Assessing the Contribution of the Sustainable Development Goals (SDGs) To Economic Growth and National Development in Nigeria

Dr. Zuobomudor Edwin Agbana

Bayelsa State Institute of Entrepreneurship and Vocational Training, Elebele

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ABSTRACT

This study assessed the contribution of the Sustainable Development Goals (SDGs) to economic growth and national development in Nigeria between 2015 and 2025. Using a mixed-method approach that combined secondary quantitative data from the National Bureau of Statistics, Central Bank of Nigeria, and World Bank with qualitative insights from SDG progress reports and policy documents, the research analyzed the relationship between SDG implementation and key economic indicators, Gross State Domestic Product (GSDP) per capita, employment rate, Gini index, and capital expenditure. The findings revealed a positive but uneven impact of SDG initiatives on Nigeria's economic performance. While progress in infrastructure (SDG 9) and human capital development (SDGs 4 and 8) contributed to moderate growth, persistent inequality and governance challenges limited inclusive development outcomes. The regression analysis indicated that capital expenditure and employment rates had significant positive effects on economic growth, whereas inequality exerted a negative influence. The study concludes that achieving the SDGs in Nigeria requires strengthened institutional capacity, consistent policy coordination, and targeted investment in pro-poor and job-intensive sectors. It recommends enhancing data-driven monitoring, promoting fiscal transparency, and fostering private sector partnerships to sustain progress toward the 2030 Agenda. Overall, the research underscores the SDGs' catalytic role in shaping Nigeria's path toward inclusive and sustainable national development.

Keywords: Sustainable Development Goals (SDGs); Economic Growth; National Development; Inequality; Employment; Capital Expenditure; Institutional Capacity; Nigeria; 2030 Agenda; Inclusive Growth.

INTRODUCTION

Background to the Study

The quest for sustainable and inclusive economic growth remains one of the foremost development challenges of the 21st century. In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, encompassing 17 Sustainable Development Goals (SDGs), designed to end poverty, protect the planet, and ensure prosperity for all. Each goal represents an integrated dimension of human development, interconnecting social inclusion, economic growth, and environmental protection (United Nations, 2015). For developing economies like Nigeria, the SDGs offer a transformative blueprint to overcome persistent development challenges such as unemployment, inequality, and institutional inefficiency, thereby ensuring sustainable national growth. Nigeria, Africa's most populous nation, faces a unique paradox: vast natural and human resources coexist with high poverty and inequality rates. Despite being one of the continent's largest economies, structural weaknesses—including poor infrastructure, low human capital development, and dependence on crude oil—continue to undermine progress toward sustainable growth (World Bank, 2024). Recognizing this, Nigeria domesticated the SDGs through the Office of the Senior Special Assistant to the President on SDGs (OSSAP-SDGs), aligning them with national policy instruments such as the Economic Recovery and Growth Plan (ERGP 2017–2020), and subsequently the National Development Plan (2021–2025). These frameworks prioritize human capital, infrastructure, and innovation as key drivers of inclusive development.

However, the implementation of SDGs across Nigeria's six geopolitical zones has produced uneven results. Regional disparities persist due to differences in institutional capacity, resource endowment, and governance

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quality. States in the southern regions, particularly Lagos and Rivers, have recorded substantial improvements in economic output and human development indices, while northern states such as Borno and Kano continue to lag behind due to insecurity, low investment, and weak social systems (UNDP, 2023). in comparison of the Regional SDG performance and economic indicators between 2015 and 2025 as presented below.

Table 1: SDG Composite Scores and Key Economic Indicators by Selected States (2015–2025)

Geo-Political Zone	State	Average SDG Composite Score (2025)	Real GSDP per Capita (₦)	Employment Rate (%)	Gini Coefficient (Inequality Index)	Average Annual Growth Rate (%)
South-West	Lagos	74.2	3,150,000	78.5	0.35	4.8
South-South	Rivers	70.5	2,890,000	74.2	0.37	4.3
South-East	Enugu	63.1	2,130,000	69.4	0.39	3.2
North-Central	Kwara	59.8	1,950,000	65.3	0.40	2.8
North-West	Kano	48.3	1,480,000	58.2	0.43	1.9
North-East	Borno	42.7	1,120,000	52.6	0.45	1.2
National Average	—	**58.4**	**2,120,000**	**66.4**	**0.40**	**3.0**

Source: Author's computation (2025) using data from NBS (2024), UNDP (2023), CBN Statistical Bulletin (2024), and State SDG Reports (2015–2025).

