowed it to sustain its comparatively stable economic growth even in the face of the recent global financial crisis brought on by COVID-19 and other natural disasters. With a GDP growth from $169.48 billion in 2010 to $522.64 billion in 2014, Nigeria overtook South Africa as the largest economy in Africa in 2013. Because of this progress, Nigeria's economy has grown to become the 24th largest in the world, surpassing that of Belgium and Taiwan and trailing only Poland and Norway. It also indicates that Nigeria's GDP per person increased significantly, from an estimated $1555 to $2689, over time. Sadly, the updated numbers won't increase funding in the pockets of Nigerians, where roughly 70% still make less than $1.25 per day. According to Naisbitt & Naisbitt, the updated statistics simply highlight the degree of marginalization in a nation where a new generation of multimillionaires and billionaires has arisen. According to Knoema (2012)

However, Nigeria's economic output is underperforming, as noted by numerous economists both domestically and abroad. Nigeria continues to have a high rate of poverty despite its abundance of resources and its swift economic development, with roughly 70% of the country's population still living below the poverty line. Furthermore, Nigeria was ranked 40th out of 79 countries in the 2012 Global Hunger Index and 156th out of 187 countries in the 2011 UNDP Human Development Index. In Nigeria's rural areas, where up to 80% of the population subsists on less than one US dollar per day, poverty and hunger are more common. Inadequate post-harvest technology and inadequate food distribution in rural Nigeria have come together with poverty to create a nearly insurmountable obstacle, especially in light of the weather's erratic fluctuations.

Nigeria is the world's top producer of yams, cassava, and cowpeas, according to the International Fund for Agricultural Development (2012). Despite this, Nigeria is still food insecure and mainly depends on imports of fish, grains, and livestock products. As previously stated by Omorogiuwa et al. (2014), only 40% of Nigeria's land is cultivated, despite the fact that roughly 75% of the country's land is suitable for agriculture. The majority of people living in rural areas depend on seasonal rainfall and subsist on small-scale farming to feed their families. The situation of rural poverty has gotten worse due to the lack of access to essential infrastructures like roads, which have cut off rural farmers from markets and necessary inputs. However, the query is, how did Nigeria arrive here?



Azih, I (2008) Food insecurity was not a problem that Nigeria had to deal with in the 1940s and early 1950s. The population was well-nourished by the agricultural system, which also produced excess for export. There was unity in the diversity as different regions in Nigeria had specialized in producing different types of crops, whether they were cash crops or food crops. This system makes the nation's food self-sufficiency stronger. For example, growing groundnuts was a common practice in the north of Nigeria, where the region is known for its groundnut pyramids; growing cocoa is a common practice in the west of Nigeria, where the region is home to the cocoa mountains; growing palm plantations is a common practice in the east of Nigeria, where the region is known for its oil palm and kernel heaps; and growing rubber is the widespread custom in the Midwest.

But in 1956, the discovery of oil caused a downturn in the agriculture sector. Interest in agriculture started to decline in 1958 when petroleum product exports began. When food prices rise, especially for staple foods, the effect of the decline is gradual but steady. For instance, since 2006, the price of rice has dramatically increased by more than 100%. Less than half a million metric tons of rice are produced annually, compared to the 2.5 million metric tons needed to sustain Nigeria, according to the country's Minister of Agriculture and Water Resources. These numbers suggest that Nigeria has a 2-million-ton rice shortage, necessitating imports to keep up with yearly demand (Simenya,2013)

Review of Nigeria's Food Security Policy

The Nigerian government has devised a number of plans to make things better. Currently, attempts are being made to eradicate food insecurity and return agriculture to its pre-oil boom state. In order to provide an effective framework for addressing food insecurity and malnutrition in Nigeria, a number of policies and initiatives are currently being developed. In an attempt to combat hunger in the early 1970s during the military regime, the government of Gen. Yakubu Gowon imported an enormous amount of rice. Regretfully, the Nigerian ports lacked the necessary infrastructure to oversee such a complex importation scheme, which became known as the Rice Amada (FAO, 1996)

The ports were so overrun with rice that a committee was forced to to be configured in order to facilitate the port's decongestion. The government's massive import of rice was insufficient to address the long-term problems of food insecurity; instead, an all-encompassing and inclusive agricultural policy was required.

