# Agricultural Productivity, Economic Growth and Poverty Reduction in Nigeria: A Trend Analysis Approach

**Awe Emmanuel Omoniyi (PhD)[*1], Ahmed Adamu (PhD)[2], Oyelayo, Michael Oluwasegun[3]**

**[1,2]Department of Economics, Nile university of Nigeria**

**[3]Northwestern polytechnic, Grande Prairie, Alberta, Canada**

**[*]Corresponding Author**

**DOI: https://dx.doi.org/10.47772/IJRISS.2025.908000214**

**Received: 28 July 2025; Accepted: 03 August 2025; Published: 04 September 2025**

## ABSTRACT

A strong agriculture sector benefits all of these factors: it is rich in foreign exchange, creates jobs, feeds the nation's rising population, and provides raw materials for other industries. The contribution of Nigeria's agriculture industry to economic growth and the struggle against poverty is examined in this essay. Nigerian agriculture has always been an important part of the country's economy because it reduces poverty, creates jobs, and promotes economic growth. The study utilized time series data from 1980 to 2023 using a trend analysis methodology. Over 60% of Nigerians were employed in agriculture prior to the discovery of oil, and only 6% of the country's population lived in poverty. This illustrates the industry's significant influence on Nigeria's economic prosperity and, therefore, the reduction of poverty. In other words, enhancing agriculture will contribute to employment creation, which reduces poverty. The study, therefore, recommended that government should raise agricultural capital spending, boost marketing efforts for agricultural production, and boost agricultural productivity.

**Keywords:** Agriculture, Economic growth, Poverty, Inflation, and employment.

## INTRODUCTION

In the discussion of the important role of agriculture in Nigeria, it is vital to establish ways of generating sustainable economic growth that will mobilize development. It is well recognized that with over 80% of the population living in rural areas and depending on agriculture for livelihood, an improvement in the sector will have a significant impact on poverty reduction and improvement in standard of living. It has been the hope of the Nigerian government and the citizens alike that by stimulating growth in agriculture, it will be possible to improve the lives of the rural people, who have for so long been neglected in terms of public investment and resource allocation. This must be done by raising the productivity of farming, since history has shown that growth which is based around efficient small holder agriculture has been the most effective way of reducing poverty. Therefore, this study targets the overriding goal of improving the livelihoods of Nigerians, by examining the way in which growth in the agricultural sector can provide a durable path out of poverty. This is an issue of pressing importance, but all too often policy makers seek to promote agriculture with the prospect of quick wins through the discovery of mineral resources, thus neglecting agriculture. Yet given the natural resource endowments of Nigeria, it is likely that the comparative advantage will remain in agriculture.

Furthermore, some researchers have raised a number of concerns regarding the impact of the agriculture industry on economic growth (Gardner, 2005; Chebbi, 2010). Lavorel et al. (2013) looked into the cause-and-effect link between GDP per capita and agricultural value added per worker in order to respond to Gardner's (2005) inquiry, "Is agriculture an engine of growth?" for 85 countries. But their findings presented a noteworthy assertion. They assert that they have found a causal relationship between growth and agricultural

value added for developing countries, but not for industrialized ones. This data lends credence to the theory that developing economies have historically been built on the backs of the agricultural sector. Furthermore, Matahir (2012) adopted a unique perspective in his investigation of the ways in which agriculture impacts other economic domains and fosters economic expansion. Time series Johansen cointegration techniques were applied to determine the non-causality link between Tunis's agriculture and other economic sectors. Policymakers should take into account the agricultural sectors as essential resources when examining inter-sectorial growth initiatives, based on their findings. This validates the studies on the Thai economy carried out by Jatuporn et al (2011). Politicians, in their opinion, ought to acknowledge and promote agriculture as a major economic force in Thailand.

Furthermore, despite the political unrest on the small island, Katircioglu (2006) reiterated the significance of the agricultural sector for the economy of Northern Cyprus in his examination of the influence of the sector on the Cyprus economy. His research shows that any economy, particularly the small island of Northern Cyprus—needs a thriving agricultural sector to develop. His study demonstrated the long-term, dynamic, bidirectional causal links between the macroeconomic factors. In other words, the economy's growth depends a great deal on the reaction from the agriculture sector.

However, research has shown that most developing nations are mostly rural and agrarian in landscape (Katircioglu, 2006; Dim and Ezenekwe, 2013; Jatuporn et al, 2011; Tiffin et al., 2013). Because a large majority of Nigeria's populace lives in rural areas, policymakers and decision-makers have become interested in the rural areas. In terms of its contribution to Real Gross Domestic Products (GDP), the agriculture sector's productivity/output fell after the 1970s after the discovery of oil. According to an empirical study, the agricultural sector's contribution to GDP rose from 29.2% to 37% between 1970 and 2002 but significantly decreased to 23.4% in 2021. (World Bank, 2022).

In a similar vein, Bekun (2011) studied the "Economics of Yam Marketing in Minna, Nigeria." The paper states that yam production in the research regions totaled more than 31.5 million metric tons. Furthermore, because this is so massively vast, half of the population in the coverage zone may be implicated. The agricultural industry has a lot of promise, but its resources aren't being utilized to their fullest extent yet. Following a reduction in the latter part of the 1970s, the percentages dropped sharply, reaching a low of 20 percent by the close of the 1990s and 23.4 percent in 2021. World Bank, 2022.The oil finding in the 1970s accounts for the fall in the agricultural sector's contribution. Oil was first discovered in commercial quantities throughout the 1970s. Due to this discovery, the agriculture sector has been neglected and the petroleum sector has received more attention (oil sector). This resulted in Nigeria being an oil-dependent and monoculture economy in one manner or another.

Agriculture still plays a dominant role in the economies of many Sub-Saharan African countries, Nigeria inclusive. With the plummeting price of oil and its revered position as the main source of foreign exchange and top revenue earner, Nigeria's reliance on oil has acted as an impediment to sustainable economic development. This has prompted the government, policy makers, donor agencies, and the international research institutes to seek alternative strategies to relaunch its development aspirations. Empirical evidence has shown that agricultural growth is more effective and pro-poor than any other sector in reducing poverty. Since the Abuja declaration in 2001, the Nigerian government has committed to devote at least 10 percent of its annual budget to developing the agricultural sector, with the Economic and Transformation Agenda 2011 giving priority to achieving greater growth and reducing the high incidence of poverty in rural areas. The primary problem besetting the agricultural sector in Nigeria lies in the low productivity of its smallholder farmers. This, in turn, defines the livelihood of the majority of rural poor who rely heavily on farming for subsistence and income generation. It is their inability to produce enough food and a surplus for sale which keeps them in a state of poverty. This same sector represents the main opportunity for immediate and pro-poor economic growth. By raising the productivity of the smallholder farmers and linking them to new or existing market opportunities, agriculture can be a stepping stone out of poverty and a force for economic growth in rural areas.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

Why has the agriculture been ignored in spite of allure obvious output and excellent potential? The answer to this question serves as the inspiration for this study. Recent research uses cross-sectional method to check the relationship between the farming sector and financial development. We lack a clear understanding of the real gift of Nigeria's agricultural productivity to economic development on account of a shortage of study engaging period-series record. This work aims to close that gap. The purpose of this study is to employ a time series analysis to examine agriculture's contribution to economic growth and poverty alleviation in Nigeria. Through trend analysis, we hope to learn more about the current relationship between agriculture, economic growth, and poverty reduction. We would look into the potential causes of this sector's neglect outside of the 1970s oil boom, as well as the impediments to its expansion in Nigeria.

