

# Mitigating the Recessional Impact of COVID-19 on Nigerian Economy through Agricultural Enterprises Promotion

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## Summary

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COVID-19 is undoubtedly depressing the world economy and the Nigerian economy is no exception. The economic slowdown is triggering food and non-food price shocks with declining income to small, medium, and large-scale businesses. This paper examines the implications of COVID-19 pandemic on the Nigerian economy and highlights how the promotion of agricultural enterprises can help to mitigate the recessional impact arising from the pandemic. The paper is extensively theoretical and conceptual in its nature. Findings show that COVID-19 pandemic, though a threat to lives and the economy, has provided opportunities in some enterprises. Digital technologies have become a positive enabler facilitating business continuity and connecting people more than ever in the phase of economic paralysis due to lockdown and movement restriction of people. The paper concludes that scaling up of innovations in agribusiness enterprises will save the country from the imminent deleterious impact of COVID-19. Digital agriculture solutions and e-commerce are required in order to stimulate food production, processing, and marketing during and after the pandemic. Active measures are required to reduce food wastes and losses that may arise from supply chain bottlenecks. Provision of subsidies to food producers and reduction of import tariffs will assist investors in agribusinesses to continue their activities. The government could temporarily review taxation policy on imported goods to compensate for potential cost increases and the impact of the devaluation of the currency.

## Key words

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agribusiness promotion, pandemic, economic recession, mitigation, COVID-19 crisis, agricultural enterprises, digitization, Nigeria

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## INTRODUCTION

The COVID-19 pandemic has become one of the most serious threats to global markets and international trade in recent times besides the threat to lives. Border closures and travel restrictions instituted by different countries to curtail the spread of the virus have adversely affected transportation and other supply-side businesses and services (Rosamond, 2020). Nigeria, like all the nations of the world, is navigating these uncertain times. The evolving uncertainty of the emergence of COVID-19 pandemic has adversely impacted the economies and businesses. The economic and other outcomes of COVID-19 are dependent on the baseline situation of communities, countries and regions, as well as their resilience to shocks. One noticeable fact is the recognition of the significance of agriculture, its upstream and downstream activities as critical to the other businesses' survival despite the current restrictions enacted to stop the spread of the virus. Enterprises of various sizes have been affected by the pandemic and many have stopped operations, while others cut working hours and laid off staff. Many are on the brink of collapse as shops, restaurants are closed, flights and hotel bookings canceled, and businesses shift to remote working. Many workers have lost their jobs and those whose employment status is uncertain are mostly migrant agricultural workers, itinerant sellers, selling staff, waiters, kitchen staff, baggage handlers, and cleaners.

Nigeria's vulnerabilities to the impact of external shocks can be attributed to increased dependencies on global economies for fiscal revenues, foreign exchange inflows, fiscal deficit funding, and capital flows required to sustain the nation's economic activities. The food and agribusiness sectors are affected to varying degrees with some food companies experiencing rapid increased demand for products as panic buying escalates across some countries and in some cases, import competitors are restricted. A lot of export markets have been closed down while others are in and out of operations in many countries. Some domestic food producers have a rapid decline in demand for food and restaurant services. The countries face an unenviable challenge of managing the COVID-19 pandemic. Lower oil prices for nations like Nigeria, dependent on oil revenues, have serious implications for governments in meeting the obligation of payment of salaries to government workers. This problem, coupled with weak health systems and limited monetary and fiscal buffers, urgently demands structural reforms to build a competitive, diversified economy, by creating essential jobs that can reduce poverty. Keeping agricultural enterprises running is an indispensable economic component in the ongoing battle against COVID-19, yet discussions on the outbreak have thus far devoted very little attention to the challenges facing agribusinesses and the need to promote agribusiness enterprises to mitigate the recessionary impact of COVID-19. The promotion of agribusiness enterprises to minimize the impact of the COVID-19 crisis on the economy is critical. This paper, therefore, assesses the immediate challenges the pandemic had posed to the Nigerian economy, especially the agribusinesses and suggests mitigation measures through the promotion of agricultural enterprises to ensure a sustainable sector in the post-crisis period. Specifically, the paper is designed to provide an insight on (i) the state of the Nigerian economy before COVID-19, (ii) analysis of the state of agribusiness sectors in Nigeria before the pandemic, (iii) discussing the challenges and opportunities for improved agribusiness performance. (iv)

information on the level of import and exports in Nigeria, (v) highlighting the roles of individuals, private and public sectors and (vi) assessment of how entrepreneurship in agribusiness can help to mitigate the impact of COVID-19.

### Literature Review on the Effects of COVID-19 on Economy

There have been growing interest and a remarkable number of studies on the economic consequences of COVID-19 since its outbreak in December 2019 (Barro et al., 2020; Correia et al., 2020; IMF, 2020; Jorda et al., 2020; Kohlscheen et al., 2020; McKibbin and Fernando, 2020; OECD, 2020; Saez and Zucman, 2020; UNCTAD, 2020; Farayibi and Asongu, 2020 Ferguson et al., 2020). This disease has been reported to spread to over 200 countries with a negative effect on the global economy (Congressional Research Service, 2020) which has led to the conclusion that COVID-19 is the most serious episode since the 1918 Spanish Influenza pandemic the world has ever had (Ferguson et al., 2020). COVID-19 is unique when compared with the 2008-2009 global financial crisis and other major pandemics/epidemics like the Spanish influenza pandemic in 1918, Severe Acute Respiratory Syndrome (SARS) in 2003, swine flu pandemic in 2009, MERS pandemic in 2012, Ebola in 2013, Zika pandemic in 2015, due to global lockdowns and trauma of financial markets it has created leading to a global sudden stop in economic activity and looming global recession (Boissay and Rungcharoenkitkul, 2020).

