

## Nigeria's Food Insecurity and Its Implications on Sustainable Development Goal (SDG) 2 Amidst the COVID-19 Era

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### **Abstract**

*Food plays a core role in providing health, social and economic benefits as well as preventing diseases. The International Covenant on Economic, Social and Cultural Rights in 1976 acknowledged the need for hunger to be eliminated through an international cooperation, hence the international cooperation on the inclusion of Goal 1 of the Millennium Development Goals (MDGs) which was later replaced by Goal 2 (zero hunger) in the Sustainable Development Goal (SDGs). Although, there was a drop in the number of undernourished people globally, nevertheless, malnutrition and hunger still lingers as a barrier to sustainable development in many countries and in Nigeria, specifically. This paper therefore sought to examine how the food insecurity being experienced in Nigeria impacts on the progress and attainment of the second SDG (zero hunger) in the era of COVID-19 pandemic. It underscored that although, before the outbreak of the pandemic, the nation was already plagued by food insecurity due to factors such as climate change and security threats, to mention a few, however, with the pandemic the levels of food insecurity were exacerbated. The paper concluded that while food insecurity was being experienced before the pandemic with 9.1% of the Nigerian population severely food insecure between 2017 and 2019, nevertheless, the outbreak of the disease exacerbated the insecurity people faced in accessing food items, leading to 58% of Nigerian households to experience acute food insecurity. It also stressed that this analysis will have a negative implication on the progress being made on SDG2 and the attainment of the Goal by 2030. The paper recommended among others that, there is need for public-private partnership throughout the agricultural and food value chain, in order to make food available, accessible and affordable to people through the development of an inclusive data on agricultural and food programs, which at the long run translates to ending hunger and beef-up progress of the SDG 2 through food security.*

**Keywords:** Food Insecurity, COVID-19 and Sustainable Development Goal 2

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### **Introduction**

A necessity for life and disease prevention is food, as it plays a crucial role in providing health, social and economic benefits, in the world at large (Neumann, 2003). To this end, the term food security gained global recognition in the World Food Conference of 1974, where it was declared that every person regardless of their sex or age had the right to be free from hunger and malnutrition, in order to function socially and develop mentally (FAO, 2006). In addition, to drive the point on the importance of food as a strong determinant for sustainable development of nations, the International Covenant on Economic, Social and Cultural Rights in 1976, not only proclaimed the right to be free from hunger, but also, acknowledged the need for hunger to be eliminated through an international cooperation (Ajibade et al., 2019). To this end, the highest profile commitment in international efforts to address hunger is through the SDGs. Hence, the international agreement on Goal 1 of the Millennium Development Goals (MDGs) and the agreement to include Goal 2 into the broad Sustainable Development Goals (SDGs) which superseded the MDGs in 2015. Although, the SDGs

in its Goal 2 (Zero Hunger), has an ambitious aim to end all forms of hunger and malnutrition by 2030, through sustainable agriculture, support to small-scale farmers, access to land and markets, as well as investments in agricultural technology and infrastructure. While in the past two (2) decades the number of the undernourished dropped by almost half, as a result of increase in agricultural productivity and economic growth by a number of nations, including some developing countries which were suffering from acute hunger and famine. Nevertheless, despite the drop in the numbers, malnutrition and hunger still lingers as a barrier to sustainable development in many countries.

Studies shows that an estimated 821 million persons as at the year, 2017, were acutely undernourished, 90 million children underweight, and most South America and sub-Saharan African nations were witnessing severe food insecurity, as a direct consequence of environmental degradation (UNDP Nigeria, 2021), drought and conflicts, to mention a few. Additionally, research show that the worst hit continent by global warming is Africa, hence, projections shows that the most vulnerable sector is the African agricultural sector (Ojo & Adebayo, 2012). In addition, while food insecurity was being witnessed globally at different scales, as a result of various challenges (climate change, as well as conflict), nonetheless, the outbreak of the COVID-19 pandemic exacerbated the levels in Africa.