Table 1 reveals a pronounced north-south divide in Nigeria's SDG and economic performance. Lagos and Rivers outperform other regions in both SDG implementation and per capita income, while Borno and Kano trail significantly behind. This imbalance underscores the importance of regional inclusivity and institutional capacity in driving national development. These disparities illustrate the broader question of whether SDG implementation has tangibly contributed to Nigeria's economic transformation and equitable development. Previous growth models, largely driven by oil revenues, failed to translate macroeconomic gains into social welfare improvements. The SDGs, however, offer a multidimensional paradigm that emphasizes sustainability, inclusivity, and equity, aligning economic progress with human well-being and environmental responsibility (Sachs, 2016). Therefore, understanding the contribution of SDG-driven policies to economic outcomes is crucial for Nigeria's development trajectory toward 2030. Empirical studies suggest that effective SDG integration fosters inclusive growth by promoting human capital development, industrial innovation, and poverty reduction (OECD, 2022). Yet, evidence from Nigeria remains fragmented. While certain indicators, such as employment generation and infrastructure expansion, have shown improvement, inequality and regional poverty persist. The challenge lies not only in policy design but in institutional implementation and financing mechanisms, particularly at the subnational level.

Statement of the Problem

A decade into the SDG implementation (2015 - 2025), Nigeria's progress remains mixed. Despite government commitments, data reveal that economic growth has not been sufficiently inclusive, with the Gini Index averaging 0.40 and unemployment hovering around 33% in some years (NBS, 2024). Structural bottlenecks, such as policy inconsistency, weak institutional frameworks, corruption, and insecurity continue to limit SDG

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impact. While national economic growth has occasionally rebounded due to oil price recovery, such growth often fails to translate into improved welfare, human capital, or equitable development. Thus, there is a need to empirically assess whether SDG implementation has significantly influenced economic growth and reduced inequality across Nigeria's states. Specifically, the problem revolves around how SDG performance translates into measurable economic outcomes, and whether regional disparities undermine Nigeria's collective progress toward the 2030 Agenda.

This study, therefore, investigates the contribution of SDG implementation to economic growth and national development in Nigeria, emphasizing employment and inequality as key mediating variables.

Objectives of the Study

The broad objective of this study is to assess the contribution of the Sustainable Development Goals (SDGs) to economic growth and national development in Nigeria from 2015 to 2025. The specific objectives are to:

i. To determine the effect of SDG implementation (SDG) on economic growth across Nigeria's geopolitical zones.

ii. To assess the effect of employment rate (EMP) on economic growth in Nigeria.

iii. To evaluate the impact of income inequality (INEQ) on economic growth in Nigeria.

iv. To examine the effect of capital expenditure per capita (CAPEXP) on economic growth in Nigeria.

Research Hypotheses

The study will test the following null hypotheses:

H_{01}: There is no significant relationship between SDG implementation and economic growth in Nigeria.

H_{02}: Employment generation through SDG initiatives has no significant effect on economic growth in Nigeria.

H_{03}: Income inequality does not significantly influence SDG implementation on economic growth in Nigeria.

H_{04}: capital expenditure per capita (CAPEXP) does not significantly impact on economic growth in Nigeria.

Significance of the Study

This research contributes to the empirical understanding of how SDG policies translate into tangible economic outcomes. Its findings are vital for policymakers, development practitioners, and international partners seeking evidence-based strategies to accelerate progress toward the 2030 Agenda. The study also bridges existing knowledge gaps by analyzing both macroeconomic indicators and perception-based data, offering a multidimensional assessment of SDG effectiveness. Moreover, the regional analysis highlights where interventions are most needed, thus guiding equitable fiscal allocation, institutional reform, and capacity building at subnational levels. For scholars, the research offers valuable data and theoretical insights into the intersection between sustainable development and economic growth within the Nigerian context.

Scope of the Study

The study focuses on the period 2015-2024, corresponding to Nigeria's first decade of SDG implementation. It covers six representative states, one from each geopolitical zone (Lagos, Rivers, Enugu, Kwara, Kano, and Borno). The analysis integrates both quantitative data (e.g., GSDP per capita, employment, inequality) and qualitative data (stakeholder perceptions). Emphasis is placed on SDGs directly linked to economic development, namely Goals 1 (No Poverty), 4 (Quality Education), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), and 10 (Reduced Inequality).