McKibbin and Fernando (2020) are the authors of one of the earliest systematic studies of the potential economic cost of COVID-19 even though the study was conducted at a time when the pandemic had not appeared to be an imminent threat with an assumption that the epidemic would be contained within China. The authors used data from historical pandemics to explore seven plausible scenarios of the economic consequences. Based on such assumption, they observed that the disease would lead to 0.3–2.2% loss in terms of global GDP, and in pandemic scenarios, where fatality reaches 3% and risk premia spike globally, the loss is expected to go up to 11%. Five principal shocks were also identified by McKibbin and Fernando to be induced by COVID-19 pandemic independent of the country. These according to them are shock on labour supply (ILO, 2020a); shock on equity risk premium of economic sectors; shock on production costs; shock on consumption demand due to precautionary savings, and shock on government expenditures all leading to a sharp decline of Gross Domestic Product (GDP). The scars that would be created by COVID-19 on the economic fabric based on experiences from past recessions are predicted to be deep and persistent (Eichengreen, 2020).

De Vito and Gomez (2020) investigated via a series of scenarios, the likely impact of COVID-19 on the liquidity of listed firms across 26 countries. The authors assessed the extent to which firms' liquidity could withstand a decline in sales of 25%, 50%, and 75%. They found that in the most extreme case (where sales decline by 75%), the average firm would exhaust liquidity in approximately 12 months with around a third of firms becoming illiquid in less than six months.

Global economy is affected through supply chain disruptions due to COVID-19 containment measures (such as border

shutdowns, travel restrictions, and quarantine) enforced in countries which constitute the world's largest economies (Brodeur et al., 2020, UNCTAD, 2020). The majority of people are staying at home, practicing social distancing, and working remotely (Harapan et al., 2020) in order to control the spread of the disease and to decrease the death rate. The cumulative results of all these as predicted by a lot of international bodies, financial companies, and research institutes will lead to economic crisis and recession (Buck, et al., 2020). For instance, the Food and Agriculture Organization predicted that there would be shocks on both the demand and the supply sides of the world economy through multiple transmission mechanisms (FAO, 2020). The World Trade Organization expects world merchandise trade to plummet by between 13 percent and 32 percent in 2020 (WTO, 2020). Foreign direct investment flows have also been predicted to fall between 30 percent to 40 percent during 2020–2021 (UNCTAD, 2020). The OECD estimates that the global economic recovery will be slow and gradual. The Organisation for Economic Co-operation and Development also predicted that the average unemployment rate among OECD countries will rise to 9.2% under a single wave scenario and 10.0% under the second wave scenario (OECD, 2020). The IMF utilizes a semi-structural Dynamic Stochastic General Equilibrium (DSGE) model and in its June 2020 World Economic Outlook, projected a deeper global recession in 2020 and a slower recovery in 2021 as a result of COVID-19 (International Monetary Fund, 2020). Global output according to this organization is projected to decline by 4.9 percent in 2020, followed by partial recovery, with growth at 5.4 percent in 2021. Other studies such as Maliszewska et al. (2020) and the World Bank (2020a) utilize Computable General Equilibrium (CGE) models and mainly focus on the impact of mortality, morbidity, and increased production costs on the economies. The spread of COVID-19 has dramatically increased business uncertainty (Altig et al., 2020) with a consensus in the literature that the pandemic will cause a major economic recession (Vaitilingam, 2020). Prominent economists have raised the possibility of GDP falling by as much as half in the short run, as a consequence of the global sudden stop (Gourinchas, 2020, Saez and Zucman, 2020).

## MATERIAL AND METHODS

The accuracy of analysing the current economic effects of COVID-19 outbreak or to predict the future effects is a function of the availability of data on the pandemic and the interesting economic indicators or ample historical data respectively (Petropoulos and Makridakis, 2020). Historical data are lacking at the beginning of the pandemic in Nigeria, thereby making predictions widely uncertain. Notwithstanding, data and information for this study were obtained principally from secondary sources. These include published reports and books, unpublished discussion papers, research reports (such as Brodeur et al, 2020, the International Fund for Agricultural Development<sup>1</sup>, the World Trade Organization<sup>2</sup>), national database (such as the Nigeria Centre for Disease Control<sup>3</sup>), international databases (such as the World Health Organisation COVID-19 Dashboard<sup>4</sup>,

<sup>1</sup> <https://www.ifad.org/en/covid19>

<sup>2</sup> [https://www.wto.org/english/news\\_e/news20\\_e/agri\\_18jun20\\_e.htm](https://www.wto.org/english/news_e/news20_e/agri_18jun20_e.htm)

<sup>3</sup> <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria>

<sup>4</sup> [https://covid19.who.int/?gclid=EAAlQobChMIuO\\_iv\\_b6wIVjbHtCh1Ofwf-wEAYASAAEgIkF\\_D\\_BwE](https://covid19.who.int/?gclid=EAAlQobChMIuO_iv_b6wIVjbHtCh1Ofwf-wEAYASAAEgIkF_D_BwE)

European Centre for Disease Prevention and Control<sup>5</sup>), policy documents such as: World Bank (2020b)<sup>6</sup>, ILO sectoral brief (ILO, 2020b); position papers on COVID-19 and agribusiness (Such as: International Agri-Food Network<sup>7</sup> Alliance for a Green Revolution in Africa<sup>8</sup>). The data and information were gathered to cover a range of conceptual and empirical issues relating to how the promotion of agricultural enterprises could be used to mitigate the effect of COVID-19 pandemic on the economy. The paper uses expository analysis in providing essential information.

