



ENUGU STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

JOURNAL OF SOCIAL SCIENCES & HUMANITIES

Volume 7 Number 2, 2022

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PUBLISHED BY

Faculty of Social Sciences,
Enugu State University of Science And Technology

Improving Agriculture for Nigerian Economic Development at Post COVID-19 Pandemic Era: A Theoretical Review

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Abstract

Considering the importance of agriculture in providing food, fabrics, Cotton wool, leather, wood for construction and paper products- are all agricultural products to mention a few. This study is set to investigate ways of improving agriculture for Nigerian economic development at Post Covid-19 Pandemic Era. In recent past, Nigeria has been good at promoting agriculture for better economy until the covid-19 pandemic era. Covid-19 is a dangerous, very deadly disease that emanated from china and spread to all other parts of the world including Nigeria. During the period and in the attempt to curtail the spread of this disease, various governments across the globe including Nigeria placed eight months lock-down on all the nations' activities including agriculture. However, during the period, agriculture was grossly neglected. People were not able to neither do robust farming nor harvest their crops let alone commercial marketing for survival due to so many restrictions. Farmers were terribly affected especially small scale farmers who had to eat up their seed crops, consumed their mega capital and were left with nothing to continue their agricultural occupation. This led to little or no investment going on in the country; our youths were supposedly jobless leading to hyperinflation and depletion of our exchange rate. Call to mind that agriculture offers about 86% of workforce in Nigeria, it then means that covid-19 impacted more job losses in Nigeria with its attendant worries like high crime rate of all sort. The authors examine the context, with a view to preferring ways of improving agriculture at post covid-19 pandemic era and relative to Economic development in Nigeria. This study concludes that since the main sustenance of the nation is agriculture, effort should be seriously geared towards improving agriculture through youth involvement in agricultural process among others. The implication of the study is that the federal government should revise its 1956 resolution which shifts attention to oil, by making a U turn shifting its attention and support to agriculture otherwise, sooner or later there will not be a country called Nigeria. Secondly, Government should invest in data systems at the local, state, national and global levels so that real time information can be made available for decision makers to help increase confidence in supply during crises; and finally, educational attainment of youth's in agriculture should be increase as one of the means to improve the economy of Nigeria at post covid-19 pandemic era.

Keywords: *Agriculture, Nigerian-Economy, Pandemic, Post Covid-19,*

Introduction

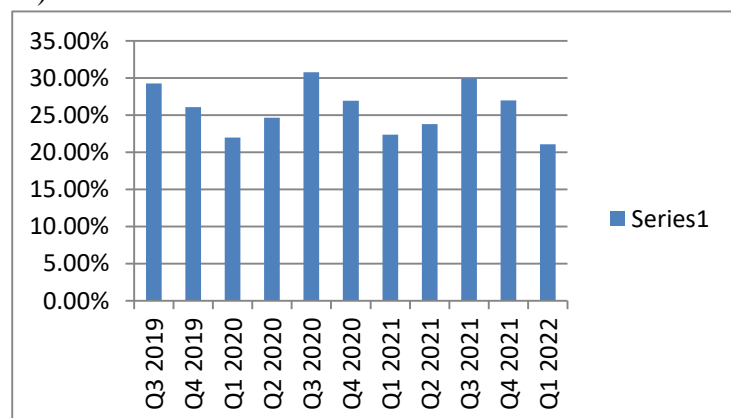
It is true that the Bible said in Matt. 4:4 “It is written: *Man shall not live on bread alone, but on every word that comes from the mouth of God.*” On the other hand and in the same Bible Jesus admonished his decuples that as they go about preaching the word of God; that any house they enter and they receive them, they should stay in that *house, eat* and drink what *they* give them; for *the laborer is worthy of his wages.* Luke 10:8. Therefore in the light of the above, since human beings must eat: then is agriculture necessary to sustain live. Agriculture plays a crucial role in the life of an economy. It is the backbone of economic system and its not only provides food and raw material but also employment opportunities to a very large proportion of population (Google, 2022). According to Adeniran, Ekeruche and Castradori (2021) Agriculture remains a key sector in Nigeria as it is the largest contributor to the nation’s GDP (24.6% in Q2 of 2020), the highest non-oil export earner, and absorbs the majority of the workforce (48% of Nigerians were employed in the sector in 2018). However, the sector remains overwhelmingly informal and has had challenges adapting to modern practices in a

Q3 2019	29.25%
Q4 2019	26.09%
Q1 2020	21.96%
Q2 2020	24.65%
Q3 2020	30.77%
Q4 2020	26.95%
Q1 2021	22.35%
Q2 2021	23.78%
Q3 2021	29.94%
Q4 2021	26.97%
Q1 2022	21.09%

manner that contributes to the country’s diversification drive, while simultaneously combating the adverse effects of climate change. As a result, domestic agricultural produce has been unable to keep up with the country’s vertiginous population growth, resulting in progressively increasing reliance on imports totaling around USD 8 billion yearly over the last few years (USDA, 2020).

