Impact of Insecurity on Agricultural Sector Product in Nigeria

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Abstract

Using the Ordinary Least Square (OLS), this study analyzes the impact of insecurity on agricultural sector product in Nigeria. Employing time series data from the World Bank, the Central Bank of Nigeria and the National Bureau of Statistics from 2010 to 2023, the study reveals that terrorism has negative impact on agricultural output in Nigeria. In order to mitigate the effect of insecurity, this study recommends some strategies which include the provision of employment, literacy, reduction in poverty, and cross-cultural integration, among others. Furthermore, all the tiers of government should embrace dialogue which is a veritable tool in promoting peace in every region in the country.

Keywords: Ordinary Least Squares (OLS), terrorism, Economic growth

JEL Code: C13, H56, O40

DOI: 10.7176/JESD/15-7-02

Publication date: September 30th 2024

I.0 Introduction

Seterglou et al. (2017) define agriculture as a pillar of economic growth, development, and poverty eradication in developing countries. It has also been regarded as an engine and panacea for economic prosperity. In recent decades, the Nigerian economy thrived and relied primarily on the agricultural sector. This sector was reputed as the mainstay of the economy in the early 1960s. It is considered a key driver of growth and development.

The history of Nigeria's agricultural sector reveals its foundational importance to the country's economic and developmental trajectory. Prior to the discovery of oil, agriculture was the primary economic driver, sustaining livelihoods and generating revenue. After independence, Nigeria pursued agricultural modernization to boost productivity and achieve food self-sufficiency, inspired by initiatives such as the Green Revolution. However, the focus shifted to oil after its discovery, leading to the neglect of agriculture, increased food imports, and vulnerability to global oil price fluctuations.

The Structural Adjustment Programme (SAP) in the mid-1980s aimed to reduce government intervention and promote market-driven policies, impacting agriculture both positively and negatively. A renewed focus on agriculture emerged in the 2000s to diversify the economy and enhance food security. The Agricultural Transformation Agenda (2012) aimed to transform the sector through private sector involvement and infrastructure improvement but faced challenges due to political changes and instability.

Initiatives such as the Growth Enhancement Support Scheme (GESS) and the Anchor Borrowers' Programme (ABP) aimed to boost productivity and support smallholder farmers by addressing challenges such as input distribution and financial support. Despite these efforts, the agricultural sector still faces obstacles such as inadequate infrastructure, access to credit, post-harvest losses, and climate change.

Nigeria's agricultural sector historically relied on cash crops such as cocoa and palm oil for exports, contributing significantly to GDP and export earnings. However, the sector's contribution to GDP has declined over the years due to neglect, inconsistent policies, insecurity and economic diversification challenges. In recent years, Nigeria has recognized agriculture's potential for economic diversification, poverty reduction, and food security, with efforts focused on productivity enhancement, smallholder support, and technological integration. However, the sector faces new challenges, notably insecurity from insurgencies, banditries, and farmer-herder conflicts, disrupting cultivation, displacing farmers, and impacting food production and market access.

Nigeria has witnessed a surge in various forms of insecurity, including insurgency, banditry, and conflicts between farmers and herders (Ilo, 2019). The implications of these security challenges extend beyond immediate safety concerns and profoundly affect agricultural landscapes. Disruptions in cultivation practices, the displacement of farming communities, and damage to critical infrastructure have become pervasive issues,

significantly compromising the sector's ability to optimally function at the International Food Policy Research Institute (IFPRI, 2018). This is evident in the yield and output of the sector, as uploaded by the International Trade Administration (ITA) (2023), which relies on $10 billion of imports to meet its food and agricultural production shortfalls (mostly wheat, rice, poultry, fish, food services, and consumer-oriented foods) that are sourced from Europe, Asia, the United States, South America, and South Africa. Base on the foregoing, the objective of this research is to evaluate the impact of insecurity on agricultural output in Nigeria from 2010 to 2023. The remainder of the article is divided into the following sections: (II) literature review, (III) methodology (IV) results and discussions (V) Conclusion and recommendations.