## RESULTS AND DISCUSSION

### Pre-COVID-19 State of the Nigerian Economy and Current Status.

The Nigerian economy is one of the largest in Africa. Since the late 1960s, it has been primarily based on the petroleum industry. A series of world oil price increases from 1973 produced rapid economic growth in transportation, construction, manufacturing, and government services in the economy. This led to a great influx of rural people into the urban centers, and resulted in the stagnation of the production of agricultural commodities to such an extent that cash crops such as oil-palm, peanuts (groundnuts), and cotton are no longer significant export commodities. Starting in 1975, Nigeria was forced to import basic commodities such as rice, wheat, sugar, cassava, vegetable-oil, and fish for domestic consumption. The system worked well while oil revenues flowed in. Since the late 1970s, the agricultural sector has been in a continuing crisis because of the fluctuating world oil market and the country's rapid population growth. The declining farming population left in its wake of urban migration, created a shortage in food production which was the cause of increasing food import. The various attempts by both the past and present governments in finding a solution to this challenge by banning agricultural imports to encourage local production appear not to have yielded the desired results.

In the late 1990s, the government began the privatization of many state-run enterprises especially in communications, power, and transportation in order to enhance the quality of service and reduce dependence on the government. Most of the enterprises had been successfully privatized by the beginning of the 21<sup>st</sup> century, but a few remained in government hands. At the turn of the 21<sup>st</sup> century, Nigeria continued to face an unsteady revenue flow. The government attempted to counter the borrowing from international sources by introducing various austerity measures. An ever-increasing share of the national budget is needed for debt repayment. This, with sharp practices in government operations, meant that very little of Nigeria's income was spent on the people and their needs. The country benefited from a 2005 debt-relief plan by which the majority of its debt to a group of creditor countries known as the Paris Club were forgiven when it repaid a certain amount. Nigeria successfully met this condition in 2006 and become the first African country to settle its debt with the group. Nigeria entered a recession in 2016, partly because of falling global

<sup>5</sup> <https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases>

<sup>6</sup> <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19>

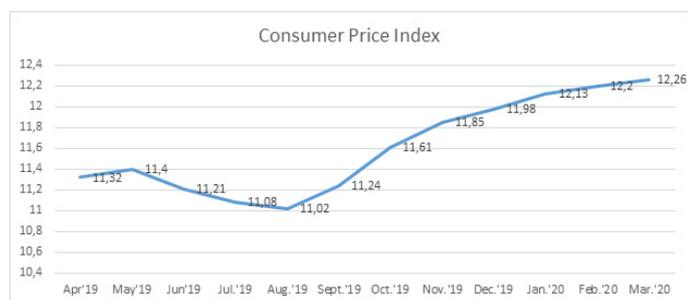
<sup>7</sup> <https://agrifood.net/position-papers/383-psm-position-on-covid/file>

<sup>8</sup> [https://agra.org/wp-content/uploads/2020/05/AGRA-Position-Paper-on-COVID19-02.04.20\\_v3.pdf](https://agra.org/wp-content/uploads/2020/05/AGRA-Position-Paper-on-COVID19-02.04.20_v3.pdf)

oil prices (global oil shock). Nigeria was grappling with weak economic recovery when COVID-19 outbreak, which started early December 2019 in China, spread to the country in February 2020. Nigeria's economic recovery strengthened marginally, with an annual 2019 gross domestic product growth rate average of 2.3 percent. The country's debt profile has been a source of concern for policymakers and development practitioners as the recent debt service-to-revenue ratio was put at 60 percent.

Nigerian economy is projected to contract by 3 percent in 2020. The macroeconomic situation appears to be more challenging than in 2015-2016 when oil prices fell sharply. Nigeria is expected to experience its first recession in 25 years due to the outbreak of COVID-19 and fall in crude oil prices with fewer buffers and policy instruments to cushion the adverse effects.

Consumer Price Index (CPI), which measures changes in the prices paid by consumers for a basket of goods and services, has changed drastically between December 2019 and March 2020 (See Figure 1). Data from the National Bureau of Statistics (NBS) revealed that Nigeria's inflation rate increased by 12.20% (year-on-year basis) in February 2020. This is 0.07% higher than the rate of 12.13% recorded in January 2020 and the highest rise since April 2018. On a month-on-month basis, it increased by 0.84 percent in March 2020, which is 0.05 percent higher than the 0.79 percent recorded in February 2020. According to the report, the food index rose from 14.85% recorded in January to 14.9% in February 2020.



**Figure 1.** Nigeria's Consumer Price Index CPI Growth from April 2019 to March 2020. Source: Data from NBS, 2020

### The state of Agribusiness in Nigeria before COVID-19 and Emerging Evidence of the Effects

The popularity of agribusiness enterprises was huge in Nigeria particularly in the agricultural sector in the wake of a dearth of employment opportunities in the public sector. However, agribusiness (especially the food production component) has continued to be vulnerable to climate-related shocks, diseases, weak input supply chains, conflicts, and economic shocks. Overall, Nigeria has no shortage of arable land, but there is an extreme shortage of farmland in the most densely settled areas of the southeastern states (such as Delta, Rivers) and the northern states (like Kano, Katsina, and Sokoto). This has forced large numbers of Igbo, Ibibio, and Hausa people to migrate to other parts of the country. Cultural traditions, such as the prohibition of selling family land, have restricted access to farmland in some localities that appear to have abundant cultivable land, and, in the far north, desertification has severely limited the land area available for cultivation.