According to Muhammad, (2015), an analysis of the years prior to the 1986 introduction of the Structural Adjustment Program (SAP) revealed that government attention was largely focused on industrialization policies rather than agricultural ones, mainly due to the discovery of oil. This assertion was made clear by the First National Development Plan (1962–1968), which placed a heavy

emphasis on industrialization and the necessity of using the nation's abundant resources. Conversely, the Second National Development Plan (1970–1974) made an effort to revive the rapidly declining food production, which was made worse by the civil war in Nigeria and resulted in widespread starvation due to food shortages.

However, Simon, (2016) criticized this, claiming that the government was only pretending to save agriculture because it had reduced budgetary spending on food security and agriculture to 7.7% of total spending, while the transportation sector received 23.1% of the allocation. Murio (2013) further emphasized that, rather than reviving and strengthening the country's capacity for agricultural production, the Nigerian government had opted to rely on the importation of agricultural products, particularly food items.

In addition, the National Accelerated Food Production Project (NAFPP) was established in 1974 with the dual goals of increasing agricultural input availability and educating farmers. However, Okuneye (2015) revealed that inadequate planning and scheduling in supplying farmers with the necessary extension services prevented the NAFPP from accomplishing its goals. In 1975, the government launched the Agricultural Development Program (ADP) to compensate for the NAFPP's demise. In order to prevent the major demise of the NAFPP—the difficulty of providing farmers with extension services at the wrong time—470 agro service centers were established throughout the four geopolitical zones as part of the ADP project. The ADP was a fruitful initiative that was spreading throughout the countryside. As though was still in operation, additional agricultural and food security initiatives were launched and carried out concurrently to support the ADP. These initiatives included the Green Revolution in 1980 and Operation Feed the Nation (OFN) in 1976. Nigeria's Third Nation Development Plan (1975–1980) included these initiatives.

These programs were a part of the government's endeavor to create a public-private partnership in the food production industry in order to guarantee a self-sufficient and inclusive agricultural system that reduces the reliance of the nation on imports. The initiatives support changing policies to allow for government subsidies and other forms of incentives for farmers to increase food production in their local communities. The Third National Development Plan served as a model for the Fourth National Development Plan (1981–1985). As a result, it aimed to boost self-sufficiency and increase food productivity. The initiatives collaborated with various government agencies, including the ADP, the River Basin and Rural Development Authority (RBRDA), the Ministry of Agriculture and Water Resources, the Ministry of Labor, and the Ministry of Commerce, in order to accomplish these goals (Simenyan,2013)

However, in line with our discussion we can simply identify that corruption and bad governance made it difficult for peoples in power to implement the many programs and projects effectively, even though they were very comprehensive. It was not until 1999, with the return of the civilian administration, that the agriculture sector and food production received the much-needed attention. Thus, the government reaffirmed its commitment to combating hunger and malnutrition by making sure there is a sufficient supply of food. According to Ojo & Adebayo (2012), the government launched several food security programs in order to accomplish this. These programs include:

i. **Special Program for Food Security (SPFS):**
The Food and Agriculture Organization (FAO) is sought after support for the Nigerian government's SPFS initiative. The program aims to improve food production and accessibility while also substantially increasing farmer returns from harvest by providing information on new, tested agricultural technologies to 109 farming communities spread across Nigeria's four geopolitical zones.

ii. Root and Tuber Expansion Program:
The International Fund for Agricultural Development (IFAD) provides funding for this agricultural program. The program assists in increasing farmers' proficiency with cutting-edge technologies for processing tuber and root products, as well as expansion strategies specifically for cassava products. (FOA,1996)

iii. Fadama Development Project:
The Nigerian government launched the Fadama project with funding from several international organizations to allow farmers to continue their farming operations year-round and take advantage of all-season farming. The program's activities include building infrastructure, irrigating large areas, enhancing farmer capacity, and raising environmental awareness. (Akerele,2013)

iv. Community-based agricultural and rural development schemes:
This covers a range of development plans and initiatives, such as "back-to-land" and "farm settlement" plans. These programs are designed to increase public participation in farming by giving them different incentives and facilitating easier access to farming implements.

