

IMPLICATIONS OF COVID-19 PANDEMIC ON FOOD SECURITY IN NIGERIA: VIEWS AND OPINIONS

ABSTRACT

The article reviewed the implications of Covid-19 pandemic on Food Security in Nigeria: Views and Opinions sourcing from World Bank and Nigeria Centre for Disease Control (NCDC) analysis. COVID – 19 pandemic has significantly affected the socio-economic status of farmers by reducing agricultural activities, health and income. Investigations on the impacts of the pandemic indicated increases prices of consumables, especially food items with prices into double digits in Nigeria of about 12-13%. It is suggested that, vulnerable households to be mitigated through cash transfer or improved credit access to the genuine farmers in the rural areas, who produce the bulk of the farm outputs and interventions to improve agricultural inputs supply chains, hence, attaining the required food security to the Nigerian population.

KEYWORDS: *Covid-19 pandemic, Food Security, Opinions, Views, implications.*

Introduction

Background of the study

World Health Organization (WHO) (2020) announced “COVID-19” as the name of the new disease on 11 February, 2020. Furthermore, WHO on March 11th 2020 declared covid-19, a pandemic pointing to the over 118,000 cases in over 110 Nations around the world. In Nigeria, over 25,000 cases, 500 deaths have been recorded by the Nigeria Centre for Disease Control (NCDC, 2020). The effects of the pandemic have brought devastating halt on both human, social and economic activities and so impacting negatively on human livelihood. Farming activities being the chief sustainer of livelihood has received its own festering share. The number of people engaging in farming activities as well as the number of man-hour put into the farming operations have been greatly affected. Food security issues which has to do with the availability as well as the accessibility of food have also been a matter of concern. The lockdown as well as restrictions on human movements have affected food supply thereby leading to increases in local demand with its consequent rises in the prices of food items.

Within the period 30th April to 15th May 2020, the number of infections rose from 1932 on 30th April 2020 to 4971 on 14th May, indicating a percentage increase of 157.3% in two weeks. Furthermore, the fatality rate increased from 58 on 30th April 2020 to 164 on 14th May 2020,

indicating a percentage change of 182.76% in two weeks. But the daily fatality rate has remained constant at 3% despite the increasing number of daily infections.

Measuring Food Security and Insecurity

Food security as a concept originated in the 1974, in the discussions of international food problems at a time of global food crisis. The initial focus was the volume and stability of food suppliers. During that period, food security was defined by World Food Summit (WFS) in the 1974 as: “availability at all times of adequate world food supplies of basic food stuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices” (United Nations 1975). The most recent careful redefinition of food security is that negotiated in the process of international consultation leading to the WFS in November 1996. According to WFS (1996) definition, “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. This definition addresses four key components of food supplies and security namely: availability, stability, access and utilization (Schmidhuber and Tubiello 2007).

Over time a large number of different definitions have been proposed. However, at the World Summit of Food Security in 2009, this definition was reconfirmed, and the concept was extended and specified by adding that the “four pillars of food security are availability, access, utilization, and stability” and stated that “the nutritional dimension is integral to the concept”. The strength of this definition is its comprehensiveness and imperative for “concerted actions at all levels” (that are “individual, household, national, regional, and global levels”) and “coordinated efforts and shared responsibilities” across institutions, societies, and economies to tackle food insecurity effectively (FAO 1996).

In order to understand better the nature and extent of the food security situation and the possible ways to improving it, it is important to distinguish between food security at the national, local, household and intra-household levels. The ultimate goal is to meet the food requirements of the people at all levels.

- Food security at the national level is determined by the availability of enough resources for the whole population. The most widely used indicators are quantities of available food compared with needs, as well as import requirements compared with the country’s capacity to import.

- At the sub-regional levels, food security can be measured by comparing regional nutritional requirements with availability of dietary calories per head. Furthermore, the problem is increasingly being used in terms of seasonal or local level.
- At the household level, food security is dependent on a household's access to enough food. Thus it is closely linked with the issue of poverty, access, sufficiency, vulnerability and sustainability. At the household level, food security is measured by actual dietary intake of all household members using household income and expenditure surveys. It is important that changes in socio-economic and demographic variables be monitored continuously over time. A food poverty indicator shows the number of individuals living in a household whose access to food is sufficient to provide a dietary intake adequate for growth, activity and good health. Individual food security implies an intake of food and absorption of nutrients sufficient to meet an individual's needs for activity, health, growth and development. The individual's age, gender, body size, health status and level of physical activity determine the level of need.

