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# EVALUATION OF THE EFFECTS OF COVID-19 ON FOOD SECURITY IN NIGERIA

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#### Abstract

The eruption of the novel coronavirus disease (COVID-19) since December 2019 has brought untold challenges and hardship to the world population. The pandemic has greatly affected the actions and activities of mankind in Nigeria, food security inclusive. The COVID-19 pandemic came at a time in Nigeria when food systems were already under pressure. There was no prior preparation against the COVID-19 crisis. The measures put in place by the government to curtail the spread of the virus like lockdown, social distancing, movement and transport restrictions resulted to loss of jobs, decreased labour for agricultural food production, rise in food prices and decreased purchasing power of people for food accessibility. Food security is an essential part of sustainable development. This research work is aimed at evaluating and discussing the effects of COVID-19 pandemic on food security in Nigeria. The paper proposes control measures to be adopted to ensure food security in a COVID-19 afflicted Nigeria. For this study, exploratory research method was employed. For the evaluation and discussion, data from the World Bank (WB), the World Health Organization (WHO), the Food and Agriculture Organization (FAO), the World Food Program (WFP), the World Economic Forum (WEF), scientific and technical documents have been used. The findings of this study will serve as a guide to policy makers to include social protection policies for improvement of the lives of the people, especially the poor and vulnerable in Nigeria. There is enough proof to conclude that the COVID-19 pandemic had significant effects on food security in Nigeria.

Keywords: COVID-19, effects, food security, control measures, Nigeria

#### INTRODUCTION

The COVID-19 erupted in Wuhan, a city in China, by December 2019 and was declared a pandemic in January 2020 by the World Health Organization (WHO, 2020;

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Chakraborty and Maity, 2020). COVID-19 is now the major global health problem affecting the actions and activities of mankind.

Some researchers had earlier reported that previous pandemics experienced in the world indicated that quarantines and panic affected not only human activities and economic growth but also agricultural activities (Barmejo, 2004; Hanashima and Tomobe, 2012). There is always rise in hunger and malnutrition whenever an outbreak of infectious disease occurs (Sar, Aernan & Houmsou, 2010; Burgui, 2020). The situation gets worse as the disease progresses and movements are restricted. This can cause shortages of harvest and farmers may find it difficult to supply their produce for sale in the markets resulting to scarcity of food.

Though this pandemic has affected every part of the world, but its impact has been more severe on low and middle income countries such as Nigeria. Nigerian communities are known for subsistence agricultural food production mostly for their use and for income generation (Oyetoro, Abdulraheem & Adefare, 2020) and the agricultural sector is responsible for the production and supply of food items.

The United Nations' Committee on World Food Security defined food security as that state where all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their food preferences and dietary needs for an active and healthy life (Dev, 2020). The COVID-19 pandemic came at a time in Nigeria when food systems were under pressure occasioned by conflicts, natural disasters, climate change, terrorism, banditry attacks, kidnapping, etc. There was no prior preparation against the COVID-19 crisis. The measures put in place by the government to curtail the spread of the virus like lockdown, social distancing, movement and transport restrictions resulted to loss of jobs, decreased labour for agricultural food production, rise in food prices and reduction in people's income for food accessibility. Information on the effects of COVID-19 on food security in Nigeria is scarce, hence this study Therefore, the objective of this study was to evaluate and discuss the effects of COVID-19 pandemic on food security in Nigeria. The paper proposes control measures to be adopted to ensure food security in a COVID-19 afflicted Nigeria.

### LITERATURE REVIEW

#### **COVID-19 and Food Security**

The challenges hindering the achievement of food security in Nigeria has become worse with COVID-19. The pandemic came at a time when food security and food systems were already under pressure occasioned by conflicts, natural disasters, climate change, farmer-herder clashes, etc., and these were already weakening food security before the eruption of COVID-19. The COVID-19 outbreak caused a great shock on the Nigerian food system because there were no preparations or preventive measures in place before the crisis. The measures put in place by government to curtail the spread of the virus such as lockdowns, movement restrictions and transportation restrictions led to great losses in the agricultural sector (Oyetoro *et al*, 2020) and this had severe effect on the Nigeria food

supply chains (Reardon, Mishra, Nuthalapati, Bellemare & Zilberman, 2020). Planting and harvesting of crops, processing of agricultural produce and transportation of farm produce to markets were hampered leading to stoppage of the means of livelihoods of farm workers and spoilage of farm produce. Agriculture is the mainstay of many Nigerian communities both for food production and income generation. Food is a necessity and the agricultural sector is concerned for the production and supply of food products. The COVID-19 pandemic affected the food systems in Nigeria. The supply and demand chains of food showed a reduction in food production and supply, and increase in prices. The pandemic also affected people's income and the capacity to produce and distribute food were indirectly affected especially on the poor and vulnerable (FAO, 2020).