CONTRIBUTION OF AGRICULTURE TO GDP IN NIGERIA FROM 3RD QUARTER OF 2019 TO THE 1ST QUARTER OF 2022

Source: Doris Dokua Sasu (Feb 1, 2022)



In the words of Serpil and Mehmet, (2020) developing countries like Nigeria, temporary or seasonal employment is common, especially for planting, sorting, harvesting, processing, or transporting crops to markets. Therefore, the supply chain is significantly affected as a result of the absence of local or migrant workers due to sickness or travel restrictions imposed by lockdown. It also weakens not only production abilities for others, but also their own food safety, in cases where the disease directly affects their health or movement. Especially, labour shortage due to COVID-19 crisis caused severe disruptions in some sectors such as livestock production, horticulture, planting, harvesting, and crop processing which are relatively labour intensive. However, shortage of farm workers was a major issue well before the COVID-19 outbreak. Also, many skilled workers in the harvest could not access various countries because of the border controls; a call has been made to the unemployed persons to work in the fields. However, due to the shortage of workforce as a result of illness and physical distance to be maintained during production, the crisis undermines the ability of farms and agricultural businesses to work. These conditions retarded the delivery of food, agricultural inputs and created problems in providing continuous food supply to markets. Although many manufacturers rely on their core inputs, most are more susceptible to disruptions, as they must obtain their requirements from domestic markets. Logistics barriers that disrupt food supply chains further weaken high-value goods due to their short shelf life

Impact of COVID-19 on agriculture

The Food and Agriculture Organization states that COVID-2019 is affecting agriculture in two significant aspects: the supply and demand for food. These two aspects are directly related to food security, so food security is also at risk. Organization of Economic Community Development, (OECD, 2020) record that COVID-19 pandemic as a global health crisis had a devastating impacts on the Nigerian economy.– both directly and through necessary measures to contain the spread of the disease. These impacts are felt by the agriculture sector. While the supply of food has held up well to date, in Nigeria, the measures put in place to contain the spread of the virus are starting to disrupt the supply of agro-food products to markets and consumers, both within and across borders. The sector is also experiencing a substantial shift in the composition and – for some commodities – the level of demand.

However, these damaging impacts turn out to be for food security, nutrition and the livelihoods of farmers, fishers and others working along the food supply chain depend in

large part on policy responses over the short, medium and long term. Still in the short term, governments must manage multiple demands – responding to the health crisis, managing the consequences of the shock to the economy, and ensuring the smooth functioning of the agricultural sector. While the pandemic poses some serious challenges for the agricultural sector in the short term, it is also an opportunity to accelerate transformations in the food and agricultural sector to build its resilience in the face of a range of challenges, including low agricultural produce.

According to OECD, (2020) Interim Economic Outlook, the downside scenario saw global growth halved to 1.5%. That was optimistic. Most recent estimates in the June 10 OECD Economic Outlook suggest an unprecedented collapse in the first half of 2020 –an almost 13% decline in global GDP. Moreover, the costs to the global economy from support packages, through central banks and fiscal actions, are very significant and likely to have long-lasting and complex effects on management of sovereign and corporate debt. Yet notwithstanding these efforts, most major economies now look set to enter recession and more serious scenarios in the near future. Also, economic activity is being shut down; this crisis is having a disproportionate impact on MSMEs framers; Greater disruption to agricultural production leading to pressure on scarcity of food. Governments are facing the challenge of having to act rapidly and at a large scale across a wide range of policy areas. Government has to think immediate term, and longer term at the same time

COVID-19 argues for agricultural produce to be re-nationalized or at least shortened, to reduce risks from global exposure (OECD, 2020). From this perspective, Nigerian firms may need to re-think sourcing decisions, resulting in re-ordering of agricultural production, with potentially far-reaching implications especially for developing countries. Equally, it is argued that governments will need to reconsider the list of strategic goods for which there is a requirement for domestic production, or impose new sourcing constraints on businesses. Government procurement practices may also be revisited.

According to Tejvan, (2019) cited in Okolo, Duru and Ani, (2021) Economic growth should enable a rise in living standards and greater consumption of goods and services. As a result, economic growth is often seen as sought after by macroeconomics. According to the authors, for any community to survive, its citizens must have employment opportunities, and its government must be able to generate revenue to provide services. Economic development, if done effectively, works to retain and grow jobs and investment within a country (Wikipedia,).

