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# Nigeria's Long-Term Socio-Economic Development: Exploring the Agriculture Value Chain Pathway

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## Abstract

This study investigated the role of agriculture in enhancing socio-economic development in Nigeria, using the ex-post facto research design. It utilized secondary data from 1981 to 2022, which were sourced from the Central Bank of Nigeria, the Nigeria Bureau of Statistics, and the World Bank. The secondary data were analyzed using the Ordinary Least Squares (OLS) estimation technique. The result showed that the agricultural sector output has a positive and significant impact on socio-economic development in Nigeria. Other results showed that industrial output and services output have a positive and significant effect on economic development in Nigeria. The study concluded that the agricultural value chain is crucial in achieving socio-economic development in Nigeria. Thus, the study recommended that the government should invest heavily in the agricultural sector by increasing the budgetary allocation and providing basic infrastructure to the sector for improved productivity.

**Keywords:** *Socioeconomic development; Agriculture, Agriculture value chain; Nigeria; Ordinary Least Squares*

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## **1. Introduction**

Over the years, Nigeria, like other developing countries, has pursued the objective of accelerating economic growth and development. For this to be achieved, the agricultural sector has been upheld as one that could accelerate the process of economic growth and development. This is because apart from providing food for the teeming population, agriculture is the source of raw materials that other sectors utilise in their production process (Ijaiya & Abdulaheem, 2000; Idisi, Ebukiba & Sunday, 2019). The rearing of animals also provides agro-allied products for industrial growth and development. In line with this, Abayomi (2006) stated that increasing agricultural productivity is sacrosanct for achieving successful industrialisation.

In Nigeria, in the pre- and immediate post-independence period, agriculture was the dominant economic activity; employing over 60 per cent of the population, providing about 70 per cent of federal government revenue and constituting almost 80 per cent of Nigeria's total exports. Statistics have shown that the share of agriculture in total output was about 63.5 per cent in 1960, making it the dominant economic activity during that decade (CBN, 2009). However, this impressive role played by agriculture has since diminished following the discovery and subsequent exploitation of oil in commercial quantities, especially beginning from 1970. Since then, the hitherto flourished sector has been neglected in preference for the perceived lucrative oil production with no second thought concerning its enviable position in economic growth and development.

Statistics showed that the share of agriculture in total gross domestic product declined sharply from 48.8 per cent in 1970 to 23.0 per cent in 1976, and further to 20.2 per cent in 1980. The share of agriculture in total GDP is 18.41 per cent in 1985, 21.77 per cent in 1990, 25.74 per cent in 1995, 21.58 per cent in 2000, 26.36 per cent in 2005, 23.89 per cent in 2010, 20.24 per cent in 2015, 24.45 per cent, and 24.05 per cent in 2022 (CBN, 2022).

The decline in the performance of the agricultural sector, as statistics showed, could be attributed to disincentives created by the macroeconomic policies and programmes. Without addressing the problem of the agricultural sector, it will be

impossible for a country to attain its sustainable development goals. The concern of the policy makers has been the quest to address the agricultural challenges in Nigeria to realise the potential that the sector has. Overall, the sector has suffered from years of mismanagement, neglect and inconsistent government policies. This may not be unconnected to the era of huge oil revenues that today has nose-dived. Hence, there is a need for reexamination of the impact of the agricultural sector on the growth of the Nigerian economy (Idisi, Ebukiba & Sunday, 2019).

The poor performance of the agricultural sector in Nigeria has also affected the socio-economic development indicators over the years. In terms of the Human Development Index, the United Nations (2025) ranked Nigeria at the 156<sup>th</sup> position out of 193 countries sampled. This is a setback from the 151<sup>st</sup> position it was in 2004. Other macroeconomic indicators, such as rising inflation rates, decaying infrastructures, poor standard of living, as a result of decreasing gross domestic product and low per capita income, high levels of poverty, endemic corruption, etc., have shown that the country has not fared well over the years. The argument now is that, given the poor performance of socio-economic indicators as presented here, it is rather debatable as to the role of agriculture in enhancing economic development.

