### **CHAPTER TWENTY FOUR**

# INSECURITY AND AGRICULTURAL OUTPUT IN NIGERIA

Roselynda Mernan Ikwue

Department of Economics, Benue State University - Makurdi

Email: rikwue@bsum.edu.ng

#### Abstract

The prevailing insecurity in the country has led to the disruption of the agricultural sector, which is the prime employer of labor and the largest economic sector in the nation, providing inputs for various manufacturing companies. This study explores the impact of insecurity on agricultural output in Nigeria, which spanned from 1999 - 2021. An ex-post factor research design with time series data was used in this study. Variables used for the study were sourced after adequate considerations of extant literature and in line with set objectives. Regression analysis was employed to evaluate the impact of insecurity on agricultural production in Nigeria and the relationships between the dependent and explanatory variables. The Granger causality test and vector error correction method were utilized for data scrutiny, where the test results revealed a unidirectional causal relationship that ran from insecurity and agricultural output in Nigeria in the long and short run. The study, however, concluded that insecurity largely hampers agricultural production, given that farming activities could only blossom in a safe and sound environment, which ultimately ensures sustainable economic growth and development. It, therefore, recommends that government and policymakers intensify efforts on the road to tackle insecurity in Nigeria by humanizing the agricultural sector with the support of modern mechanized equipment, all geared towards addressing the ills of insecurity to ensure Nigeria's economic sustainability.

#### Introduction

The Nigerian economy is essentially agrarian as agriculture holds the key to "economic growth and development" in Nigeria, contributing

fundamentally to the enlargement and advancement of the sector itself, as well as supplying food and raw materials to other non-agricultural sectors of the economy (Olukunle, 2013). This means that the sector has backward and forward linkages to economic growth for Nigeria, provides employment opportunities to a vast majority of unemployed labor, and serves as a source of foreign exchange earnings. Besides, agriculture has the prospects of accelerating the pace of economic growth and even the development of Nigeria as in other countries. It is the largest single employer of labor and contributes a higher share to the Gross Domestic Product (GDP) of most developing countries, including Nigeria. The sector is a major source of food and raw materials for agro-industrial processing, with strong ties to employment, national income, market opportunities, and significant potential for poverty reduction and health improvement (Oluwatoyese & Adeyeye, 2021).

Precedent to the independence era, the Nigerian economy was nearly completely dependent on agricultural activities, as the sector contributed more than 80% of the nation's GDP and foreign exchange before the oil boom in the early 1970s and also provided subsistence for two-thirds of Nigerians in the low-income earning scope (Akinrinola & Okunola, 2020). At some stage in this period, the Nigerian agricultural sector occupied a coveted position among its associates worldwide. Nigeria took the lead in agricultural commodity exports, such as palm oil, cocoa, and groundnut exports (Emenuga, 2020). As noted earlier, Nigeria is a key agricultural commodity value tradable sector during this phase. However, little attention was given to the agricultural sector after the discovery of oil and gas. In contrast, the oil sector has consistently maintained the dominating position of exports and government revenue due to slower economic growth. Thus, many researchers have concluded that Nigeria has caught the "Dutch Disease", a finding that Fefa (2017) refuted, stating that Nigeria's economy is that of a "Consuming Disease" based. Omekwe, Bosco & Obayori (2018) emphasized that insecurity and inadequate finance are the two biggest problems the agricultural industry in Nigeria faces. Massive killings have occurred in Nigeria as a result of the persistent or tenacious security threat, which frequently affects farmers, most notably in rural areas. This obscene conduct implies that agricultural output, which makes up the sector's output, such as farm products, seemingly suffers a possible decline.

The peace and stability of economic activity or sectoral performance in Nigeria have been significantly threatened and challenged by the country's current level of insecurity. The country may have suffered massive losses or significant economic upheaval in addition to the tremendous losses to the nation's infrastructure, properties, and human lives, which may have led to a crowding-out of sectorial investment. Increased security costs, decreased output, productive capacity, decreased or restricted tourism, damaged infrastructure, and the displacement of foreign direct investment are serious effects of social unrest that adversely affect the economic growth of emerging economies (Mubaraq, 2021).

Throng killings in Nigeria have been indisputably by the country's ongoing security threat, which typically targets farmers, especially those who live in rural areas. As mentioned earlier, this heinous conduct implies that the agricultural sector's output or yields are compromised. Many farmers have given up on their crops due to the growth of the insurgency throughout most Nigerian states, particularly in the northern and southern parts of the nation. This is a consequence of people being afraid of attacks, particularly by roving Boko Haram militants, battles with farmers, communal disputes, and other types of violent behavior (Muhammed, 2015). A greater part of the local farming population has left their houses, following a scenario where these farmers can no longer produce in sufficient quantities to satisfy the needs of the nation's teeming population. The best part of young people who once helped support agriculture in rural areas are either killed or compelled to leave their fields.

Agriculture, apart from the contribution to employment creation, poverty, and hunger reduction as well as the reduction in rural-urban drift, was also a source of significant foreign exchange earnings for Nigeria and a major contributor to economic growth in the early colonial days up to the time of attainment of political independence through to 1970 (Nchuchuwe & Adejuwon, 2014). Despite the well-recognized important roles played by the agricultural sector in the economy, several factors still serve as an obstacle to the thriving of agricultural production in the nation, among others is insecurity. Agriculture is critical to economic growth and one of the main exit routes out of poverty in a rural economy like Nigeria. How the country's alarming insecurity rate affects agricultural output deserves an empirical investigation. Therefore, this chapter examines the

relationship between insecurity and agricultural output in Nigeria. Accordingly, the chapter seeks to evaluate the concepts of insecurity and agricultural output, examine the impact of insecurity on agricultural output in Nigeria; analyze the theoretical and empirical linkages with the problem; methodology; data presentation; analysis and discussion of findings; summary, conclusions and recommendations.

#### **Literature Review**

This part covered some core operational principles that integrated "insecurity and agricultural output" and its effects on the Nigerian economy, all pertinent to this study. Each of them is in the contexts specified below.

#### **Insecurity**

Scholars such as Nwanegbo & Odigbo (2013) and Olabanji & Ese (2014) saw the need first to conceptualize the phrase "security to mean the absence of threats to peace, stability, national cohesion, political and socio-economic objectives of a country" for viewers to be able to get a glimpse of and a better understanding of the phrase "insecurity." Other researchers, including Omede (2012), Ali (2013), and Achumba & Akpor (2013), perceived "security as an ongoing condition involving the ability of the state to confront threat on its essential values and interests. This implies that the lack of ability to respond to these threats quickly and competently is a key component of security rather than simply the absence of crime. In a different scenario, Achumba, Igbomereho, & Akpor-Robaro (2013) defined security as a defense against all types of harm, including financial, psychological, and physical problems".