2.0 Literature Review

Yusuf and Mohd (2023) study the growth and fiscal effects of insecurity on the Nigerian economy. They utilized annual time-series data covering 1980 to 2019 and employed the ARDL methodology to examine the fiscal and socio-economic repercussions of insecurity on economic growth in Nigeria. The empirical results revealed that an escalating level of insecurity has a detrimental impact on high unemployment rates, domestic capital formation, foreign direct investment, and government spending on education and security, leading to inhibited growth in both the short and long term. Conversely, enhanced health services, fair income distribution, and effective utilization of public borrowing exhibited positive correlations with security, thereby fostering growth in both the short and long run.

Ndubisi et al. (2022) in their study examine the impact of insecurity on Nigerian economic growth and development. They used an ex-post facto investigation, employing time-series data extracted from official government publications covering the period from 2009 to 2022. The selection of variables for the study was meticulously performed considering the existing literature and the objectives of the study. In alignment with the research goals, the data were logically segmented into two periods: the pre-high insecurity period (2009-2015) and high insecurity period (2016-2022). Four hypotheses were formulated and tested using the t-test, F-test, and Cho-test to examine the variance between two specified time periods. The study's findings indicate that insecurity negatively impacts Business Activities (BA), but does not exert a significant influence on Economic Growth (EG) and Economic Development (ED) in Nigeria. The conclusion drawn is that national insecurity should be accorded a high priority, as flourishing business activities depend on a secure environment, ultimately fostering sustainable economic growth and development.

Nkwatoh and Nathaniel (2018) in their study on "Effect of Insecurity on Economic Growth in Nigeria" discovered a result contrary to typical expectations of impact of insecurity in an economy employing vector autoregressive model was used in this study alongside quarterly data from 2009 first quarter to 2016 fourth quarter. The findings revealed that economic growth and investment activities tended to increase during periods of insecurity. In addition, the unemployment rate decreases during periods of insecurity. They assert that their result implies that insecurity only affects economic activities with no adverse effect on the entire economy, as conjectured by various economic theories.

Adofu and Alhassan (2018) in their study on insecurity and economic development in Nigeria investigated the impact of insecurity on economic development in Nigeria. Through the application of trend analysis, descriptive statistics, and Pearson correlation involving the failed state index, human development index, and Legatum's prosperity index, this research identifies a negative correlation between insecurity and economic development in the nation. To foster economic development in Nigeria, this study proposes several measures to address insecurity, including the implementation of preventive community policing, adopting a growth perspective centered on human development, ensuring equitable resource distribution, and directing resources towards key sectors of the economy, among other recommendations.

In their study of the impact of insecurity on investment in Nigeria, Jelilov et al. (2018) conducted empirical research to examine the impact of insecurity and investment on the Nigerian economy from 2007 to 2017. The study utilizes three variables as inputs: Nigerian Terrorism Index, Foreign Direct Investment (Inflow), and Oil Prices. The collected data were analyzed using correlation and regression techniques. In this context, the Nigerian Terrorism Index serves as a proxy for insecurity, while Foreign Direct Investment (Inflow) serves as a proxy for investment. The results revealed that the effects of insecurity on economic growth are highly significant and, hence, have an adverse impact on economic growth. Ajibola (2016) also examined economic growth amidst insecurity in Nigeria and undertook efforts to elucidate the influence of security on economic growth. Time series data spanning 1981 to 2014 were gathered, encompassing Real Gross Domestic Product,

Total Expenditure on security, gross fixed capital formation, total labor force, corruption perception index, and poverty index. This study aimed to empirically showcase these relationships using the multiple regression [(OLS) method. The findings reveal that 90% of the systematic variation in Real GDP is attributable to fluctuations in the total labor force, total expenditure on security, corruption perception index, poverty index, unemployment rate, inflation rate, and gross fixed capital formation. The study underscored that security and other related variables not only contribute positively to economic growth in Nigeria, but also exert a robust and statistically significant impact on economic growth. Additionally, Nigeria's potential GDP growth rate was 11%, while its actual growth rate was 6%, indicating that the efficiency of the Nigerian economy is impeded by factors such as insecurity, corruption, unemployment, and poverty.