From the foregoing, this study examines the role of the agriculture sector and, hence, the agriculture value chain to socio-economic development in Nigeria. This study comprises five (5) sections. Section one is the introduction. The review of literature and theories is the focus of section two. Section three presents the methodology. Presentation and analysis of results is the focus of section four, and section five presents the conclusion.

## **2. Conceptual Review**

### **2.1 Economic Development**

The concept of economic development in itself is broad-based and multi-dimensional. According to Kane (2004), economic development means a qualitative change in what or how goods and services are produced through shifts in resource use, production methods, workforce skills, technology, information, or financial

arrangements. Thus, development involves a process of economic, political, and social change in a progressive direction towards a better social wellbeing for the members of the society (Okobiah, 1984; AbdulRaheem, 2003). Chambers (2007) views economic development as shifting from ill-being to well-being. It is generally argued that economic development increases the capacity of a nation's economy to create wealth for residents. For this reason, development depends upon the development of a nation's building blocks, such as labour, financial capital, facilities and equipment, know-how, land, and other physical resources such as public and private infrastructures (Kane, 2003).

The three basic objectives of development include (i) to increase the availability and widen the distribution of basic life sustaining goods (basic needs) such as food, shelter, health and protection; (ii) to raise the living standards of the people including higher incomes, job creation, better education and health, attention to cultural and human values, etc.; (iii) to expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only about other people and nation states but also to the forces of ignorance and human misery (Idisi, Ebukiba, & Sunday, 2019).

Several indicators of economic development have been advanced in the development literature. Some of these indicators include:

- i. **Gross domestic product:** This is the total monetary value of all final goods and services produced within a country's borders over a specific period, usually quarterly or annually.
- ii. **Gross National Product:** This is the total monetary value of all final goods and services produced by the citizens and businesses of a country in a given year, regardless of whether the production occurs within the country or abroad.
- iii. **Human development index (HDI):** This is a composite statistical measure developed by the United Nations Development Programme (UNDP) to assess and compare the level of human development in different countries. HDI measures three key dimensions of human development, which are health, education, and standard of living.

- iv. **Per Capita GDP:** This is a measure of the average economic output per person in a country. It is calculated by dividing a country's total GDP by its population.
- v. **Literacy Rate:** This is the percentage of people within a specific age group-usually aged 15 years and above, who can read and write a simple statement about their everyday life with understanding.
- vi. **Life Expectancy:** This is the number of years an individual is expected to live, assuming that current age, specific mortality rates remain constant throughout their life.
- vii. **Unemployment Level:** This is the number of people who are without work, currently available for work, and actively seeking employment.
- viii. **Poverty Rate:** The poverty rate is the proportion of people whose income or consumption falls below the national or international poverty line, indicating the level of poverty within a population.
- ix. **Birth Rate:** This is the number of live births occurring in a population during a specific period (usually a year), per 1,000 people in the total population.
- x. **Death Rate:** This is the number of deaths in a population, during a specific period (usually one year), per 1,000 people in the total population.
- xi. **Infant Mortality Rate:** This is the number of deaths of infants under one year of age per 1,000 live births in a given year.
- xii. **Accessibility to quality Healthcare:** This refers to the ability of individuals and communities to obtain timely, affordable, and effective health services that meet established standards of care and lead to better health outcomes.
- xiii. **Accessibility to Clean Water Supply:** This refers to the ability of individuals and households to obtain safe, sufficient, and affordable water for drinking, cooking, personal hygiene, and sanitation, without risk to health; and
- xiv. **Access to Infrastructure:** This refers to the availability and usability of essential physical systems and services such as transportation, electricity, water, sanitation, communication, and housing that support the functioning of a society and enable economic and social development.