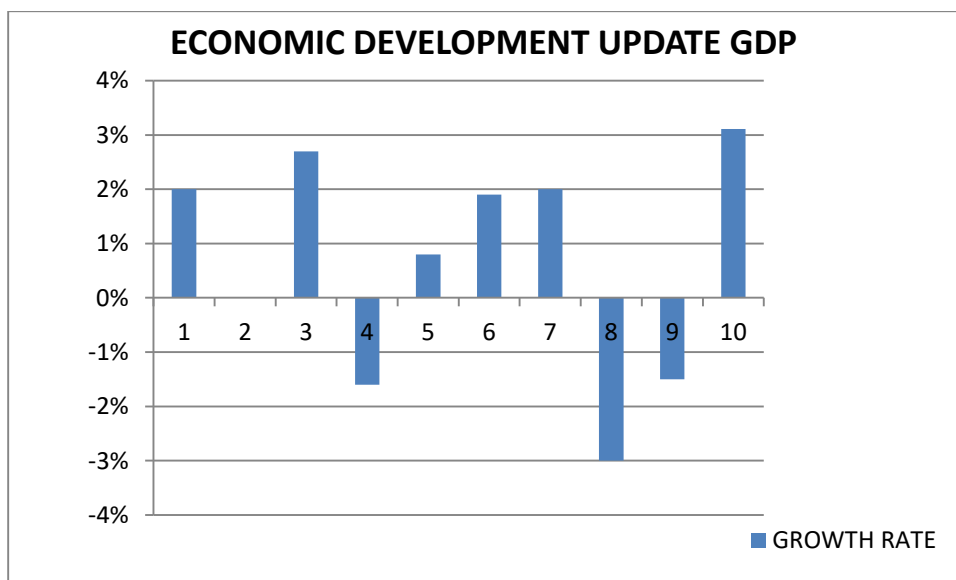
The present situation of Nigeria's economy grew by 3.6% in 2021 from a 1.8% contraction in 2020, underpinned on the supply side by 4.4% expansion in the non-oil sector against 8.3% contraction in the oil sector; non-oil growth was driven by agriculture (2.1%) and services (5.6%). GDP growth is projected at 3.4 percent (y/y) in 2022 while inflation is expected to remain elevated. The fiscal deficit of the Consolidated Government is expected to remain high at 6.1 percent of GDP due in great measure to costly petrol subsidies and limited tax revenue collections (Google, 2022).

Nigeria is already facing serious fiscal problems, with its rising budget deficit, debt and shrinking revenue; In, premium times, (2022) reported how the country's fiscal position worsened in the first four months of the year as the cost of repaying debt surpassed the government's revenue in the first quarter of 2022.

NIGERIA ECONOMIC DEVELOPMENT UPDATES GDP RATE

DATE YEAR	SITUATION	GROWTH RATE
2016	RECOVERY FROM ECONOMIC SLOW DOWN	2%
2015		2.7%
2016	SUDDEN SLOW DOWN	-1.6%
2017	GROWTH REBOUNDED	0.8%
2018	GROWTH REBOUNCE	1.9%
Half of 2019	STABLE GROWTH RATE	2%
2020	DECLINE	-3%
2021		-1.5%
2022		3.11%

Source: World Bank, (June, 2022)



Source: Authors' Computation

Premium times, (2022) further mentioned the following as the major six reasons at which economic development plays essential role in our nation's economy: Job creation: Economic developers provide critical assistance and information to companies that create jobs in our economy; Industry diversification: A core part of economic development works to diversify the economy, reducing a region's vulnerability to a single industry, Business retention and expansion: A large percentage of jobs in most economy are created by existing companies that are expanding their operations; Economy fortification: Economic development helps to protect the local economy from economic downturns by attracting and expanding the region's major employers; Increased tax revenue through increased presence of companies in the region translates to increased tax revenue for community projects and local infrastructure; Improved quality of life: Better infrastructure and more jobs improve the economy of the region and raise the standard of living for its residents. It is against this back drop that, this study seek to investigate ways toward improving Agriculture for Nigerian Economy at Post Covid-19 Pandemic Era

Statement of the Problem: Agriculture plays a crucial role in the life of Nigerian economy. Since human beings must eat: then is agriculture necessary to sustain live. It is the backbone of economic system and it not only provides food and raw materials but also employment opportunities to a very large proportion of population (Google, 2022).