## AGRICULTURAL SECTOR IN NIGERIA

Agriculture has contributed for an average of 24% of Nigeria's GDP over the last eight years (2013-2022), ranking as the country's largest industry. Furthermore, the industry employs the highest proportion of workers in the country—more than 36%—making it the largest employer of labour. Nigeria's four main agricultural sectors are forestry, cattle, fishing, and crop cultivation. Crop production remains the industry's leading activity, accounting for more than 87.6% of total output. Following this, the percentages for forestry, fishing, and livestock are 8.1%, 3.2%, and 1.1%, respectively.

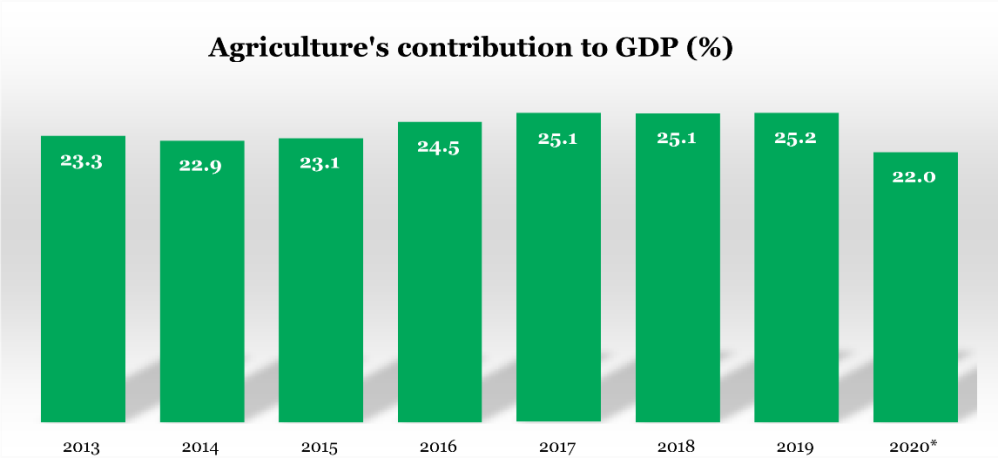



FIG. 1: Agriculture's contribution to GDP (%)

Source: NBS, PwC analysis, (2025)

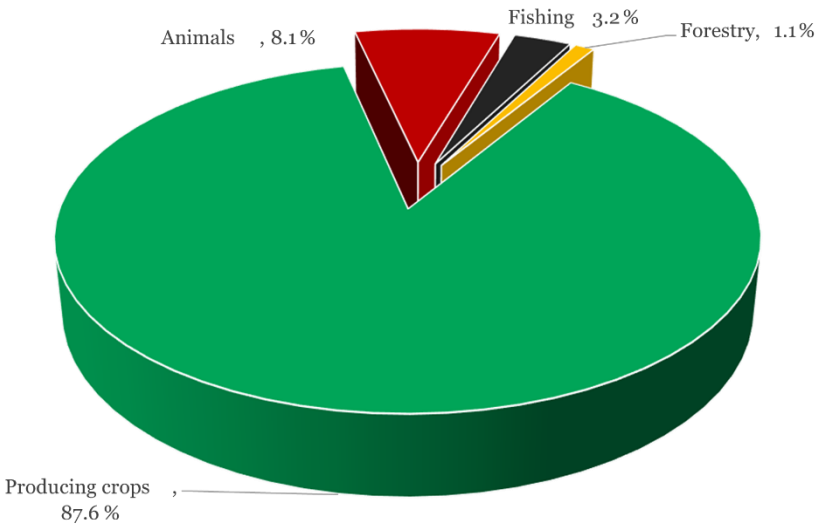



FIG. 2: Agricultural Production in Nigeria

Source: NBS, PwC analysis, (2025)

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

Crude oil exports continue to generate the majority of Nigeria's total export revenue rather than agricultural exportations. While crude oil accounted for 76.5 percent of all exports in 2019, less than 2 percent. Exports of agricultural products reached 232.35 in 2021. NBS (2022). Nigeria's primary agricultural exports are cotton, sesame seeds, cashew nuts, cocoa beans, ginger, and frozen shrimp; its primary agricultural imports are wheat, sugar, fish, and milk.

Sesame, cashew nuts, and cocoa make up more than half of the country's agricultural exports. However, wheat is the most popular agricultural import. Agricultural exports declined by nearly 11% in 2019, from N302.2 billion in 2018 to N269.8 billion. Over that time, the value of Nigeria's agricultural imports increased by 12.7%, from N851.6 billion to N959.5 billion, the country's highest ever figure (NBS, 2021).

Nigeria remains importer of net amount of food. The agriculture trade gap widened from N549.3 billion in 2018 to N689.7 billion in 2019, as imports outpaced exports. Between 2016 and 2019, Nigeria purchased N3.35 trillion in agricultural items, four times its exports of N803 billion (NBS, 2021).

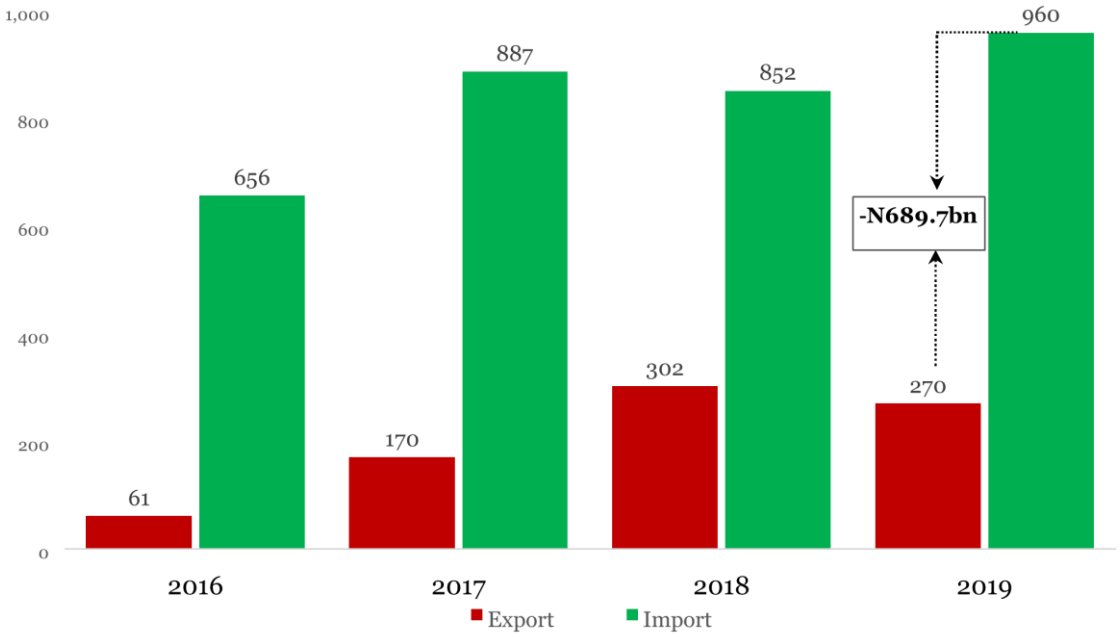



Fig. 3: Nigeria's agricultural trade (N' billions)