## **2.2 Agriculture**

Agriculture involves the cultivation of land, raising and rearing of animals, for the production of food for man, feed for animals, and raw materials for industries. It involves forestry, fishing, processing and marketing of these agricultural products. Essentially, it is composed of crop production, livestock, forestry, and fishing (Idisi, Ebukiba, Sunday, 2019). The role of agriculture in reforming both the social and economic framework of an economy cannot be overemphasised. It is a source of food and raw materials for the industrial sector. It is also essential for the expansion of employment opportunities, for the reduction of poverty and improvement of income contribution, for speeding up industrialisation and easing the pressure on the balance of payment (Idisi, Ebukiba, Sunday, 2019). In effect, it has been the main source of gainful employment, which the nation can feed its teeming population, a regenerative source of foreign exchange earnings, a means of providing the nation's industries with local raw materials and as a reliable source of government revenue (Idisi, Ebukiba, Sunday, 2019).

The agriculture sector is composed of four components, namely the crop subsector, livestock subsector, forestry subsector, and fishery subsector. The crop subsector is a component of agriculture that is involved with crop production. It is thus an aspect of agronomy that deals with crop production and management. Activities in this subsector include food crops farming, cash crops farming, fruits and nuts, fibre farming, and wood farming. Livestock agriculture involves the rearing of farm animals for man's use. Activities in this subsector include livestock farming, dairy farming, and poultry farming. Animals reared in Nigeria include: Cow, Goat, Sheep, Cattle, Pig, Horse and several others, while poultry birds include chicken, turkey, duck, pigeons, and others. Rearing activities are mainly undertaken by local farmers and nomadic Fulanis.

Forestry agriculture involves the planting and management of forest trees. The Nigerian Forests support a wide range of forest industries, which include both the formal and informal sub-sectors. The formal sector is essentially wood-based and is fairly well developed, and comprises mechanical wood industries, including sawmills, veneer and plywood manufacturers, particle board, paper and paperboard manufacturers. The informal forest sector comprises an informal wood-based

sector, which is the country's largest user of wood (most of which is burnt as fuel) and the non-wood forest products. Fishery farming involves the rearing and management of fish and other aquatic animals. Fishery in Nigeria is mainly done by the artisanal sector. The coastal and brackish waters constitute the major areas of production, followed by inland rivers and lakes, and production from aquaculture is still low.

### **3. Theoretical Review**

Several theories of economic development are reviewed in this section as they relate to this study. Specifically, this study is anchored on two theories, namely: The Leis theory of development and the Rostow's stages of growth model of economic development. The Lewis theory of development was propounded by *Arthur Lewis in 1954* to explain the growth of a developing economy in terms of a labour transition between two sectors, the capitalist sector and the subsistence (agricultural) sector. In the Lewis model, the underdeveloped economy usually consists of two main sectors:

- i. The traditional, overpopulated rural subsistence sector characterised by zero marginal labour productivity, which is a situation that permits Lewis to classify this as surplus labour in the sense that it can be withdrawn from the agricultural sector without any loss of output, and
- ii. The high-productivity modern urban industrial sector in which labour from the subsistence sector is gradually transferred to (Lewis 1954).

According to the theory, surplus labour from the traditional agricultural sector is transferred to the modern industrial sector, whose growth over time absorbs the surplus labour, promotes industrialisation and stimulates sustained development (Lewis 1954; Amaghionyeodiwe and Udejaja, 2003). Hence, this theory is applicable in this study in that an increased investment in the subsistence agricultural sector has the potential of increasing aggregate productivity, which could lead to economic development.

The Rostow's stages of growth model of economic development was developed by Walt Whitman Rostow in 1960. According to the Rostow theory, the transition path from underdevelopment to development can be described in terms of a series of steps or stages through which all countries must follow to move gradually from the underdevelopment state to the developed state. The theory identifies five stages through which developing countries have to pass to reach an advanced state of an economy. These stages include: Traditional society; Preconditions for take-off; Take-off; Drive to maturity, and Age of high mass consumption.

According to Rostow's model, a country has to follow some rules of development in order to reach the take-off stage. These rules according to the theory include that: the investment rate of a country has to be increased to at least 10 per cent of its GDP; one or more manufacturing sectors with a high rate of growth has to be established; and an institutional, political and social framework has to be created to promote the expansion of those sectors (Rostow, 1960).