Today, a lot of Nigerians sustain their living by engaging in agribusiness. Most are small-scale subsistence farmers who produce only a little surplus for sale and derive additional income from one or more cash crops and from the sale of local crafts. Because of limited access to land and inability to afford mechanized equipment, the hoe and machete continue to be the dominant farm implements. The shortage of farmland in some localities and limited access to land in others are among the factors that restrict the size of farmland cultivated by families. Environmental deterioration, inferior storage facilities, poor transport systems, and lack of investment capital contribute to low productivity and general stagnation of agribusiness. With the population growing rapidly and urbanization accelerating, the food deficit continues to worsen despite government efforts to rectify the situation. Root and tuber crops (notably yams, cocoyam, and cassava) are the main food crops in the south, while grains and legumes (such as sorghum, millet, cowpeas, and maize) are the staple crops of the drier north. Rice is also an important domestic crop. Tree crops (notably oil- palm, cocoa, and rubber) are the principal industrial crops of the south, while groundnuts and cotton are produced in the north. Small-scale farmers dominate the production of industrial crops and staple food crops. Cocoa beans from the cocoa tree, are the major agricultural export. Production and processing of other industrial crops have declined owing to the general stagnation in agribusiness.

The Operation Feed the Nation program of 1976–80 sought to increase local food production and thereby reduce imports. Citizens were encouraged to cultivate vacant plots of land while urban dwellers raised gardens in undeveloped building plots. In 1982, the first major step taken to halt the decline in industrial crop production was the disbandment of the Produce Marketing Boards, which paid harrowing prices set by the government. Many farmers have since been motivated to cultivate tree crops, with the federal and some state governments establishing plantations of oil- palm, rubber, and cocoa. The programs to alleviate the food shortage featured the direct purchase and distribution of foodstuffs by government agencies and the production by government parastatals of various staples on large commercial farms. The raising of sheep, pigs, and goats was underdeveloped at the beginning of the 21<sup>st</sup> century. The cattle-herding Fulani are still the main beef producers, although some of the cattle under the care of these nomads belong to settled farmers and city dwellers.

Nigeria's permanent forest reserves occupy less than one-tenth of the total land area. Outside these reserves, much of the forest cover has been destroyed through indiscriminate felling of trees and regular burning to prepare the land for farming or to facilitate hunting. Forest destruction is most extensive in the more densely settled areas, such as the Niger Delta, and in the drier savanna, where overgrazing, bush fires, and the high demand for fuelwood prevent normal regeneration of plants on fallow land. There are many large plantations of exotic species, such as Gmelina and teak, established by the government to provide electric and telegraph poles and fuelwood. In the arid zone of Sokoto, Kano, and the Borno States, forest belts have been established to help arrest the southward advance of the Sahara. Forest plantations have been established in many watersheds to protect water catchment areas of rivers and to reduce the incidence of soil erosion. Fishing has assumed greater importance as a food source following the loss of thousands of head of livestock during the recurring drought in

the Sahel since the early 1970s. The domestic catch supplies more than half of the fish demand. Lake Chad and the southern coastal waters are the main sources of fish, but large quantities are caught every year in pools in seasonal rivers of the northern states.

There has been temporary lay-off of workers in agriculture sector businesses which usually employ day labourers because of the lockdown, physical distancing, and other shelter-in-place policies. Unavailability of large numbers of prime-age adults for work during COVID-19 outbreak affects time-critical agricultural tasks like land preparation, planting or harvesting, and causes potential short-term disruption to the supply of perishable produce. High mortality among older people might negatively affect the transmission of valuable indigenous knowledge. The restriction of public transport is negatively affecting smaller farmers who transport produce and inputs in articulated vehicles and is limiting the movement of those who migrate to provide agricultural labour.

### **Challenges and Opportunities for an Improved Agribusiness in Response to COVID-19**

Agribusiness is the sleeping giant that could realize the potential of the agriculture sector across a wide range of subsectors of food, textile, biotechnology, and energy industries. The COVID-19 pandemic is reshaping the global business environment and agribusiness holds the key to this transformation. COVID-19 and the various measures taken by governments are restricting and making it difficult for the activities of food supply chain actors. Farmers depend on field laborers who are not able to travel from surrounding villages to help with land preparation, planting, weeding, and harvesting. Aggregators are unable to purchase at the farm gate, markets are closed, and supply chains are restricted due to quarantines. Sick truck drivers, border closures, and trade restrictions take tolls on the sector. To process crops, smallholder farmers need to transport crops to processing centers which are now closed down. Markets where agricultural inputs are obtained and farm products sold are closed down, too. Large international agribusiness firms, which supply inputs and purchase local farmers' products are withdrawing at least temporarily, from the rural economies. Interrupted transportation and closures pose serious challenges to maintain safe business continuity throughout the rural economy. The risk is not only that of immediate rural production, food deliveries, exports, employment, and incomes are on the verge of collapsing. Also, planting for next year's crops is disrupted.