The problem of food insecurity has existed for a long time in Nigeria as evidenced by the high global hunger index of Nigeria, its low food consumption scores and high calorie deficiency (Global Hunger Index, 2019). World Bank (2020a) and IMF (2020) reported that about 5 million Nigerians are projected to be pushed into poverty because of COVID-19 and associated mobility restrictions and lockdown measures. It was reported that about 32.1 million people in Nigeria are currently either in a stressed, crisis or emergency food-insecure situation (WFP, 2020) and the number of people who cannot access and/or afford safe, nutritious food is even higher.

### METHODOLOGY

The COVID-19 pandemic disrupted the global food systems, Nigeria inclusive; from production to the supply and demand chains and these have significant implications for food security.

The exploratory research method was adopted for this study using qualitative secondary data. The disruptions on Nigeria's food security by COVID-19 has been assessed using data from World Bank (WB), World Health Organization (WHO), Food and Agriculture Organization (FAO), World Food Program (WFP), World Economic Forum (WEF), scientific and technical documents.

# DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

# Effect of COVID-19 on the Production of Food

Every participant in all parts of the food system is affected by COVID-19 pandemic. The COVID-19 pandemic preventive measures disrupt the production of agricultural products. The majority of farming systems in all countries are labour intensive and with the lockdowns and other restrictions to curtail the spread of the virus, there were shortages of labour for food production (Schmidhuber, Pound & Qiao, 2020; Microsoft News, 2021) and this led to low agricultural production. The lockdown led to loss of jobs and created untold misery for agricultural workers and disrupted agricultural production process. For example, livestock production and sale was affected because of the reduced earnings by many people that limited their purchasing power. Also, the poor people who mainly depend on their

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farm produce ran out of food and this led to hunger, starvation and malnutrition which put their health and well-being at risk (United Nations/Department of Economic and Social Affairs, 2020). In fact, COVID-19 pandemic had adverse effects on the poor and vulnerable that were already grappling with inadequate food and malnutrition.

The transportation restrictions imposed to curtail the spread of COVID -19 had negative effects on food production. The transportation of farming inputs (such as fertilizers, insecticides, pesticides, etc.) to farms was hampered and this affected food production (FAO, 2020). The lockdowns also slowed down harvests which led to spoilage of perishable farm produce.

#### Effect of COVID-19 on the Supply of Food

The COVID-19 pandemic disrupted the food supply and demand chains in addition to decreased incomes which led to food insecurity in countries (World Bank, 2020). The measures put in place to contain the virus disrupted distribution of agricultural products. For example, the lockdown slowed down transport of farm produce to the markets and there were losses in perishable farm produce due to supply chain disruptions. FAO (2020) noted that the inability to distribute food in the country is one of the reasons for food insecurity and high cost of food in Nigeria.

Some researchers reported that the panic buying experienced before the lockdown caused scarcity of essential food and household items, imbalance in food supplies and severe changes in consumer behavior (Cariappa, Acharya, Adhav, Sendhil & Ramasundaram, 2020; Loxton et al., 2020). The restrictions put in place to curtail the spread of the virus which led to shortages of labour for food production, consequently caused decrease in food availability and supply. In Nigeria unemployment increased as a result of the restrictions to prevent the spread of the pandemic and this led to hunger and malnutrition. Although food and food production activities were exempted from direct restrictions imposed during the lockdown, but they were indirectly affected due to their connection to other parts of the economy. For example, supply chain disruptions caused food companies to operate below capacity resulting to low food production and this affected food security.

#### Effect of COVID-19 on the Demand for Food

The effect of COVID-19 on food supply extends to food demand. In Nigeria, the hunger index is very high and people spend large portion of their income on food. The lockdown imposed at the beginning of COVID-19 pandemic led to higher demand for food and panic-buying (Cariappa et al., 2020; Loxton et al., 2020) by the public who anticipated scarcity in supplies during the lockdown. Food demand in developing nations is greatly linked to income where income loss could influence consumption. Income influenced food demand have a direct effect on food security. According to FAO (2020b), demand for food reduced because of decrease in people's income and job loss. Also, decreased demand due

to reduced purchasing power affected the ability of producers to invest in their products and this further depleted food production.