This theory applies to this study in that since Nigeria is a developing economy, the activities in the agricultural sector could serve as a precondition for the take-off process to catapult the economy into a development path. Thus, the proper harnessing of agricultural sector activities could provide a strong take-off process for achieving sustainable economic development in Nigeria.

#### **4. Empirical Review**

Herve, Wilfrid and Edwige (2004) examined the influence of agriculture on gross domestic product in China and three Sub-Saharan countries (Cameroon, Congo and Burkina-Faso), using data from 1990 to 2001. The Ordinary Least Squares (OLS) estimation technique was used in estimating the equation. Results showed that agricultural productivity has a positive effect on overall gross domestic product in China, Congo and Burkina-Faso, but a negative effect in Cameroon. Awe and Ajayi (2009) analysed the contribution of the agriculture and petroleum sectors to the growth and development of the Nigerian Economy for the period 1960-2010. The study revealed that the R<sup>2</sup> for agricultural revenue was significant. About 60 per cent of the movement was explained by the relationship. Also, a dynamic

relationship exists between the revenue from the non-oil sector and economic development.

Aminu and Abdulrahman (2012) investigated the contribution of the agricultural sector and the petroleum sector to the economic growth and development (GDP) of the Nigerian economy between 1960 and 2010. The study applied the OLS technique and found that the agricultural sector is contributing more than the petroleum sector, though they both have a positive impact on economic growth and development of the economy. They concluded that a good performance of an economy in terms of per capita growth may therefore be attributed to a well-developed agricultural sector and capital.

Thus, Yusuf (2014) empirically investigated the role of agriculture in economic development in Nigeria, using annual data covering the period 1981 - 2012. The study employed the Vector Error Correction Model (VECM) method and found that agriculture plays a significant role in economic development in Nigeria. The study recommended that agriculturally friendly government policies and policy orientation should be put in place to enhance the development of the agricultural sector for economic development.

Uma et al. (2014) assessed the effect of agriculture on Nigeria's economic growth, using data spanning from 1970 to 2009. The study employed the Ordinary Least Squares (OLS) technique within the framework of the Error Correction Modelling. The study found that the contributions of crop production, livestock, and fishing to economic growth were statistically insignificant. Only forestry contributed significantly to growth during the period of study. However, the combined effect of the variables was significant.

Chukwuma and Ezenekwe (2014) examined whether agriculture matters for economic development in Nigeria. They modelled life expectancy against agricultural output and agricultural expenditure, amongst other variables. They found that agricultural output has a negative and significant impact on life expectancy in Nigeria. The impact of agricultural expenditure was found to be positive but insignificant on life expectancy. Real gross domestic product and industrial output were also found to influence life expectancy. The study concluded that agriculture

matters for economic development, but that can be achieved with corresponding and simultaneous development of other crucial sectors, such as education, health, and industry, will not yield positive results for economic development in Nigeria.

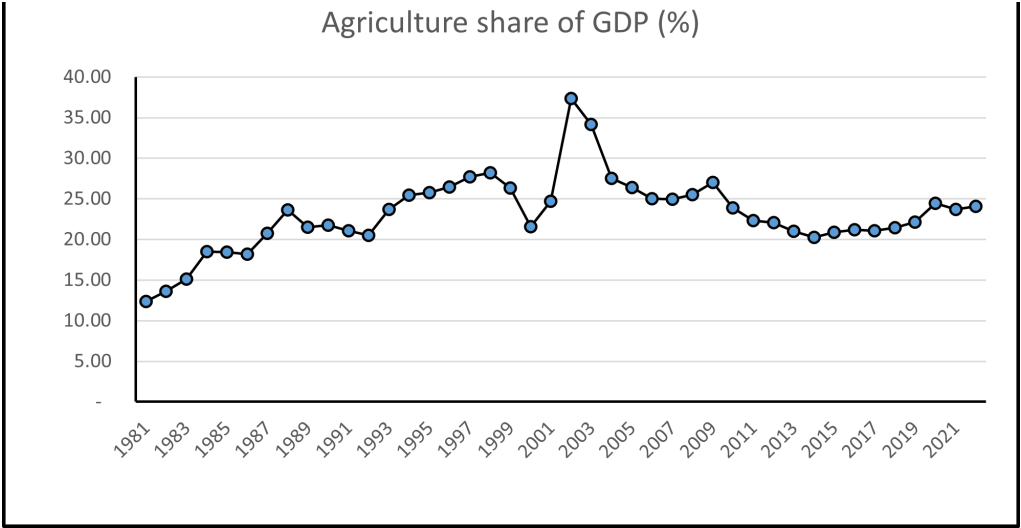
Sertoğlu, Ugural, and Bekun (2017) empirically examined the impact of the agricultural sector on the economic growth of Nigeria, using time series data from 1981 to 2013. The study employed the Vector Error Correction Model (VECM) and revealed that real gross domestic product, agricultural output and oil rents have a long-run equilibrium relationship. The error correction result showed that agricultural output had a positive impact on economic growth. Based on the result, the study recommended that the government and policy makers should embark on diversification and enhance more allocation in terms of budgeting to the agricultural sector.