Youth participation in agriculture is one of the means to reduce unemployment rate in Nigeria (InfoGuide Nigeria, 2022). Nevertheless, our youths are supposedly, not interested in agriculture but busy looking for white collar man's job Akinyetun, (2020) assert that as the Nigerian population continues to increase, so does the number of youth, in what has been described as the youth bulge. Maintaining that, the upsurge in the youth population—although a strain to the education system and labour market—also has economic value provided that these youth are meaningfully engaged. As such, it is any government's duty to take advantage of the teeming population of youth to create a demographic dividend, a declining dependency ratio, and to harness such dividend for increased productivity and an increasing labour force.

In the words of Serpil and Mehmet, (2020) temporary or seasonal employment is common in developing nations, especially for planting, sorting, harvesting, processing, or transporting crops to markets. Thus, the supply chain is terribly affected as a result of the absence of local or migrant workers due to sickness (covid-19) and or travel restrictions imposed by lockdown. Food safety is also affected together with the production abilities. There were also, very serious Labour shortage due to COVID-19 crisis caused severe disruptions in agricultural sector such as livestock production, horticulture, planting, harvesting, and crop processing which are relatively labour intensive. However, shortage of farm workers was a major issue well before the COVID-19 outbreak, too.

Also, many skilled workers in the harvest could not access various countries because of the border controls. However, due to the shortage of workforce as a result of illness and physical distance to be maintained during production, the crisis undermines the ability of farms and agricultural businesses to work. These conditions retarded the delivery of food and agricultural inputs; created problems in providing continuous food supply to markets. Bello, Baiyegunhi, Mignouna, Adeoti, Dontsop-Nguezet, Abdoulaye, Manyong, Bamba, Awotide, (2021) assert that the increasing rate of youth unemployment in Africa, particularly in Nigeria, remains among the challenges to social and economic stability. Accordingly, the Nigerian government implemented several interventions, including the Youth-in-Agribusiness (YIA) program to reduce youth unemployment. However, the effect of these programs on gainful employment creation is yet to be documented. Therefore, this study examined the impact of the YIA program on creating gainful employment among the youth. Multistage random sampling was used to obtain cross-sectional data from 668 youth in Southwestern Nigeria. Propensity score matching and endogenous switching probit techniques were used for the estimations. Results indicated that variables such as educational attainment, access to training, non agricultural activity, membership in a youth organization, access to credit, productive resources, and youth location were significant and positively influenced youth decision to participate in the YIA program. Furthermore, participation in the YIA program has a significant positive impact on gainful employment among the youth. Therefore, the study recommends that strengthening social capital such as youth organization, credit scheme (financed by private and government), vocational training, and educational system is vital in enhancing participation in the YIA program and eventually gainful employment of youth.

Purpose of the Study: The general purpose of the study to is to investigate improving Agriculture for Nigerian Economic Development at Post Covid-19 Pandemic Era

The specific purposes are as follows:

1. To ascertain whether Youth participation in agriculture is one of the means to reduce unemployment rate in Nigeria at post covid-19 pandemic
2. To determine whether educational attainment of youth's in agriculture is one of the means to improve the economy of Nigeria at post covid-19 pandemic.

Review of related Literature

Omodola, (2021) assert that the challenge of persistent poverty and food insecurity in Nigeria has been an issue of concern. Stressing that, the government's effort to alleviate poverty in Nigeria through agriculture appears ineffective because most poor people are rural dwellers and are coincidentally the farmers. They seem not to be benefiting from the government interventions to support farming due to corruption and other unquantifiable factors.

Omorogiuwa, ivkovic and Ademoh, (2014) opine that, Nigeria is on its way to modern development. Branding itself as the "giant of Africa", the country now needs to prove its potential by raising its standards to a level with other fast developing economies of the world. The vision 20-20-20 program Nigeria is currently pursuing is a major step to achieve this goal. Nigeria, according to its seven point agenda, is focusing on developing agriculture as an important strategic move. The paper uses trend analysis in terms of a historical and current perspective and various descriptive methods to analyse the development of Nigeria through each decade since its independence in 1960 and examines the factors that have had an impact on its agricultural productivity which will aid in describing and predicting the performance of the agricultural sector in Nigeria and as a result, the overall economic development of the country in the coming decade. The paper proves that an in-depth research on the development of the agricultural sector is essential to the progress of the country. Also, it is important to find out what has not worked previously and why, before taking any steps to develop the agriculture or the economy while the basis of this development should start with the empowerment of the poor.

