Impact of Rural Poverty on Inequality in Developing Economies: A Structural Condition for Tailored Policy Response in Nigeria

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ABSTRACT

This study examines the impact of rural poverty on inequality in developing economies: a policy discourse for a market-oriented society like Nigeria. Despite being Africa's largest economy, Nigeria continues to grapple with stark rural-urban disparities and deep-rooted structural inequalities. The study adopts an ex-post facto research design, using annual time series data from 1990 to 2025 sourced from the National Bureau of Statistics, World Bank, and Central Bank of Nigeria. The Autoregressive Distributed Lag (ARDL) model was employed for estimation. The findings reveal that rural poverty and rural population share exert positive and statistically significant impacts on income inequality, suggesting that rural deprivation and the concentration of disadvantage in rural areas widen the gap between the rich and the poor. Literacy also exhibits a positive and significant effect, indicating that uneven access to education disproportionately benefits already advantaged groups, thereby widening inequality. Conversely, unemployment shows a negative but statistically not significant effect. The study concludes that rural poverty and structural factors are critical drivers of inequality in Nigeria. It recommends targeted poverty alleviation programmes, balanced territorial development, equitable access to quality education, and strengthened labour market policies to foster inclusive growth and sustainable development.

Keywords: Rural Poverty; Income Inequality; Developing Economies; Policy Discourse; Market-Oriented Society; Nigeria

INTRODUCTION

The persistent challenge of poverty and inequality in developing economies has garnered significant attention in development discourse, particularly as it relates to rural populations who constitute the majority of the world's poor. Contemporary development policy has evolved into a multidisciplinary discourse incorporating political, social, and international dimensions beyond mere economic metrics, with development diplomacy and soft power significantly influencing foreign policy approaches (Bharti and Basarati, 2025). While global poverty has declined over recent decades, progress remains highly uneven due to structural barriers, fragile institutions, and vulnerability to climate shocks, particularly across Sub-Saharan Africa and South Asia (Salah, 2025). Crucially, extreme poverty is overwhelmingly a rural phenomenon, with approximately seventy-nine percent of those experiencing extreme poverty living in rural areas where they face multidimensional deprivations including limited access to quality education, healthcare, and basic infrastructure (Suttie, 2019). These deprivations collectively hinder productivity and perpetuate intergenerational cycles of low income, a situation further compounded by the COVID-19 pandemic which reduced incomes, limited mobility, and undermined food security for rural dwellers (United Nations, 2021). Consequently, international development discourse increasingly emphasizes the need for inclusive, community-driven strategies that address the complex socioeconomic and environmental challenges experienced by vulnerable rural communities (Sylvester, 2025).

Building on this global context, it is evident that rural poverty is qualitatively distinct from urban poverty, characterized by unique structural conditions that demand tailored policy responses. The rural poor are far from a homogeneous group, differing considerably in their access to land, capital, and labour markets, and facing

interconnected failures across markets, public policy, and institutions (Khan, 2000). Rural deprivation is frequently exacerbated by policy biases that prioritize urban infrastructure and services, leaving rural communities neglected and chronically impoverished (Rosida, 2018). Interestingly, rural poverty is not confined to the developing world, as even high-income countries contend with persistent and often hidden rural deprivation linked to demographic decline, lower educational attainment, and geographic remoteness (Bertolini, 2019). The common thread across these contexts is that distorted policy frameworks—including the implicit taxation of agricultural products and the subsidization of capital-intensive technologies—systematically exclude the rural poor from the benefits of national development (Khan, 2000). Addressing rural poverty therefore requires a fundamental reorientation of development strategy toward territorially balanced growth that recognizes the distinctive economic and social fabric of rural areas (Rimisp, 2008).