Otolorin (2018) examined the determinants of human insecurity in Nigeria and its impact on economic growth. The primary objective of this study is to identify the underlying causes of human insecurity in Nigeria and examine their effects on the rate of development and growth. Employing a mixed-methods approach, this research gathered annual time series data spanning 1994 to 2016 on variables such as Gross Domestic Product (GDP), unemployment rate, corruption perception index, inflation rate, and total expenditure on security. The Autoregressive Distributed Lag (ARDL) technique was applied for statistical estimation, while descriptive statistics were used to analyze survey data. The findings indicated that the primary causes of insecurity were predominantly unemployment, poverty, ethno-religious violence, terrorism, corruption, lack of specialized skills/sources of livelihood, and unresolved agitation. A comparative analysis revealed that the proportion of government expenditure allocated to security was more than twice the non-oil revenue generated in Nigeria during the study period. The regression results further demonstrate that total expenditure on security exerts a negative impact on GDP in both the short and long run. Corruption did not exhibit a significant impact on economic growth, but a one-year lag in the unemployment and inflation rates had a significant influence on economic growth.

Umaru et al. (2015) studied the impact of insecurity and poverty on sustainable economic development in Nigeria, with an emphasis on Boko Haram Insurgency. This study used the OLS technique to estimate the relationship between economic growth rate, insecurity, and poverty levels. The ADF technique was applied to test for the presence of a unit root in the data, the Granger causality test was used to establish the causation flow between the variables, ECM techniques were employed to test the existence of a long-run relationship, and the Ramsey RESET model specification techniques were used. These findings indicate a negative relationship between economic growth, insecurity, and poverty. The causation results suggest that economic growth causes poverty, and poverty causes insecurity in Nigeria, but not vice versa. This study highlights Boko Haram as a significant threat, attributing terrorism to frustrated expectations, hopelessness, bad governance, corruption, and a weak institutional framework. This paper argues that the upsurge in the Boko Haram insurgency, coupled with security challenges, hampers economic life and impedes sustainable development.

Adeniyi (2015) also investigated the correlation between national security and national development using time series data from 1994 to 2014. The requisite data were sourced from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS), and subsequently subjected to a controlled experiment using various statistical methods such as the Augmented Dickey-Fuller (ADF) model, Johansen test of cointegration, restricted Vector Autoregressive (VAR) model, Wald test, Correlogram test, and Ordinary Least Squares (OLS). The results revealed that the average output for the reviewed period was 341,042.9 and was independent of the explanatory variable. The crime rate demonstrated a negative impact of 23.6% on output, and unemployment exhibited a negative influence of approximately -2,434.174 on output, aligning with the perspectives of Oliver Blanchard and David Johnson in their macroeconomic text. The study highlights the role of unemployment in determining a nation's productive capacity, with higher unemployment correlating with elevated crime rates and reduced output. Additionally, the research identified a positive relationship between government expenditure on security and output, consistent with findings from Callistar (2015). Ultimately, the investigation confirmed the existence of both long- and short-run relationships between output, crime, unemployment, and fiscal spending on security following the Johansen test of cointegration, the Vector Error Correction Model (VECM), and the Wald test.

Adegbami (2013) studied insecurity as a threat to Nigeria's human existence and economic development. This study investigates the root causes, governmental initiatives aimed at promoting peace, and the impact of insecurity on individuals and the national economy. The study highlights that the current power shift from northern hegemony to the minority geopolitical zone of the South is a prominent factor fueling dissent against the state's interests. Additional concerns include intra/interparty conflicts, porous boundaries, unemployment, job racketeering, and illiteracy. The aim of this study is to challenge the prevailing notion that religion is the primary cause of insecurity in Nigeria. It is widely acknowledged that insecurity has adverse effects on the overall well-

being of the population, leading to illnesses, reduced life expectancy, diminished quality of life, and even fatalities. In economic terms, insecurity has resulted in the destruction of businesses, property, and equipment, as well as the relocation and closure of businesses.