A comparison of the COVID-19 pandemic with the circular flow of income showed that the mean score associated with respondents who believed that the circular flow of income has been slowed down since the commencement of the COVID-19 pandemic was 3.572 with a standard deviation of 1.5709 and a standard Error Mean of 0.0397. Against a test value of 3, this resulted in a mean difference of 0.572. A t-test for significance of this mean difference resulted in a computed t and an associated significant probability of 14.41 ($P < 0.001$). Consequently, the mean score of people who agreed that COVID-19 has significantly constrained circular flow of income in Nigeria is significantly higher than the test value. The implication is that, at the ninety-nine per cent confidence level, we can conclude that the COVID-19 pandemic has significantly constrained the circular flow of income in Nigeria

The demographic distribution of COVID-19 cases in Nigeria indicates that a greater proportion of the infected people are males with the proportion of infected males fluctuating between 67% and 69% daily while the proportion of females fluctuates between 33% and 31% daily. Furthermore, the results also indicate that the most gullible age group is 21–40 years and the percentage of infected people within this range has been ranging between 22% and 25%.

A comparison of the COVID-19 pandemic with economic growth showed that the mean score associated with respondents who believed that the COVID-19 pandemic has constrained economic growth in Nigeria was 3.4375 with a standard deviation of 0.5840 and a standard Error

Mean of 0.0406. Against a test value of 3, this resulted in a mean difference of 0.4375. A t-test for significance of this mean difference resulted in a computed t and an associated significant probability of 10.78 (0.016). Consequently, the mean score of people who agreed that COVID-19 has resulted in constrained economic growth in Nigeria is significantly higher than the test value. The implication is that, at the ninety-nine per cent confidence level, we can conclude that the COVID-19 pandemic has significantly contributed to restrictions in economic growth in Nigeria.

Recent discussions on COVID-19 pandemic impacts in Nigeria

COVID-19 Pandemic has unarguably impacted negatively on Nigeria's economy as other parts of the world. Nigeria recorded its first (index) case in February, 2020 following subsequently by the spread of the virus to all its 6 geopolitical zones. With the zonal outbreaks, the North Eastern zone recorded a significant infection of about 7% of Nigeria's total COVID-19 confirmed cases as at June, 2020 (NCDC, 2020). Also the pandemic has disturbed the socio-economic life of people in the zone with its farming population being the worst hit. This is because most of the farmers in the zone are rural dwellers who are associated with high levels of illiteracy and conservatism which limit their rate of adoption of COVID-19 preventive measures. The above problem is further worsened by lack of isolation centers, test kits and insufficient health workers in these agrarian communities. Therefore, the farming population in Taraba State, Nigeria has been affected by the pandemic thereby decreasing annual agricultural production and threatening the food security drive of Federal Government of Nigeria.

The Government's policy measures such as travel restrictions, lockdowns, and restrictions on economic and social activities, aimed at curbing the spread of COVID-19, had affected the livelihoods and food security of smallholders in Nigeria (Bedru, et. al., 2020). In their study the results showed that 88 % of the households reported that they lost about 50 % of their income due to the COVID-19 pandemic. As a result, about 66 % of respondents reported they reduced food consumption. Travel and movement restrictions caused disruptions in agricultural activities and supply chains, as 29 % of respondents reported planting fewer crops in the 2019/2020, 24 % reduced cropping area, and 24 % reduced fertilizer application. In terms of household's food security, results show that COVID-19 significantly worsened the food security situation of many households in Nigeria, especially poorer households and rural farmers. More than 80 % of

respondents worried about not having enough food and 77 % ate less food than they thought they should. Furthermore, survey households also reported a significant reduction of consumption of proteins (eggs, meat, and dairy products) and fruits since the pandemic struck. Increases in food prices are felt by most households (85 %) (Bedru, et. al., 2020).