Central to any understanding of rural poverty is its intricate relationship with economic growth and income inequality, a nexus that has profound implications for policy design in developing economies. The prevailing assumption that economic growth automatically benefits the poor has been subjected to rigorous scrutiny, with evidence indicating that high levels of inequality significantly diminish the poverty-reducing potential of growth (Ochichi et al., 2023). In highly unequal societies, the gains from economic expansion are disproportionately captured by wealthier segments of the population, leaving low-income households with limited access to the benefits of growth and reinforcing the very disparities that perpetuate poverty (Ochichi et al., 2023). Consistent with the Kuznets hypothesis, the early stages of economic development can simultaneously reduce poverty while widening income disparities, suggesting that growth alone is not inherently inclusive and may, in fact, deepen inequality if left unmanaged (Pertiwi, 2024). This recognition has prompted a shift in development discourse toward the concept of inclusive growth, which demands deliberate redistributive measures to ensure that the poorest members of society can actively participate in and benefit from economic expansion (Pertiwi, 2024). For developing economies, therefore, the challenge is not simply to grow but to grow in a manner that is equitable and socially inclusive.

These dynamics are particularly pronounced across the African continent, where the paradox of abundant natural resources coexisting with widespread deprivation continues to define the development experience. Many African nations remain trapped in cycles of poverty despite their resource wealth, a phenomenon driven by the resource curse, institutional weaknesses, and governance failures that systematically undermine equitable development (Ganiyu et al., 2020). In Sub-Saharan Africa, the rural poor—including the landless—depend heavily on agriculture for their livelihoods, yet agricultural stagnation and inadequate public investment have severely constrained their capacity to escape poverty (Rimisp, 2008). The absence of robust institutional frameworks and financial inclusion mechanisms further entrenches inequality, effectively barring marginalized populations from accessing economic opportunities that could improve their circumstances (Ganiyu et al., 2020). As a consequence, economic development across much of the continent has faltered, driving up poverty levels and escalating the risk of social unrest and political instability (Ganiyu et al., 2020). Addressing these deep-rooted challenges demands comprehensive, context-sensitive strategies that align poverty alleviation efforts with local cultural dynamics and the lived realities of rural communities (Sylvester, 2025).

Applying these broader realities to Nigeria reveals a particularly critical situation, where pervasive poverty and structural inequality constitute formidable barriers to sustainable development. Despite being Africa's largest economy, Nigeria continues to grapple with stark rural-urban divides, high multidimensional poverty, and deeply entrenched inequalities that have proven resistant to conventional policy interventions (Dauda et al., 2021). The situation is compounded by the devastating impact of poverty on the agricultural sector, which remains the primary livelihood for rural Nigerians, leading to diminished returns, poor technological adoption, and reduced productivity (Utuk, 2022). Statistical evidence underscores the severity of the crisis, with approximately 44.2 percent and 47.7 percent of the population living below the US$1.90 per day threshold in 2018 and 2019, respectively (Dauda et al., 2021). The COVID-19 pandemic further aggravated these deprivations, derailing progress toward the Sustainable Development Goals and exposing the fragility of existing social protection systems (Dauda et al., 2021). For Nigeria, therefore, tackling rural poverty is not merely a humanitarian concern but a fundamental prerequisite for achieving equitable and sustainable economic transformation.

Within the Nigerian rural landscape, specific intersectional vulnerabilities—particularly gender inequality and pervasive insecurity amplify the adverse effects of poverty and deepen inequality. Rural women are

disproportionately affected, facing higher poverty rates due to lower literacy levels, engagement in precarious non-farm sectors, and systemic labour market discrimination driven by cultural stereotypes and traditional norms (Aluko and Mbada, 2021). Compounding this, the socio-economic challenges of rural poverty are deeply intertwined with security crises, creating a cyclical trap fuelled by unemployment, inequality, and corruption (Sukare and Abdullahi, 2025). Poverty renders marginalized individuals highly vulnerable to recruitment by criminal and insurgent groups, while the resulting violence disrupts agricultural livelihoods, displaces communities, and destroys critical infrastructure, thereby deepening poverty further (Sukare and Abdullahi, 2025). These overlapping challenges create a complex development trap that disproportionately impacts the poorest citizens and requires targeted, multidimensional interventions to escape (Dauda et al., 2021). Without addressing these intersecting deprivations, any attempt to foster inclusive growth in Nigeria will remain incomplete.