Idisi, Ebukiba, and Sunday (2019) investigated the impact of the agricultural sector on the economic growth of Nigeria for the period covering from 2008 to 2017. The study employed the OLS technique. The findings showed that agricultural products are positive and statistically significant at 5% level of significance, as it relates to the level of gross domestic product. A 1% increase in total agriculture output will result in a 2.78% increase in gross domestic product. The study recommended that the government should increase its spending on these areas.

## **5. Performance of the agricultural sector in Nigeria**

This section carries out an analysis of the performance of the agricultural sector in Nigeria. The performance of agriculture in Nigeria is measured in terms of its percentage share in the aggregate gross domestic product. Figure 1 presents the share of agriculture in total gross domestic product in Nigeria from 1981 to 2022. As shown in the figure, the share of agriculture in total gross domestic product rose from 12.3 per cent in 1981 to 14.1 per cent in 1985 and increased further to 23.0 per cent in 1988 and declined consistently to 20.52 per cent in 1992. The share of agriculture in total gross domestic product rose again consistently from 23.73 per cent in 1993 to 21.9 per cent in 1998 but declined rapidly to 21.5 per cent in 2000 (CBN, 2022).

The share of agriculture in total gross domestic product rose from 24.73 per cent in 2001 to an all-time high of 37.35 per cent in 2002, but fell sharply to 27.51 per cent in 2004 and fluctuated between 24.92 per cent and 2.3 per cent from 2003 to 2008. The share of agriculture in total gross domestic product rose to 27.03 per cent in 2009 but declined consistently from 23.9 per cent in 2010 to 20.24 per cent in 2014. Meanwhile, the share of agriculture in total gross domestic product rose 20.866 per cent in 2015, 24.45 per cent in 2020, fell to 23.70 per cent in 2021 and increased to 24.05 per cent in 2022 (CBN, 2022).



**Fig. 1: The share of agriculture in total GDP in Nigeria (1981-2022)**

Source: Researcher's computation from Central Bank of Nigeria Statistical Bulletin, 2022.

## 6. Methodology

### 6.1 Model specification

The empirical model for this study is anchored on the Lewis theory of development and the Rostow stages of growth theory of development. From the preceding theoretical postulates, the role of agriculture in economic development can be

evaluated. This study followed the works of Herve, Wilfrid and Edwige (2004) and specified an equation, expressing economic development, represented by per capita income, as a function of agricultural output, industrial output and services output, written functionally as:

$$PCI = f(AGR, IND, SEV) \dots\dots\dots (1)$$

Where:

PCI = per capita income, measuring economic development;

AGR = agricultural sector output in Nigeria;

IND = industrial sector output in Nigeria; and

SEV = services sector output in Nigeria.

An equation in its implicit log form can be expressed as follows:

$$LOG(PCI) = \alpha_0 + \alpha_1 LOG(AGR) + \alpha_2 LOG(IND) + \alpha_3 LOG(SEV) + U \dots\dots\dots (2)$$

$\alpha_0$  = The intercept term;  $\alpha_1$ ,  $\alpha_2$  and  $\alpha_3$  = the coefficients to be estimated; and U = the error term.