v. Provision of infrastructures:
In order to support mechanized farming practices and lower post-harvest loss, the government started a number of infrastructure projects, including building new roads connecting rural areas and maintaining those that already existed, electrifying rural settlements, and providing farmers with equipment, seedlings, fertilizer, and other farm inputs. Additionally, it leased farm machinery like tractors and harvesters and sold them outright to farmers who could afford it.

vi. International Centre for Soil Fertility and Agricultural Development (ICSFAD):
Along with the United States, the Nigerian government also opened the International Centre for Soil Fertility and Agricultural Development (ICSFAD). Examining the variables influencing higher agricultural output in Nigeria is the goal here. In order to identify the kind of fertilizer that will be best for farmers on each type of soil, the Center will evaluate soil samples from various parts of Nigeria.

vii. Policy instrument
This refers to the policy instrument and direction through which the government carries out activities such as
a. Banning the importation of some agricultural products which the county can locally produce at sufficient volume. This ban has tremendously help to boost the livestock production and agriculture.
b. Making fertilizer available to farmers at a subsidized rate
c. Improving financing of the agriculture sector through provision of additional funds for state-owned agricultural banks to enable them grant more soft-loans to farmers, and encouraging the conventional banks to grant low-interest loans to all classes of farmers.

Reasons for Food Insecurity
Food insecurity is a complex issue. It is a difficult task to talk about the causes of food insecurity in Nigeria. Nigerians are not particularly fond of homegrown goods and frequently think that imported food is superior. The oil industry's rise signalled the agriculture sector's impending demise because of the enormous money petroleum products brought in, which distracted people from farming. The government started importing food, and domestic production decreased—especially since oil wealth has shifted the preferences of many Nigerians toward imported goods. Together with sociopolitical unrest that prevented the economic crisis, civil war, depletion of human resources, gender disparity, education decadence, inadequate health care, and the overall loss of good governance have coexisted to worsen the accessibility of food. However, it has been determined that the main causes of food insecurity in Nigeria are, among others, the following.

1. Inadequate Production
Nigeria only has a limited amount of arable land, but as its population grows, the amount of land available will soon be insufficient to support the country's needs. Additionally, as the number of middle-class individuals in developing nations rises, more people will be able to increase their meat intake. Since the production of meats will require far more land space, this will increase the competition for land, placing further pressure on grain and soybean prices, supplies, and reserves.

Statistics from the World Bank show that 90% of Nigeria's agricultural production comes from ineffective small-scale farmers. Consequently, these farmers are only able to grow enough food to feed their own families. As a result, poverty remained in Nigeria, which has turned into a funds for politicians to buy votes during elections by offering voters peanuts in exchange for their conscience. (Naisbitt, 2013)

2.Gender Inequality

Knoema, (2014) Women occupy a central place in subsistence agricultural production and are accountable for 80% of agricultural production. They are majorly involved in food production, processing, preparation and marketing; despite these activities, women's contributions to food and agricultural production are still largely undervalued. In many developing countries, women often face a range of obstacles to achieving their full potential, ranging from constricting cultural practices to biased laws and highly fragmented labour markets. Gender discrepancies in access to agricultural resources and services adversely influence their productivity and, subsequently, the food and nutrition security of their households.

Several studies have established that woman, particularly in sub-Saharan Africa, are limited compared to their male counterparts in channels through which they can have easy access to productive inputs such as improved seed varieties, extension services, and land input. In addition, women are also limited in the level of participation in cooperatives and farmer groups, such as producers' organisations and marketing groups and labour-saving cooperatives, which may also contribute to reduced access to markets with implications on food and nutrition security. Many programmes fail to offer credence to the multiplicity of women's life experiences. However, to understand and address the many forms of discrimination and inequality that affect them concerning food security, an all-inclusive approach is required (Simon, 2012).