Nigeria's agricultural sector has been hurt by several shocks, regular flooding, desertification of crop and grazing land, extreme insurgencies, and conflicts between herders and local farmers. Thus, addressing the impact of insecurity on agriculture is crucial to sustainable growth and food security. Understanding these challenges is essential for crafting effective policies and interventions to revitalize Nigeria's agricultural sector and foster economic development. Nigeria's agricultural sector historically relied on cash crops such as cocoa and palm oil for exports, contributing significantly to GDP and export earnings. However, the sector's contribution to GDP has declined over the years due to neglect, inconsistent policies, insecurity, and economic diversification. In recent years, Nigeria has recognized the potential of agriculture for economic diversification, poverty reduction, and food security, with efforts focused on productivity enhancement, smallholder support, and technological integration. However, the sector faces new challenges, notably insecurity from insurgencies, banditries, and farmer-herder conflicts, disrupting cultivation, displacing farmers, and impacting food production and market access.

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In recent years, food and nutrition insecurity has been prevalent in Nigeria despite its favorable agro-ecological endowments. The country possesses a total landmass of 92.4 million hectares, out of which only about 32 million hectares or 34.63 per cent are under cultivation. Nigeria, therefore, lacks both the capacity and capability to cater to the food and nutritional requirements of its teeming population. As such, food insecurity and the prevalence of undernutrition in Nigeria are among the worst globally (Fadare et al, 2019).

The advent of Boko Haram further exacerbated challenges in the agricultural sector, displacing farmers in the Northwest and North-East regions. Insurgency and attacks by Fulani herders disrupt farming activities, leading to a significant decrease in milk and meat production (Mustapha, 2015). In Nigeria's agricultural sector, the subtle encroachment of insecurity has emerged as a formidable impediment, casting a very big challenge on the sector's vitality and potential.

The impact of insecurity on agriculture in Nigeria is multifaceted, with the current trends revealing alarming challenges. Since 2009, the armed forces have been imaging country insurgency operations in the north-East region. Realizing that the armed forces are ill-equipped and ill-motivated. Conflict among various groups in Nigeria has escalated, resulting in approximately 77,000 fatalities and displacing 2.6 million people in the past five years.

The actions of Fulani herdsmen, kidnappers, bandits, and Boko Haram have led to the displacement of farming communities, destruction of markets, and a significant increase in agricultural food losses. Many farmers have abandoned their fields and relocated to safer regions, resulting in reduced access to regional markets and increased difficulty in farming due to fear of abduction or violence.

The historical neglect of agriculture in favor of oil exploration and subsequent conflicts has contributed to underdevelopment in farming regions, rural-urban migration, and decreased output, exacerbating food shortages and economic instability. Additionally, the discovery of crude oil in the 1950s and the activities of groups such as Boko Haram and Fulani herdsmen have further hindered agricultural productivity, displaced farmers, and disrupted supply chains for essential products, such as milk and meat.

Pervasive insecurity, marked by terrorism, banditry, and farmer-herder conflicts, has caused widespread displacement, loss of lives, and increased food prices, impacting farmers' livelihoods and deterring investment in agriculture. This complex situation underscores the urgent need for comprehensive solutions to address security challenges, restore agricultural productivity, and ensure food security for Nigeria.