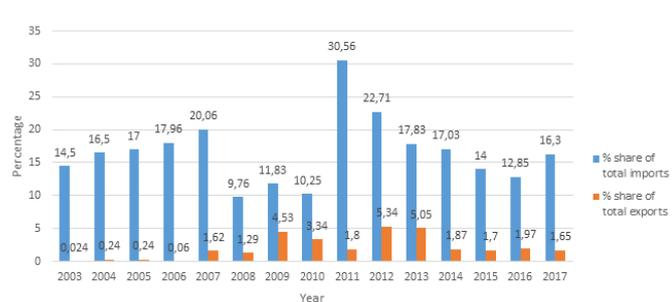
Addressing many domestic challenges caused by COVID-19 will create new opportunities. While sectors such as travel and transport are in crisis through grounded aircraft, food markets, supermarkets, and restaurants are experiencing rapid growth. The development of agribusiness will generate employment among rural masses and reduce poverty. The growth of agribusiness such as manufacturing industries for food, beverages, paper, textile, leather, furniture, etc will depend upon the progress made in the agriculture sector. Agribusiness has the potential to integrate smallholder farmers into the sector in a range of innovative ways. First, by farmers organizing themselves into co-operatives which can take advantage of the economies -of- the scale of larger organizations, e.g bulk buying of inputs and bulk selling

of produce, as well as adhering to quality standards. Second, is by becoming contract farmers to a commercial company with the responsibility to supply specific agricultural commodities. These schemes, also known as 'outgrower schemes', provide growers with the security of supply and product integrity and protect them from the fluctuations in both price and demand that exist in the open market. The storage and packaging of commodities is a way of unlocking the potential of the agricultural sector. Through appropriate and attractive packaging, higher prices may be offered to the benefit of the farmer, while storage shelf life increases and reduces post-harvest losses.

COVID-19, though a threat to the growth of the agribusiness industry, creates abundant opportunities. The demand for grains and other staples (particularly locally grown rice) is likely to increase as food demand spikes from panic buying. The grocery focused supermarkets also represent a bright spot for the time. The rush to stock-up from groceries by households has been the major driver of growth for this segment of economy. Willingness for new investment in backyard or garden farming will generate income for the households and improve the nutritive values of what they consume. COVID-19 is forcing people to change the ways they conduct businesses. Many businesses have moved to remote working. Meetings and conferences have switched to audio-virtual to enable businesses to continue working productively during the pandemic.

### **Levels of Imports and Exports in Nigeria before COVID-19 and the Present Situation in Nigeria**

The value of net export in Nigeria (Export-Import) has always been very low (See Figure 2). Available records have shown that Nigeria spent over N40 trillion on food imports in 21 years to meet domestic consumption. Data from the National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN) show that this translates to an average of NGN1.92 trillion food imports per year and NGN1 billion every day from 1990 to 2011. Nigeria imported US\$47.4 billion worth of goods from around the globe in 2019, up by 40% since 2015 and up by 29.9% from 2018 to 2019. Since Nigeria's agricultural sector is not competitive, there is a greater reliance on imports and less agriculture-driven poverty reduction in rural areas. Before COVID-19 outbreak in Nigeria in 2020, Nigeria government closed her land border in August 2019 to reduce smuggling, protect domestic producers, and address security concerns. The border closure contributed to a rise in inflation (12 % in December) and welfare losses concentrated in border regions and neighboring countries and a decline in food import compared to export. Imports to Nigeria grew by 26.3 percent year-on-year to NGN 1,759 billion in December 2019, as higher purchases of manufactured products (54.2 percent); solid mineral goods (63.8 %), and raw material goods (13.2 %) were partly offset by declines in those of energy goods (-68.5 %). Meanwhile, the importation of agricultural products rose only 1.4%. The disruptions caused by COVID-19 are affecting Nigeria import and export businesses. The export of Nigeria's raw materials and importation of machinery and manufactured goods from European, Chinese and Indian markets into the continent have decreased.



**Figure 2.** Percentage Share of food in total imports and exports of Nigeria. Source: Data from NBS, 2020

### The Implications of the Dictates of Autarky Nature of the Nigerian Economy to Mitigate COVID-19 Virus

Exports of commodities (oil and natural gas) are the main factor behind Nigeria's growth and represent about 95.0% of Nigeria's export revenue and a downturn in the market for the commodity always has a ripple effect on its economy. Exports from Nigeria soared by 48.0% year-on-year at NGN1,396 million in December of 2019, driven by shipments of manufactured products (11.8%) and crude oil (14.5%). Meanwhile, sales fell sharply for agricultural goods (-38.9 %); raw material goods (-71.3%); solid mineral goods (-79.8%), and energy goods (-51.0%), mainly attributed to the country's borders closure.

Nigeria is highly vulnerable to the global economic disruption caused by COVID-19, particularly the pronounced decline in oil prices and spikes in risk aversion in global capital markets. The magnitude of the impact is sensitive to the duration and domestic spread of the outbreak. The primary transmission channel to the Nigerian economy is the oil price. Oil accounts for over 90 percent of exports, a third of banking sector credit, and a half of the government revenues. Non-oil industry and services' growth is highly elastic to oil prices, with additional pressures arising from foreign portfolio investors' reassessment of risks and domestic liquidity management. These shocks tend to spook the foreign exchange market leading to a depreciation of the naira and reactive demand management by the Central Bank to conserve foreign reserves. In January 2020, the price of Bonny Light, the major variant of Nigeria's crude production averaged over \$60 per barrel declined by more than half that value as at the end of the fourth quarter in 2019.