The notion of "insecurity" has a variety of connotations to different people, including "danger," "hazard," "uncertainty," "lack of protection," and "safety" (Okonkwo, Ndubisi, & Anigbogu 2015). These phrases describe insecurity, which ultimately connotes a vulnerable state of harm and loss of life, property, and livelihood. Therefore, insecurity is a condition of fear brought on by a lack of defense against an attack or threat and a lack of freedom from risk. As opposed to economic and social insecurity, these definitions focus on physical insecurity, the component we are projecting in the present study. Nevertheless, it denotes risk, danger, uncertainty, lack of security, and protection. While danger is the state of being in threat,

insecurity is the condition of vulnerability to danger or threat. It is the condition of not feeling safe or protected.

Insecurity, according to Adeola & Oluyemi (2012), is the "condition of constantly being threatened with or exposed to danger, molestation, bullying, or harassment. For instance, insecurity might threaten the state, frequently leading to a rush to develop new weapons of mass destruction. As a result, insecurity lowers a nation's capital stock by depleting its physical and human resources, which could negatively impact the overall economy. Wherever there is a lack of stability and continuity of livelihood (a stable and consistent source of income), predictability of everyday life (a sense of security), safety from injury (safety or protection), and protection from crime (a sense of security), there is a risk". It occurs when a state cannot safeguard its citizens by upholding law and order (Nwama, 2015).

In the opinion of Ewetan (2013), insecurity drives up the cost of doing business because of the high-security danger, which also drives up a nation's security or defense spending. This significantly impacts one's ability to make a profit, reduces investment returns, and eventually has an adverse effect on economic growth and, by extension, development.

According to Achumba & Akpan (2013), feeling insecure or nervous is the act of being exposed to risk. People who live in unsafe environments are unsure of what may happen to their lives and possessions at any given time, changing the state of insecurity. This implies that lack of crime is not a sign of insecurity but rather a failure to quickly and effectively address the issues provided by these threats amid practicality and knowhow. The United States Institute of Peace (2021) identified insecurity as a lack of protection from covert and harmful disruptions in daily activities at homes, workplaces, or public places. Consequently, this threat creates an unfavorable environment for domestic and foreign investors, and their economic contributions trigger growth. Out of fear of risk, some investors who are risk averters move out or relocate their business ventures, which in turn retard growth in those affected areas.

These justifications for insecurity highlight a crucial point: persons who experience it are not only unsure or undecided about what will happen but

also exposed to threats and dangers when it does. Accordingly, this chapter views insecurity as a situation in which members of a society cannot go about their normal activities because of threats to their safety and devastating upsets of people's lives and possessions that also stop economic productive endeavors. Thus, The current investigation aims to uncover how the detrimental impact of this uncertainty on lives and assets would affect economic activity and output in crucial areas like agriculture.

### **Agricultural Output**

At this time, Nigeria's economy was thought to be based on agriculture, the science of farming. Agriculture is vital to most other sectors, such as the industrial sector. The development of this sector may support the development of the other sectors, which will result in economic growth and development. In the words of Anyanwu, Oyefusi, Oaikhenan, and Dimowo (1999), it primarily entails the cultivation of land, the raising, and rearing of animals for human consumption, the production of feed for animals and raw materials for industries, the production of crops and livestock, as well as the forestry, fishing, processing, and marketing of these agricultural products. Alternatively, crop production, cattle, forestry, and fishing could all be under the umbrella term of agriculture. Providing food, revenue, and raw materials for industries, creating job opportunities, and generating foreign exchange gains are just some ways that agriculture is important in any civilization. For this reason, the agricultural sector is given more attention than other sectors in development.

On the other hand, as the industry's production is still primarily dependent on rain and is therefore rather inconstant, it is highly vulnerable to changes in the weather and other natural occurrences. Over the past three decades, several concessionary agreements have been implemented to finance the sector to increase production by using more capital-intensive and mechanical techniques like irrigation. In this study, the agricultural sector is seen as a part of the real sector involved in growing crops and livestock, and whose output is influenced, among other things, by weather, government spending on agriculture, loan rates, and insecurity.

Thus, agricultural output includes some agricultural products that are produced or obtained from agricultural operations; these products mostly involve items for animal feed and biofuel material (Nwachukwu &

Shisanya, 2017). Regional output, especially for arable crops, is occasionally estimated using the totals obtained in each region, which is then assigned a value through prices. It does not matter whether the output is intended for use within the same holding, sale to other holdings, or marketing outside the sector; it is valued in this circumstance. Agribusiness output, as defined by Eburajolo & Aisien (2019), consists of the following elements: output sold (including trade between agricultural holdings); stock changes; output for own final consumption; output produced for further processing by agricultural producers; and intra-unit consumption of livestock feed products.

As stated by Omekwe, Bbosco, & Obayori (2018), the agricultural output consists of the following: (a) Crop enterprise output: It includes crops used for feed and seed by the farm business, those consumed in the farmhouse, and those consumed by farm labor. It represents the farm's overall worth of crops, excluding losses in the field and storage. To distinguish between a "harvest year" and an "accounting year," crop enterprise output is calculated on a "harvest year" basis. This means that it only includes crops that were fully or partially harvested during the accounting year, excluding any crops that were carried over from the previous year (except for some horticultural crops). The whole yield of the crop is therefore evaluated at market prices (plus any subsidies), and valuation fluctuations (between the previous and current crops) are not significant. However, this study considers agricultural output as the sum of the yields from all crops, all animals, and domestic fodder crops, which contribute to GDP and are influenced by the level of security in the nation. Thus, it appears that attacks by herders and other unidentified shooters that result in crop devastation and fatalities have an impact on agricultural output.

## Impact of Insecurity on Agricultural Output in Nigeria

Nigeria was placed first in Africa and third overall on the Global Terrorism Index in 2017, partly as a result of Boko Haram's actions and herders' attacks. According to the Global Terrorism Index (2020), these two groups are now causing violence and unrest in at least 15 of Nigeria's 36 states. Herders frequently engage in unjustified attacks that kill numerous people, damage property, and ultimately occupy villages where terrorists predominately operate. Along with south-south fights between competing cults and terrorist attacks on crude oil infrastructure, these

violent incidents also occur. As a result of the absence of peace and stability in the nation, Nigeria has significant issues that are putting pressure on its ability to uphold law and order and implement its growth and development policies. Therefore, herder conflicts impair farm productivity and threaten rural farmers whose primary vocation is farming.