Similarly, Nigeria's food insecurity and the resulting malnutrition are being aggravated continuously by a number of factors including climate change, violent clashes, intra-state conflicts and more recently, the outbreak of the pandemic. Hence, prior to the outbreak of the pandemic, Nigeria in a bid to support the effective implementation of the SDG 2 launched some policies and programs to address issues bordering on food insecurity. However, the prospects of attaining the set targets of the SDGs and specifically, Goal 2, was challenged with the outbreak of COVID-19 pandemic. Although, Nigeria was already facing food crisis and issues of malnutrition before the outbreak of the pandemic with an average of 9.1% Nigerians between 2017 to 2019 experiencing severe food security, nonetheless, the socio-economic uncertainties brought about by the social vaccine, known as the lockdown, further disrupted and disproportionately affected the livelihoods of the poor as well as exacerbated food insecurity in the country (OSSAP-SDG, 2020).

This paper, therefore intends to examine how food insecurity of Nigeria impacts on the progress and attainment of the second SDG (zero hunger) in the era of COVID-19 pandemic. Based on this, the paper is organized into nine (9) sections; with recommendations proffered in the last session to inform short to medium term policies capable of speeding up the progress in attaining the target of SDG 2 by the year 2030.

### **Methodology**

Using the quantitative and qualitative methods to gather sources of data, the paper will examine how reduced agricultural productivity as well as food insecurity worsened by the outbreak of the pandemic strains efforts at progressing with the targets of the SDG 2 in Nigeria.

### **Conceptual Definitions**

- a) Agriculture: Evers & West (2011), described agriculture as the art and science of nurturing the soil, cultivating crops and rearing livestock through the preparation of animal and plant products for market distribution and the people's consumption. To this end, the term agriculture refers to the act of farming which encompasses crop production and livestock raising to meet food demand by individuals, groups or societies, in small or large scale.
- b) Food Insecurity: According to FAO (2010), the inability to consume adequate nutritious food within the domain of nutrition and health needed for one's physiological use is known as

food insecurity. Accordingly, Otaha (2013), stated that food insecurity refers to the consequence of undernourishment as a result of the unavailability of food as well as lack of economic and social access to sufficient food. In addition, when food insecurity is left unaddressed this leads to hunger and malnutrition.

- c) **Food Security:** The concept of food security is hinged on the four pillars, namely; availability of supply, accessibility, stability regardless of seasonal fluctuations and utilization (Applanaidu et. al., 2014; Mabrouk & Mekni, 2018; Nsiah & Fayissa, 2019). It is therefore conceptualized as a situation when individuals at any given time, have access to adequate, nutritious and safe food, which meets the dietary requirement of any human to live actively and healthily (Ibukun & Adebayo, 2021), making them free from hunger (World Food Program, 2012, p 170). This means that an individual or group is referred to being food secure if they are not hungry or free from living with the fear of hunger (SPRING, 2018, p 4).
- d) **Food Crisis:** According to Lee et. al. (2012, p 303), food crisis exists when situations abruptly threatens food security as a result of shortages. Also, food crisis refers to food scarcity in a society on a large scale arising from a number of factors such as failure in crop production as well as policies by government; which results in malnutrition, hunger and starvation of a group of individual, usually the vulnerable masses.
- e) **Hunger:** The broad conceptual definition of hunger as described by Anderson (1990), is “the uneasy or painful sensation caused by a lack of food, the recurrent and involuntary lack of food... with a potential... consequence of food security”. Hunger is therefore a possible sign or result of food insecurity, as it relates to an acute food access or deprivation (National Research Council, 2006) due to the unavailability and inaccessibility to food due to circumstances that can be socio-economic in nature.

### **Overview of Agriculture and Food Security in Nigeria**

In the early and mid-twentieth century, specifically the 1940s and 1950s, Nigeria was not contending with the issues of food insecurity. All regions of the country at the time were specialized in the production of a major food or cash crop, making the nation self-sufficient in food production, as the systems could afford to feed the citizenry, as well as export the surplus agricultural and food items (Ojo & Adebayo, 2012). This narrative made Nigeria become a promising agricultural hub prior to and in the first decade of independence, as the nation was self-sufficient, food secure and thriving as the world’s largest producer of palm oil and groundnut, as well as a significant cocoa, rubber and cotton producer. To this end, the agricultural sector employed over 70% of the Nigerian labour force in 1965, while cash crops amounted to 62.2% of the country’s foreign exchange and 66.4% accounting for the nation’s Gross Domestic Product (Cooke, 2016).