The expected signs of the parameters of the equations are expressed as follows:  $\alpha_1 > 0$ ,  $\alpha_2 > 0$ ,  $\alpha_3 > 0$ . This means that an increase in agricultural output, industrial output, and services output should lead to an increase in per capita income, and hence economic development.

## 6.2 Estimation technique

The ordinary Least Squares (OLS) regression technique was used in estimating the specified model. The OLS technique is applied based on the Gauss–Markov theory, which states that of all econometric estimators, the Ordinary Least Squares (OLS) estimator is the best linear unbiased estimator (BLUE) with minimum error.

## 6.3 Data sources

Data used for the estimation were obtained from the Central Bank of Nigeria publications such as the Statistical Bulletins and the Annual Report and Statement

of Accounts (various issues), the National Bureau of Statistics, and the World Bank. Data were collected on an annual basis from 1981 to 2022.

6.4 Analysis of results

6.5 Descriptive Statistics

The descriptive statistics are presented in Table 1. From the table, per capita income has a mean value of 225,807.7 with the maximum value of 925,981.1 and the minimum value of 1,853.14, during the period of analysis. Agricultural output has an average value of 9,450.26, with the maximum value of 47,944.06 and the minimum value of 17.05 during the period of evaluation. Industrial output has a mean value of 10,941.04 during the period of evaluation, with the maximum value of 62,278.99 and the minimum value of 50.33. Lastly, the services output has a mean value of 20,589.79 during the period of evaluation, with the maximum value of 89,112.99 and the minimum value of 66.20.

Table 1: Descriptive Statistics

|              | PCI      | AGR      | IND      | SEV      |
|--------------|----------|----------|----------|----------|
| Mean         | 225807.7 | 9450.626 | 10941.04 | 20589.79 |
| Median       | 77015.71 | 3133.470 | 2519.430 | 4144.150 |
| Maximum      | 925981.1 | 47944.06 | 62278.99 | 89112.99 |
| Minimum      | 1853.140 | 17.05000 | 50.33000 | 66.20000 |
| Std. Dev.    | 271838.1 | 12611.17 | 15709.99 | 27395.81 |
| Skewness     | 1.039902 | 1.465765 | 1.755511 | 1.118660 |
| Kurtosis     | 2.831109 | 4.328597 | 5.427753 | 2.795609 |
| Jarque-Bera  | 7.619693 | 18.12831 | 31.88720 | 8.832910 |
| Probability  | 0.022152 | 0.000116 | 0.000000 | 0.012077 |
| Sum          | 9483922. | 396926.3 | 459523.8 | 864771.3 |
| Sum Sq. Dev. | 3.03E+12 | 6.52E+09 | 1.01E+10 | 3.08E+10 |
| Observations | 42       | 42       | 42       | 42       |

Source: Authors' computation (2025)

## 6.6 Correlation Analysis

Table 2 presents the correlation analysis for the variables captured in this study. From the correlation matrix, there is a high positive correlation between per capita income and agricultural output, given the correlation coefficient of 0.987. Similarly, there is a high positive correlation between per capita income and industrial output, given the correlation coefficient of 0.968. Lastly, there is a positive correlation between per capita income and services output, given the correlation coefficient of 0.993. The conclusion from the correlation analysis showed that agricultural output, industrial output and services output have exerted a high relationship with per capita income and hence economic development in Nigeria during the period of analysis.

**Table 2: Correlation Analysis**

|     | PCI      | AGR      | IND      | SEV      |
|-----|----------|----------|----------|----------|
| PCI | 1.000000 | 0.987471 | 0.968691 | 0.993230 |
| AGR | 0.987471 | 1.000000 | 0.991216 | 0.979417 |
| IND | 0.968691 | 0.991216 | 1.000000 | 0.956624 |
| SEV | 0.993230 | 0.979417 | 0.956624 | 1.000000 |

*Source: Authors' computation (2025)*

## 6.7 Analysis of regression results

The result of the regression analysis is presented in Table 3.