According to Serpil, and Mehmet, (2020) priority steps and actions are outlined to guide against the pandemic in eight main topics: Coordination, planning, and monitoring at the country level;

Risk communication and community participation; Surveillance, quick response teams, and case investigation; Entry points; National laboratories; Prevention and control of infection; Situation management; Operational support and logistics as cited in World Health Organization (WHO, 2020a). Thus, the implementation of these measures caused the closure of workplaces and educational institutions, and temporary restrictions in travels and social meetings. Flexible workings from home and online meetings have become standard practices nowadays. However, people who work in the food industry do not have work from home option hence they need to keep their typical office routines

Kilbourne, (2006) opined that, three worldwide (pandemic) outbreaks of influenza occurred in the 20th century: in 1918, 1957, and 1968. The latter 2 were in the era of modern virology and most thoroughly characterized. All 3 have been informally identified by their presumed sites of origin as Spanish, Asian, and Hong Kong influenza, respectively. They are now known to represent 3 different antigenic subtypes of influenza A virus: H1N1, H2N2, and H3N2, respectively. Not classified as true pandemics are 3 notable epidemics: a pseudopandemic in 1947 with low death rates, an epidemic in 1977 that was a pandemic in children, and an abortive epidemic of swine influenza in 1976 that was feared to have pandemic potential. Major influenza epidemics show no predictable periodicity or pattern, and all differ from one another. Evidence suggests that true pandemics with changes in hem agglutinin subtypes arise from genetic reassortment with animal influenza A viruses.

Impacts on agricultural production and incomes

Limits on the mobility of people across borders and lockdowns were contributing to labour shortages for agricultural sectors in many countries, particularly those characterized by periods of peak seasonal labour demand or labour-intensive production. Harvesting season is imminent for many products in Nigeria, and a shortage of labour could lead to production losses and shortages in the market. In Nigeria, this comes on top of existing difficulties in sourcing seasonal labour.

On the other hand, disruptions downstream from the farm gate are in some cases causing surpluses to accumulate, putting a strain on storage facilities and, for highly perishables, increasing food losses. For some products, supply side disruptions are being compounded by demand side reductions (in particular foods typically eaten away from home, and luxury items). In combination, these effects are putting a strain on farm incomes. Moreover, those farm

household income losses may be compounded by reduced off-farm income. The COVID-19 pandemic may also affect the availability of key intermediate inputs for farmers. For the moment, there do not seem to be shortages in producing regions of developed countries, although farmers may face extra difficulties in sourcing inputs due to additional restrictions on the movement of people and goods. However, in the People's Republic of China (hereafter "China"), for example, the production of pesticides declined sharply and only resumed gradually after production plants were shut down following the outbreak. Low availability and/or high prices of inputs such as pesticides could weigh on yields and crop production in 2020 and 2021, particularly in developing countries. Closing borders or slowing down the transboundary movement of seeds could potentially hamper seed supply chains and on-time delivery of seed with negative impacts on agriculture, feed and food production over the next season and further into the future.

Effects of pandemic on food supply chain

The Food supply chain can be divided into five stages, including agricultural production, postharvest handling, processing, distribution/retail/service, and consumption (Serpil, and Mehmet, 2020). Hence, two systems are being used in the food supply chain regarding food quality and safety. The First one is based on regulations and laws that use mandatory standards which are inspected by state agencies. While the Second one, is relying on voluntary standards which are defined by market laws or international associations. Therefore, safety measures ought to be in place to ensure the continuity of food flow in each stage can be grouped as food employee's health issues, personal hygiene, using personal protective equipments such as elnets and glove, sanitization of surfaces and working environments, safe handling/preparation/delivery of food, and maintenance of social distance. Therefore, protective measures in the last stages of the food supply chain are critical since more people can be potentially affected as moved towards the last. Most agricultural activities depend on the season and weather, and therefore, activities need to follow a fine-tuned schedule with flexibility so that immediate actions can be performed when needed. Since all processes and stages in a supply chain are strongly connected to each other, a slight delay or glitch can trigger a butterfly effect resulting in a big loss in the yield and output. Actually, there are many reports that farmers were forced to destroy their products by burning or leaving them to spoil because of the restrictions.

The first vulnerable groups are people who experience chronic hunger and do not consume enough caloric energy to live a normal life, which currently number about 820 million people. This group of people cannot afford any possible interruption of their livelihoods or access to food that a situation with COVID-19 could bring. If the virus spreads in countries where such people live, with health systems with limited capacity, the consequences could be serious. A second vulnerable group are small farmers, who may be prevented from working on their land and accessing markets to sell their products or buy seeds and other essential inputs. The third vulnerable group are children from low-income families, who are mainly nourished by food provided by social programs; the suspension of these programs due to the pandemic puts food security and nutrition at risk, and as a consequence the existence of children with limited capacity to cope with diseases. Thus, each country must direct its actions to maintain social food programs, taking the necessary precautions to avoid transmission of the virus. Steps that can boost agriculture in Nigeria are as follows: Using improved implements and tools; Modern Irrigation Techniques; Maintaining Good Animal Health; Soil improvement; Crop and Animal Improvement; Crop Protection; Better Storage, Processing and Transportation Methods; Use of Agro-Standards; Standardized price control; The quality of products; Land availability for agriculture; Packaging and preservation standards; Use of agro-based loans by the government to encourage farmers; More government programs to boost agriculture; Local Awareness Creation