## Theoretical Framework

The framework of this study is based on the Phillips curve theorem which emphasized the relationship between the unemployment rate, inflation, and changes in real wages. According to the hypothesis, the rate of unemployment and an increase in money wages or inflation are inversely correlated (Chaido & Melina, 2013). An increase in unemployment is a decreasing function of money wage rates, according to Phillips' empirical connection. That is, an increase in money wages results in a decrease in unemployment. This is so because the pay is thought to encourage productivity. Therefore, labor will be reluctant to lend their services at any wage less than the base (or minimum) wage rate at a lower wage rate. Due to the small number of unemployed people, wages rise when unemployment rates fall. This is because there is a higher demand for labor. As a result, business owners will swiftly bid wage rates over the minimum wage rate. Additionally, business activity is another element that contributes to the negative relationship between the unemployment rate and wage growth. According to Chaido and Melina (2013), when business is growing, there is a higher demand for labor due to a decline in unemployment. As a result, firms will raise wages over the minimum wage in an effort to attract labor. Equally, during a downturn in corporate activity, unemployment rises as a result of a decline in the demand for labor, which makes companies reluctant to raise wages and puts workers in a difficult position to demand raises.

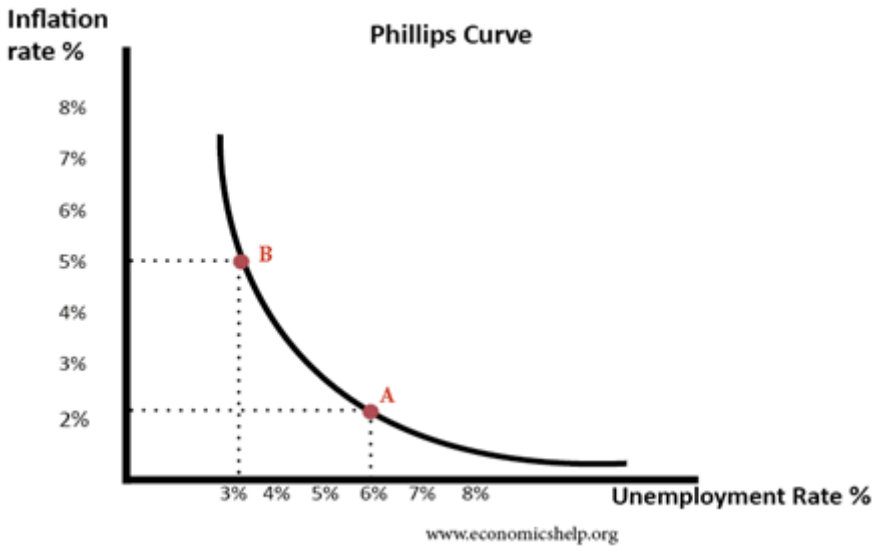



Fig. 4: The Philips Curve

## POVERTY IN NIGERIA

According to Bello et al. (2009), between the 1960s and the early 1970s, poverty in Nigeria was at its lowest level. This was brought on by the consistent rise in per capita income as the public, industrial, and agricultural sectors absorbed the majority of the labor force. In the late 1970s and early 1980s, when oil prices started to decline in 1982 and per capita income and private spending fell, Nigeria experienced its first period of true poverty. For instance, between 1985 and 1986, the poverty rate was 43%, but in 1996, 1997, and 1999, it increased to 54%, 61%, and 66%. (World Bank, 1995; CBN, 2000). According to the National Bureau of Statistics, the prevalence of poverty dropped to 54.4% before rising to 69% in 2010. (Oyekale and Oyekale, 2013). The prevalence of poverty in Nigeria has been high and rising since 1980, according to Nnadi et al. (2013). According to empirical surveys, at least half of the population of Nigeria, a country in Sub-Saharan Africa, lives in extreme poverty.