### Strategies to Save the Nigeria Agribusiness Sector from COVID-19

The strategy to mitigate the spread of COVID-19 such as border closures, restrictions of movement, closures of the market, community quarantine, supply chain, and trade disruptions have significantly affected agricultural production, food supply, and demand. COVID-19 is affecting food demand in various ways. Reduced income and uncertainty make people spend less and result in shrinking demand. During the period of lockdown, people reduced trips to food markets thereby affecting food choice. The demand was more for cereal crops and consumption with an upsurge in eating at home. Since food demand is linked to income, many poor people lost their income-earning opportunities which negatively impacted more on their consumption.

Considering the growing demand for food during COVID-19 pandemic and post-COVID period, it is obvious that some changes in Nigerian agribusiness systems are required. Such as:

- increasing and modernization of mechanization to reduce human interface. Though this has implications on human labour, it is a safer approach given the prevailing circumstances as it will ultimately ensure efficiency and effectiveness;
- implementation of new IC technologies such as drones, farm apps, satellite monitoring of crop performance etc;
- logistics and supply chain system. It is necessary to revisit the block chain technology because it offers a platform in the industry for securing production data in a register, in a fashion that cannot be altered; and contracts or agreements agreed to, can be saved there. It further allows transactions between companies without intermediaries;
- digital financing solutions or the use of electronic cash system. Physical handling of cash promotes corruption in most business operations. Money acts as a good vector for transmission of contagious diseases, like COVID-19. Cashless operations were proposed way back and it is almost the norm in developed countries. However, in Africa, it is still at infancy permeating the economy at a snail pace. Cashless technology offers greater traceability and accountability, which could help to create a more transparent ecosystem. Digital transactions offer a payment solution that negates the requirement for cash to change hands, thereby enabling greater adherence to physical distancing. We need to increase sensitization and awareness, particularly in rural areas, to promote the electronic payment system. Grain Discovery, AgriDigital and GrainChain are successful examples of block chain technology in agriculture.
- improvement of education and training in the Nigerian agri-food sector. The time has come for agribusinesses and other institutions to transit from face-to-face operations to online trainings such as the use of webinars, podcasts, instructional videos, and production of audio-visual training content. Although digital distance learning cannot entirely replace face-to-face training, however, methodologies and technologies are now available to achieve a highly satisfactory quality of training, as seen in such initiatives by many universities around the world.

### The Enterprises to Promote

Developing countries such as Nigeria stand to benefit if entrepreneurship and agribusiness development are promoted during and after COVID-19 pandemic through organic farming system. Organic farming is a type of farming that avoids the use of synthetic fertilizers, pesticides, growth regulators, and livestock feed additives. Organic farming as an alternative form of farming can be cost-effective as a result of the non-use of chemical fertilizers and pesticides. Moreover, it can result in the production of healthy food free from harmful chemicals, artificial flavors and preservatives. It can reduce the risk of food contamination arising from pesticides residues and positive environmental effects in terms of reduced soil degradation in nutrients.

### *The Roles of Individuals*

Businesses are encouraged to institute workplace health and safety measures and guidelines in line with the World Health Organization guidelines, (WHO, 2020). This involves ensuring clean and healthy workplace environments and promotion of good personal and respiratory hygiene for employees, clients, and other visitors to their establishments. To cushion the effects of the additional production costs incurred as a result of COVID-19 outbreak, large farms, local governments, and agricultural products distributors can buy high-tech protective equipment that prevent the spread of the coronavirus while reducing human contact.

### *The Roles of the Public Sector*

If governments act decisively to ensure business continuity, prevent layoffs and protect vulnerable workers, Nigeria has a chance to save millions of jobs and enterprises. Expansionary fiscal and monetary policies are essential to prevent the current headlong downturn from becoming a prolonged recession. The government must ensure that people have enough money in their pockets. This means ensuring that enterprises (the source of income for millions of people) remain afloat during and after the pandemic. The government should introduce time-bound financial/tax relief and income smoothing measures to support business continuity, especially for micro, small and medium-scale enterprises (MSMEs) and the myriads of one-man self-employed personnel through subsidies, credit mediation/re-financing to overcome liquidity constraints. The Central Bank could inject funds into the agricultural sector through a grant facility, which might help agro-based MSMEs on the supply side while casual labourers and low salary people are advanced loans to create demand.

### *The Roles of the Private Sector*

It is essential to find ways to support farmers to keep producing food and fibers in order to remain connected to markets. Several private sector initiatives can be launched to promote entrepreneurship. The private sector should be proactive and be ready to invest in production equipment beyond giving cash to either the government or individuals. They can help farmers or the MSMEs, increase access to personal protective equipment such as masks and gloves that are in high demand due to the needs in the health care system. The private sector can produce in a manner that reduces contact with packaging and products. Taking measures such as these can reduce the spread of COVID-19 and promote continued production, processing, and marketing of food. The private sector can help farmers through the provision of labor-saving equipment such as agricultural drones that will compensate for reduced labor availability caused by sick family members, limitations on collective labor, and restrictions on the movement of people to farms.

What some private business organizations have done following the outbreak of COVID-19 in Nigeria to make the businesses and economy moving is laudable.

With the institution of travel restrictions, physical distancing, and/ or quarantine policies, businesses were affected as they are obliged to comply with government policies. This resulted in businesses changing their work environment policies to protect

the health and provide safety of their workplaces and employees while prioritizing business continuity and the maintenance of the quality of services provided.