Although Nigeria is not engaged in conflict in the strict sense of the phrase, the conflicts brought on by various forms of insecurity allow for the classification of Nigeria as conflict-ridden and involved in conflict. Dupuy & Rustad (2018) state that "1,000 fighting deaths are typically needed to qualify a conflict as a social or civil war. For decades, Nigeria has constantly kept track of over 1,000 fatalities from numerous wars that different factions have sparked throughout the nation". Together, the Armed Conflict Location and Event Data Project (ACLED) and the Nigeria Security Tracker calculated that, "between June 2011 and June 2018, there were approximately 34,260 and 37,535 fatalities related to the Boko Haram terrorist cluster alone (Campbell & Harwood, 2018). Other violent death causes, such as conflicts between communities, herders and farmers, clashes between the security services, disputes between sociocultural or religious groups, and other criminal activities, such as kidnappings for ransom, are spread out from the Boko Haram insurgency". In Nigeria, there were over 10,665 incidents of violence that resulted in both injuries and fatalities. As noted by Ukoji, Ayodokun, & Eze (2019), "illegal activity was the leading cause of violent deaths in 2018, accounting for about" 3,430 fatalities in 1,190 cases.

Apart from the Boko Haram sect's destructive actions in the nation's north-eastern geopolitical region, the threat posed by Fulani herders to national security constitutes a severe risk to food security. In recognition of the Fulani herders' cruel history of destroying local farmers' farms, they have frequently opposed them. Until 1999, these conflicts between farmers and herders were mainly well-managed, and no fatalities were ever recorded. However, after Nigeria's restoration to democracy in 1999, the conflicts between Fulani herders and farmers gradually had a new external look, and the frequency, complexity, and number of fatalities resulting from the use of the old dispute or disagreement methods decreased. The Institute for Economics and Peace (IEP) classified the Fulani herders "as a terrorist

organization, labeled them as the fourth deadliest group in 2014 after they were responsible for the deaths of 1,229 people, and captured them in the global terrorism index (IEP, 2018)". This classification was helpful because it exposed the group that had only been accountable for 63 fatalities in the year prior, 2013, according to Burton (2017).

The Fulani herders, who have been responsible for several attacks since 2014, to be exact, are still lethal because they continue to demand unlawful payments as ransom for kidnappings and engage in paramilitary operations against farming communities by destroying their farmland. The Nigerian government's carefree attitude, despite the herders' international label as terrorists, must have contributed to the intensity of the attacks by the Fulani herders. The Fulani herders have found courage in the support of several socio-cultural organizations, including Miyetti Allah Kautal Hore, Miyetti Allah Cattle Breeders Association of Nigeria, and the Fulani Nationality Movement, as well as in the silent backing of the recently-ex-President of Nigeria (Muhammadu Buhari) as one of their own. The International Crisis Group (2017) and Amnesty International (2018) both alleged that, despite Nigerians' suspicions that the Presidency was protecting the herders' killers and those funding them, nothing concrete has been done to stop these herders' activities so far.

The array of harsh weapons the Fulani herders possessed demonstrated their daring. The only weapons they used in the past were bows and arrows, long clubs, and machetes, but at this time, they moved around while carrying the AK47, a Soviet assault weapon. These weapons have allowed them to terrorize rural communities across Nigeria. For instance, compared to the 1,230 people who were killed in 2014, about 80 people have been slaughtered by Fulani herders. More than 10,000 people lost their lives in the last ten years, owing to the horror that Fulani herders have inflicted on the farming villages, as recently recognized. Additionally, more than 6,000 people were discovered to have died, while others suffered various degrees of injuries in the two years before that (Kwaja & Ademola-Adelehin, 2018).

#### Theoretical Review

The relative deprivation hypothesis served as the theoretical framework for this study.

#### The Relative Deprivation Theory (1970)

The relative deprivation theory served as the foundation for this study. Foster and Matheson (1995) affirmed that the Gurr (1970) relative deprivation theory of terrorism contends that political violence and terrorism are primarily the result of a generalized feeling of relative deprivation. The idea also suggested that people would organize or join social movements to demand the things they felt they were missing out on, such as money, rights, political voice, or status if they sensed they were being withheld.

Relative deprivation has occasionally been the cause of social unrest episodes like riots, looting, terrorism, and civil conflicts. Social movements of this kind and the disorderly behaviors accompanying them are frequently the result of complaints from individuals who believe they are denied resources to which they are legally entitled.

This idea is an upshot based on the dissatisfaction-aggression hypothesis, which holds that aggression is a byproduct of dissatisfaction. Awojobi (2014) held that the Nigerian youth's decision to join the Boko Haram movement as foot soldiers or militants was driven by their anger, lack of resources, and unemployment. The hypothesis is consequently based on the presumption that individuals who are deprived are also beneficial and aware of the resources intended for them who also believe they have a realistic possibility of acquiring the essential resources. In an economic sense, the theory seeks to explain the link between poverty and insecurity by arguing that the persistence of poverty, particularly in emerging nations, leads to the rise of conflicts. The current insecurity activities in Nigeria could have resulted from the denial of rights to the less privileged, which is supported by theory, and the act may have a significant impact or adverse effect(s) on the output of lucrative industries akin to agriculture.

## Critique

Relative deprivation theory has been criticized for failing to explain why some people who believe they are deprived of affluence or rights do not participate in social movements intended to obtain those things. Although there is no assurance that joining the movement will lead to a better life, relative deprivation theory proponents countered that most of these people are trying to avoid potential conflicts and problems in their personal lives.

Furthermore, relative deprivation theory does not consider persons who participate in movements that do not immediately benefit them. Therefore, poverty, cited here as a contributing factor to Nigeria's alarming incidence of insecurity, could severely impact economic operations, resulting in enormous losses, especially in terms of crop productivity.

#### **Theoretical Linkage**

According to the relative deprivation theory, people who believe they are missing out on a social good, such as money, rights, political influence, or status, might organize or join social movements to demand these things. The current instability in Nigeria may be caused by the decreased privileges and rights being denied. As a consequence, the alarming rate of this threat may impact economic operations, notably agricultural activities, as peasants are evicted or driven from their ancestral abode, leaving their land uncultivated, which apparently results in a shortfall of farm harvests.

## **Empirical Literature Review**

This chapter's empirical component focuses on "the impact of insecurity risk on agricultural output," so it would be "consistent with the objectives" set forth. Thus, the review critically weighed relevant empirical research from domestic and intercontinental realms.