In addition, states in the North like Kano had groundnut pyramids which made them employ vast strip for farming, leading the state to become an economic hub regionally as it symbolized the country’s agricultural wealth; while the cocoa maintains flourished in western Nigeria, oil palm and kernel heaps in the East and rubber plantation in mid-West. Thus, the link created through a reliable and extensive rail network between the northern cities and the southern ports fostered regional integration and economic interdependence (Cooke 2016).

The discovery of oil in 1956 and its exportation in 1958, however gradual; later furiously changed the fate of the Nigerian agricultural sector. The rise in oil prices and boom, marked the beginning of a decline in the interest in agriculture and the resultant consequence of the decline, led to local market tensions which featured as a result of the rise of food prices and importation of key food items to address the shortfalls in food supplies. Accordingly, it was estimated that in the first decade of the

twenty-first century, Nigeria had spent \$2 billion importing six million tons of wheat, \$750 million on rice, \$700 million on sugar and \$500 million on dairy products (Ojo & Adebayo, 2012). This on its own has a harmful consequence in diminishing farmers' incomes and disincentive for local food production, in addition, it makes the vulnerable poor households suffer from undernutrition and malnutrition (Okolo, 2006).

Although, beyond the high prices of food, other issues like climate change, security threats such as conflicts and limited practice of modern mechanized farming, to mention a few are also responsible for the food crisis being experienced in Nigeria. Additionally, given that Nigeria is an agrarian society the food crisis it faces therefore transcends households and is also being faced in the political and economic sphere.

Whilst the Nigerian government has embraced the idea of rolling out plans and programs to address the gap in food security at one time or the other (Okolo, 2006), notwithstanding, little has been achieved in curbing insecurity in food.

### **Agriculture and Food Security Challenges in Nigeria**

The Nigerian government as a way of keying into the new opportunity presented by the SDG 2 resorted to advance its agricultural production and enhance food security by establishing some institutional frameworks and implementing social reforms to improve coordination to mainstream the SDGs (Ajibade et al., 2019). To this end, programs and policies were developed such as the Incentive Based Sharing System for Agricultural Lending, Green Alternative Promotion Policy, Rural Finance Institution Building Programs, Commercial Agriculture Credit Scheme, Savings Internal Loan Schemes and the Zero Hunger, to mention a few. Despite these, Nigeria is unable to attain self-reliance and resilience in food production as a result of its inability to diversify its food import profile, corruption, lack of harmonization and economic recession (Federal Republic of Nigeria, 2017; Ajibade et al., 2019).

Although, Nigeria has the manpower and expanse of arable land required and favorable for the advancement of agriculture and to boost livestock as well as food production. Nevertheless, there exist only limited modern technology, infrastructure, training and education necessary to increase agricultural yields to meet national demands. Additionally, according to Eme et al. (2014), many investments are not targeted at the agricultural sector and a lot of the small and medium scale farmers do not have access to credit facilities, coupled with the poor road networks and transportation systems. These challenges make it difficult to address issues of food production locally and consequently impacts the attainment of the set target of SDG 2.

It is also pertinent to state that agricultural and food crisis increased with the outbreak of several intra-state conflicts. For instance, the concerns over internal conflicts, such as the farmer-herder conflicts, Boko Haram insurgency, kidnapping and banditry across the country, negatively impacted on the production of food, its availability, access and prices across Nigeria (Ajibade et al., 2019). Also, other forms of discontent and grievance were awakened as a result of the reduction in food accessibility, this can be seen during the end SARS protest, which gave rise to the looting of warehouses that stored COVID-19 food palliatives across the length and breadth of the country. Indeed, the lack of or meagre efforts by the Government to decisively address food insecurity induced by security threats and conflicts, are partly responsible for the increase in the number of vulnerable poor, hungry and starving households in most parts of the country. In line with this, most farmers have had to flee their farmlands for want of safety as a result of these insecurities, as there exist no

conflict resolution mechanism available to address, prevent the vicious cycle of conflicts as well as crimes; in order to achieve sustainable peace.