The COVID-19 pandemic is a crisis unlike any we have seen in our lifetimes. It pushed 100 million people into extreme poverty in 2020. It has widened inequality, posing a risk that recovery could leave poor countries behind. And it comes on top of long-term challenges that make many countries fragile: unsustainable debt, climate change, conflict, and weak governance. The World Bank Group has mounted the largest crisis response in its history to help over 100 low- and middle-income countries fight the health, economic, and social impacts of COVID-19. The pandemic makes clearer than ever that connectivity infrastructure is critical for economic and social development. But in countries where few have internet access, achieving universal, affordable, and high-quality connectivity requires massive investment (World Bank, 2022). Domestic food price inflation remains high around the world. High inflation continues in almost all low-income and middle-income countries, and the share of high-income countries with high inflation is also increasing sharply (World Bank, 2022).

The agricultural, cereal, and export price indices were stable over the past 2 weeks. Domestic food price inflation remains high around the world. High inflation continues in almost all low-income and middle-income countries, and the share of high-income countries with high inflation is also increasing sharply. The war in Ukraine threatens poor countries with overlapping food and debt crises; suffice it to including Nigeria

Food inflation is defined as percent change in monthly nominal food and beverages Consumer Price Index (CPI), year on year (e.g., index in May 2020 relative to prices in May 2019). Blank (white) cells indicate missing data. Food inflation is calculated from the food and non-alcoholic beverages component of the CPI index, for each country.

In August, 2022, record high food prices have triggered a global crisis Nigeria not excluded, that will drive millions more into extreme poverty, magnifying hunger and malnutrition, while threatening to erase hard-won gains in development. The war in Ukraine, supply chain disruptions, and the continued economic fallout of the COVID-19 pandemic are reversing years of development gains and pushing food prices to all-time highs. Rising food prices have a greater impact on people in low- and middle-income countries, since they spend a larger share of their

income on food than people in high-income countries. This brief looks at rising food insecurity and World Bank responses to date.

Domestic food price inflation remains high around the world. Information from between April and July 2022 shows high inflation in almost all low- and middle-income countries; 92.9% of low-income countries, 92.7% of lower-middle-income countries, and 89% of upper-middle-income countries have seen inflation levels above 5%, with many experiencing double-digit inflation. The share of high-income countries with high inflation has also increased sharply, with about 83.3% experiencing high food price inflation. Compared to the January 2021 average, maize and wheat price indices are 20% higher, while the rice price index is 16% lower.

According to the World Bank's April 2022 Commodity Markets Outlook, the war in Ukraine has altered global patterns of trade, production, and consumption of commodities in ways that will keep prices at historically high levels through the end of 2024 exacerbating food insecurity and inflation. As of August 11, 2022, the Agricultural Price Index was 1% higher than two weeks ago. Both maize and wheat prices are 2% higher compared to January 2022, while rice prices are about 6% higher. Compared to the January 2021 average, maize and wheat price indices are 20% higher, while the rice price index is 16% lower.

Following the start of the war in Ukraine, trade-related policies imposed by countries have surged. The global food crisis has been partially made worse by the growing number of food trade restrictions put in place by countries with a goal of increasing domestic supply and reducing prices. As of August 11, at least 23 countries have implemented 33 food export bans, and at least seven have implemented 11 export-limiting measures.

By June 2022 the number of acute food insecure people – whose access to food in the short term has been restricted to the point that their lives and livelihoods are at risk – increased to 345 million in 82 countries according to WFP. In addition, WFP and FAO warned that acute food insecurity could worsen in 20 countries or areas during June to September 2022.

Rapid phone surveys done by the World Bank in 85 countries show a significant number of people running out of food or reducing their consumption in the first two years of the COVID-19 pandemic. Reduced calorie intake and compromised nutrition threaten gains in poverty reduction and health and could have lasting impacts on the cognitive development of young children (World Bank, 2022).

World Bank supports/interventions during the COVID-19 pandemic

In the face of multiple crises, the World Bank deployed short- and long-term responses to boost food and nutrition security, reduce risks, and strengthen food systems. In May, the World Bank Group and the G7 Presidency co-convened the Global Alliance for Food Security, which aims to catalyze an immediate and concerted response to the unfolding global hunger crisis. As part of a comprehensive, global response to the ongoing food security crisis, the World Bank Group is making up to \$30 billion available in existing and new projects in areas such as agriculture, nutrition, social protection, water and irrigation. This financing will include efforts to encourage food and fertilizer production, enhance food systems, facilitate greater trade, and support vulnerable households and producers.