Dependent Variable: LOG(PCI)

Method: Least Squares

Date: 06/06/24 Time: 00:02

Sample: 1981 2022

Included observations: 42

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 4.233554    | 0.043234   | 97.92240    | 0.0000 |
| LOG(AGR) | 0.300346    | 0.035343   | 8.498068    | 0.0000 |

|                    |          |                         |           |        |
|--------------------|----------|-------------------------|-----------|--------|
| LOG(IND)           | 0.193231 | 0.047214                | 4.092691  | 0.0002 |
| LOG(SEV)           | 0.370284 | 0.036549                | 10.13117  | 0.0000 |
| R-squared          | 0.999480 | Mean dependent var      | 10.92875  |        |
| Adjusted R-squared | 0.999439 | S.D. dependent var      | 2.145845  |        |
| S.E. of regression | 0.050823 | Akaike info criterion   | -3.030540 |        |
| Sum squared resid  | 0.098153 | Schwarz criterion       | -2.865047 |        |
| Log likelihood     | 67.64134 | Hannan-Quinn criterion. | -2.969880 |        |
| F-statistic        | 24350.71 | Durbin-Watson stat      | 0.242802  |        |
| Prob(F-statistic)  | 0.000000 |                         |           |        |

*Source: Authors' computation (2025)*

From the Table, the estimated coefficient of agricultural output is positive (0.30), showing that there is a positive relationship between agricultural output and per capita income in Nigeria. This result is in line with theoretical expectations, showing that an increase in agricultural activities has resulted in an increase in per capita income and hence economic development in Nigeria. The result in real terms showed that a 1% increase in agricultural output resulted in a 0.30% increase in per capita income and hence economic development in Nigeria. Agricultural output was also statistically significant in its influence on economic development at the 5% level of significance, given its zero (0.0000) probability value.

In the same vein, the estimated coefficient of industrial output is positive (0.19), showing that there is a positive relationship between industrial output and per capita income in Nigeria. This result is in line with theoretical expectations, showing that an increase in industrial activities has resulted in an increase in per capita income and hence economic development in Nigeria. The result in real terms showed that a 1% increase in industrial output resulted in a 0.19% increase in per capita income and hence economic development in Nigeria. Industrial output was also statistically significant in its influence on economic development at the 5% level of significance, given its low probability value of 0.0002.

Lastly, the estimated coefficient of services output is positive (0.37), showing that there is a positive relationship between services output and per capita income in

Nigeria. This result is in line with theoretical expectations, showing that an increase in services sector activities has resulted in an increase in per capita income and hence economic development in Nigeria. The result in real terms showed that a 1% increase in services output resulted in a 0.37% increase in per capita income and hence economic development in Nigeria. Services output was also statistically significant in its influence on economic development at the 5% level of significance, given its zero (0.0000) probability value.

The high values of the R-squared (0.999480) and the Adjusted R-squared (0.999439) showed that the estimated model has a very high explanatory power. The high F-statistic of 24350.71 with its zero (0.0000) low probability value showed that the overall model is statistically significant at the 5% level of significance. This means that the explanatory variables have a joint effect on the explained variable.

## **7. Conclusion and Recommendations**

This study was undertaken to assess the role of the agriculture value chain as a pathway to enhancing socio-economic development in Nigeria. The agriculture sector has been upheld as a catalyst for speeding up the rate of economic growth and development. However, the performance of the sector has not been impressive in Nigeria over the years. Such performance has generated a debate as to the role of agriculture in socio-economic development in Nigeria. Investigating this debate was the focus of this study. The result of the analysis showed that agricultural sector output has a positive and significant impact on per capita income, which was used as a measure of economic development. Other results of the study showed that industrial and services output have a positive and significant effect on economic development in Nigeria. The conclusion from the study is that the agricultural value chain is crucial in achieving socio-economic development in Nigeria.

Based on the results, the study recommends that:

- i. The Nigerian government should invest heavily in the agricultural sector by increasing the budgetary allocation to the sector for improved productivity; and
- ii. There is also a need for the government to provide basic infrastructures like

motorable roads, steady electricity, functional storage facilities, water supply, communication facilities, etc., to help improve agricultural productivity for socio-economic development.

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