Another challenge to agricultural production and food security in Nigeria was the outbreak of COVID-19 pandemic. In order to contain the spread of COVID-19, the Nigerian government put in place the lockdown and a number of restrictions at the onset of the pandemic. The lockdown and restrictions imposed consequently disrupted agricultural activities and food supply chains as it limited food access, hence, exacerbating the acute food insecurity and negatively impacting on the vulnerable (Federal Ministry of Health, 2020). Research shows that COVID-19 pandemic worsened food security significantly in many Nigerian households. For instance, a study carried out by International Food Policy Research Institute (IFPRI) in small households in four (4) Nigerian States reported that 88% of the data collected from the respondents showed that they lost half of their earnings due to the pandemic, 66% reduced food consumption and 24% reduced the application of fertilizer in their farmlands (Balana et al., 2020).

### **The Nexus Between Food Security and the SDGs**

Most of the goals in the UN SDGs which replaced the Millennium Development Goals (MDGs) in 2015 are significantly interconnected by a number of related objectives linked to food and agriculture. While the SDG 2 specifically focuses to end hunger, attain food security, improve nutrition and promote agricultural practices that are sustainable; nevertheless, the other goals have their objectives related to the challenges being faced in the food system. For instance, the first goal has a focus on reducing poverty, in which case the agricultural sector has a vital role to play. Likewise, SDG 6 (on water), SDG 12 (on sustainable consumption and production), SDG 13 (on climate change adaptation and mitigation), SDG 14 (on marine resource and oceans), as well as SDG 15 (on land use and ecosystems); all features roles to be played by sustainable agriculture (Brooks, 2016).

Furthermore, according to UNESCO (2010), while social, economic, environmental and political dimensions are all enshrined in the SDGs, nevertheless, the full range of the SDGs cannot be achieved without eradicating hunger by the year 2030. Hence, this translates to mean that an essential way to realise the all-inclusive SDG agenda, is to aim to achieve the second SDG target by achieving food security, improving nutrition, promoting sustainable agriculture and improving quality diets (Matemilola & Elegbede, 2017). To this end, little wonder that the UN MDGs later transformed to the SDGs in 2015 was borne as a result of the clamor for international cooperation to achieve sustainable development which ensures quality of life for all people (UNESCO, 2010).

### **Implication of Food Insecurity on the Attainment of SDG 2 in Nigeria**

According to FAO (2020) and McIntyre (2003), a social determinant of sustainable development and health is food security, however, with the global concern over food crisis, 10% and 19% of the global and African population, respectively, have become severely food insecure. Although, Nigeria is adorned with rich human and natural resources which makes her capable of feeding her citizens, regardless, in the past four (4) decades, Nigeria has been experiencing a heightened food insecurity due to neglect of the agricultural sector (Otaha, 2013) and reduced food production as a result of crude oil, which is worsened by factors such as climate change, security threats and aggravated by the outbreak of the COVID-19 pandemic, making it difficult to achieve progress for the SDG 2 target. The SDG 2 target have two (2) indicators to monitor hunger at the global and regional levels namely: (a) the prevalence of undernourishments (PoU) and (b) the prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES)- which is utilized to provide information that reflects the food access dimension of food security (FAO, 2019). These indicators

are utilized to compute the estimated number of people lacking the needed dietary energy for an active and healthy life. Based on the second indicator, groups experiencing moderate food insecurity has been forced to reduce their quality and quantity of food, this therefore signifies a lack in consistent access to food. However, societies or group of people facing severe food insecurity experience food crisis and hunger. It therefore means that, the vulnerable have their wellbeing threatened by grave risk of food insecurity (FAO, 2019).