Table 1: Relative Poverty in Nigeria 1980 – 2021

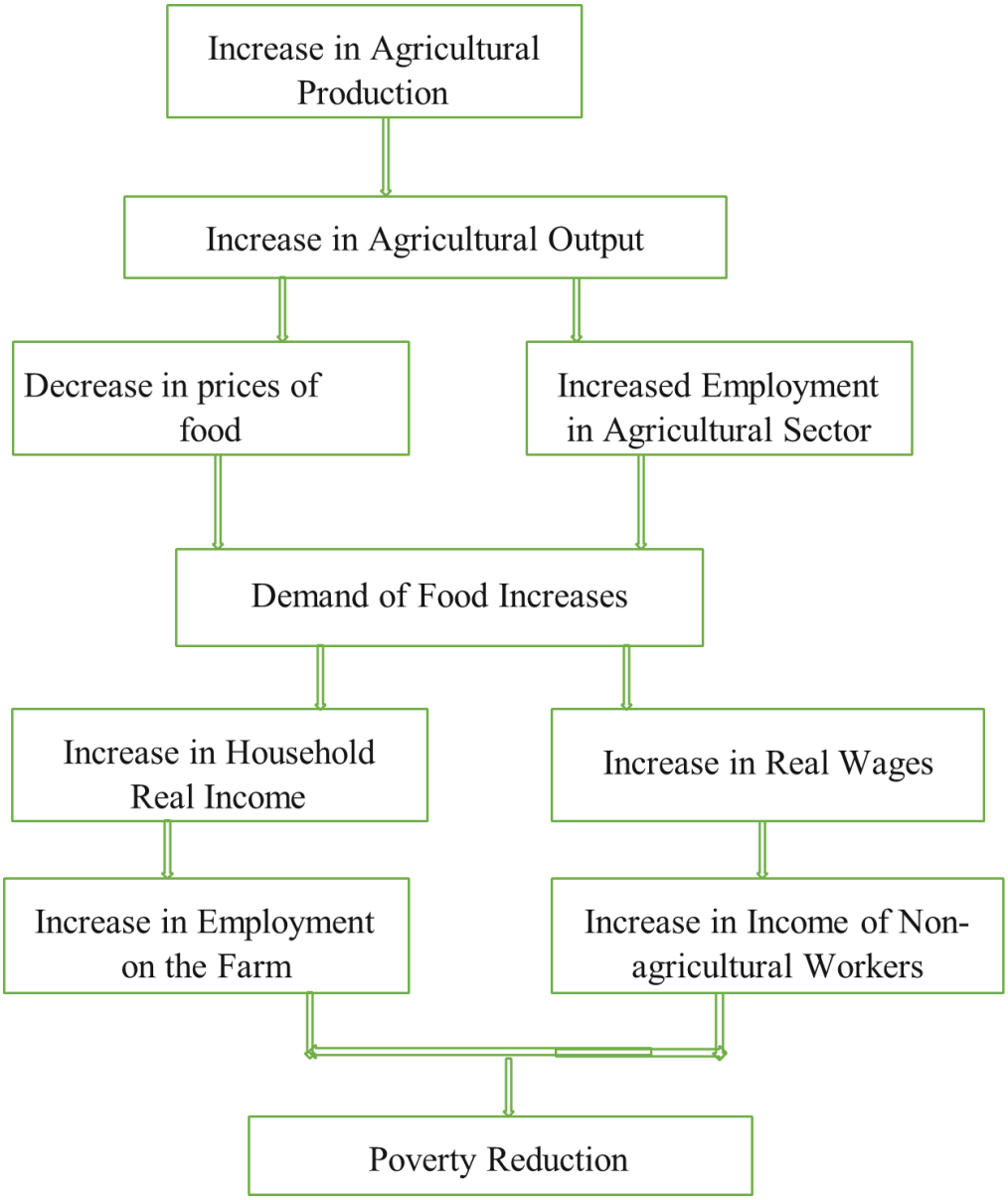
| YEAR | NON-POOR | MODERATELY POOR | EXTREMELY POOR |
|---|---|---|---|
| 1980 | 72.8 | 21.0 | 6.2 |
| 1985 | 53.7 | 34.2 | 12.1 |
| 1992 | 57.3 | 28.9 | 13.9 |
| 1996 | 34.4 | 36.3 | 29.3 |
| 2004 | 43.3 | 32.4 | 22.0 |
| 2010 | 31.0 | 30.3 | 38.7 |
| 2015 | 39.5 | 21.4 | 39.1 |
| 2020 | 18.0 | 42.0 | 40.0 |

Source: Author's compilation, (2025).

According to Table 1, the bulk of the population (72.8%) was not poor in 1980, but the remaining 27.2% were, with 21.0% classified as moderately poor and 6.2% as extremely poor. proving that the majority of the poor were not extremely destitute, i.e., could afford some necessities of life. They were just underprivileged compared to the country's general standard of living. At that time, both the government and the general public saw agriculture as a significant occupation. By 1996, there were 65.6% more poor people than non-poor people, with non-poor people making up 34.4% of the population. However, even then, it wasn't until 2010 that the severely poor (38.7% vs. 30.3%, respectively) outnumbered the moderately poor. The country

experienced a decline in the poverty rate in 2015 as a result of the high growth rate of 7.4% experienced in the nation. However, the poverty rate doubled in 2020 which could be traced to insecurity where there was a massive decline in agricultural productivity coupled with covid-19.

**AGRICULTURE AND POVERTY REDUCTION FRAMEWORK**




Author's compilation, (2025).

## DATA AND METHODOLOGY

The World Bank Development database, the National Bureau of Statistics (NBS), and the Central Bank of Nigeria (CBN) provided the study's annual data set. The series spans from 1981 to 2021. The availability of data influenced the choosing of the time lag. The model's dependent variable is RGDP, which measures economic performance and poverty rate separately. Explanatory variables include agricultural contribution to GDP, inflation rate, oil contribution to GDP, and employment generation by the agricultural sector. The model's formulation is displayed below:

$$GDPg = f(AGGDP, OILGDP) \quad (1)$$

$$POV = f(EMPGEN, INFR) \quad (2)$$

This can be written in stochastic for as:

$$GDPg = \alpha 0 + \alpha 1AGGDP + \alpha 2OILGDP + \mu - - - - - - - - - - - - - - - - - - - - (3)$$

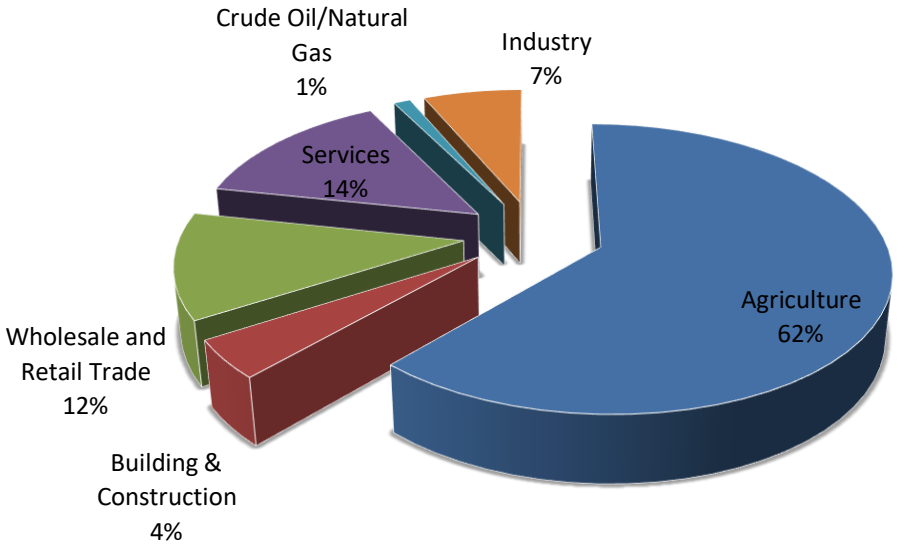
$$POV = \beta 0 + \beta 1EMPGEN + \beta 2INFR + \mu - - ======= - - - - - - - - - - - - (4)$$

Where: POV is the poverty rate, INFR is the inflation rate, AGGDP is the contribution of the agricultural sector to GDP, EMPGEN is the employment created by the agricultural sector, OILGDP is the contribution of the oil sector to GDP, α and β are the parameters, and μ is the error term. Moreover, the association between these factors was examined using a trend analysis. Trend analysis was chosen because of its ease of use and precision.