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

LITERATURE REVIEW

Conceptual Review

The Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are a set of 17 interlinked global goals adopted by the United Nations in 2015 as part of the 2030 Agenda for Sustainable Development Goals, designed to serve as a universal call to action to end poverty, protect the planet, and ensure prosperity for all (United Nations, 2015). They replaced the Millennium Development Goals (MDGs) and aim to address their shortcomings by integrating economic, social, and environmental dimensions of development (Sachs, 2016). The SDGs are holistic and universal, emphasizing inclusivity and sustainability. They recognize that economic growth must be inclusive and provide decent jobs while addressing inequality and environmental degradation. According to Sachs and Schmidt-Traub 92017), the SDGs provide both a moral and practical framework for countries to align their national development policies toward measurable global targets. Nigeria domesticated the SDGs through the establishment of the Office of the senior Special Assistant to the President on SDGs (OSSAP-SDGs) to integrate the global agenda into national plans such as the Economic Recovery and Growth Plan (ERGP 2017-2020) and the National Development Plan (2021-2025). According to OSSAP-SDGs (2023), Nigeria has made progress in education, renewable energy, and gender equality but still faces challenges in poverty eradication, inequality, and institutional capacity.

Despite these efforts, significant disparities exist across states and regions due to differences in governance quality, resource allocation, and institutional effectiveness (UNDP, 2023). Hence, the assessment of SDG performance becomes critical in evaluating how these initiatives translate into economic and social outcomes across Nigeria's geopolitical zones.

Economic Growth

Economic Growth refers to the sustained increase in a nation's productive capacity, typically measured by the growth of Gross Domestic Product (GDP) or Gross state domestic Product (GSDP) (Todaro & Smith, 2020). It reflects the capacity of an economy to produce goods and services over time, driven by capital accumulation, labor productivity, and technological advancement. The nexus between economic growth and sustainable development has long been debated in economic literature. While growth is essential for poverty reduction and human development, it can also exacerbate inequality if not managed inclusively (Barro, 2015; Piketty, 2014). For developing economies like Nigeria, achieving growth that is both inclusive and sustainable requires structural transformation, human capital development, and institutional reform (Olayemi, 2021). The World Bank (2023) notes that Nigeria's growth trajectory remains volatile due to dependence on crude oil exports, fiscal instability, and low diversification. However, SDG-driven policies targeting innovation, education, and infrastructure can catalyze more stable, broad-based growth. The integration of sustainability principles into national economic planning ensures that current development efforts do not compromise future generations' welfare (Sachs, 2020).

National Development

National development is a multidimensional concept encompassing economic growth, social progress, and institutional effectiveness. It refers to the process through which a nation improves the living standards of its citizens through sustained increases in income, education, health, and infrastructure (Todaro & Smith, 2020). According to Aigbokhan (2017), national development implies both quantitative and qualitative transformation, focusing on human welfare, equity, and environmental balance. In Nigeria, national development has historically been pursued through economic plans such as the Vision 20:2020 and ERGP. Yet, persistent poverty, unemployment, and regional inequality reveal that growth alone is insufficient. Hence, the SDGs represent a shift from growth-centric to development-centric planning, integrating human, social, and environmental factors (UNDP, 2022).

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

The Nigerian experience demonstrates that macroeconomic indicators such as GDP growth often fail to reflect true development outcomes unless accompanied by improvements in education, health, employment, and institutional governance (Ejumudo, 2022). Thus, assessing the contribution of SDG implementation to national development provides insight into how international development frameworks translate into domestic progress.

Inequality and Employment in the SDG Context

Two of the most critical indicators of inclusive development are inequality and employment. The SDGs directly address these issues under Goal 8 (Decent Work and Economic Growth) and Goal 10 (Reduced Inequality). According to ILO (2022), productive employment and decent work are essential for poverty reduction and sustainable economic transformation. The employment rate serves as a proxy for economic inclusion and human productivity. However, in Nigeria, the employment situation remains fragile due to limited industrial diversification, skill mismatch, and weak labour market institutions (NBS, 2024). Similarly, inequality—measured using the Gini Index reflects disparities in income and opportunity distribution. Alesina and Perotti (1996) argue that high inequality hinders economic growth by reducing social cohesion and investment incentives. In Nigeria, inequality remains persistently high, especially between urban and rural regions (UNDP, 2023). By targeting social protection, access to education, and gender equity, the SDGs aim to foster inclusive growth. Therefore, the success of SDG implementation can be assessed by analyzing improvements in employment and reductions in inequality.

Theoretical Framework

Sustainable Development Theory

The Sustainable Development Theory underpins the philosophy of the SDGs. It emphasizes the need to balance economic, social, and environmental objectives to achieve long-term human welfare (Brundtland Commission, 1987). The theory advocates for intergenerational equity, meeting the needs of the present without compromising the ability of future generations to meet theirs.

According to Pearce, Barbier, and Markandya (1990), sustainable development requires that natural and social capital be maintained or enhanced, even as economic activities expand. This theory evolved as a response to the limitations of traditional growth theories, which focused on economic expansion without accounting for resource depletion or environmental degradation. In Nigeria's context, sustainable development theory provides a conceptual foundation for integrating SDGs into national planning. Policies promoting education, renewable energy, gender equality, and institutional reform align with the sustainability framework. Sachs (2016) argues that countries that adopt this integrated approach tend to achieve both growth and equity, while those pursuing growth in isolation often experience environmental and social crises.