Challenges of the Nigerian agricultural sector

First is violent conflict: Due to the desertification and water depletion in the northern part of Nigeria, nomadic herdsman are now shifting towards the south of the country in search of grazing fields and water for their animals. This has resulted in violent conflict with crop farmers in the south. Increased violence in the food producing states is causing decline in Nigeria's food production output. Secondly are source shortages: Over the past years, Nigeria has dealt with very low yields per hectare due to shortages in the supply of inputs such as seedlings and fertilizers as well as inadequate irrigation and harvesting systems, which hinders productivity and yield rates. Thirdly, is Lack of access to finance: Although the Nigerian government has provided several facilities through the Central Bank of Nigeria (CBN) such as the Anchor Borrower's Programme to help provide small-scale farmers with adequate

financing, the farming industry still lacks adequate access to finance. The fourth is insufficient supply to meet population growth and food demand: With a population of roughly 200 million people, Nigeria's agricultural productivity is insufficient to meet the food demanded of its growing population thus increasing the demand and supply gap in Nigeria. The Fifth is: Absence of value addition and supply-chain linkages Nigeria focuses mostly on food production, thus neglecting the processing and manufacturing segment of the value chain. The chain reaction that arises from shortages of resources, lack of financing for small-scale farmers and inefficient transport systems, exacerbates the development of food production along the value and supply chain. The Last but not the Least is, Outdated system of agriculture: Outdated methods of agriculture such as the use of hoes and cutlasses reduce efficiency as these methods are costly and time consuming. Nigeria's failure to adopt advanced mechanized systems has reduced the quality of its agricultural products and; supposedly, debar youths from active participation in agriculture.

Empirical Study

Fawole, and Ozkan, (2019) investigated the willingness of unemployed graduates to participate in agriculture with a view to showcase the potentials in Nigerian agriculture especially in the area of employment generation for the youths. The study made use of primary data collected with the aid of structured questionnaires from 180 respondents from the three states of Ondo; Oyo and Osun states are the representative states from the entire South West. The binary logistic regression model was used to identify those factors that influence the willingness of the respondents who were graduates of various disciplines to participate in agriculture. The findings of the study showed that the majority of the respondents interviewed representing 62.8 percent were unemployed with the majority of the respondents (68.3 percent) willing to participate in agriculture given the needed and required supports such as conducive environment by the stakeholders particularly the government. Educational status, marital status, gender, possession of agricultural training and employment status of respondents significantly influenced their willingness to participate in agriculture. However, recommendations for further studies that would comprise the entire geopolitical zones of the country to pave way for comparative analysis were made. The study is originally carried out by conducting a survey to collect the data and is coming to fill the existing gap in the literature

in terms of potentials embedded in Nigerian agriculture to assist the government in providing employment opportunities for teeming youths.

According to Nwangwu, (2019) agriculture sector in Nigeria has remained largely undeveloped. The reason for this is due to the limited public sector funding in the different agricultural value chains including research and development. On the other hand, there has also been very minimal private sector investment in the sector. The cause of this is a lack of incentive for the private sector in Nigeria to invest in sectors like agriculture with very informal market structures and therefore without clear paths to profitability. It is believed that these problems can be resolved with better collaboration between the private and public sector actors through the instrumentality of public-private partnerships (PPPs). This will increase investment in the sector by pooling both public and private sector resources and also create realizable and foreseeable income streams for investors. This fact seems to be finally catching on in Nigeria, where the government has initiated a number of PPP programmes to address some of these underlining problems. The study looks at some of the PPP programmes that have been initiated by the government with particular focus on the provision of services, infrastructure, sustainable land use systems and the development of structured markets. The study aims to evaluate the impact of these programmes and also suggest improvements that will ensure that agriculture PPPs are further enhanced in Nigeria

Omodero, (2021) investigates the impact of agricultural output and food production on poverty decrease in Nigeria. The data used in the study span from 2009 to 2019. Relevant diagnostic tests and regression analysis are performed to obtain the empirical evidence highlighted in this paper. Thus, the findings reveal that the Food Production Index significantly and positively impacts poverty reduction, while Agricultural Output has an immaterial negative effect on poverty decrease. The study concludes that poverty alleviation in Nigeria and food security will depend on government's full involvement in agriculture and improvement on its agricultural budget. Accordingly, the provisions of necessary facilities to boost agriculture have been recommended. The facilities include modern farming equipment, sufficient power supply, credit facility, storage facility, and large markets.