As a way of making products available to consumers during COVID-19, some private organizations employed the use of e-payment platform to lift some of the burdens from Nigerians during the pandemic. Providers such as JumiaPay and the Lagos-based Paga reduced user fees. Also, some electronic platforms provided Nigerians with a contact-free option for bill payments, as well as quick access to small personal loans. Konga, which also has its own logistics platform, Xpress, and licensed payment wallet, KongaPay, offered users a 'no contact' delivery option to reduce the likelihood of virus transmission. These are developments to be promoted.

The Government alongside the private wholesalers can boost food supply and crash temporary price spike of foodstuffs through grains preservation in silos.

## CONCLUSION AND RECOMMENDATIONS

The COVID-19 pandemic is a history-altering event and its effects are still uncertain and unpredictable in the business environment. The short-term assessment however, shows that the pandemic poses huge challenges to agribusinesses, government and people all over the world. We find that the main issue with agricultural enterprises is logistics disruption, especially shortages of raw materials/inputs and output distribution problems. The impact is being felt by all from small businesses to large firms. The restriction of public transport has negatively affected smaller farmers who transport produce and inputs and particularly those who migrate for the provision of agricultural labour. The outbreak has dampened consumer confidence particularly of those who rely on daily income made through services they provide, thus resulting in a decline of private consumption and demand. The Nigerian private sector should employ a co-integration approach that will reduce or eliminate risk and waste within the non-oil export value chain. This feat can be achieved in the long term through structured data collection system that will provide evidence along with the equilibrium of investment, return on investment, the trade relationship with the domestic environment, exports, and other major determinants. The data collected will be used to predict and adjust variables that impact the value chain and substantial variation in the risk exposure of all actors in the export ecosystem of non-oil export.

Both the public and private sectors could build on this opportunity to invest on how to increase their access to the internet, electricity, and other digital resources, particularly in impoverished areas. All these technological innovations can help farmers to cope with the restrictions of COVID-19 and any future crises or stresses to the food system, while also making agriculture more productive and more attractive to the youths. Nigeria must learn to act fast in planning an economic diversification as the dependence on one sector to provide economic growth is very dangerous and may not achieve the desired economic growth.

Nigeria already has a comparative advantage in the production of agricultural produce to overcome post-COVID-19 economic crisis. The government at all levels should focus on agricultural value addition opportunities by creating an enabling the environment

that will encourage private sector investment to establish agro-based manufacturing industries which will spur investment and boost production for domestic needs and exports. Urgent actions are needed to help SMEs to adopt new work processes, speed up digitalization, and find new markets. Such policies should not only aim to address urgent short-term challenges but also contribute to strengthening the resilience of SMEs in a more structural way to support their further growth. Such policies should include support for finding new alternative markets, teleworking and digitalization, innovations and training, and re-training of the workforce. These policies are very important since SMEs may find it very difficult to adopt such new technologies and methods which are beyond their means. At the same time, supporting the adoption of new technologies and practices may enable them to strengthen their post-crisis competitiveness and ability to address the challenges posed by the pandemic.