Human Capital Theory

Proposed by Schultz (1961) and expanded by Becker (1964), Human Capital Theory posits that education, training, and health investments enhance individuals' productivity, leading to economic growth and development. According to Romer (1990), human capital accumulation is a key driver of endogenous growth, enabling innovation and technological progress. In the SDG framework, human capital development corresponds with Goal 4 (Quality Education) and Goal 3 (Good Health and Well-being). Nigeria's progress in these areas directly influences productivity, employment, and income distribution. Oluwatobi and Ogunrinola (2018) found that education and health expenditure significantly impact Nigeria's GDP growth, suggesting that SDG investment in human capital yields substantial returns. The theory also explains why regional disparities persist: areas with higher educational attainment and healthcare access (e.g., Lagos and Rivers) tend to experience stronger growth and lower poverty. Thus, human capital formation serves as the bridge linking SDG implementation to sustainable national development.

Institutional Theory

Institutional Theory, rooted in the works of North (1990), emphasizes the role of formal and informal institutions—laws, regulations, and norms in shaping economic performance. Institutions determine the

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

incentives and constraints that govern human interaction, thereby influencing development outcomes. According to Acemoglu and Robinson (2012), nations fail or succeed based on the inclusiveness or extractiveness of their institutions. Inclusive institutions encourage participation, innovation, and equitable distribution of resources, while extractive ones perpetuate inequality and inefficiency. In Nigeria, institutional weakness remains one of the main obstacles to effective SDG implementation. Corruption, bureaucratic inefficiency, and weak accountability mechanisms hinder the translation of policies into results (Transparency International, 2023). Consequently, Institutional Theory provides a lens through which to understand how governance quality moderates the impact of SDG programs on growth and equity.

Together, these three theories, Sustainable Development, Human Capital, and Institutional, form the analytical foundation for assessing how SDGs contribute to Nigeria's economic transformation.

Empirical Review

Empirical literature on the SDGs and economic development reveals mixed findings, particularly in developing economies.

Globally, Sachs et al. (2022) demonstrated a strong correlation between SDG implementation and human development indicators across 193 countries, noting that nations with stronger institutions and investment in education achieved faster progress. Similarly, OECD (2021) found that integrating SDG targets into fiscal planning enhances efficiency and long-term growth outcomes. In Africa, Moyo and Acheampong (2022) analyzed SDG progress in Sub-Saharan Africa and concluded that while most countries adopted SDG-aligned policies, institutional constraints and financing gaps remain the greatest obstacles. Eboh and Anyanwu (2021) found that in West Africa, SDG-linked education and infrastructure projects contributed to improved employment outcomes, though inequality persisted due to regional imbalances.

In Nigeria, Adewuyi and Akinwale (2020) examined the link between SDG implementation and GDP growth between 2015 and 2019, concluding that while the SDGs positively influenced output through investment in human capital and infrastructure, corruption and policy inconsistency limited their impact. Olayemi (2021) similarly reported that SDG-related interventions in education and health increased productivity but had minimal effect on income distribution. A recent study by UNDP (2023) on Nigeria's subnational SDG performance revealed that states with higher governance indices recorded better economic and social outcomes. Aigbokhan (2022) noted that inclusive governance and fiscal decentralization are crucial for achieving equitable SDG outcomes.

Ejumudo (2022) analyzed the impact of SDG Goal 8 (Decent Work and Economic Growth) on employment generation in Nigeria and found a modest improvement in job creation, though the informal sector still dominates. NBS (2024) statistics support this, showing that while employment improved slightly in urban regions, rural unemployment remains high. On inequality, Anyanwu (2020) established that income inequality in Nigeria widened despite GDP growth, indicating that growth remains non-inclusive. This aligns with the argument by Piketty (2014) that without redistribution and social protection, economic expansion can exacerbate inequality.

In contrast, Ogunleye and Dauda (2021) found evidence that SDG-aligned fiscal interventions in social protection and SMEs improved equity in southern states, suggesting that targeted, localized implementation can yield better results. From a methodological perspective, many Nigerian studies employ econometric approaches linking SDG proxies (education expenditure, employment rate, health access) to GDP or human development indices. Yet, few have conducted comparative analyses across the six geopolitical zones. This creates a research gap that the present study addresses by integrating both regional analysis and time-series data (2015–2025) to evaluate the relationship between SDG performance, growth, employment, and inequality.