Akanle, Adejare, Adewusi and Yusuf, (2021) opine that the conflict between farmers and herders have constituted serious concerns and impediments to development in Nigeria. This development entails food security, of which dairy needs are integral. Noting that, the global

campaign for good agricultural practices (GAP) essentially focuses on the preservation of humans, animals and the general ecosystem, as the world continues to confront the depletion of the ozone layers. However, in Nigeria, the development concerns of farmers-herders' conflicts are not only pertinent but also daunting as the protracted conflicts increase the burden of food insecurity, human insecurity, ethnic/tribal tensions and underdevelopment outcomes. While the challenges posed by the farmers-herders' conflicts are serious, existentially threatening and hydra-headed, their impacts on development of the country are massive and require urgent attention, research and policy terms. This is because development can only be sustainable in an atmosphere of peace and tranquility. Therefore, in situations where conflicts and insecurity are near intractable, development may be mere desideratum. The authors, utilized Maslow's Hierarchy of Needs to examine the context, burden and tractability of farmers-herders' conflicts in Nigeria with a view to unpacking the interface of (in) security and development relative to food/agriculture security in Nigeria.

Serpil, and Mehmet, (2020) State that a pandemic is not a new event encountered in the history of humanity because mankind has faced various pandemics in history. Maintaining that, the common point of pandemics is their serious negative effects on the global economy. Considering the food supply chain, one of the most important sectors of the economy, it has been seen that COVID-19 has an impact on the whole process from the field to the consumer. Therefore, in the light of recent challenges in food supply chain, there is now considerable concern about food production, processing, distribution, and demand. The authors stress that, COVID-19 resulted in the movement restrictions of workers, changes in demand of consumers, closure of food production facilities, restricted food trade policies, and financial pressures in food supply chain. Therefore, governments should facilitate the movement of workers and agric-food products. In addition, small farmers or vulnerable people should be supported financially. Suggesting that, Facilities should change the working conditions and maintain the health and safety of employees by altering safety measures and that, Food protectionist policies should be avoided to prevent an increase in food prices. In conclusion, each country must realize the severity of the situation and sometimes should tighten or loosen the measures according to the spread of the pandemic. The supply chain also should be flexible enough to respond to the challenges in the food supply chain. The purpose of the review is to evaluate the impact of COVID-19 on the agriculture and food sector and to summarize the recommendations required to reduce and control the effect of the pandemic.

Siche, (2020) investigated the different pandemics that humanity has experienced, such as the Spanish Flu, Asian Flu, Hong Kong Flu, HIV/AIDS, SARS, Ebola and Swine Flu, have had a great impact on the economy, the environment and any human activity, such as livestock, agriculture, tourism, transport, education, health, fishing, mining, industry, commerce, etc. Currently, humanity is facing another pandemic, the infection of the new coronavirus (2019-nCoV) that generates the disease known as COVID-19. The objective of this document is to analyze and discuss the effects in agriculture of events related to the disease of COVID-19. For this analysis, data from the Food Agriculture Organization (FAO), the World Health Organization (WHO) and scientific and technical documents have been used. There is sufficient evidence to affirm that the pandemic caused by the COVID-19 disease has an important effect on agriculture and the food supply chain, mainly affecting food demand and consequently food security, with a great impact on the most vulnerable population.

Dirk and Derek,(2008) state that throughout history, agriculture-led development strategies with state support programs have been essential to achieving rapid economy-wide growth, poverty reduction, and structural transformation. Yet over the last three decades, the domestic and international policy environments have continued to discriminate against agricultural development in the poorest countries. The authors' paper studies the causes and manifestations of this "urban bias," including discrimination in domestic pricing policies and in the international trade regime, decreasing financial support from governments and aid donors, and increasing neglect of agriculture in development theory and economic research. The authors conclude that urban bias remains a persistent and paramount obstacle to sustained growth and poverty reduction in the least developed countries.