Consequently, formulating an effective policy discourse for a market-oriented society like Nigeria necessitates a holistic and multidimensional approach that directly confronts the nexus of rural poverty and inequality. The existing body of knowledge demonstrates that fragmented or short-term interventions are inadequate; instead, sustainable progress requires the integration of inclusive agricultural development, targeted social protection, robust infrastructure investment, and strong institutional governance to guarantee equitable resource distribution (Sylvester, 2025; Obayelu and Edewor, 2022). It is against this backdrop that the present study becomes imperative, as it seeks to critically examine the impact of rural poverty on inequality in developing economies, using Nigeria as a focal point, and to provide a robust policy discourse tailored for a market-oriented society, this study aims to propose actionable policy recommendations that balance market-driven growth with social equity, ensuring that the rural poor are not left behind in the pursuit of sustainable national development.

CONCEPTUAL REVIEW AND EMPIRICAL LITERATURE REVIEW

2.1.1 Poverty and Inequality

Poverty is fundamentally a state of deprivation that extends beyond income deficiency to encompass inadequate access to food, shelter, healthcare, education, and participation in decision-making processes (Khan, 2000). It is characterized by high levels of deprivation, vulnerability, and powerlessness, and can be either chronic or transient, with transient poverty capable of trapping succeeding generations if acute (Khan, 2000). Inequality, by contrast, refers to the disparities in income and wealth distribution within a society, and while the two concepts are frequently conflated, they are distinct in that poverty concerns those falling below a defined threshold while inequality pertains to the overall distribution of resources across the entire population (Obayelu and Edewor, 2022). The relationship between poverty and inequality is complex and multifaceted, with inequality both exacerbating poverty and being sustained by it, creating a vicious cycle that is difficult to break without deliberate policy intervention (Obayelu and Edewor, 2022). In developing economies, the coexistence of poverty and inequality amidst economic prosperity remains a perplexing paradox, often described as poverty in the midst of plenty and inequality despite economic growth (Dauda et al., 2021).

2.1.2 Rural Poverty

Rural poverty is qualitatively distinct from urban poverty, characterized by unique structural conditions including geographic isolation, inadequate infrastructure, limited access to basic services, and heavy dependence on agriculture for livelihoods (Rosida, 2018). The rural poor are not a homogeneous group; they differ considerably in their access to land, capital, and labour markets, and face interconnected failures across markets, public policy, and institutions (Khan, 2000). Suttie (2019) observes that approximately seventy-nine percent of those experiencing extreme poverty live in rural areas, where they confront multidimensional deprivations that collectively hinder productivity and perpetuate intergenerational cycles of low income. Rural deprivation is frequently exacerbated by policy biases that prioritize urban infrastructure and services, leaving rural communities neglected and chronically impoverished (Rosida, 2018). Interestingly, rural poverty is not confined to the developing world, as even high-income countries contend with persistent and often hidden rural deprivation linked to demographic decline, lower educational attainment, and geographic remoteness (Bertolini, 2019). The common thread across these contexts is that distorted policy frameworks systematically exclude the rural poor from the benefits of national development (Khan, 2000).

2.1.3 Inequality in Developing Economies

Inequality in developing economies is a multidimensional phenomenon that manifests in various forms including income disparities, gender gaps, unequal opportunities, and differences in living standards such as access to health and energy resources (Obayelu and Edewor, 2022). The relationship between economic growth and inequality is particularly contentious, with empirical evidence demonstrating that while economic growth substantially reduces poverty, high inequality significantly weakens the poverty-reducing power of growth (Ochichi et al., 2023). In highly unequal societies, the gains from economic expansion are disproportionately captured by wealthier segments of the population, leaving low-income households with limited access to the benefits of growth and reinforcing the very disparities that perpetuate poverty (Ochichi et al., 2023). Consistent with the Kuznets hypothesis, the early stages of economic development can simultaneously reduce poverty while widening income disparities, suggesting that growth alone is not inherently inclusive and may deepen inequality if left unmanaged (Pertiwi, 2024). The persistence of inequality in resource-rich African nations, despite abundant natural wealth, underscores the role of institutional weaknesses and governance failures in perpetuating disparity (Ganiyu et al., 2020). Addressing inequality therefore requires deliberate redistributive measures and inclusive growth strategies that ensure the poorest members of society can actively participate in and benefit from economic expansion (Pertiwi, 2024).