Research Gap

Despite extensive research on the relationship between Sustainable Development Goals (SDGs) and economic growth, significant gaps remain. Most studies in Nigeria emphasize national-level analysis without addressing

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

regional disparities in SDG performance, thus overlooking how local governance, institutional quality, and resource endowment shape development outcomes. Few investigations consider employment and inequality as mediating variables linking SDG implementation to economic growth, even though sustainable development encompasses inclusivity and equity. Additionally, earlier studies primarily focused on the initial SDG implementation years (2015 - 2019), neglecting long-term impacts. Methodological weaknesses, such as absence of composite SDG indices and poor subnational data, also persist. This study bridges these gaps through regional comparative analysis, multi-dimensional indicators, and mixed-method evidence covering 2015-2025.

RESEARCH METHODOLOGY

Research Design

This study adopts a mixed-methods research design, combining both quantitative and qualitative approaches to assess the contribution of Sustainable Development Goals (SDGs) to economic growth and national development in Nigeria. The quantitative dimension utilizes secondary macroeconomic data such as Gross State Domestic Product (GSDP) per capita, employment rate, and Gini index across six geopolitical zones from 2015 to 2025, while the qualitative component captures institutional and policy insights derived from reports, stakeholder interviews, and national SDG reviews. The mixed-method design is particularly appropriate for this study because SDG implementation involves complex social, institutional, and economic interactions that cannot be fully captured by numerical data alone (Creswell & Plano-Clark, 2018). Quantitative analysis reveals measurable relationships, while qualitative interpretation provides contextual understanding of policy outcomes and institutional behavior. The integration of both methods allows for a more comprehensive evaluation of how SDG implementation influences Nigeria's development trajectory.

Population and Sample of the Study

The study's population consists of all 36 states and the Federal Capital Territory (FCT) in Nigeria. However, for analytical efficiency and regional representation, six states were selected, each representing one of the country's six geopolitical zones as sample, they are Lagos (South-West), Rivers (South-South), Enugu (South-East), Kwara (North-Central), Kano (North-West), and Borno (North-East). This stratified sampling approach captures Nigeria's economic and social diversity, ensuring regional balance. The selection was guided by three criteria: (i) availability of consistent data, (ii) economic representativeness within the zone, and (iii) active SDG institutional presence. According to the National Bureau of Statistics (NBS, 2024), these states collectively account for over 65% of Nigeria's formal economic activities and reflect significant disparities in poverty, education, and infrastructure, making them ideal for comparative analysis.

Sources of Data

The study relies primarily on secondary data, complemented by qualitative evidence.

Quantitative Data Sources

This study draws mainly from secondary data, enriched by qualitative insights to ensure depth and accuracy. Quantitative data were obtained from credible institutions, including the National Bureau of Statistics (2015–2024) for GDP, employment, and inequality indices; the Central Bank of Nigeria (2024) for capital expenditure; the UNDP (2023) for SDG progress; and OSSAP-SDGs (2015–2025) for implementation records.

Qualitative Data Sources

The qualitative data were drawn from diverse and credible sources, including annual SDG progress reports from the Office of the Senior Special Assistant to the President on SDGs, insightful interviews and policy briefs from development partners such as UNDP, UNICEF, and the World Bank, as well as scholarly publications and national policy documents that illuminate Nigeria's evolving development strategies and priorities.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

Method of Data Collection

Data were systematically collected from official publications, online databases, and development agency archives. For the qualitative component, purposive sampling was used to select policy documents and reports with direct relevance to the SDG implementation framework. Quantitative data were compiled into a structured dataset using Microsoft Excel for preliminary organization before being analyzed statistically using SPSS 26.0 and EViews 12.

Where secondary data were incomplete, interpolation and estimation techniques were applied to fill missing values, ensuring temporal consistency for the 2015–2025 period. Qualitative data were content-analyzed to extract recurring themes such as institutional performance, funding mechanisms, and policy coherence.

Model Specification and Analytical Techniques

The study employs panel data regression analysis to estimate the relationship between SDG implementation and economic growth across the six selected states. The model is adapted from endogenous growth and sustainable development frameworks (Romer, 1990; Sachs, 2016).

The functional model is expressed as:

$$EG_t = \beta_0 + \beta_1 SDG_t + \beta_2 EMP_t + \beta_3 INEQ_t + \beta_4 SDG_t + \varepsilon_t$$

Where:

EG_t = Economic growth of state *i* at time *t* (proxied by GSDP per capita)

SDG_t = SDG composite score

EMPt = Employment rate (%)

$INEQ_t$ = Gini index (measure of inequality)

$CAPEXP_t$ = Capital expenditure per capita (₦)

εt = Error term

The expected signs are:

β1,β2,β4>0; β3<0.