# Effect of COVID-19 on the Prices of Food

The COVID-19 pandemic had negative effects on Nigeria's food security. The lockdown and other restrictions imposed by the government disrupted the food supply and demand chains. The supply of basic food items reduced due to restrictions while demand increased leading to increase in prices. Also, lack of labour for harvest led to loss of perishable crops like tomatoes, cucumbers, maize, rice, sorghum and millet and food shortages in the markets, rise in prices of food items and hunger (Microsoft News, 2021). The sudden directive on lockdown did not give people enough time to plan and this led to panic buying where consumers stocked up on essential food items. Panic buying resulted to hike in prices of basic foodstuffs. For example, in Lagos, prices of staple food items like garri, beans, rice, yams, rose to 80% - 100% (NBS, 2020). The rise in prices of basic food items is another way COVID-19 impacted on food security in Nigeria because people just bought what they can afford not minding the quality and quantity. Also, the rise in prices of basic food items at the time when many people had less money to buy food made access to food difficult. Food security is affected since majority of the people buy their foods from their local markets (FAO, 2020). Barrett (2020) opined that disruptions on economic activities have direct effect on food security of the Nigerian people.

# CONCLUSION AND RECOMMENDATIONS

#### Conclusion

The COVID-19 pandemic is an unprecedented problem to Nigeria in particular and the world at large. The measures employed to curtail its spread such as lockdown, social distancing, movement and transport restrictions are highly disruptive for food security. Also, the COVID-19 pandemic affected agricultural production which is a tool for promotion of food security. Therefore, building resilience of the Nigerian food system is very essential to prevent food insecurities occasioned by COVID-19 pandemic.

Basic food items and cash should be provided to the people, especially the poor and vulnerable groups to help alleviate their suffering occasioned by COVID-19. The awareness created for people to maintain personal hygiene should be sustained and people should be advised not to hoard essential food items to curb food insecurity.

# Recommendations

The negative effects of the COVID-19 pandemic on food security in Nigeria calls for interventions geared towards alleviating these problems. The control measures to be adopted for food security in Nigeria are as follows;

• There should be investment in research and development aimed at increasing food production to boost food security in Nigeria.

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- Agricultural food production and food processing industries need to be strengthened in order to reduce the dependence on imported foods. This is because the inability to import foods due to the restrictions for COVID-19 prevention caused food shortages. It was reported that Africa (Nigeria inclusive) is more dependent on externally sourced food imports than locally manufactured foods (World Economic Forum, 2020). Food supply chain and private food processing companies should be protected from disruptions because they are essential to achieving food security in Nigeria.
- Government should provide basic food items and money to the poor and vulnerable, and also supply enough food to the markets from food banks/reserves with the aim of forcing down prices of basic foodstuffs in the markets and make them accessible to everybody.
- Government should provide cash and farm inputs to agricultural workers to ameliorate their losses occasioned by the lockdowns and enable them continue in food production. For example, the Federal government through the Federal Ministry of Agriculture distributed improved seeds to farmers in some states in Nigeria to help cushion the effects of COVID-19 on them and assist them continue their farm work (Reliefweb 2020), knowing that the farmers used up their capital during the lockdown.
- Government should ensure that the relief and stimulus packages they are providing get to those targeted. This can be achieved by proper monitoring and record keeping.
- Concerted efforts should be made to prevent the spread of COVID-19 to rural areas since that is where majority of agricultural production occurs and food scarcity can be very severe if the pandemic spreads to rural areas (Taffesse and Minten, 2020).
- Food production, marketing and distribution should be included as essential services. This will ensure sustainability of the food systems in the face of a pandemic.
- Workers in the food sectors should be protected against exposure to COVID-19 as those in the health sectors. This is really necessary for workers that interact with the public or with crowd, such as in food processing plants, wholesale markets and grocery markets.
- The use of masks and protective equipment in addition to adhering strictly to rules for social distancing, staggering hours of work and use of machines for sorting and counting processes should be adopted to prevent spread of COVID-19 in food processing industries.
- Government and private agencies should continue to create awareness on the need for people to maintain personal hygiene at all times to prevent COVID-19 infection.
- People should be cautioned against hoarding of essential food items in order to prevent food insecurity.

 Social protection policies should be enacted by policy makers to take care of the citizens especially the poor and vulnerable in the event of a pandemic to ensure their food security.

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