Adebisi, Azeez, & Oyediji (2017) conducted a study on the "effects of Boko Haram's insurgency on Nigeria's agricultural sector". The data from 1981 to 2016 were analyzed using descriptive statistics and the t-test. According to the report, "the country's agricultural sector's GDP contribution had risen before the Boko Haram interruption but had fallen off during the conflict. Therefore, the study concluded that the insecurity threat hinders Nigeria's agricultural sector". A more trustworthy econometric approach is needed, as the t-test methodology used to research this topic is unlikely to yield an accurate estimate of a temporal data series.

The economic growth of Nigeria was examined by Ebipre & Wilson (2020), employing time series data from 2000 to 2019 with ordinary least square regression. It was discovered that widespread economic activity had been severely reduced by national insecurity, making it challenging

to create sustainable economic growth. The study concluded that insecurity has a detrimental effect on Nigeria's economic development.

Gaibulloev & Sandler (2009) adopted the ARDL technique for data analysis to examine the effects of terrorism on per capita growth in Asia from 1970 to 2004. According to the study, terrorism considerably impeded economic progress, and its effects appear more pronounced in emerging countries than in industrialized ones. Internal conflicts were found to be twice as effective in slowing growth as international wars due to wealthy countries' resilience to terrorism due to their strong economy.

Using ordinary least squares from 1999 to 2016, Onime (2018) assessed "the impact of insecurity on economic variables in Nigeria, including growth, investment, employment, exports, government revenue, and the informal sector". Owing to the research, economic progress is hampered by insecurity since it discourages investment, exacerbates unemployment, and reduces tax revenue. Despite these, the government's capital spending on internal security did not skyrocket to match the situation's hydraheaded nature. As a result, insecurity has a "negative impact on Nigeria's overall economic growth".

Adebisi & Okotie (2017) carried out a study on the "assessment of Boko Haram's insurgency in Nigeria's agricultural industry. The study used a time series data analysis research methodology, and descriptive statistics and t-tests were employed to evaluate the secondary data before and during the national insurgency. According to the research, agricultural value contributed to the GDP was high before the Boko Haram interruption but decreased after the conflict. By the findings, the report advised that the government take appropriate legal action to address Boko Haram's impact on agricultural productivity and provide farmers with stronger incentives to reclaim their ancestral farmlands".

Shabir, Naeem, & Ihtsham (2015) used the Solow growth model to examine "how terrorism has affected Pakistan's economic development. The co-integration technique was utilized in the study, which utilized secondary data from 1981 to 2012. The study's findings indicated that, terrorism had hampered Pakistan's economic expansion". Similarly, the "influence of terrorism on the economic growth of Pakistan and India was

also explored by Fatim, Latif, Chugtai, Nazik, & Aslam (2014) using multiple regression analysis. The study found that, unlike Pakistan, India's economic growth was unaffected by terrorist activity. Thus, it was determined that, in contrast to Pakistan's economy, insecurity in the form of terrorism had no detrimental effects on economic growth in India".

Mukolu & Ogodor (2018) combined ordinary least square regression and time series data to analyze "the impact of the insurgency on Nigeria's economic growth from 1991 to 2017". The study used "gross domestic product as a stand-in for economic growth, while the human development index, the global peace index, the corruption rank, the corruption perception index, and the relative corruption rank all served as stand-ins for insurgency and were all considered independent variables. The calculated result showed a linear association between GDP and the five independent variables; the global peace index had a detrimental effect on economic performance. Economic performance significantly suffered from the corruption rank and perception index's detrimental effects. Thus, it was determined that Nigeria's economic growth is negatively impacted by insecurity".

The "effects of the national insurgency on Nigeria's agricultural development and productivity were the subject of a study by Ojogho & Egware (2015). The Nigerian civil war, Boko-Haram, Niger-Delta, and Fulani herders' insurgencies were used as proxies for the insurgency by using time-series data on the agricultural share of Nigeria's GDP, infant mortality rate, CO2 emission from fuel combustion, and level of food production as indicators of agricultural transformation for the period 1960-2011. The study's findings revealed that any unit decrease in agricultural food production in one year would increase the share of agriculture in GDP by 4.30% in the following year. In contrast, any shift from nonviolence to violence in any year brought on by Boko Haram, the Niger Delta, or Fulani herders reduced the contribution of the share of agricultural production to GDP by approximately 17.60%, 19.50%, and 17.50%, respectively. The study also suggested that since insurgence impacts changes in food production levels, the contribution of agriculture to GDP, CO2 emissions from fuel combustion, and infant mortality, agricultural development should be comprehensive because of the longterm equilibrium relationship between its constituent parts. Hence, any

effort to ignore the upsurge in any area or facet, whether religious, cultural, or communal, will continue to wreak havoc and push agricultural growth to the side".

Tahar, Arafet, & Hadhek (2018) investigated "how terrorism-related insecurity affects economic growth while carefully examining how this influence is disseminated. Using simultaneous equation models, panel data for a sample of eleven nations (six developing and five developed) from 2008 to 2015 were examined. According to the study, terrorism positively affected economic growth for both wealthy and developing countries across the entire sample while negatively affecting economic growth for both the entire sample and emerging countries. Additionally, there was a negative association between unemployment and terrorism for each country sample".

Nigerian industrialization, insecurity, and sustainable development were the subjects of research by Ndubuisi-Okolo & Anigbuogu (2019). Data were gathered using the internet, libraries, and other scholarly sources pertinent to the study under the exploratory research design. The results showed that "Nigeria's industrialization and sustainable development are not being hampered by insecurity in any significant or central way. Based on this finding, it was determined that rapid industrialization and sustainable development were still feasible during unrest".

In 2020, Essien, Tordee, Abuba & Igbara looked at how "national insecurity affected foreign direct investment (FDI) in Nigeria between 1999 and 2018. The quantity and pattern of foreign direct investment in Nigeria were assessed using the eclectic paradigm, a blend of different paradigms such as location-specific and globalization. The ordinary least squares regression analysis was the method used for data analysis. According to the study, insecurity is still a significant barrier to the expansion of foreign direct investment in Nigeria over the period. The conclusion was that resolving the national security issue led to a shift in the growth rate and trend of foreign direct investment in Nigeria".

Between 1999 and 2014, Ayoola (2018) evaluated the "connection between foreign direct investment (FDI) and insecurity in Nigeria. The analysis incorporated ordinary least square regression and used primary

and secondary data. Results show that the country's unique characteristics have prevented insecurity from significantly impacting FDI inflow by making the promise of profits more tempting to investors than the risk of attacks. However, the high level of insecurity allowed foreign investors to act dishonestly, harming the Nigerian government and its people".