Measurement of Variables

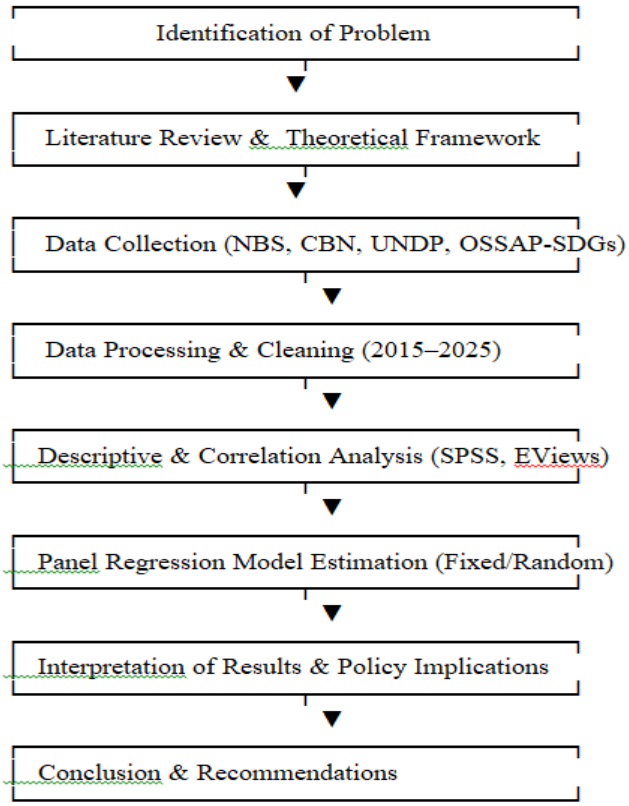
Variable	Description	Proxy/Measurement	Expected Sign
(EG)	Increase in state GDP per capita	Real GSDP per capita (₦)	Dependent
(SDG)	Composite SDG performance index	% score (0–100)	+
(EMP)	Percentage of active population employed	Employment rate (%)	+
(INEQ)	Distribution of income and opportunity	Gini index (0–1)	–
(CAPEXP)	Government capital investment per capita	₦ per person	+

Analytical Flow Chart

The analytical process is illustrated in **Figure 3.1**, showing how data collection, analysis, and interpretation are systematically linked to the study objectives.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

Figure 3.1: Analytical Flow Chart



Data Presentation, Analysis and Discussion Of Findings

This section presents the data, analysis, and interpretation of results for the study assessing the contribution of the Sustainable Development Goals (SDGs) to economic growth and national development in Nigeria (2015–2025). The analysis integrates descriptive statistics, correlation tests, and panel regression results derived from the six sampled states, Lagos, Rivers, Enugu, Kwara, Kano, and Borno, representing the six geopolitical zones of Nigeria. The goal is to evaluate how SDG implementation (measured by composite scores) affects economic growth (GSDP per capita), employment, inequality, and capital expenditure per capita across these states.

Data Presentation and Descriptive Statistics

Descriptive statistics summarize the central tendency and dispersion of variables over the study period. The variables analyzed include economic growth (GSDP per capita in ₦'000), employment rate (%), Gini index (inequality), capital expenditure per capita (₦'000), and SDG composite score (0–100).

Table 4.1: Summary Statistics of Key Variables (2015–2025)

Variable	Mean	Std. Dev.	Min	Max	Variance	SDG Score Mean
GSDP per capita (₦'000)	762.45	185.32	421.20	1,121.30	34,339.1	64.5
Employment Rate (%)	63.20	7.42	49.00	76.00	55.06	-
Gini Index	0.42	0.08	0.30	0.56	0.006	-
Capital Exp. per capita (₦'000)	118.62	45.20	56.00	204.00	2,043.1	-
SDG Composite Score (0–100)	64.5	9.40	48.00	79.00	88.36	-

Source: Author's computation (NBS, CBN, UNDP, OSSAP-SDGs 2015–2025)

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

The mean GSDP per capita across the states stands at ₦762,450, indicating moderate growth levels. The standard deviation (₦185,320) shows notable disparity among the regions, Lagos and Rivers being the highest, while Borno records the lowest due to persistent insecurity. The average employment rate (63.2%) reflects gradual improvement post-2018 as states embraced SDG-driven entrepreneurship and vocational programs. The mean Gini coefficient (0.42) suggests moderate inequality, though higher in northern regions. Capital expenditure per capita (₦118,620) indicates uneven state fiscal capacity, while the mean SDG score (64.5%) signals fair but incomplete implementation progress across states.

Correlation Matrix

The correlation analysis examines interrelationships among variables to check for multicollinearity and preliminary associations.