## RESULTS AND DISCUSSIONS

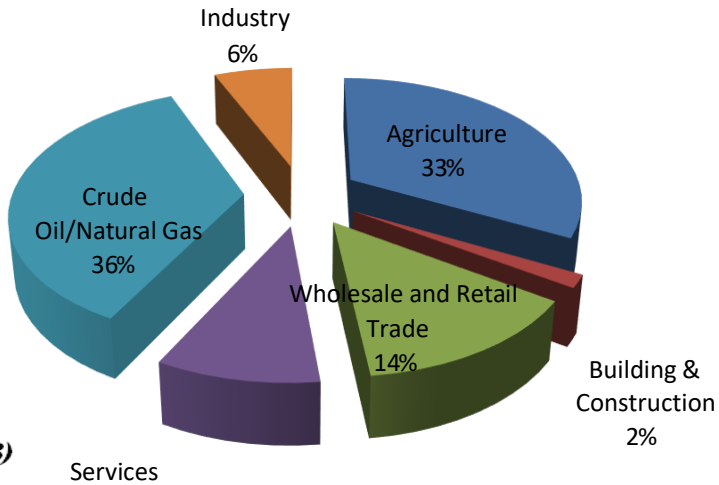
Table 2: Sectoral contributions to GDP

**Fig. 5a: Percentage of Sectoral Contributions to GDP (1962)**




***Source: CBN (2008)***

**Fig. 5b: Percentage Sectoral Contributions to GDP (1985)**




*Source: CBN (2008)*

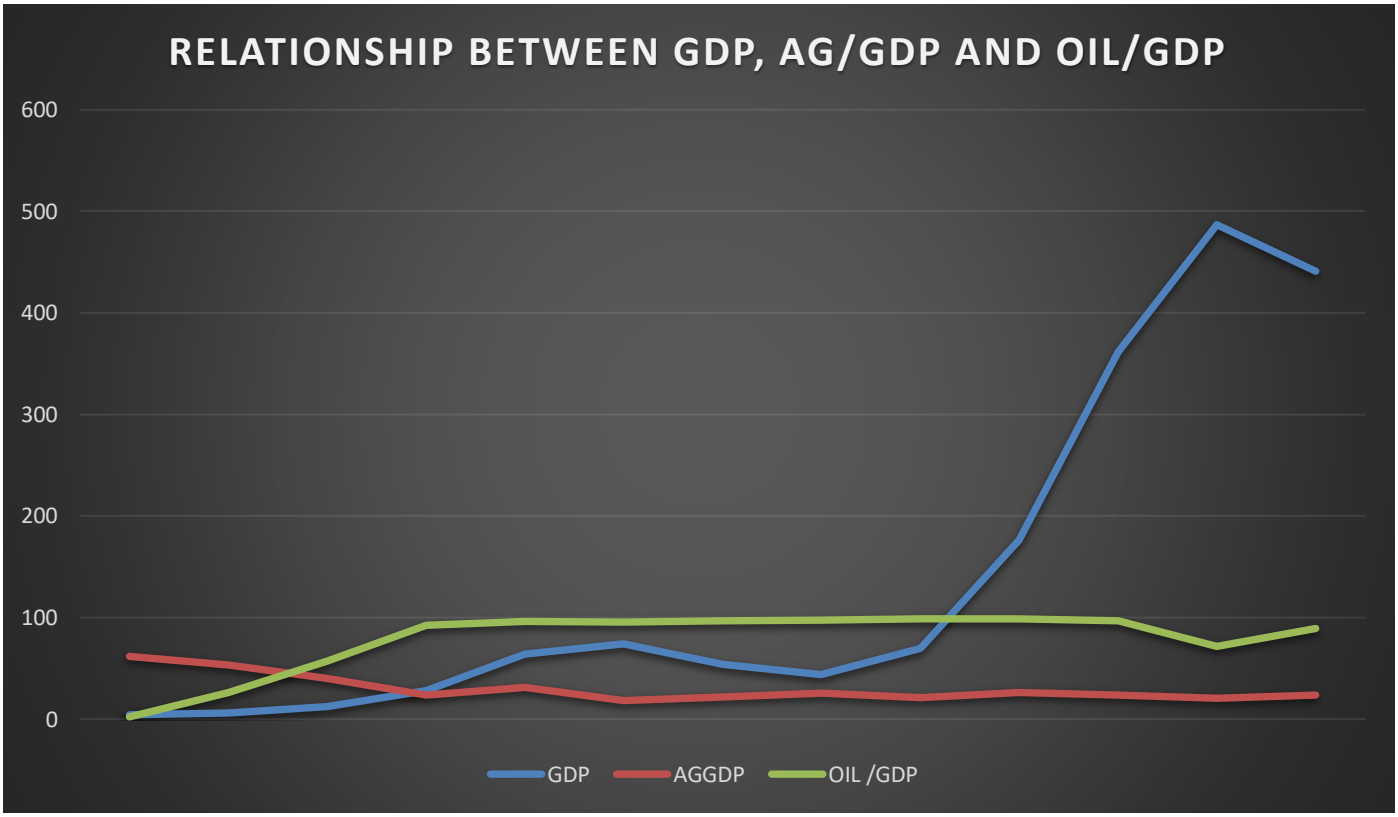
ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

Table 2: GDP, AGGDP and OIL/GDP

| YEAR | GDP | AGGDP | OIL /GDP |
|---|---|---|---|
| 1960 | 4.196092 | 61.7 | 2.1 |
| 1965 | 5.909303 | 53.3 | 25.9 |
| 1970 | 12.54585 | 40.0 | 57.3 |
| 1975 | 27.77893 | 23.8 | 92.5 |
| 1980 | 64.20179 | 31.3 | 96.1 |
| 1985 | 73.74582 | 18.2 | 95.7 |
| 1990 | 54.0358 | 21.6 | 97.0 |
| 1995 | 44.06247 | 25.5 | 97.6 |
| 2000 | 69.44876 | 21.4 | 98.7 |
| 2005 | 176.1341 | 26.1 | 98.5 |
| 2010 | 361.4566 | 23.9 | 96.6 |
| 2015 | 486.8033 | 20.6 | 71.4 |
| 2021 | 440.777 | 23.4 | 89.0 |

Source: CBN, (2025).