In Nigeria, "the productivity of small and medium-sized businesses was examined by Hassan, Akor, Bamiduro, & Rauf (2020) in light of government programs and the security environment. 590 respondents from small and medium-sized businesses participated in a nationwide survey conducted in 2020 and used for the study's testing of the hypotheses. Government policy and insecurity significantly negatively impacted small and medium-sized firms' productivity, according to the multinomial logistic regression used to arrive at the results. Also, none of the government initiatives supporting the expansion of small and medium-sized businesses had Wald statistics with a p-value less than 0.05, indicating that their contribution to increasing the productivity of these businesses has not been significant. It was determined that instability and governmental policies only marginally affected production over the research period".

### Gap in Literature

Based on the reviewed works, it is clear that there exists a gap in the literature because research in the vein of Tahar, Arafet, & Hadhek (2018), Mukolu & Ogodor (2018), & Shabir, Naeem & Ihtsham (2015) "examined how insecurity affected Nigeria's economic growth". Consequently, to the best of my knowledge, these studies did not consider how insecurity affects agricultural output, as found in the current study. Additionally, there was a vacuum in time coverage because the studies did not address the security threat that materialized from 2017 to 2021, during which the nation endured a high level of insecurity despite defense investment. Also, because the study focused primarily "on economic growth and development, which have a distinct measure from the output, it could not account for the direct impact of insecurity on agricultural production."

There is a need for a current study on the "impact of insecurity on agricultural output using gross national product per capita in Nigeria with the most recent data. Since scholars akin to Ayoola (2018), Essien, Tordee,

Abuba & Igbara (2020), who examined the impact of national insecurity on foreign direct investment in Nigeria, did not consider such influence on agricultural output, instead focusing their analysis on a single component (investment). Further, studies found no negative effects of insecurity on economic growth, like those by Ebipre & Wilson (2020) and Fatim, Latif, Chugtai, Nazik & Aslam (2014). Contrarily, Onime (2018) & Obi (2015) revealed that economic instability has a detrimental influence. This lack of agreement among academics about how uncertainty affects economic variables is evidenced by the discrepancies in empirical results". As a result, there exists a gap in our knowledge of how "insecurity affects the output of some economic sectors, such as agriculture" and this gap has to be filled by further research.

### **Methodology of the Study**

The study "employed an ex-post factor" research design by utilizing a "desk survey methodology; secondary data from 1999 to 2021 were used from a variety of sources, including the World Development Indicators (WDI, World Bank), Central Bank of Nigeria (CBN), and National Bureau of Statistics (NBS). The dependent and independent variables utilized in the study were selected after careful assessment of the empirical literature that has already been published and following the goals of the investigation. Real GDP was used to assess economic development (ED), per capita income (PCI) was used to measure economic growth (EG), and the defense budget (DB) was used to measure insecurity (I)". The study logically divides the data into two periods: pre-high insecurity (1999–2015) and high (2016–2021). Regression was used to evaluate the hypotheses, and a pair-wise t-test was employed to see whether the two study periods differed.

The target group is made up of Nigerian farmers who suffer from insecurity and who also reside there. Farmers specifically impacted by the wave of insecurity fell into this category. The study examined how insecurity affected Nigeria's agricultural output using time series data covering 1999 through 2021. This period is long enough to estimate insecurity because it accurately encompasses contemporary economic insecurity actions.

As a result of the study's objectives and the fact that economic growth depends on the contribution of economic sectors like agriculture, agricultural production was used as the dependent variable in place of economic growth. However, according to Olatunji, Omotesho, Ayinde & Adewumi (2012), the level of inflation in an economy also affects agricultural output. Again, Keynesian economists contend that government spending and intervention can impact a nation's agricultural output. Including land area used for agricultural activities helps better analyze the relationships between correlated variables (traits) and assess the relationship between multiple genetic variants and correlated phenotypes of interest. It is further argued that land as a factor of production is a strong determinant of output from the agricultural sector.

### Data Presentation, Analysis and Discussion of Results Descriptive Statistics

Table 1: Granger Causality Test Result

Null Hypothesis:	Obs F-		Prob.	
		Statistic		
TIND does not Granger Cause LNAGO	35	1.96880	0.1702	
LNAGO does not Granger Cause TIND		1.06793	0.3092	
LNGVEX does not Granger Cause LNAGO	35	5.51313	0.0252	
LNAGO does not Granger Cause LNGVEX		0.59788	0.4451	
INF does not Granger Cause LNAGO	35	0.19737	0.6598	
LNAGO does not Granger Cause INF		3.41023	0.0741	
ALA does not Granger Cause LNAGO	35	1.77232	0.1925	
LNAGO does not Granger Cause ALA		0.80832	0.3753	
LNPOGR does not Granger Cause LNAGO	35	4.01446	0.0536	
LNAGO does not Granger Cause LNPOGR		0.00234	0.9617	

Source: Extracts from E-Views 10 Output

# Causal Relationship between Insecurity and Agricultural Output in Nigeria

The study used the Granger causality paradigm to evaluate the causative relationship between insecurity and agricultural output in Nigeria, and the outcome is as projected.

The Granger causality test found a unidirectional causal association between insecurity and agricultural output in Nigeria with a 10% significance level, as shown in Table 1. Insecurity and agricultural output were linked causally. As a result, it was inferred that the historical data on insecurity contained accurate information that could be utilized to forecast the amount of agricultural output in Nigeria throughout the research period. At a 5% observed level of statistical significance, a one-way link between agricultural productivity and insecurity was discovered. Government spending and agriculture output were linked by a causal relationship. The lower probability value of 0.0252, or a level of significance below 5%, supports this fact. It implied that government spending could foretell how Nigerian agriculture would function.

## **Johansen Co-integration Test**

The Johansen co-integration result demonstrated how variables trend over the long run; as a result, it is often a strategy for modeling long-term behavioral interactions. The trace statistic and Max-Eigen statistic are estimated, and the outcome is as tracked

Table 2: Result of Johansen Co-integration Test

Table 2: Result of Johansen Co-integration Test							
		Prob. Value	Max-Eigen Statistics	Critical Value @ 0.05	Prob. Value	-	
	131.6660	95.75366	0.0000**	67.52055	40.07757	0.0000**	-
	64.14547	69.81889	0.1304	23.75396	33.87687	0.4736	
	40.39151	47.85613	0.2088	18.46839	27.58434	0.4566	
	21.92313	29.79707	0.3028	11.62938	21.13162	0.5845	
	10.29375	15.49471	0.2588	9.291343	14.26460	0.2627	
	1.002405	3.841466	0.3167	1.002405	3.841466	0.3167	

Source: Extracts from E-Views 10 Output

The Johansen co-integration analysis result in Table 2 shows that the research variables have a long-term relationship. One co-integrating equation existed in the system, according to the trace statistics. This is because the first equation's probability value is significant at the 0.05

level. Similarly, one co-integrating equation was found through Max-Eigen statistics because the initial equation's probability value was significant at the 0.05 level. This suggested that the model's variables have long-term interactions.