The World Bank is helping countries boost food and nutrition security during the current crisis of COVID – 19 pandemic including:

- a) A \$300 million project in Bolivia that will contribute to increasing food security, market access and the adoption of climate-smart agricultural practices.
- b) A \$315 million loan to support Chad, Ghana and Sierra Leone to increase their preparedness against food insecurity and to improve the resilience of their food systems.
- c) A \$500 million Emergency Food Security and Resilience Support Project to bolster Egypt's efforts to ensure that poor and vulnerable households have uninterrupted access to bread, help strengthen the country's resilience to food crises, and support to reforms that will help improve nutritional outcomes.
- d) A \$130 million loan for Tunisia, seeking to lessen the impact of the Ukraine war by financing vital soft wheat imports and providing emergency support to cover barley imports for dairy production and seeds for smallholder farmers for the upcoming planting season.
- e) The \$2.3 billion Food Systems Resilience Program for Eastern and Southern Africa, helps countries in Eastern and Southern Africa increase the resilience of the region's food systems and ability to tackle growing food insecurity. The program will enhance inter-agency food crisis response also boost medium- and long-term efforts for resilient agricultural production, sustainable development of natural resources, expanded market access, and a greater focus on food systems resilience in policymaking.

The agricultural, cereal, and export price indices were stable over the past 2 weeks, with the agricultural index closing at the same level as 2 weeks ago, the export index up by 2 percent, and the cereal index down by 1 percent. Maize prices closed 1 percent higher than 2 weeks ago,

wheat prices 2 percent lower, and rice prices 5 percent lower. Maize prices were 2 percent lower than the January 2022 average, wheat prices 4 percent higher, and rice prices 5 percent higher. The maize and wheat price indices were 16 percent and 22 percent higher, respectively, than the January 2021 average, and the rice price index was 14 percent lower.

Domestic food price inflation (measured as year-on-year change in the food component of a country's Consumer Price Index (CPI)) remains high. Information from the latest month between March and June 2022 for which food price inflation data are available shows high inflation in almost all low-income and middle-income countries; 93.8 percent of low-income countries, 89.1 percent of lower-middle-income countries, and 89 percent of upper-middle-income countries have seen inflation levels above 5 percent, with many experiencing double-digit inflation. The share of high-income countries with high inflation has also increased sharply, with about 78.6 percent experiencing high food price inflation. The most affected countries are in Africa, North America, Latin America, South Asia, Europe, and Central Asia. In real terms, food price inflation exceeded overall inflation (measured as year-on-year change in the overall CPI) in 78.7 percent of the 160 countries for which food CPI and overall CPI indexes are both available.

According to Word Bank (2022) Food Inflation July 2021–June 2022 (Percent Change, Year on Year), Nigeria is classified as lower middle income country of the world. The inflation rates from July 2021 (21%), September 2021 (21%), October (21%), November 2021 (21%), December 2021 (21%), January 2022 (22%), February 2022 (22%), March 2022 (22%), April 2022 (22%), May 2022 (22%), and June 2022 (22%) respectively. These price increases ranges between 5 and 30 percent for the group with other countries of the world like: Angola, Algeria, Bangladesh, Pakistan, Ukraine, Tunisia, Armenia, Azerbaijan, Belarus, Egypt. Georgia, Russian Federation, South Africa, Kuwait, Uruguay and so on. The general Indicators for the world as a whole are: Price increase less than 2 percent (High Income), Price increase 2 to percent 5 (Upper Middle Income), Price increase 5 to 30 percent (Lower Middle Income), and Price increase 30 percent or higher (Low Income). The percentage incomes fluctuate even within a year in a particular country, hence, is the average is taken in month of the year under consideration (Word Bank, 2022).

Conclusion

Fallout of the COVID-19 pandemic have impacted economic activities in Nigeria and globally in general. Socio-economic variables were heavily affected by the pandemic to the extent of

reducing the availability, accessibility, and utilization of dietary food materials, by implications causing food insecurity in Nigeria. Consequently, causing reduced incomes of the citizens, deficiency of food nutrients, leading to health complications due to increased inflation of prices of foodstuffs despite several palliatives both in kinds and cash. Hence, productivity especially among the farming households, mostly in the majority farming population in the rural areas of Nigeria. It is therefore suggested that three key main policy emphasizes: support vulnerable households to mitigate the implications of income reduction and loss through cash transfer or improved credit access to genuine farmers; interventions to improve agricultural inputs supply chains to ease the pandemic's impact on agricultural production; and support food insecure households through direct food distribution.