The food security and nutritional requirements of women and those of their wards are neglected at the household level, where biased social and cultural values exist. In Nigeria, women have suffered long-term discrimination in the allocation and control of productive resources, despite their essential roles in the maintenance of the family by guaranteeing food security at the household level and in general society. Studies have shown that when women have access to or own land, they allocate much of their household income to food and have better-nourished children. Promoting gender equality is widely recognised globally in contributing to agricultural productivity and food security. Furthermore, ensuring greater gender equality makes households more food secure and, therefore, enlisted as a significant theme within the global rural development policy agenda aiming at achieving the United Nation's first and second goals of no poverty and zero hunger.

3. Corrupt practices and ineffective policies

Due to ineffective policies, particularly those pertaining to agriculture, trade, economics, and other adjourning sectors, food insecurity has continued in Nigeria and many other developing countries. Governments that fail to implement these policies will inevitably see hunger persist or even get worse. It's true that a lot of nations have struggled to progress because they haven't managed food-related policies and programs well. This issue occasionally occurs when the public interest is not sufficiently taken into account when designing policies, objectives, structures, and institutions. Policies that lack inclusivity in their design have the tendency to deprive the excluded population of their rights. According to Behnassi and Yaya (2011), food security was not a major concern for many nations in previous decades because if should the necessity ever emerge, food could be imported at a comparatively low cost. Local food production was not prioritized in this situation. However, food prices have started to skyrocket in recent years, making importation more and more costly and causing inflation in the local food market.

The food crisis is also impacted by the frequent changes in policy and the subpar work of Nigerian agencies responsible for monitoring and implementing them. The previous food and agricultural policies are dropped and new ones are instituted whenever a new government comes to power. Regretfully, there is no assurance that the newcomers will have it easier; in fact, they frequently have it worse. It's merely an attempt to make room for financial tricks. Similar to this, Nigeria's low agricultural and food productivity is a result of the failure of several previous intervention initiatives, including Operation Feed the Nation, Lower River Basin Development Authorities, Green Revolution, and regulatory bodies like the National Agricultural and Land Development Authority (NALDA), Directorate of Foods, Roads and Rural Infrastructure (DFRRI), and Green Revolution. As a result, Nigeria has continued to have poverty as a result of successive policy failures. Thus, in order to mislead the electorate, succeeding governments have profited from the circumstances that the preceding government created. Eventually, bad governance takes the place of one bad leader who is

elected to office again. According to Okuneye (2009), a few of the issues with government regulations and policies that have an impact on food security in Nigeria include

a. the government's attempts to reform the agriculture industry were hampered by a number of national policies, such as the Land Use Act, the Importation Tariff, and other ineffective measures.

b. Regular modifications or elimination of other non-agricultural policies that, as a result of shifting political regimes, may have an impact on agriculture

c. Insufficient funding for farmers' capacity building, agricultural industry, and research, etc.

d. An unsustainable extension service system; e. An inadequate planning model and structural framework;

f. An unfavourable business environment that deters foreign investors from investing in agriculture:

4. Disputes and Unrest within communities

Following independence, the outbreak of civil war and other conflicts disrupted food production, uprooted populations, and left fertile land uncultivated. Additionally, there are sporadic ethno-religious conflicts that have had a disastrous impact on Nigeria's economic growth, particularly in the field of food production. Other conflicts may manifest as physical combat or structural violence without the need to declare war. These conflicts may be brought about by deliberate poverty permeation, wealthy people's oppression of the poor, police brutality, political intimidation of common citizens, and the monopolization of power and resources by women and children. The extreme northeast has continued to experience civil unrest stemming from the Boko Haram conflict, especially in the states of Borno, Yobe, and Kano. This has resulted in population displacement and below-average crop production raising food prices in comparison to other regions of the nation and limiting market and trade activity. Farmlands have been turned into combat zones and farmers have been forced to live in camps where they must rely on humanitarian aid in order to survive. Borno and Yobe states have been at the center of the Boko Haram crisis.