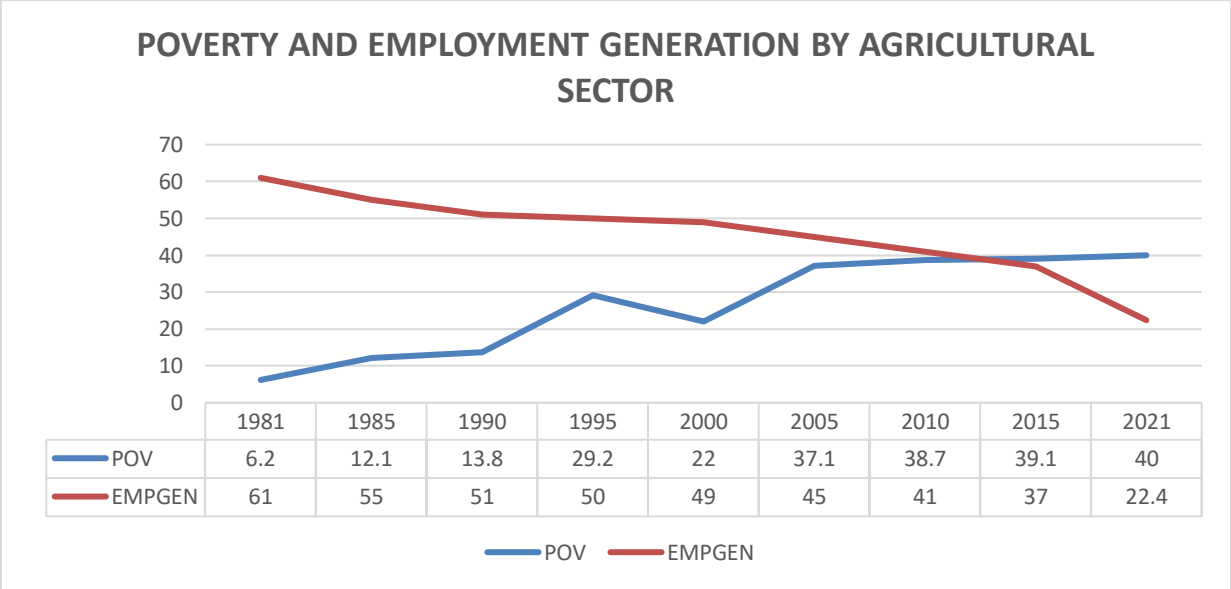
Fig. 5c: Relationship between GDP, AG/GDP and OIL/GDP




Source: Author's compilation, (2022).

Figure 5 above shows the relationship between Nigeria's economic performance proxy by the Gross Domestic Products (GDP), agricultural contributions to the GDP, and oil contribution to the GDP. The result shows that agriculture's contribution to the GDP has been significant up to the 70s. however, after the discovery of oil, Nigeria started experiencing a decline in agricultural productivity which could be traced to the oil boom experienced in the nation.

FIG. 6: Poverty and Employment Generation by Agricultural Sector

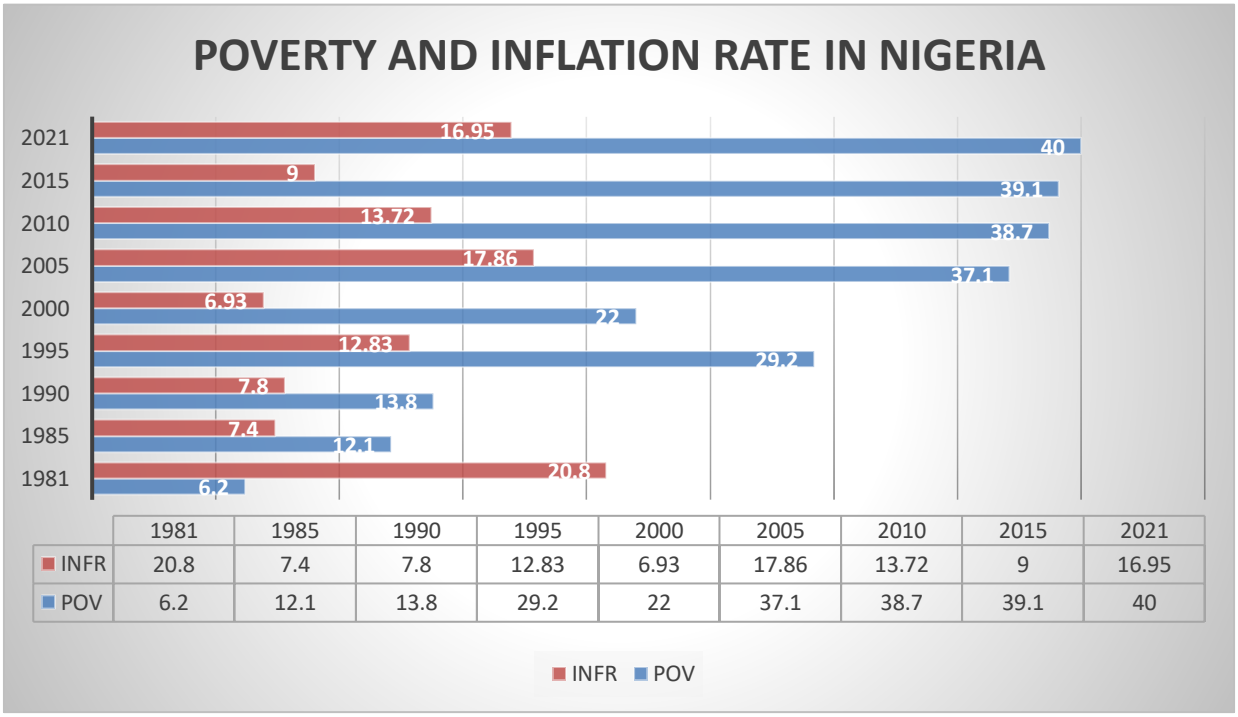



| | 1981 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2021 |
|---|---|---|---|---|---|---|---|---|---|
| POV | 6.2 | 12.1 | 13.8 | 29.2 | 22 | 37.1 | 38.7 | 39.1 | 40 |
| EMPGEN | 61 | 55 | 51 | 50 | 49 | 45 | 41 | 37 | 22.4 |

Source: Author's compilation, (2025).

Figure 6 above also revealed the relationship between poverty and employment generation by the agricultural sector. In the 80s, the agricultural sector contributed about 60 percent to employment generation in Nigeria, while poverty was a mere 6 percent in the same period. However, the neglect of agriculture and the concentration on oil alone has reduced the sector's contribution to just about 22 percent in 2021 while poverty has also been rising significantly.