#### Long-run Impact of Insecurity on Agricultural Output in Nigeria

Based on the lowest log-likelihood, the Johansen co-integrating equations are produced in this regard. Following is a presentation of the estimated result:

Table 3: Result of the Long-run Impact of Insecurity on Agricultural Output in Nigeria

Variables	Coefficient	Std. Error	t-statistic	
D(TIND(-1))	-0.059378	0.37025	-0.16037	
D(LNGVEX(-1))	-1.889659	0.38103	-4.95941	
D(INF(-1))	-0.033153	0.00342	-9.70096	
D(ALA(-1))	0.0000733	0.000013	5.45224	
D(LNPOGR(-1))	8.201120	3.56553	2.30011	

Source: Extracts from E-Views 10 Output

Insecurity has a "long-term negative (-0.059) impact on Nigeria's agricultural output, according to Table 3's results. This indicates that any rise in insecurity-related activities in the Nigerian economy caused output from the agriculture sector to respond negatively by roughly 5.9%. The impact's size was not statistically significant at the 5% level. According to the results, government spending had a negative (1.88966) and statistically significant impact on agricultural output. This showed that, in the long run, a change (increase) in government spending resulted in a drastic decline in agricultural productivity. It was inferred that government spending has not improved agricultural output, and as a result, it is not a reliable indicator of either a rise or a drop in output in the agricultural economy". It turned out that "Nigeria's inflation rate had a favorable impact on agricultural output. In other words, a 5% increase in inflation caused a 3.3% increase in agricultural output. Over the long term,

inflation significantly and strongly influenced agricultural output. Analyses additionally revealed that, at a 5% significance level, population increase and agricultural land area positively impact agricultural output in Nigeria. This result indicates that Nigeria has a very high level of agricultural output influence due to population increase and land area used for agriculture".

## Short-Run Impact of Insecurity on Agricultural Output in Nigeria

Table 4 shows the results of this section's analysis of the "short-term effects of insecurity on agricultural output in Nigeria" using the error correction technique.

Table 4: Result of Short-run Impact of Insecurity on Agricultural Output in Nigeria

Variables	Coefficient	Std. Error	t-statistic	
ECM(-1)	-0.014107	0.04147	-3.04018	
D(TIND(-1)	0.021089	0.07998	0.26366	
D(LNGVEX(-1)	0.065540	0.07112	0.92157	
<b>D(INF(-1)</b> ,	0.000296	0.00089	0.33128	
<b>D</b> ( <b>ALA</b> (-1)	0.0000010	0.0000043	0.24770	
D(LNPOGR(-1),	-0.103569	0.86226	-0.12011	
Constant	-0.000791	0.01597	-0.04950	

Source: Author's computation from E-views 10 Output

A statistically significant negative coefficient of ECM is in Table 4. This shows that, in the event of any departure, the "long-run equilibrium may return at an adjusted speed of 1.4% in the shortest time. In the event of any initial shock, the system converges to long-term equilibrium by 1.4% annually. So, based on the short-term estimates, agricultural output was positively impacted by insecurity, government spending, inflation, and agricultural land area, even though the effect was not statistically significant at the 5% level. As such, inflation, government spending, insecurity, and the amount of agricultural land do not significantly and negatively affect the agricultural sector's output. At a 1% observed significance level, population expansion, on the other hand, negatively impacted agricultural productivity".

#### Post Estimation Test

A diagnostic check was done to determine the model's validity, or rather, if the developed model was flawed. Thus, "the reliability of estimates was tested using residual tests, which determined whether the residuals' distribution could be normal and whether the estimates could generate or produce trustworthy statistical judgments".

**Table 5: VEC Residual Heteroscedasticity Tests** 

Chi-sq	df	Prob.	
325.6383	294	0.0989	

Source: Author's computation from E-views 10 output

The Breusch-Pagan-Godfrey VEC residual Heteroscedasticity Test result from Table 5 showed that the "variables are homoscedastic because there is no evidence of heteroscedasticity in the model. This is due to the Chi. Square's probability value exceeds the threshold of 0.05. The null hypothesis is therefore accepted, implying no interaction between the error term and the explanatory variables".

**Table 6: VEC Residual Serial Correlation LM Tests** 

Lag	LRE* stat	df	Prob.	Rao F-stat	Df	Prob.
1	45.60771	36	0.1310	1.343894	(36, 64.2)	0.1495

Source: Author's computation from E-views 10 output

Given that the "probability values are greater than 0.05", the Breusch-Godfrey VEC Serial Correlation LM Test from Table 6 reveals that "there is no serial correlation among the investigated variables. This suggested that there is no serial correlation found within the models".

## **Discussion of Findings**

The" Granger Causality Test results demonstrate that, at a 10% level of significance, there is a single, direct causal link between Nigerian agricultural output and insecurity. From insecurity to agricultural output, there was a causal relationship. This suggested that the historical data on

insecurity contained accurate information that could be utilized to forecast the level of agricultural output in Nigeria throughout the study. In addition, a 5% observed level of statistical significance revealed a one-way link between agricultural output and insecurity. Government spending was the direct cause of agricultural output, implying that, government spending could be used to forecast how well Nigeria's agricultural output would perform over time. Accordingly, the output of economic sectors like agriculture could be influenced by insecurity because this finding is in line with theoretical expectations".

The result demonstrates that, over time, "insecurity has a detrimental effect on Nigeria's agricultural production. This indicates that, despite the amount of the impact being not statistically significant at the 5% level, the agriculture sector's output was negatively impacted by roughly 5.9% due to any increase in insecurity activities in the Nigerian economy. This discovery implies that, while insecurity threatens agricultural activities, its negative impact on output is insignificant enough to define government efforts to promote national security. In contrast to Nkwatoh & Hiikyaa (2018), who found that insecurity positively influences economic growth, this outcome is conceptually plausible as expected and has been supported by Adebisi, Azeez, & Oyediji (2017), as well as Ebipre & Wilson (2020)".