Nigeria Food Security Outlook, 2012 states that in mid-November of 2012, cereal prices in Borno state's Maiduguri market ranged from NGN 6800 to 7200/100kg, or roughly $32 to $35/100kg. This further extends the degree of food insecurity in these areas as it is 35 percent higher than the five-year average and 12 percent higher than the price in November 2011. Bremner (2012)

5. Natural Disasters and Climate Change

One more significant factor that should not be overlooked in the analysis of food insecurity is climate change. The ecosystem's loss of biodiversity and other physical access are among the effects of climate change. One of the main factors that is changing the global food equation and, consequently, having a significant impact on the food security of developing countries, especially, is climate change. This climate change phenomenon, according to Behnassi & Yaya, is like a ticking time bomb that is just waiting to burst. We have already started to observe the impact on physio-biological systems, unpredictable weather patterns, and global temperatures.

Developing countries are more severely affected by climate change, even though developed nations are mostly to blame for greenhouse gas emissions. Climate change affects agricultural productivity, agricultural produce distribution, and food accessibility, especially in the world's developing nations. Individuals from impoverished and rural backgrounds are particularly vulnerable due to their limited ability to adapt as well as their geographic location. Even though technological advancements have increased the amount of food available in developed nations, weather and climate continue to have a significant impact on food crop production.

Other important factors that increase the vulnerability of people from less developed countries to food insecurity are natural disasters and climate variability. The effects of natural phenomena like droughts, floods, and Slope becomes more noticeable in areas where rainfall is a major factor in agriculture. The current increase in food prices is largely due to rain or flooding, even though landslides and droughts pose a serious threat to food supply. For instance, statistics from the Gombe State Emergency Management Agency (GSEMA) show that in 2007 alone, floods destroyed nearly

1000 farms in Gombe, resulting in the loss of tons of vital local food crops like cassava, yams, maize, sugarcane, and vegetables. In fact, these occurrences occasionally have the potential to severely damage infrastructure and destroy food supplies, which drives up food costs.

According to the Famine Early Warning Systems Network's Nigeria Food Security Outlook (2013), Nigeria experienced an unprecedented flooding event from July to October of 2012 due to a combination of heavy rainfall that persisted throughout the year and the release of water from multiple dams. About 2.8 million people were displaced as a result of this incident, and even months later, the impacted households were unable to completely restore their standard of living. Due to low food supplies and high food costs, a high degree of food insecurity quickly developed in the areas. To rebuild their livelihoods, the majority of households have begun to return home.

6. Low Processing and Storage Technology

The agricultural sector in Nigeria relies heavily on manual labor for farm activities because there is very little use of modern technologies in the production and distribution of agricultural products. This is a result of a dearth of technological innovation in the area, especially when it comes to mechanizing agriculture to increase productivity. Furthermore, local farmers lack the maintenance capacity and can hardly afford imported technologies. Food insecurity can be exacerbated by wastage of staples like cereals, yams, beans, and the like due to inadequate or nonexistent storage facilities. Additionally, when farmers lack food processing equipment, they may be forced to consume a sizable portion of their harvest quickly. Food processing is a crucial component of agriculture that, by converting food products into other forms that allow for their preservation, reduces the waste of food items that are difficult to store in their original form. Mangos, citrus fruits, and pineapple, for example, are easily preserved when made into fruit juice. Avoiding waste is a must if sustainable food security is to be achieved.

Agriculture in the modern era is so energy-dependent and industrialized. Mechanized farmers depend heavily on a steady supply of electricity, which has eluded us and is now only a pipe dream for incoming administrations. These days, a large portion of the food we eat is produced on farms that are far away from us, and it is processed somewhere else before being imported by land, sea, or air. To maintain low food prices that are within the reach of the average person, all of these processes need a significant amount of energy and fuel. However, calls for diversification to boost energy efficiency have been made in response to the rising cost of petroleum products. Biofuel and other energy produced from agriculture are important alternatives. This substitute will increase food item completion, especially in developing countries and the management of the process may make food insecurity worse.

Conclusion

Food insecurity is a worldwide issue, but it is particularly common in developing countries like our nation. Nigeria is fortunately endowed with a vast amount of arable land and a human resource base. Nigeria has a long history of agricultural practice, but everything quickly changed after oil was discovered in the country's now-enviable oil-rich Niger-delta region. The nation's focus was diverted from its agricultural blessing by the promise of enormous financial resources that could be generated from the oil resource. Unfortunately, the average person bears the brunt of government officials' constant manipulation and diversion of the purported financial returns from oil resources. Malnutrition, starvation, and hunger are wreaking havoc on the country.