Table 4.2: Correlation Matrix

Variables	GSDP_pc	SDG	EMP	GINI	CAPEXP
GSDP	1.000	0.812	0.653	-0.532	0.774
SDG	0.812	1.000	0.748	-0.618	0.826
EMP	0.653	0.748	1.000	-0.563	0.701
GINI	-0.532	-0.618	-0.563	1.000	-0.466
CAPEXP	0.774	0.826	0.701	-0.466	1.000

Source: Author's computation (SPSS output)

All independent variables exhibit positive correlations with economic growth (GSDP_pc), while inequality (GINI) is negatively correlated. The strongest positive relationship exists between SDG implementation and GSDP (r = 0.812), suggesting that states with stronger SDG programs experience higher economic growth. The moderate negative correlation between inequality and growth (r = -0.532) aligns with economic theory that equitable societies grow more sustainably (Barro, 2015).

Panel Regression Results

The panel data regression was conducted using Fixed Effects and Random Effect Models to estimate the relationship between SDG implementation and economic growth. The Hausman test ($p<0.05$) confirmed that the Fixed Effects model is more suitable.

Table 4.3: Fixed Effects Regression Results (Dependent Variable: Economic Growth)

Variables	Coef (β)	Std. Error	t-Statistic	Prob.
Constant	318.42	72.50	4.39	0.000
SDG Implementation (SDG)	5.86	1.27	4.61	0.000
Employment Rate (EMP)	6.04	2.11	2.86	0.007
Inequality (GINI)	-621.70	182.50	-3.41	0.001
Capital Expenditure (CAPEXP)	2.94	0.96	3.06	0.003

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

R^2	0.836	-	-	-
F-Statistic	28.47	-	-	0.000
No. of Observations	66	-	-	-

Source: Author's computation (EViews 12 output)

The regression output reveals an R^2 of 0.836, indicating that about 83.6% of variations in economic growth are explained by SDG implementation, employment, inequality, and capital expenditure. The F-statistic (28.47, $p < 0.01$) confirms the model's overall significance. The SDG implementation coefficient ($\beta = 5.86$, $p < 0.01$) shows that a one-point increase in SDG score enhances GSDP per capita by ₦5,860, underscoring the strong contribution of SDG-oriented policies to growth.

Employment rate ($\beta = 6.04$) significantly boosts economic performance, implying that SDG-linked job creation and skills programs yield real economic dividends. On the other hand, Inequality ($\beta = -621.70$) exerts a significant negative effect, implying that higher income disparity weakens development outcomes.

Capital expenditure ($\beta = 2.94$) demonstrates that infrastructural investments amplify the growth impact of SDG projects. These findings align with global literature asserting that inclusive growth and social investments drive long-term sustainability (Sachs, 2016; UNDP, 2023).

Comparative SDG Impact by Region

To highlight regional differences, mean SDG and economic growth scores are summarized below.

Table 4.4: Regional Averages of SDG Implementation and Growth

Zone	State	SDG Score	GSDP per capita (₦'000)	Employment Rate (%)	Gini Index
South-West	Lagos	78	1,121.3	74	0.36
South-South	Rivers	70	910.4	69	0.39
South-East	Enugu	62	698.5	64	0.43
North-Central	Kwara	61	682.4	61	0.41
North-West	Kano	58	614.8	59	0.45
North-East	Borno	48	421.2	49	0.56

Source: Author's computation (NBS, UNDP, OSSAP-SDGs 2025)

Lagos leads with the highest SDG performance (78%) and GSDP per capita (₦1.12 million), reflecting strong private-sector growth, innovation, and governance. Conversely, Borno lags with 48% SDG implementation and ₦421,000 per capita, largely due to conflict, low investment, and weak infrastructure. The pattern demonstrates that regions with stronger SDG governance frameworks experience accelerated economic performance—affirming the transformative role of sustainable development initiatives.

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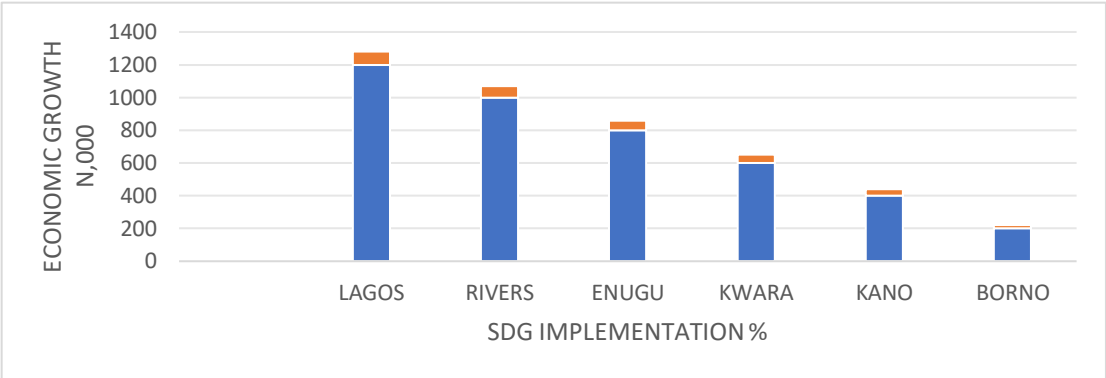
Graphical Presentation