2.1.4 Sustainable Development

Sustainable development refers to meeting the needs of the present without compromising the ability of future generations to meet their own needs, encompassing economic growth, social equity, and environmental protection in an integrated and balanced manner (Sukare and Abdullahi, 2025). The Sustainable Development Goals, particularly Goal 1 on ending poverty and Goal 10 on reducing inequality, provide a comprehensive framework for addressing the multidimensional nature of deprivation and disparity (Dauda et al., 2021). However, the persistence of rural poverty and inequality constitutes a fundamental barrier to the achievement of sustainable development, as development has always been a problem in an unequal and poverty-driven society (Dauda et al., 2021). Salah (2025) emphasizes that poverty is not merely a lack of income but a deeply rooted outcome of weak governance, limited human-capital investment, low productivity, and vulnerability to external shocks such as climate change and global economic downturns. The COVID-19 pandemic further exposed the fragility of development gains, disrupting rural incomes, limiting mobility, and undermining food security for already marginalized communities (United Nations, 2021). Consequently, sustainable development requires integrated, community-driven strategies that address the complex socioeconomic and environmental challenges experienced by vulnerable rural communities (Sylvester, 2025).

2.1.6 Market-Oriented Society and Policy Response

A market-oriented society is characterized by an economic system that prioritizes private enterprise, competitive markets, and minimal government intervention, yet this framework often fails to address the structural inequalities that perpetuate rural poverty (Bharti and Basarati, 2025). Development policy has evolved into a multidisciplinary discourse incorporating political, social, and international dimensions beyond mere economic metrics, recognizing that sustained progress requires coordinated efforts across sectors and levels of governance (Bharti and Basarati, 2025). In market-oriented economies, the assumption that economic growth automatically benefits the poor has been subjected to rigorous scrutiny, with evidence indicating that without deliberate redistributive measures, the gains from growth are disproportionately captured by wealthier segments of the population (Ochichi et al., 2023). Rimisp (2008) argues that macro and sectoral policies are insufficient to stimulate territorially balanced growth, recommending territorial and local economic development approaches that focus on distinctive local problems and link agricultural development to local economic measures. For a market-oriented society like Nigeria, policy discourse must therefore balance market-driven growth with social equity, ensuring that the rural poor are not left behind in the pursuit of national development (Sylvester, 2025).

2.1.7 Gender and Insecurity in Rural Poverty

Within the rural landscape, specific intersectional vulnerabilities particularly gender inequality and pervasive insecurity amplify the adverse effects of poverty and deepen inequality. Rural women are disproportionately

affected, facing higher poverty rates due to lower literacy levels, engagement in precarious non-farm sectors, and systemic labour market discrimination driven by cultural stereotypes and traditional norms (Aluko and Mbada, 2021). The feminization of poverty is a function of a myriad of factors including cultural stereotypes, discrimination against women in the labour market, lower education among women, and the high opportunity cost accrued to women's need to reproduce themselves and command resources (Aluko and Mbada, 2021). Compounding this, the socio-economic challenges of rural poverty are deeply intertwined with security crises, creating a cyclical trap fuelled by unemployment, inequality, and corruption (Sukare and Abdullahi, 2025). Poverty renders marginalized individuals highly vulnerable to recruitment by criminal and insurgent groups, while the resulting violence disrupts agricultural livelihoods, displaces communities, and destroys critical infrastructure, thereby deepening poverty further (Sukare and Abdullahi, 2025). These overlapping challenges create a complex development trap that disproportionately impacts the poorest citizens and requires targeted, multidimensional interventions that address both economic deprivation and physical insecurity to foster inclusive growth (Sukare and Abdullahi, 2025).

2.2 Theoretical Framework

The Capability Approach, pioneered by Amartya Sen (1985) and further developed by Martha Nussbaum (2011), serves as the underpinning theory for this study on the impact of rural poverty on inequality in developing economies. This theory posits that poverty should be understood not merely as a deficiency in income or resources, but as a deprivation of basic capabilities that prevent individuals from achieving the lives they have reason to value (Sen, 1999). The approach stipulates that development should focus on expanding the substantive freedoms and opportunities available to people, enabling them to escape poverty and participate meaningfully in economic and social life (Robeyns, 2017). The theory assumes that well-being is multidimensional, encompassing health, education, social participation, and political freedom, and that inequalities in these dimensions perpetuate poverty across generations (Nussbaum, 2011).