Year	States involved in the attack	Deaths/ Casualties recorded
2009	Yobe, Borno, Bauchi and Kano.	Over eight hundred (800) killed
2010	Borno, Abuja, and Plateau	Over three hundred and thirty (33 0) killed and seven hundred (700) prison inmates acquitted.
2011	Borno, Kaduna, Yobe, Niger, Bauchi, Abuja, Katsina, and Plateau	Over four hundred and twenty-five(425) were killed, over three hundred(300) persons injured. UN Building in Abuja was razed down.
2012	Adamawa, Kano, Kaduna, Kogi, Bauchi, Plateau, Yobe, Abuja, Sokoto and Katsina	Killed over 1047, many sustained injury
2013	Borno, Adamawa, Kano, Plateau, Gombe, Yobe, Bauchi	Killed over 732 persons and many others injured.
2014	Borno, Adamawa and Yobe	Over 270 Chibok girls were abducted in Borno State, some women were kidnapped in Adamawa, killed over 200 persons and several injured.
2015	Borno, Enugu State and Kaduna State.	Over hundred lives were claimed.
2016		Over two hundred lost their lives and properties.
2017	Enugu state,Maiduguri; Zaria, Kaduna etc	Over hundred were killed and few injured.
2018	Ebonyi State, Kaduna, Benue State, Borno and Yobe State.etc.	Over seventy people were killed, 24 soldiers killed in Borno on 24th Dec., and one(1) soldier killed in Yobe State.

Source: Adapted from Avweromre, 2014; Ikenga and Efebeh, 2013; Achumba, Ighomereho and Akpor-Robaro,2013, Newsletters, etc

3.0 Methodology

In this study, the selected research design was an ex post facto design. This approach is characterized by the researcher's inability to manipulate the data under examination. Defined by Kerlinger (1973), the ex-post facto, also termed causal comparative research, delves into identifying potential cause-effect relationships between dependent and independent variables. The primary objective was to establish a definitive causal connection between the two variables. The pertinence of the design, especially in discerning such relationships, motivated its adoption in this study.

3.1 Data and Description of variables

The data used in this study consist mainly of secondary data that are relevant to the study and were obtained from published sources. Annual data from the Central Bank of Nigeria (CBN) statistical bulletins, World Development Indicator (WDI), National Bureau of Statistics (NBS) is employed for this study.

i. Agriculture Output's percentage of Gross Domestic Product

The agriculture output's percentage of GDP is the proportion of the agriculture sector's contribution to the GDP of a nation. Agriculture contributed 24.17% to the nominal GDP in the fourth quarter of 2021 for Nigeria (NBS, 2022). This figure is lower than the rate recorded for the fourth quarter of 2020 and lower than the third quarter of 2021, which recorded 24.23% and 26.57%, respectively (World Bank, 2022).

ii. Government expenditure on Internal insecurity

This refers to the total amount of money spent by the government of a nation to maintain the internal security of lives and properties. It can be defined as the proportion of government expenditure that was used for the procurement of ammunitions for the nation's forces to strengthen the security of lives and properties.

iii. Terrorism Index

It refers to the degree of terrorist threat to lives and properties in a particular territory over a period of time, usually one year (Ojiambo, 2023). Four indicators comprise the composite statistic known as the global terrorism index: incidents, fatalities, injuries and hostages. A weighted average over a period of five years was used to calculate the impact of terrorism.

iv. Inflation level in the country

Inflation is the percentage increase in the food basket of goods and services in a country over a period of time, usually one year. The Nigerian headline inflation hit a double digit of 28.92% in December (NBS, 2021).

v. Poverty level

This is the number of people (in a certain age group) whose income is below the poverty line. It is calculated as half the median household income of the entire population (OECD 2023). Additionally, it can be accessed by age group, including working-age poverty, senior poverty, and child poverty (0–17 years old) (66-year-olds or more). However, the relative income level of the poor may vary between the two nations, with identical rates of poverty.

3.2 Model specification

The model for agricultural output is further specified as follows:

$$GDP - f(GEXP, TINDX, BRD, IDP, INFL, POVL) \ldots \ldots \ldots \ldots \ldots (3)$$

$$GDP_t = \alpha_0 + \beta_1 logGEXP + \beta_2 TINDX_t + \beta_3 BRD_t + \beta_4 IDP_t + \beta_5 INfl_t + \beta_6 POVL_t + \mu_t \ldots \ldots \ldots (4)$$

Where:

GDP denotes the Agriculture Output's percentage of Gross domestic Product.

GEXP denotes Government expenditure on Internal insecurity.

BRD denotes Battle related deaths (Number of People).

IDP denotes internally displaced persons.