With a Global Hunger Index (GHI) of 29.2, Nigeria is ranked 98<sup>th</sup> out of 107 countries, this suggests that the country is experiencing serious levels of hunger based on the index and also an exacerbated level of food insecurity which can be said is compounded by the COVID-19 pandemic (Global Hunger Index, 2020). Hence, according to Ibukun & Adebayo (2021), studies show that 12% of Nigerian households were food secure, while 5% mildly food insecure, 24% moderately food insecure and 58% were experiencing severe food insecurity with the outbreak of the pandemic. Food insecurity therefore transcends hunger as it serves as the core indicator for the SDG 2 in monitoring progress made on eradicating hunger and ensuring access to food for all.

Furthermore, a look at the recent trend in hunger and an analysis of the GHI in the country shows that there exists prevalence of undernourishment and prevalence of severe food insecurity. These indicators reflect that progress towards achieving the SDG 2 by 2030 has been reversed or halted due to factors such as climate change, security threats and COVID-19, to mention a few. Additionally, it implies that with the outbreak of the pandemic, more Nigerians were exposed to severe levels of food insecurity as a result of food deprivation and hunger.

Given that the GHI is an indicator for international hunger target and the SDGs, Nigeria's index and ranking suggests that the nation's hunger index and food insecurity has negative implications on the progress and attainment of SDG 2. Achieving the target set for the second goal by 2030 therefore, will be a challenge, given that years of progress achieved has been reversed, with more people being plunged back into poverty and many made vulnerable to hunger, as well as malnutrition.

### **Conclusion**

This study therefore examined the extent to which food insecurity among the Nigerian citizenry impacts on the attainment of the SDG 2 (zero hunger) especially in the era of COVID-19 pandemic. Using the degree of food insecurity in the country to assess the extent of progress obtained in achieving SDG 2, it was discovered that while food insecurity was being experienced before the pandemic with 9.1% of the Nigerian population severely food insecure between 2017 and 2019, nevertheless, the outbreak of the disease exacerbated the insecurity leading to 58% of Nigerian households to experience acute food insecurity. This therefore suggest that while some progress was being made in achieving the target of SDG 2, the pandemic reversed years of progress recorded prior to the first quarter of 2021 (the period COVID-19 was announced as a pandemic). Also, the findings of this study shows that factors such as climate change, conflicts, security threats also negatively influenced the impact food security have on the attainment of SDG 2. Hence, the study suggests that the government of Nigeria as well as other relevant public and private stakeholders needs to take up some activities and support programs to minimize as well as cushion the effect of food insecurity in the nation in order to attain the set targets of SDG 2.

### **Recommendations**

The following recommendations are hereby proffered:

- a) There is need for public-private partnership throughout the agricultural and food value chain, in order to make food available, accessible and affordable to people through the development

- of an inclusive data on agricultural and food programs, which at the long run translates to ending hunger and beef-up progress of the SDG 2 through food security.
- b) The COVID-19 Pandemic Response Plan developed by the Federal Ministry of Health in collaboration with Nutrition Stakeholders, should as a matter of urgency propose to the Federal Ministry of Agriculture and relevant stakeholders, measures that creates resilient farming, food supply chains and markets to cope with health emergencies.
  - c) Government should partner with key private agencies to increase investments in the agricultural sector by empowering small and medium scale farmers in particular with access to credits and modern tools, as this will improve the livelihoods and productivity of farmers', increase local productivity, as well as achieve the desired objective of the second goal of the SDGs.
  - d) It is important that the Government remove barriers that increases vulnerability to poverty and hunger by providing an integrated security strategy to address issues of security threats in the agricultural sector, which poses a threat to agricultural activities and exacerbates food insecurity and thus, hinders the progress to be achieved for SDG 2.
  - e) Public-private partnership should be encouraged to enhance storage, processing and transportation of agricultural and food products to make seasonal food items available and affordable at all times.
  - f) Nigerian policy makers should design policies and strategies that standardize prices of agricultural and food commodities in order to stabilize and curb the volatility of local markets, capable of disrupting food supplies.
  - g) There is a need for the Nigerian government to harness food and agricultural trade with other African nations in order to bridge the gap that exist in food security, so as to achieve the goal 2 of the SDGs.

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