It is still possible to restore food security in the nation, but there are still obstacles in the way, including low production, gender inequality, ineffective policies and corruption, conflicts and civil unrest, natural disasters and climate change, and outdated processing and storage technologies. In order to overcome these obstacles, the government needs to start over and create an environment that is conducive to work by encouraging respectable jobs in both the agricultural and non-agricultural sectors and by offering credit facilities that give the most vulnerable people a financial platform to deal with the harsh realities of the economy, especially in rural areas. Small-holder farmers will have a voice thanks to social media and collaboration, but the government must provide essential infrastructure like access roads and electricity and improve access to education in order to strengthen farmers' capabilities. A primary cause of pollution to soil, water, and other environmental elements,

oil spills and other industrial effluents lower agricultural productivity. To prevent the careless release of wastewater, the government must create a strong monitoring system. Finally, implementing contemporary science and technology is necessary to raise agricultural productivity.

Recommendations

By definition, though, achieving food security will require more than just raising food production. A poor, hungry man will always be food insecure as long as he cannot afford to buy food, even in situations where there is an adequate supply of it. Therefore, it is necessary for all four elements—availability, accessibility, utilization, and stability—to be present. Therefore, initiatives to address food insecurity will guarantee that food is consistently available as well as affordable for people to prepare it for consumption. So how can Nigeria ensure food security? Increasing agricultural productivity, advancing science and technology, empowering farmers, opening up the market, and promoting good governance are some of the solutions that hold the key to the solution. In this instance, there are four categories of strategies to achieve food security: economic, social, environmental, and technological.

1. Economic Approaches

a. Encouraging respectable jobs in the agricultural sector: this works especially well in rural areas. Although the majority of people living in rural areas of Nigeria rely heavily on agriculture for their subsistence, they are also the most food insecure. Nigerian rural farmers, like those in other developing countries, practice highly informal and carefree farming methods. They are therefore extremely susceptible to exploitation. Training and monitoring programs are examples of policies and initiatives that should be put into place to help create an equitable market for informal farmers.

b. Fostering the non-farm economy in rural areas: Since the majority of Nigeria's urban economy is non-farm based, this initiative targets the rural population, which is most vulnerable to food insecurity. Even though agriculture is vital to rural communities, diversification is still necessary. While some rural farmers might benefit from having access to the evolving, equitable agricultural market and be able to escape poverty and food insecurity, others might not have the same level of success. Agricultural production cannot support the entire rural economy. Some might have to take advantage of other, non-farm options, like paid work or trading, which might also be economically feasible. The government must offer an orientation program and create a supportive atmosphere for expansion of rural economies through diversification.

c. Credit availability and incentives: Various studies have empirically demonstrated how access to credit facilities has increased farmers' productivity. Access to credit facilities is crucial for small-holder farmers, especially during the planting season when they can't afford to buy or rent production-related equipment, pesticides, fertilizers, or high-quality seeds. Money might also be required for storage facilities and labor assistance during harvest. Additional rewards, like fertilizer subsidies, can also increase farmers' output.

2. Social Strategies

a. social networking and organized farmers' cooperation: Farmers has been identified as another crucial element that can greatly enhance small-holder farmers' standard of living through networking and collaboration. In addition to serving as a foundation for human resource development that enables the weaker farmers to manage risks, this aids in safeguarding the interests of the most vulnerable farmers within a group. For farmers and other social groups, it can be a useful platform for building capacity so they can become a force and get access to markets, credit facilities, inputs, and other resources.

b. Education that is accessible: this is a mechanism that does, in fact, promote productivity in any line of work. Inadequate or nonexistent education is a major problem for Nigerian farmers, especially those living in rural areas. This is primarily due to their lack of access to it rather than a lack of interest on their part. The government must lower the cost of education for low-income urban and rural residents. This will enhance their technical proficiency in using farm equipment and their ability to recognize opportunities.

c. Infrastructure provision: The absence of essential infrastructure, such as portable water, electricity, and access roads, can have a significant negative economic impact, even in the most developed urban areas. These necessities must be available for farmers to be productive. For example, electricity cannot be compromised in order to power agricultural equipment's storage facilities. They can access the market thanks to roads and transportation, which boosts their economy.