FIG. 7: Poverty and Inflation Rate in Nigeria



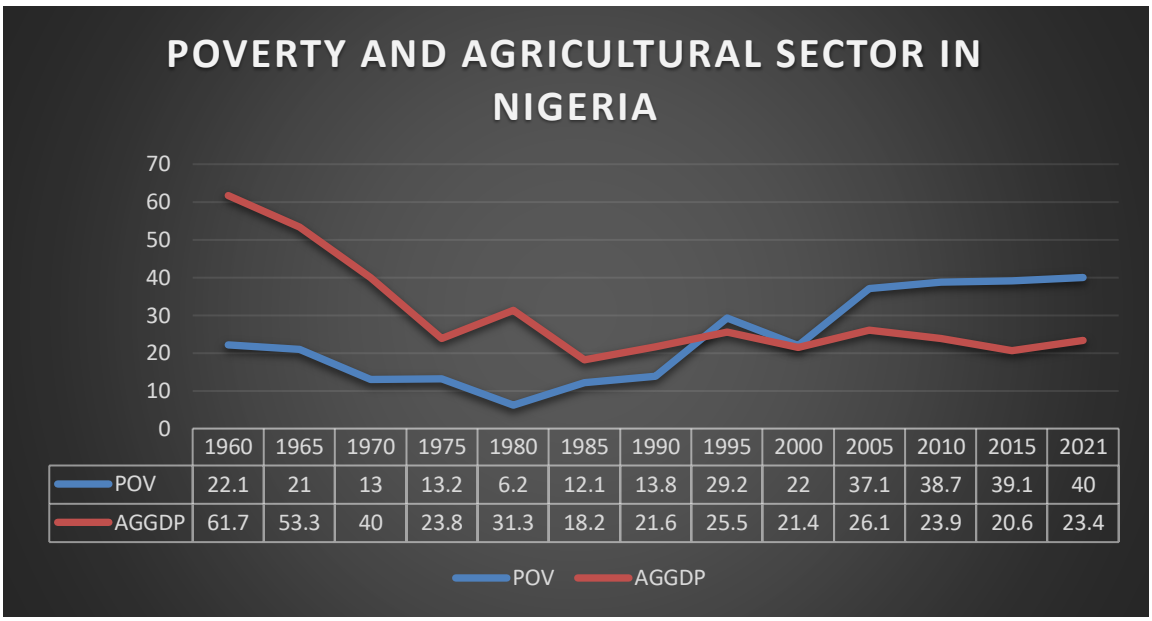

| | 1981 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2021 |
|---|---|---|---|---|---|---|---|---|---|
| INFR | 20.8 | 7.4 | 7.8 | 12.83 | 6.93 | 17.86 | 13.72 | 9 | 16.95 |
| POV | 6.2 | 12.1 | 13.8 | 29.2 | 22 | 37.1 | 38.7 | 39.1 | 40 |

Source: Author's compilation, (2025).

Figure 7 above shows the nexus between poverty and the inflation rate. The result shows that the rate of inflation from 1985 to the 90s was between 7 to 9 percent while the poverty rate lies between 12 and 14 percent. During this period, agriculture was dominant in the sector in terms of employment, exports, and

revenue. In 2005, inflation experienced double-digits of 17.86 while poverty was 38.7. similarly, in 2021 of 16.95 inflation and a 31.9 poverty rate. The rate of poverty in Nigeria can be traced to the massive unemployment experienced by the nation. This result contradicts the Philips curve theory of high inflation leading to low unemployment and hence, reduction in poverty.

FIG. 8: POVERTY AND AGRICULTURAL SECTOR IN NIGERIA




| | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| POV | 22.1 | 21 | 13 | 13.2 | 6.2 | 12.1 | 13.8 | 29.2 | 22 | 37.1 | 38.7 | 39.1 | 40 |
| AGGDP | 61.7 | 53.3 | 40 | 23.8 | 31.3 | 18.2 | 21.6 | 25.5 | 21.4 | 26.1 | 23.9 | 20.6 | 23.4 |

Source: Author's compilation, (2025).

The above figure shows the relationship that exists between poverty and the agricultural sector in Nigeria. The result shows that agriculture was the main sector of the Nigerian economy before the discovery of oil. In the 60s, agriculture contributed over 60 percent to the GDP which was the main reason the poverty rate was low. However, the decline in the agricultural contribution which was a result of over-reliance on oil led to the increasing rate of poverty where the proceeds from oil have not been properly channeled towards developmental projects.

## CHALLENGES OF AGRICULTURE IN NIGERIA

### Lack of financial access

the lack of financial access is one of the major challenges facing agriculture in Nigeria despite the huge amount government has invested through the Anchor borrower's program to assist the small scale farmers in the country.

### Conflicts between Herders and farmers

In order to obtain grazing pasture and water for their cattle, nomadic herders are currently migrating south of Nigeria due to water scarcity and desertification in the country's northern region. Consequently, there has been an increase in violent confrontation between southern agricultural farmers. Because of a rise in violence in the states that produce food, Nigeria's food production output is decreasing.

### Lack of supply-chain connections and value addition

Nigeria ignores the manufacturing and processing sectors of the value chain and concentrates mostly on food production. Inadequate support for small-scale farmers, a lack of resources, and inefficient transportation infrastructures all contribute to a downward spiral in the growth of food production throughout the value and supply chains.

**Outdated agriculture system**

Inefficient farming methods such as hoeing and cutlassing decrease productivity since they are expensive and time-consuming. The agricultural production of Nigeria has declined in quality due to the country's reluctance to adopt advanced technological technologies.

**Lack of improved seedling**

Due to inadequate irrigation and harvesting techniques, which decreased productivity and yield rate, as well as shortages of supplies such better seedlings and fertilizer, Nigeria has had exceptionally low yields per hectare over the previous few years.

## INVESTMENT IN AGRICULTURE'S ABILITY TO REDUCE POVERTY

Several agricultural investments aid in sustainable growth and the eradication of poverty (IFAD 2016). In order to fulfill the aforementioned, it is important to examine the following aspects:

1. Financial institutions offer agricultural loans and other financial support to promote the development and improvement of agriculture.
2. Farmer's groups and organizations for improved networks and market infrastructure.
3. Having access to technological advancements that promote financial services and employment centered in rural areas
4. Communication and management abilities for fast information transmission to farmers
5. Participatory agricultural research and extension on modern seed preservation, farm machinery, pest control, preservation, and marketing strategies that include local farmers and farm leaders.
6. Most impoverished communities will benefit from the development of market infrastructures such as electricity, good roads, storage facilities and warehouses, connectivity between rural and urban areas, retail and wholesale markets, water supply, irrigation and drainage, alternative energy sources, telecommunications, and sanitation facilities.

Agriculture has received more attention from the government recently than it has in the past because of its potential to increase economic growth. Small farmers in Africa are responsible for almost 80% of the continent's agricultural output (Nwankpa 2017). Modern agricultural growth is technical in nature, increasing productivity while also acting as a conduit for cheaper food costs and a greater supply of food, which benefits the underprivileged (Grewel and Ahmed 2011).

## CONCLUSION

The accomplishment of the Millennium Development Goals has given rise to a new perspective on agriculture's role in economic growth and poverty alleviation. To meet the SDGs of ending extreme poverty by 2030, more effective ways for improving poor people's incomes should be developed. Government should also look for effective ways to promote income growth. Implementing trade, agricultural, and development cooperation policies is another way to encourage agriculture's role in eradicating poverty. It is evident and unmistakable that raising agricultural incomes is crucial for boosting overall economic expansion and eradicating world poverty. This is due to the fact that, in terms of its percentage of overall GDP, agriculture is one of the most productive industries in low-income nations, which might improve people's long-term well-being. Therefore, the Nigerian government and various corporate sectors should focus on policies that would increase agricultural productivity as a weapon for poverty reduction so as to offer promising chances for underprivileged people to end poverty.