REFERENCES

- Bedru, B., Motunrayo, O., Adebayo, O., Adetunji, F., Hyacinth, E., Joel, A., and Kwaw, A. (2020). The Effects of COVID-19 Policies on Livelihoods and Food Security of Smallholder Farm Households in Nigeria Descriptive Results from a Phone Survey, International Food Policy Research Institute (IFPRI), IFPRI Discussion Paper 01979.
- FAO (Food and Agriculture Organization) (1996). Rome Declaration on World Food Security and World Food Summit Plan of Action. <http://www.fao.org/DOCREP/003/W3613E/W3613E00.HTM>.
- Lucas, B. (2020). **Impacts of COVID-19 on inclusive economic growth in middle-income countries**, K4D Helpdesk Report 811 Institute of Development Studies, Brighton, UK, Google Scholar.
- Kwaw, A., Hyacinth, E., Victor, O., Karl, P. and James, T. (2020). Estimating the Economic Costs of COVID-19 in Nigeria, Strategy Support Programme |Working Paper NO. 63, The International Food Policy Research Institute (IFPRI), Nigeria.
- The World Bank (2022). Food Security Update, Understanding Poverty, Food and Agriculture (FAO).
- World Bank (2022). The World Bank Group: Responding to the Covid-19 Pandemic *and Rebuilding Better*, An Unprecedented Global Effort, www.worldbank.org/coronavirus, www.worldbank.org/vaccines, www.worldbank.org/changinglives.
- World Bank (2022). Food Security Update, International Bank for Reconstruction and Development / The World Bank, 1818 H Street NW, Washington DC 20433, Telephone: 202-473-1000, Internet: www.worldbank.org, Update July 29, 2022.
- World Bank (2007) Floods 2007 damage and needs assessment report, Dhaka.

- WFP (World Food Program) (2005) Bangladesh poverty Map 2005. Food Security at a glance: 7, Food vulnerability. Available at: <http://foodsecurityatlas.org/bgd/country/food-security-at-a-glance#section-6>.
- WFS (World Food Summit) (1996) Basic concepts of food security: definition, dimensions and integrated phase classification. Available at [basic-concept-of-food-security.html](http://www.fao.org/docrep/010/a0401e/basic-concept-of-food-security.html).
- World Bank (2009) Implication of climate change risks on food security in Bangladesh. South Asian Region.
- World Bank (2000) Bangladesh: climate change & sustainable development, Report No. 21104
- NCDC (Nigeria Centre for Disease Control). (2020). *First Case of Corona Virus Disease Confirmed in Nigeria*. Abuja, Nigeria: NCDC. Downloaded on March 30th, 2020 from <https://ncdc.gov.ng/news/227/first-case-of-corona-virus-disease-confirmed-in-Nigeria>.
- Nigeria Centre for Disease Control (NCDC, 2020). Daily Update on Corona Virus Pandemic @COVID- 19, ncdc.gov.ng, Abuja, Nigeria, 21/06/2020.
- Nnabuife, C. 2020. “COVID-19: FG Commences Process to Distribute 70,000 Metric Tons of Food Items.” *Tribune*, April 4, 2020. <https://tribuneonlineng.com/covid-19-fg-commences-process-to-distribute-70000-metric-tons-of-food-items/>.
- Schmidhuber J, Tubiello FN (2007) Global food security under climate change. *Proc Natl Acad Sci, USA* 104(50):19703–19708.
- Ozili, P.K. (2020a). COVID-19 Pandemic and Economic Crisis: The Nigerian Experience and Structural Causes (April 2, 2020), Available at SSRN: <https://ssrn.com/abstract=3567419>, [Google Scholar](https://scholar.google.com/citations?user=Uj8p8wQAAAAJ&hl=en).
- Ozili, P. (2020b). COVID-19 in Africa: socio-economic impact, policy response and opportunities *Int. J. Sociology. Soc. Policy* (2020), Vol. ahead-of-print No. ahead-of-print, [Google Scholar](https://scholar.google.com/citations?user=Uj8p8wQAAAAJ&hl=en).