Necmiye, (2012) assert that the agricultural sector is important for Turkey for many reasons such as high rate of rural population, a large share of employment in the agricultural sector, the sector's contribution to the formation of national income, and production capacity of sector. The author maintain that, in recent years, although the share of agriculture sector in GDP and in foreign trade has declined, the share of it in employment is still protected. The agricultural sector is the backbone of the rural economy. Although there is a common view that agriculture is an important sector for an economy, there is no consensus about preference of agricultural growth in reducing poverty as the best remedy. Stressing that, some researchers advocate that

primarily this sector should bear of the importance in reducing poverty because the majority of the poor live in rural areas and are employed in the agricultural sector. Another view is that, non-agricultural activities provide capital accumulation and thus more rapid development. However, many studies in the literature, suggest that investments in the areas like rural infrastructure, health and education with agricultural development in developing countries are pro-poor. The objective of the study is to examine whether there is a relationship between agricultural growth and economic growth in the long-term and to analyze whether there is a relationship between agricultural credits as an agricultural support and agricultural growth in the long term. In addition, it is aimed to investigate if the agricultural credits are effective on the number of people employed in agriculture. Empirical findings of the study reveals that, agricultural credits has a direct effect on agricultural income and employment, on the other hand it also shows that agricultural credits has indirect effect on the agricultural income due to the impact of agricultural credits on agricultural income and the impact of agricultural income on agricultural employment.

Implication of the study

With the suspension of movement at the instance of covid-19 agriculture reduced drastically puts food security and nutrition at risk, and as a consequence the existence of children, elderly people and small framers with limited capacity to cope with diseases; therefore, Government must as a necessity redirect its actions to increase assistance to small farmers, social food programs, less there will be starvation/insecurity in the country; thereby putting the economy at a great risk. Invest in data systems at the local, national and global levels so that real time information can be made available for decision makers and help to increase confidence in supply during crises; invest in national efforts to increase adequate government communication strategies to improve agricultural sector. The implication of the study is that as in 1956, when the federal government shifted its attention to oil and neglecting agriculture, it should make a U turn shifting its attention and support to agriculture otherwise, sooner or later there will not be a beloved country called Nigeria.

Discussion

According to empirical reviews, Youth participation in agriculture is one of the means to reduce unemployment rate in Nigeria this is in agreement with the work of Bello, Baiyegunhi, Mignouna, Adeoti, Dontsop-Nguezet, Abdoulaye, Manyong, Bamba, Awotide, (2021) that, strengthening social capital such as youth organization, credit scheme (financed by private and government), vocational training, and educational system is vital in enhancing participation in the YIA program and eventually gainful employment of youth.

Seasonal employment disrupt planting, sorting, harvesting, processing, or transporting crops to markets, food safety and production abilities were affected by covid-19 pandemic. As empirical review revived and this in line with the work of Serpil and Mehmet, (2020) where the supply chain is stated to have been terribly affected as a result of the absence of local or migrant workers due to sickness (covid-19) and or travel restrictions imposed by lockdown. Again, the work of Siche, (2020) revealed that, the pandemic caused by the COVID-19 disease has an effect on agriculture and the food supply chain, seriously affect food demand and consequently food security, more on the most vulnerable people. Finally, Investment in data systems at the local, national and global levels for real time information can be made available for decision makers to help increase confidence in supply during crises this is in line with the work of

Conclusion

The so called Post Covid-19 pandemic Era has a great impact on the activities of agriculture. Leading to food insecurity due to restriction of movement, food mobility restrictions not left out, reduced purchasing power, and impacting drastically on the most vulnerable population groups like the elderly, the children and the small farmers in the developing countries like Nigeria.

The government took more drastic measures to halt the spread of the virus and also made serious efforts to increase the loan to SMEs framers (small farmers); the study concludes that since the main sustenance of the nation is agriculture effort should be seriously geared towards improving agriculture through educational attainment of youth's in agriculture and Youth participation in agriculture should be increase as one of the means to improve the economy of Nigeria at post covid-19 pandemic era.

As cases of contagion increase, governments took more drastic measures to stop the spread of the virus, also influencing the small farmers to improve agricultural system. The premise of any measure adopted should be to protect the health and agricultural/food security of the population, to the detriment of economic growth, although some governments go in the opposite direction.

Recommendation

Government should ensure the food and nutrition needs of vulnerable populations are met both now and in the future. Since COVID-19 offers an opportunity to enhance the productivity of the agricultural sector the nation ought to learn from the crisis to increase preparedness for future pandemic; work with stakeholders and international organizations to identify weaknesses, invest in data system in order to be acquainted with what other developed and developing nations are doing in terms of overcoming the pandemic coupled with the risk of exposing agriculture to risk services that need to be strengthened in order to increase preparedness for systemic risks and identify opportunities to strengthen networks between public and private stakeholders to make these investments.

Accelerate investments and reforms that would further strengthen the resilience of the food system to a range of risks, for example: Invest in data systems at the local, national and global levels so that real time information can be made available for decision makers, and educational attainment of youth's in agriculture should be increased as one of the means to improve the economy of Nigeria at post covid-19 pandemic era.

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