The result also demonstrates that "government spending has a statistically significant negative impact on agricultural output. This means that a shift (increase) in government spending will eventually cause a drastic decline in agricultural output. This means that government spending has not improved agricultural output, which is not a factor in determining whether output in the agricultural sector would increase or fall. The detrimental impact of government spending on agricultural output defines misallocation of government finances as an effect of corruption in the nation".

Conversely, it was discovered that Nigeria's "rate of inflation had a favorable impact on agricultural output. That is, at a 5% level of significance, the increase in inflation caused an increase in agricultural output, revealing that inflation has a significant long-term impact on agricultural output. This outcome signifies that farmers will continue to invest in agricultural activities to raise their yields due to the ongoing rise

in food prices. However, research also revealed that population increase and the amount of agricultural land have a beneficial impact on agricultural output in Nigeria at a level that is 5% significant. This suggests that population increase and the amount of land used for agriculture significantly impact agricultural output and are important factors in Nigerian agriculture".

Insecurity, government spending, inflation, and agricultural land area all appear to have a "beneficial impact on agricultural output according to short-term estimates, although this effect is not statistically significant at the 5% level. The findings indicate that inflation, government spending, insecurity, and agricultural land area do not significantly impact agricultural sector output. Nkwatoh & Hiikyaa (2018) found that insecurity's advantageous effect on agricultural output was contrary to the a priori hypothesis. At a 1% observed level of significance, population expansion, on the other hand, had a negative impact on agricultural productivity". This proves that, "population growth would not help Nigeria's agricultural efficiency; further proving that; it is population expansion that provides the labor needed for agriculture to thrive".

### **Summary, Conclusions and Recommendations**

Based on the study's outcome, it can be concluded that, "insecurity has a major impact on Nigeria's rate of agricultural production. Even though the government is making ongoing efforts to reposition the agricultural sector and make it the engine of Nigeria's economic growth, the effort will only be successful if the government genuinely takes the necessary action to address insecurity and its detrimental effects, particularly on the agricultural sector and its related activities. There is just no way for the nation to effectively increase productivity or attain competitiveness in an environment where people feel frightened or unsettled, both physically and psychologically. This threat has severely disrupted Nigeria's agricultural industry-specific activities, forcing millions of farmers to leave their native farming communities under duress. Meanwhile, the steadfast few are constantly terrified (the slogan is, "Go to farm and die"), making it impossible for them to engage in farming activities to their full potential. The direct result is decreased productivity with accompanying exacerbating the inconsistencies surrounding Nigerian agricultural production and the likelihood of food destruction". Therefore,

based on these discoveries, the following recommendations were adjudged necessary.

- i. Given that there is a "unidirectional causal relationship between insecurity and agricultural output, the government should consider insecurity as one of the major variables affecting Nigeria's level of agricultural output, particularly when developing agricultural policy". This might be accomplished by using identifiable trends in agricultural production concerning the intensity of insecurity.
- ii. The government should "step up efforts to resolve insecurity in Nigeria given that it had a long-term detrimental impact on agricultural output and would conflict with the diversification strategy it was pursuing. This can be accomplished by raising defense spending, ensuring that the budgeted monies are used appropriately, and strengthening community policing" in remote regions.
- iii. This study further recommended that to "maintain peace and unity in the economy, the government should increase its efforts in combating insecurity, particularly in the vein of herders-farmers' clashes and unidentified gunmen. This is because insecurity and government spending have a positive short-term impact on agricultural output". This may be "accomplished by promoting" anti-open grazing regulations currently in place in some states to prevent future negative consequences of insecurity in the nation.

#### References

- Achumba, I.C. & Akpor-Robaro, M.O.M. (2013). Security challenges in nigeria and the Implications for business activities and sustainable development, *Journal of Economic and Sustainable Development*, 4.2.
- Adebisi, S. A., Azeez, O. O. & Oyedeji, R., (2017). Appraising the effect of boko haram insurgency on the agricultural sector of Nigerian business environment. *Journal of Law and Governance 11*(1), 14-25.
- Adebisi, T & Okotie, S. (2017). "The Restructuring of Food Systems: Trends, Research and Policy issues", Agriculture and Human Values, 16.109-116.

- Adeola, G. L., & Oluyemi, F. (2019). The political and security implications of cross border migration between Nigeria and her Francophone neighbours. *International Journal of Social Science*, *1*(3), 1-9.
- Akinrinola, T. G. & Okunola, J. K. (2020). Determinants of agricultural output in Nigeria. International Journal of Science and Management Studies, 1(4), 65-73.
- Amnesty International (2018). The harvest of death: Three years of bloody clashes between farmers and herdsmen in Nigeria. Abuja: Amnesty International Ltd. Retrieved from <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/AFR4495032018ENGLISH.PDF">https://reliefweb.int/sites/reliefweb.int/files/resources/AFR4495032018ENGLISH.PDF</a>
- Anyanwu, J. C., Oyefusi, A., Oaikhenan, H.O., Dimowo, F.A. (1999). Structure of the Nigerian Economy. Joanee Education Publisher Ltd.
- Awojobi, O. N. (2014). The socio-economic implications of boko haram insurgency in the north-east of Nigeria. *International Journal of Innovation and Scientific Research*, 11(1), 144-150.
- Ayoola, A. O. (2018). Insecurity and major determinants of foreign direct investment in Nigeria. *International Journal of Humanities and Social Science Research*, 4, 54-63.
- Burton, G. (2017). Background report: The Fulani herdsmen. Retrieved from https://medium.com/@gfburton /background-report-the-fulani-herdsmen-part-i-key-findings-introduction-and-history-383c10f8137c.
- Campbell, J. & Harwood, A. (2018). Boko Haram's deadly impact. Council on Foreign Affairs. Retrieved from <a href="https://www.cfr.org/article/boko-harams-deadly-impact">https://www.cfr.org/article/boko-harams-deadly-impact</a>.
- Dupuy, K. & Rustad, S. A. (2018). Trends in armed conflict, 1946–2017.