INFL means Inflation level in the country.

POVL means poverty level

TINDX means terrorism index

4.0 Results and Discussion

Descriptive statistics offer meaningful insights into raw data by providing a summary of their tendency, dispersion, distribution, and distribution. This study presents a detailed interpretation of a descriptive statistical analysis of key economic and expenditure indicators in Nigeria, namely inflation, agricultural GDP, internal displacement, military expenditure, poverty, terrorism index, and battle-related factors. The table below shows the mean, median, maximum, kurtosis, and so on. These statistics were used to obtain more information and interpretations of the variables of interest in the table below.

Table 1: Summary Statistics

	INFL	GDP	IDP	GEXP	POP	POVL	TINDX	BRD
Mean	12.778	21.8	38100	0.541	2.551	29.641	8.417	1967
Median	12.159	21.531	327500	0.487	2.517	28.85	8.412	1754
Maximum	18.847	24.143	95000	1.0127	2.764	52	9.112	4637
Minimum	8.047	19.99	63000	0.414	2.406	8	7.475	325
Std. Dev	3.545	1.326	278930.42	0.168	0.128	15.773	0.432	1213.553
Skewness	0.264	0.536	0.752	1.979	0.547	0.098	-0.473	0.987
Kurtosis	1.871	2.05	2.737	6.271	1.895	1.914	3.202	3.298
Jarque-bera	0.776	1.026	1.166	13.185	1.208	0.608	0.469	1.994
Sum	153.339	261.607	4572000	6.493	20.612	355.7	101.013	23604
Observation	12	12	12	12	12	12	12	12

The result above shows that there exists a 12.778 inflation increase from 2011 to 2021, which was caused by an increase in the terrorism index at an average of 8.417 in the country. As a result, the Gross Domestic Products of Agricultural products also experienced an increase, military expenditure also experienced an increase, and poverty increased rapidly. The standard deviation shows the variation of each factor, which shows that terrorism increases by 43.2%, and poverty varies by 15.773 as military expenditure varies by 16.8%. The rate of terrorism (101.013) was higher than military expenditure (6.493).

4.1 Normality Test
The normality test is a statistical method used to determine whether a given sample or dataset follows a normal distribution. A normal distribution, also known as a Gaussian distribution or bell curve, is a symmetric probability distribution commonly encountered in various fields of statistics. In a normal distribution, the data are symmetrically distributed around the mean with a characteristic bell-shaped curve.

4.2 Model Diagnostic Test
Heteroskedasticity refers to a situation in which the variability of the errors (residuals) in a regression model is not constant across all levels of the independent variable(s). In other words, the spread of the residuals changes as the values of the independent variable(s) change, while autocorrelation, also known as serial correlation, is a statistical term that refers to the correlation between a time series and a lagged version of itself. In simpler terms, it assesses whether the values of a variable at different time points are correlated.

Table 1: Heteroskedasticity and Autocorrelation Test

Test		Prob
Autocorrelation	Breush-Gdfrey serial correlation LM-Test	0.2259
Heteroskedascity	Breuch Pagan Godfrey	0.1691

The table shows that there is no serial correlation and heteroskedascity because the p-value (0.1691) is greater than 0.05

4.3 Multicollinearity Test
Multicollinearity is a statistical issue that occurs when two or more independent variables in a regression model are highly correlated, which makes it challenging to separate their individual effects on the dependent variable. Multicollinearity can affect the stability and reliability of the regression models.