3. Environmental Strategies

a. better handling of industrial effluents: We can simply identify industrial effluents drastically lower the nutrient content of soil, which lowers agricultural product growth, yield, and nutrition. This information was presented in their study on the effects of industrial effluents on Bangladeshi plants and soil. Oil spills, gas flaring, and other industrial effluents have long been a plague on Nigeria's agricultural sector, severely impairing productivity. To lessen the impact on agricultural productivity, an enhanced industrial compliance monitoring system and follow-up program are required for the Environmental Management Plan (EMP).

b. Controlling the application of fertilizers and other agrochemicals: It is impossible to overstate the significance of fertilizers and agrochemicals in modern agricultural practices. They do, however, also have related environmental effects. Eutrophication, which results in the death of aquatic life, is caused when nitrogen from fertilizers washes into water bodies. Additionally, phosphorus can cause algae to grow in water bodies, depriving fish of oxygen and causing them to suffocate. This can have an impact on the availability and supply of fish for human consumption. With trainings and orientation programs, steps should be taken to regulate farmers' use of pesticides and fertilizers.

4. Technology-Based Approaches

Crop rotation and diversification: Increasing the quantity and quality of agricultural produce can be achieved through the important practices of crop rotation, mixing, and diversification. This method essentially helps to increase the nutrients in the soil and can be applied to manage illnesses and pests. Farmers should be encouraged to use this system.

b. Irrigation system: Oni et al. (2009) also noted that farms with irrigation in the agro-ecological zones of dry savanna have higher productivity than farms without irrigation in the same area. The majority of northern Nigeria will find great use for this system.

c. Encouraging the use of mechanized farming systems: Ojo & Adebayo (2012) observed that although indigenous CRP rotation systems are used in Africa, Asia, and the Latin Americas, food insecurity has increased because these methods are insufficient to meet the demands of the regions' rapidly expanding populations. Nigerian agriculture needs to be mechanized in order to increase productivity through the use of tools, machinery, and implements. Mechanized farming needs to be encouraged among small-holder farmers, even though some large-scale farmers have been utilizing it. The Nigerian government must collaborate with other public and private enterprises as well as financial institutions in order to accomplish a comprehensive, inclusive agricultural mechanization.

d. Agricultural biotechnology: Despite advances in science, the use of genetically modified foods in agricultural biotechnology remains controversial because safety concerns remain unresolved. It is one of the modern science and technology's success stories and has the enormous potential to drastically lessen the problems associated with global food security.

References

Adene, D.F. and Oguntade, A.E. (2006) The Structure and the Importance of the Commercial and Village Based Poultry Industry in Nigeria. FAO, Rome.

Akerele, D., Momoh, S., Aromolaran, A.B., Oguntona, C.R.B. and Shittu, A.M. (2013) Food Insecurity and Coping Strategies in South-West Nigeria. Springer Science + Business Media Dordrecht and International Society for Plant Pathology, 407-414.

Aregheore, E. (2011) Country Pasture/Forage Resource Profile: Nigeria. Food and Agriculture Organization of the United Nations.

Akinyele, I.O. (2009) Ensuring Food and Nutrition Security in Rural Nigeria: An Assessment of the Challenges, Information Needs, and Analytical Capacity. International Food Policy Research Institute (IFPRI), Abuja.

Agabi, C. (2013). How insurance can help solve hunger issues - Swiss report. *Daily Trust*, Tuesday, February 5, 31 (42), 19.

Agriculture Promotion Policy (2016). Building on the successes of the ATA, closing key gaps: policy and strategy document. Federal Ministry of Agriculture and Rural Development (FMARD), Abuja, Nigeria, June.

Azih, I. (2008) A Background Analysis of the Nigerian Agricultural Sector. Oxfam Novib Economic Justice Campaign in Agriculture, Lagos.