**JEL CODE**

**N5, O13, Q17.**

**COMPETING INTEREST**

**Not applicable**

**AUTHORS' CONTRIBUTION DECLARATION**

**Awe - analysis, conclusion and general editing**

**Ahmed - Introduction, literature and general editing**

**Kelvin - Data selection, references and general editing**

**AVAILABILITY OF SUPPORTING DATA**

**Included**

**FUNDING DECLARATION**

**No funding**

## REFERENCES

1. Aggrey, N. (2009), Patterns of Agricultural Growth and Overall Growth of Ugandan Economy: A Thesis Submitted to Department of Economics. University of Makerere Uganda.
2. Ahungwa, G., Haruna, U., Abdsalam, Y.R. (2014), Trend analysis of the contribution of agriculture to gross domestic product (1960-2012). Journal of Agricultureal and Veterinary Science, 7(1), 50-55.
3. Alene, A.D., Manyong, V.M., Omanya, G., Mignouna, H.D., Bokanga, M., Odhiambo, G. (2005), Smallholder market participation under transactions costs: Maize supply and fertilizer demand in Kenya. Food Policy, 33(4), 318-328.
4. Bekun, F. (2011), The economics of yam marketing: A case study of Bosso L.G.A. of Niger State Nigeria. A Thesis Submitted the Agricultural Economics and Extension Department, Niger, Nigeria. (Unpublished).
5. Bello, R. A., Toyebe, G.O. A., Balogun, I.O., & Akanbi, S.B. (2009). Poverty Alleviation Programmes and Economic Development in Nigeria: A Comparative Assessment of Aba and Ilorin West Local Government Area of Kwara State, Nigeria. An International Multi-Disciplinary Journal, Ethiopia. 3, 283 – 297.
6. Central Bank of Nigeria (2000) Nigeria's development prospect's: poverty assessment and alleviation study. Research Department, Abuja
7. Chebbi, H.E. (2010), Agriculture and economic growth in Tunisia. China Agricultural Economic Review, 2(1), 63-78.
8. Aigbokha, B. (2001), Resuscitating Agricultural Production (Cocoa, Cotton, Groundnut, Palm Oil, Rubber etc.) for Export CBN Proceedings of the 10th Annual Conference of the Zonal Research Unit, Ibadan, April, 13-16.
9. Beinteman, N.M., Stadt, G.J. (2006), Agricultural Research and Development in Sub-Sahara Africa: An Era of Stagnation. Washington, DC: International Food Policy Research Institute.
10. Daramola, A., Ehui, S., Ukeje, E., McIntire, J. (2007), Agricultural Export Potential in Nigeria. Available from: http://www.csae.ox.ac.uk/ books/epopn/AgriculturalexportpotentialinNigeria.pdf.
11. Dickey, D.A., Fuller, W.A. (1981), Likelihood ratio statistics for autoregressive time series with a unit root. Econometrica: Journal of the Econometric Society, 49, 1057-1072.
12. Ezenekwe, U & Dim, C., (2013), Does agriculture matter for economic development? Empirical evidence from Nigeria. Journal of Finance and Economics, 1(1), 61-77.
13. FAO. (2006), Prospect for Food, Nutrition, Agriculture and Major Commodity Groups, Being an Interim Report on World Agriculture Towards 2030/2050. Rome: FAO.

14. Gardner, B.L.& Myrdal, J. (1984), Causes of rural economic development. Agricultural Economics, 32(S1), 21-41.
15. Higgs, H. (1897), The Physiocrats: Six Lectures on the French Economists of the 18th Century. New York: Macmillan and Company, Limited. (Augustus M. Kelly Reprint, 1989).
16. IDA (International Development Association) (2009): Agriculture: An Engine for Growth and Poverty Reduction. Available at: http://www.worldbank.org/ida. Accessed 20 October 2012.
17. Izuchukwu, O. (2011), Analysis of the contribution of agricultural sector on the Nigerian economic development. World Review of Business Research, 1(1), 191-200.
18. Jatuporn, C., Chien, L.H., Sukprasert, P., Thaipakdee, S. (2011), Does a long-run relationship exist between agriculture and economic growth in Thailand? International Journal of Economics and Finance, 3(3), 227-233. Johansen, S. (1988), Statistical analysis of cointegration vectors. Journal of Economic Dynamics and Control, 12, 231-254.
19. Lavorel, S., Storkey, J., Bardgett, R. D., Bello, F., Berg, M. P., Roux, X., Harrington, R. (2013), A novel framework for linking functional diversity of plants with other trophic levels for the quantification of ecosystem services. Journal of Vegetation Science, 24(5), 942-948.
20. Matahir, H. (2012), The empirical investigation of the nexus between agricultural and industrial sectors in Malaysia. International Journal of Business and Social Science, 3(8), 225-230. Myrdal, G. (1984), International inequality and foreign aid in retrospect. Pioneers in development, 151-165.
21. NATIONAL BUREAU OF STATISTICS (2022): Nigeria poverty Profile Report. Abuja.
22. National Bureau of Statistics (2021) Nigeria poverty Profile Report. Abuja
23. Newbold, P., Granger, C. W. (1974). Experience with forecasting univariate time series and the combination of forecasts. Journal of the Royal Statistical Society. Series A (General), 131-165.
24. Nandi, F.N., Chikaire, J., Echetama, J. A., Ihenacho R. R. & Utazi, C.O. (2013).Assessment of agricultural extension strategies for poverty alleviation inImo State, Nigeria. Net Journal of Agricultural Science. 1(2): 17 – 23.
25. Olumide, O.T., Akinlabi, B.H., Tijani, A.A. (2012), Agriculture resource and economic growth in Nigeria. European Scientific Journal, 8, 22-30.
26. Oluwatoyese, O.P. (2013), Effect of agricultural, manufacturing and services sectors performance in Nigeria, 1980-2011. Journal of Economics and Sustainable Development, 4(20), 35-41.
27. Oluwatoyese, O.P. & Applanaidu, S.D. (2013), Effect of agricultural, manufacturing and service sector performance in Nigeria, 1980-2011. Journal of Economics and Sustainable Development, 4, 35-41.
28. Oyekale, T.O. & Oyekale, A.S. (2013). Assessment of Multi-dimensional povertyinRural and Urban Nigeria: Evidence from Demographic and HealthSurvey (DHS). Kamla-RaJ Hum Ecol. 42 (2): 141 – 154.
29. Tiffin, R., Irz, X. & Jude, C.N. (2013), Is agriculture the engine of growth? Agricultural Economics, 35(1), 79-89.
30. Turan Katircioglu, S. (2006), Causality between agriculture and economic growth in a small nation under political isolation: A case from North Cyprus. International Journal of Social Economics, 33(4), 331-343.
31. UNDP (United Nations Development Programme) (2012): Africa Human Development Report 2012. Towards a Food Secure Future. New York.
32. United Nation. (2007), The Millennium Development Goals Report. Available from: http://www.un.org/millenniumgoals/pdf/mdg2007.pdf. World Bank Development Report. (2008), Agriculture for Development. Available from: http://www.siteresources.worldbank.org/ INTWDR2008/Resources/WDR_00_book.pdf.
33. World Bank. (2022). Human Development Report.
34. World Development Report. (1995), Agriculture for development United States of America. Monthly Report, 2, 7-9.