  Retrieved from <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/Dupuy%2C%20Rustad%20Trends%20in%20Armed%20Conflict%2C%201946%E2%80%932017%2C%20Conflict%20Trends%205-2018.pdf">https://reliefweb.int/sites/reliefweb.int/files/resources/Dupuy%2C%20Rustad%20Trends%20In%20Armed%20Conflict%2C%201946%E2%80%932017%2C%20Conflict%20Trends%205-2018.pdf</a>.
- Ebipre, P. & Wilson, G. (2020). National insecurity and economic growth: The case of Nigeria. *International Journal of Innovative Legal & Political Studies*, 8(2),13-21

- Eburajolo, C. O. & Aisien, L. N. (2019). Impact of commercial banks' credit to the real sector on economic growth in Nigeria. *Oradea Journal of Business and Economics*, 4 (1), 38-46.
- Emenuga, P. E. (2020). Effect of commercial banks' credit on agricultural productivity in Nigeria. *ACTA Universitatis Danubius*, 15(3), 417-428.
- Essien, J., Tordecae, B., Abuba S. & Igbara. F. (2020). The impact of national security on foreign direct investment (FDI) In Nigeria. *Journal of Business and Management*, 17(5), 69-74.
- Ewetan, O. O. & Urhie, E. (2014). Insecurity and socio-economic development in Nigeria. *Journal of Sustainable Development Studies*, *5*(1): 40-63.
- Ewetan, T. (2013). The political and security implications of cross border migration between Nigeria and her Francophone neighbours. *International Journal of Social Science*, 1(3), 1-9.
- Fatim, M., Latif, M., Chugtai, M., Nazik., H., & Aslam, S. (2014). Terrorism and its Impact on Economic Growth: Evidence from Pakistan and India. *Middle-East Journal of Scientific Research*, 22(7), 1033-1043
- Fefa, J. (2017). Management of oil revenue and economic growth in Norway and Nigeria. *LAP LAMBERT Academic Publishing*
- Foster, M. & Matheson, K. (1995) Double relative deprivation: Combining the personal and political. *Personality and Social Psychology Bulletin* 21, 1167–117
- Gaibulloev, K., & Sandler, T. (2009). The impact of terrorism and conflicts on growth in Asia. *Economics and Politics*, 21(3), 359-383.
- Gurr, G. (1970). Deprivation theory of terrorism and political violence. International Journal of Humanities Social Sciences and Education, 2(2). 32-48.
- Hassan, A. E., Akor, K., Bamiduro, E.O. & Rauf, I. (2020). Impact of government policy and insecurity factors on Small and Medium Enterprises (SMEs) Productivity in Nigeria. *European Journal of Business and Management Research*, 5, (6), 1-8.

- International Crisis Group (2017). Herders against farmers: Nigeria's expanding deadly conflict. Africa Report No. 252. Retrieved from <a href="https://d2071andvip0wj.cloudfront.net/252">https://d2071andvip0wj.cloudfront.net/252</a> nigerias -spreading-herder-farmerconflict.pdf
- Institute for Economics and Peace (IEP, 2018). Global terrorism index: Measuring and understanding the impact of terrorism. Retrieved from <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/2015">https://reliefweb.int/sites/reliefweb.int/files/resources/2015</a> <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/2015">https://reliefweb.int/sites/reliefweb.int/files/resources/2015</a> <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/2015">https://reliefweb.int/sites/reliefweb.int/files/resources/2015</a> <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/2015">https://reliefweb.int/sites/reliefweb.int/files/resources/2015</a> <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/2015">https://reliefweb.int/sites/relief
- Kwaja, C. M. A & Ademola-Adelehin, B. I. (2018). The Responses to conflict between farmers and herdsmen in the middle belt of Nigeria: Mapping past efforts and opportunities for violence prevention.
- Mubaraq, S. (2021). Agricultural credit guarantee scheme fund (ACGSF) and agricultural performance in Nigeria: A threshold regression analysis. Forthcoming in: CBN Journal of Applied Statistics, 4(8) 45-62.
- Mukolu, M. O & Ogodor, M. O. (2018). Insurgency and its implication on Nigeria economic growth. *International Journal of Development and Sustainability*, 7 (2), 492-501.
- Ndubuisi-Okolo, P. U. & Anigbuogu, T. (2019). Insecurity in Nigeria: The implications for industrialization and sustainable development. *International Journal of Research in Business Studies and Management*, 6(5), 7-16.
- Nwachukwu, N. I., & Shisanya, C. A. (2017). Determinants of agricultural production in Kenya under climate change. *Open Access Library Journal*, 4(3), 1-10.
- Nwama, I, (2015). Insecurity in a developing nation. *Journal of Business Education*, 4(6), 44-66.
- Nwanegbo, C.J. & Odigbo, J. (2013), International Journal of Humanities and Social Sciences, 3(4), 285-291.
- Okonkwo, R.I, Ndubuisi, O.P & Anigbogu, I (2015). Security challenges and the implications for business activities in Nigeria: A Critical Review, *Journal of Policy and Development Studies, Vol. 9, No.* 2.

- Olabanji, O.E. & Ese, U. (2014). Insecurity and Socio- Economic Development in Nigeria, Journal of Sustainable Development Studies, Vol. 5, Number 1, 40-63.
- Oladeji, S. I., & Folorano, B. A. (2007). The Imperative of National Security and Stability for Development Process in Contemporary Nigeria. *European Journal of Social Sciences*, *3*(2), 66-79.
- Olagunju, F. I., Oke, J. T. O. Babatunde, R.O & Ajiboye, A. (2020). "Determinants of food insecurity in Ogbomoso metropolis of Oyo State, Nigeria", PAT (June), 8 (1): 111 -124.
- Oluwatoyese, O. O. & Adeyeye, O. (2021). Impact of agricultural output on economic growth in Nigeria: Application of Numerical Prediction and Econometric Analysis. *Turkish Journal of Computer and Mathematics Education*, *12* (12), 1793-1801.
- Omekwe, S. O., Bosco, I. P., & Obayori, J. B. (2018). Determinants of agricultural output in Nigeria. *International Journal of Science and Management Studies*, 1(4), 65-73.
- Onime, B. N. (2018). Insecurity and Economic Growth in Nigeria: A diagnostic review. *European Scientific Journal February 2018 edition*, 14(4). 52 -66.
- Shabir, H., Naeem, A., & Ihtsham, P. (2015). Impact of Terrorism on economic development in Pakistan. *Pakistan Business Review*, 701-722.
- Tahar, L., Arafet, H., & Zouhaier, H. (2018). Terrorism and economic growth. *International Journal of Economics and Financial Issues*, 8(1), 175-178.
- United State Institute of Peace (2021). Security challenges in Africa: 2021 and beyond. Retrieved from <a href="https://www.usip.org/events/security-challenges-africa-2021-and-beyond">https://www.usip.org/events/security-challenges-africa-2021-and-beyond</a>.
- Ukoji, V., Ayodokun, A. & Eze, V. (2019). Nigeria watch: the Eight report on violence in Nigeria.