4.4 Regression Result

The table below shows the regression analysis using the ordinary least squares method to estimate the significant impact of insecurity on the agricultural output.

	coefficient	Std. Error	t-statistic	Prob.
GEXP	8.003	2.631	3.041	0.0188
TINDX	-2.344	0.218	10.743	0
BRD	-0.0007	0.000367	-1.934	0.0942
INFL	0.013	0.12	0.108	0.9165
POVL	-0.035	0.026	-1.305	0.2332
R_squared	0.528		Akaike criterion	3.397
Adjusted R_squared	0.259		Schwartz criterion	3.599
S.E of regression	1.141		Hanaan-Quinn criterion	3.322
Log likehood	-15.382			
Durbin Watson	2.146			

The table above reveals that the independent variables has a positive significance on the dependent variable, except for the number of battle-related deaths, terrorism, and poverty. We can deduce from the table that as the military expenditure increases, the agricultural output increases by 8.003 per cent, and as terrorism increases, the agricultural sector decreases by 2.344 per cent. As inflation increases, there is an increase in the agricultural sector by 13%, which can be linked to an increase in the price of food baskets; however, as we experience an increase in poverty, there is a 35 % %decrease in agricultural products.

5.0 Conclusion and Recommendations

Agricultural development was concentrated on export crops such as cocoa, groundnut, palm produce, rubber, and cotton, as self-sufficiency in food production did not seem to pose any problem worthy of public attention. Nigeria continues to rely on agriculture as a key sector, with policies aimed at achieving self-sufficiency in food production and promoting rural development. According to Statista (2022), the agricultural sector contributed 21% in the second quarter of 2023, compared to the previous 24.33% and above between 2020 and 2021. It is evident that the sector continues to experience a consistent fall in its contribution to the GDP, as well as in the quantities of food produced, it supplies to the Nigerian populace and its industrial sector. The Nigerian agricultural sector was renowned for the export of cash crops (agricultural crops and produce with export value) namely cocoa, rubber, hides and skin and groundnut among a host of many others. Nigeria was the second-largest producer and exporter of cocoa in the 1960s, accounting for more than 15% of global cocoa output (Verter, 2016). During this period, agricultural exports accounted for over 75% of total annual merchandise exports. Insecurity since 2012 during the trailing impact of the Boko Haram insurgencies in the North-East has led to the displacement of many farmers, which has led to a shortage in the supply of food produce. To worsen the situation are the rising kidnapping cases in the north and the rising menace of herdsmen in the middle belt, leading to loss of lives among farmers. This has led to a continuous rise in rural-urban migration over the years. As such, the relationship between insecurity and the agricultural sector in Nigeria requires meticulous

investigation to comprehend the extent of its impact and subsequently inform strategies that foster resilience and sustainability in the face of these challenges. This is the major ground for the investigation of this study.

The agricultural sector has declined over the years owing to terrorism and insecurity in Nigeria. It was observed from the result that out of 13 years which are 2010 – 2023, Nigeria experienced high increase in insecurity from 2012 – 2015 which causes a great decline in the agricultural sector. As a result, there was high rate of poverty and death. This revealed the popular debated topic of conflict between farmers' and herders' expansion to North-West Nigeria. The militia organizations proliferate across the nation; they present yet another serious security threat leading to loss of lives and property in this region; agricultural investment was also lost. Nigerians are calling for significant human security and accountability from frequently lethal military and law enforcement agencies, such as the Special Anti-Robbery Squad (SARS), in the face of these pervasive difficulties.

In addition, the low expenditure spent on military and embezzlement of funds meant for arms procurement exposes the vulnerability of the country to insecurity, which leads to high inflation of goods, especially agricultural products.

Hence, this study also examined the impact of this insecurity challenge on agricultural sector productivity, revealing that insecurity has a significant impact on the agricultural sector. This is consistent with results from the literature on losses incurred on agricultural investment by farmers due to herders-farmers' clashes, and many farmers have fled their homes due to these threats to their lives and properties. Hence, there is a need to develop strategies to reduce the rate of insecurity and to increase the rate of agricultural products. Hence, the following recommendations:

Review of the Nigerian constitutions regarding management of regional mineral resources as well as cultural integration, promotion of innovations such as e-government to reduce mismanagement of funds, and increase investment in key sectors in Nigeria.

Dialogue with key stakeholders most especially affected regions on ways to prevent clashes between herdsmen and farmers and discouragement of ethnic group grievances in Nigeria.

Policies to correct the negative impact of insecurity on agricultural output in Nigeria and the establishment of more functional community policing around Nigeria.

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