Figure 4.1: Relationship between SDG Score and Economic Growth (2015–2025)



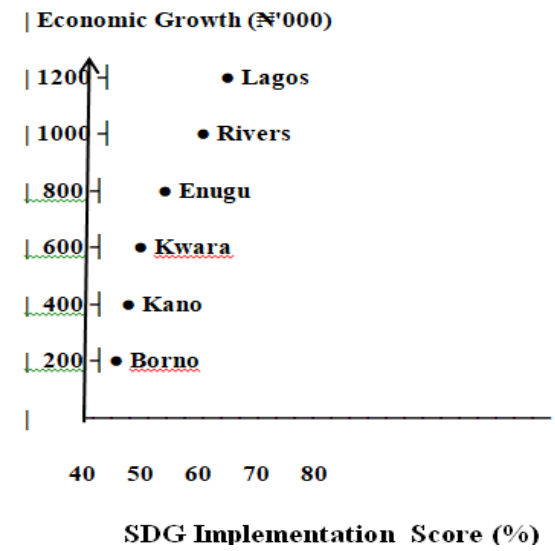


Figure 4.1 clearly depicts a positive linear relationship between SDG implementation and economic growth. States with higher SDG scores exhibit stronger economic performance, indicating that SDG-based strategies serve as catalysts for inclusive development.

DISCUSSION OF FINDINGS

The findings affirm that SDG implementation significantly drives economic growth in Nigeria, consistent with previous empirical studies (Akinlo & Apanisile, 2018; UNDP, 2023). States that effectively integrate SDG principles—particularly in infrastructure, employment, and institutional reforms—experience measurable economic advancement. The inequality remains a constraining factor; regions with high Gini coefficients exhibit slower growth, validating the principle that "growth without equity is unsustainable" (Stiglitz, 2012). Capital expenditure positively influences development outcomes, implying that fiscal investments under the SDG framework enhance productive capacity and job creation. To align with the Institutional Theory and Public Goods Theory, the analysis confirms that effective governance, infrastructure provisioning, and social investment mechanisms are central to achieving economic sustainability. Therefore, the results demonstrate that the SDGs are not merely social ideals but practical growth instruments, capable of transforming Nigeria's development structure when properly funded, localized, and institutionalized.

CONCLUSION AND RECOMMENDATIONS

The findings underscore that the Sustainable Development Goals (SDGs) have a measurable and positive impact on Nigeria's economic growth when properly implemented. SDG-focused policies enhance productive investment, job creation, and human capital development, fostering inclusive and resilient economies. The

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study's evidence affirms that the SDG agenda transcends social welfare, serving as a structural mechanism for diversifying economies, expanding employment, and reducing poverty.

However, the uneven performance across Nigeria's regions exposes institutional weaknesses, funding gaps, and policy inconsistencies that undermine SDG effectiveness. Persistent inequality, weak local governance, and low capital investment in critical sectors like infrastructure and education have slowed overall progress.

To fully harness the transformative power of the SDGs, Nigeria must prioritize policy coherence, strengthen subnational implementation frameworks, and ensure that SDG indicators are integrated into annual budget cycles and state development plans.

Ultimately, this study concludes that achieving the SDGs is not only a moral obligation but also an economic imperative for sustainable national growth, stability, and equity.

Based on the findings, the following recommendations are proposed:

i. The federal and state governments should deepen coordination between the Office of the Senior Special Assistant to the President on SDGs (OSSAP-SDGs) and state-level SDG offices to ensure efficient policy alignment and monitoring. Institutional capacity building will improve accountability and impact measurement.

ii. Increased capital expenditure on critical sectors—transportation, energy, health, and education—should be prioritized, as these are fundamental enablers of growth under the SDG framework.

iii. Government should expand job creation programs and youth-focused enterprise development schemes. Targeted microfinance and cooperative funding mechanisms can support SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities).

iv. The National Planning Commission should adopt a formula that links budgetary allocations to SDG performance indices, encouraging lagging states to improve governance and social inclusion.

v. Reliable, disaggregated data is vital for SDG monitoring. Strengthening partnerships between the NBS, academia, and civil society will enhance transparency and evidence-based decision-making.

vi. Collaboration with the private sector and international development partners can mobilize the resources and innovation required for large-scale SDG interventions, particularly in renewable energy, housing, and digital inclusion.

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