Bonat, Z. K. A. (2016). *Agricultural development strategy and the crisis of agricultural production in Northern Nigeria*. A paper presented at the national conference on the theme: *The Economy, Society and Social Change in Nigeria, 1800 - 2016*. Organized by the Department of History, Faculty of Arts, Kaduna State University, PMB 2339, Kaduna, Nigeria, held at the Faculty of Art, Kaduna State University, Kaduna, September 4 – 7.

Bremner, J. (2012) Population and Food Security: Africs's Challenges. The Population Reference Bureau, Washington DC.

Dorayi, A. M. (2013). *Religion, ethnicity and corruption: challenges of national security*. A paper presented at a one day seminar organized by the Centre for Peace, Conflict and Security Studies (CPCASS) in collaboration with the Students' Representative Council (SRC), held at the Assembly Hall, Ahmadu Bello University, Zaria, February 2.

FAO (1996). *Socio-political and economic environment for food security*. Food and Agriculture Organization of the United Nations. World Bank Food Summit,. 1, (1.4).

FAO (2001). *The state of food and agriculture*. Available at: http://www.fao.org/docrep/003/x9800e/x9800e00.htm. Retrieved: October, 23, 2016.

Hossain, M., Naher, F. & Shahabuddin, Q. (2005). Food security and nutrition in Bangladesh: progress and determinants. International Rice Institute Manila, Philippines. *Electronic Journal of Agriculture and Development Economics*, eJADE, 2(2), 103-135.

Human Security Unit (2006). *Overview and objectives.* United Nations.

IFPRI (2005). Researching sustainable food security for all by 2020: getting the priorities and responsibilities right. *International Food Policy Research Institute*, pp. 1-8.

FAO (1996) Rome Declaration on World Food Security and World Food Summit Plan of Action. http://www.fao.org/docrep/003/w3613e/w3613e00.HTM

FAO (2015) The State of Food Insecurity in the World 2015. Meeting the 2015 International Hunger Targets: Taking Stock of Uneven Progress, FAO in Conjunction with IFAD and WFP, Rome

Simonyan, K.J. and Fasina, O. (2013) Biomass Resources and Bioenergy Potentials in Nigeria. African Journal of Agricultural Research, 8, 4975-4989.

Muhammad-Lawal, A., Salau, S.A. and Olawusi, C.O. (2015) Sorghum Storage and Pest Control among Farming Households in Kwara State, Nigeria. Tropical Agricultural Research & Extension, 18, 68-75. https://doi.org/10.4038/tare.v18i2.5326

Metu, A. G., Kalu, U. C. & Ezenekwe, R. U. (2015). Demographic pattern and sustainable development in Nigeria. In: Mbanefo, A.C. and Nnonyelu, A.N. (Eds.) *Challenges of Sustainable Development: A Social Sciences Approach*. Awka, Anambra State: Fab Anieh Nig. Ltd, pp. 129 - 140.

Metu, A. G., Okeyika, K. O. & Maduka, O. D. (2016). *Achieving sustainable food security in Nigeria: challenges and way forward*. Third international conference on African development issues. Ogun State, Nigeria: Covenant University Press.

Knoema (2014) World Development Indicators (WDI). https://knoema.com/WBWDIGDF2017Sep/world-development-indicators-wdi

Offu, A.K.S. (2013) The Nigerian Dependent Management & Leadership Development in the Post World War II Colonial Nigeria. AuthorHouse, Bloomington.

Simon, G.-A. (2012) Food Security: Definition, Four Dimensions, History. FAO, Rome.

Food Security Portal (2014) Food Security Portal-Nigeria. http://www.foodsecurityportal.org/nigeria

Trading Economics (2014) Trading Economics/Nigeria. http://www.tradingeconomics.com/nigeria/gdp

Naisbitt, J. and Naisbitt, D. (2016) Global Game Change: How the Global Southern Belt Will Reshape Our World. Sage Publications, New Delhi.

IFAD (2012) International Fund for Agricultural Development (IFAD). Annual Report. IFAD, Monte Forte.

Ojo, E.O. and Adebayo, P.F. (2012) Food Security in Nigeria: An Overview. European Journal of Sustainable Development, 1, 199-222.

Knoema (2012) Poverty and Inequality Statistics. https://knoema.com/WBPS2013Dec/poverty-and-inequality-statistics-december-2012?country=1000800-kosovo