## REFERENCES

- Altig D., Barrero J. M., Bloom M., Davis S. J., Meyer B., Parker N. (2020). Surveying Business Uncertainty. National Bureau of Economic Research (NBER) Working Paper 25956
- Barro R. J., Ursúa J. F., Weng J. (2020). The Coronavirus and the Great Influenza Pandemic: Lessons from the "Spanish Flu" for the Coronavirus's Potential Effects on Mortality and Economic Activity. NBER Working Paper No. 26866
- Boissay E., Rungcharoenkitkul, P. (2020). Macroeconomic effects of Covid-19: an early review. Bank for International Settlements (BIS) Bulletin No 7, April 17, 2020. Available at: <https://www.bis.org/publ/bisbull07.pdf> [Accessed 1 August 2020].
- Buck T., Arnold M., Chazan G., Cookson C. (2020). Coronavirus declared a pandemic as fears of economic crisis mount. 2020. Available at : <https://www.ft.com/content/d72f1e54-6396-11ea-b3f3-fe4680ea68b5> [Accessed 9 July 2020].
- Brodeur A., Islam A., Gray D., Bhuiyan S. J. (2020). A Literature Review of the Economics of COVID-19. Institute of Labor Economics, Discussion paper series. IZA DP No. 13411. Available at : <http://ftp.iza.org/dp13411.pdf> [Accessed 20 August 2020].
- Congressional Research Service (2020). Global Economic Effects of COVID-19. Available at: <https://fas.org/sgp/crs/row/R46270.pdf> [Accessed 1 August 2020].
- Correia S., Luck, S., Verner E. (2020). "Pandemics Depress the Economy, Public Health Interventions Do Not: Evidence from the 1918 Flu", 26 March 2020. Available at: <https://marginalrevolution.com/marginalrevolution/2020/03/pandemics-depress-the-economy-public-health-interventions-do-not-evidence-from-the-1918-flu.html> [Accessed 20 August 2020].
- De Vito A., Gómez J-P. (2020). Estimating the Covid-19 Cash Crunch: Global Evidence and Policy. *Journal of Accounting and Public Policy* 39(2):1-14.
- Eichengreen B. (2020). "The Human-Capital Costs of the Crisis", Project Syndicate, 10 April 2 Available at: <https://www.project-syndicate.org/commentary/covid19-pandemic-erosion-of-human-capital-by-barry-eichengreen-2020-04>. [Accessed 15 July 2020].
- Farayibi A., Asongu S. (2020). The Economic Consequences of the COVID-19 Pandemic in Nigeria (June 29, 2020). European Xtramile Centre of African Studies, WP/20/042 (2020), Available at: <https://ssrn.com/abstract=3637668> or <http://dx.doi.org/10.2139/ssrn.3637668> [Accessed 30 August 2020].
- FAO (2020). COVID-19: Channels of Transmission to Food and Agriculture. Rome. Available at: <https://doi.org/10.4060/ca8430en> [Accessed 8 July 2020].
- Ferguson N., Laydon D., Nedjati G. G., Imai N., Ainslie K., Baguelin M., Bhatia S., Boonyasiri A., Cucunuba Perez, Z., Cuomo-Dannenburg G., Dighe, A., Dorigatti I., Fu H., Gaythorpe K., Green W., Hamlet A., Hinsley W., Okell L., Van Elsland S., Thompson H., Verity R., Volz E., Wang H., Wang Y., Walker P., Walters C., Winskill P., Whittaker C., Donnelly C., Riley S., Ghani A. (2020), Report 9: Impact of Non-Pharmaceutical Interventions (NPIs) to Reduce COVID-19 Mortality and Healthcare Demand. Imperial College London. Available at: <https://doi.org/10.25561/77482> [Accessed 30 June 2020].
- Gourinchas P. O. (2020). "Flattening Pandemic and Recession Curves". In Baldwin, R., Weder di Mauro, B. eds. *Economics in the Time of COVID-19*. London: CEPR Press.
- Harapan H., Itoh N., Yufika A., Winardi W., Keam S., Te H., Megawati D., Hayati A. L., Wagner Z., Mudatsir M. (2020). Coronavirus Disease 2019 (COVID-19): A Literature Review. *Journal of Infection and Public Health*, 3(5):667-673. doi: 10.1016/j.jiph.2020.03.019.
- ILO (2020a). "COVID-19 and the World of Work: Impact and Policy Responses". ILO, Geneva.
- ILO (2020b). COVID-19 and the Impact on Agriculture and Food Security. ILO sectoral brief. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/briefingnote/wcms\\_742023.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_742023.pdf) [Accessed 30 July, 2020].
- International Monetary Fund (2020). *World Economic Outlook: A Crisis Like No Other, An Uncertain Recovery*, June 2020. IMF, Washington DC. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020> [Accessed 30 August 2020].
- Jorda O., Singh S. R., Taylor A. M. (2020). "Longer-Run Economic Consequences of Pandemics". NBER Working Paper 26934, National Bureau of Economic Research, Cambridge, MA.
- Kohlscheen E., Mojon B., Rees D. (2020). "The Macroeconomic Spillover Effects of the Pandemic on the Global Economy". *BIS Bulletin* No. 4, 06 April 2020.
- Maliszewska M., Mattoo A., van der Mensbrugghe A. (2020). "The Potential Impact of COVID-19 on GDP and Trade: A Preliminary Assessment". Policy Research Working Paper 9211. World Bank. Washington DC.
- McKibbin W. and Fernando, R. (2020). "The Global Macroeconomic Impacts of Covid-19: Seven Scenarios". Centre for Applied Macroeconomic Analysis (CAMA) Working Paper, No 19/2020.
- NBS (2020). CPI and Inflation Report March 2020. Available at: <https://nigeria.opendataforafrica.org/NGNBSNCP1R2017/cpi-and-inflation-report-march-2020> [Accessed 20 May 2020].
- Organisation for Economic Co-operation and Development (OECD) (2020). *OECD Updates G20 Summit on Outlook for Global Economy*. Geneva. Available at : <http://www.oecd.org/newsroom/oecd-updates-g20-summit-on-outlook-for-globaleconomy.htm> [Accessed 17 May 2020].
- Petropoulos F., Makridakis S. (2020). Forecasting the Novel Coronavirus COVID-19. *PLoS ONE* 15(3): e0231236. <https://doi.org/10.1371/journal.pone.0231236>
- Rosamond H. (2020). *The Economic Effects of COVID-19 Around the World* (World Economic Forum, 17 February 2020), Available at: <https://www.weforum.org/agenda/2020/02/coronavirus-economic-effects-globaleconomy-trade-travel/> [Accessed on 20 April 2020].
- Saez E., Zucman G. (2020). "Keeping Business Alive: the Government Will Pay", *Social Europe*, March 18. Available at: <https://www.socialeurope.eu/keeping-business-alive-the-government-will-pay> [Accessed 19 August 2020].
- United Nations Conference on Trade and Development (UNCTAD) (2020). *Coronavirus Could Cut Global Investment by 40%, New Estimates Show*. Geneva. Available at: <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2313> [Accessed 17 April 2020].
- Vaitilingam R. (2020). Likelihood of a Coronavirus Recession: Views of Leading US and European Economists. *VoxEU*, March. Available at: <https://voxeu.org/article/economic-impact-pandemic-igm-forum-survey> [Accessed 20 April 2020].
- World Bank (2020a). *Food Security and COVID-19*. World Bank Brief. Available at: <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19> [Accessed 31 August 2020].

World Bank (2020b). East Asia and Pacific Economic Update: East Asia and Pacific in the Time of COVID-19. World Bank. Washington DC. April.

World Health Organization (2020). "Getting Your Workplace Ready for COVID-19." Available at: <https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf> [Accessed on 21 March 2020].

World Trade Organization (WTO)(2020). Trade Set to Plunge as COVID-19 Pandemic Upends Global Economy. Geneva. Available at: [www.wto.org/english/news\\_e/pres20\\_e/pr855\\_e.htm](http://www.wto.org/english/news_e/pres20_e/pr855_e.htm) [Accessed 24 July 2020].

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