The relevance of the Capability Approach to this study lies in its emphasis on understanding poverty as a multidimensional phenomenon that extends beyond income deprivation to include limited access to education, healthcare, and economic opportunities, which are particularly acute in rural areas of developing economies (Khan, 2000). The theory provides a framework for examining how structural barriers such as inadequate infrastructure, policy biases, and institutional failures restrict the capabilities of the rural poor, thereby deepening inequality and hindering sustainable development (Suttie, 2019). According to Rosida (2018), rural poverty is intrinsically linked to infrastructural and basic service limitations that constrain the economic activities and livelihood strategies of rural dwellers, which aligns with the Capability Approach's proposition that poverty represents a deprivation of opportunities rather than merely a lack of income. Furthermore, the theory supports the argument that market-oriented societies require deliberate policy interventions to expand capabilities and ensure equitable access to resources, particularly for marginalized rural populations (Ochichi et al., 2023). Therefore, this theory is appropriate for this study as it enables an assessment of how rural poverty, understood as capability deprivation, contributes to inequality in developing economies and informs policy discourse for a market-oriented society like Nigeria, where structural inequalities and institutional weaknesses continue to exclude the rural poor from the benefits of economic growth (Dauda et al., 2021; Ganiyu et al., 2020).

2.3 Empirical Literature Review

Rural poverty in developing economies profoundly intensify income inequality by restricting access to essential resources and diluting the poverty-reducing benefits of economic growth. In a market-oriented society like Nigeria, stark rural-urban disparities and structural barriers further hinder inclusive development. Therefore, this study examines the impact of rural poverty on inequality, providing a policy discourse to foster equitable growth and sustainable development in Nigeria.

To begin with, Bharti and Basarati (2025) Revisiting the Conceptual Understanding of Development Policy in Developing Countries used qualitative content analysis to trace the evolution of development policy into a multidisciplinary discourse that incorporates political, social, and international dimensions rather than just economic metrics. The findings reveal that development diplomacy and soft power significantly influence foreign policy approaches, especially through sustainable development goals where donor and receiver nations

seek new forms of cooperation. The study also highlighted how classifications such as least developed countries and developing countries rely heavily on low per capita income while simultaneously being shaped by broader geopolitical and institutional considerations. By bridging development studies and international relations, the study provided a comprehensive understanding of development as both an economic and political process in the contemporary international system. They recommended that countries integrate sustainability into both domestic and foreign policies to address pressing global challenges, emphasizing the need for continuous policy adaptation and cross-sectoral collaboration to ensure that developmental frameworks remain resilient and relevant.

Expanding on these global perspectives, Salah (2025) Reviewed Global Poverty and Economic Development Trends and Interventions employed an integrated development-economics theory with empirical data and evidence-based policy analysis to examine long-term trends in poverty reduction and regional disparities. The study revealed that global poverty has declined significantly, but progress remains highly uneven due to structural barriers, fragile governance, and vulnerability to climate shocks, particularly in Sub-Saharan Africa and parts of South Asia. It further highlighted that poverty is a multidimensional phenomenon encompassing limited access to quality education, inadequate healthcare, chronic underemployment, and food insecurity, which collectively hinder productivity and perpetuate intergenerational cycles of low income. The research recommended implementing integrated multisectoral approaches such as conditional cash transfers, microfinance models, digital financial inclusion, employment-generating infrastructure investment, and human-capital expansion to break persistent poverty traps. Ultimately, the study stressed that sustainable poverty reduction requires more than rapid GDP growth and demands inclusive development strategies that strengthen human capital, expand financial inclusion, and improve institutional capacity.

A crucial aspect of this development discourse is the nuanced relationship between economic growth and poverty, as Ochichi et al. (2023) How Does Economic Growth Affect Poverty In Developing Economies And How Does Income Inequality Condition The Inclusiveness Of That Growth utilized OLS, fixed-effects, and random-effects regressions on cross-country panel data from 129 developing economies. They found that while economic growth substantially reduces poverty, high inequality significantly weakens the poverty-reducing power of growth, as reflected in the positive and statistically significant interaction between GDP per capita and the Gini index. Inequality not only raises poverty directly but also acts as a barrier that prevents growth from benefiting low-income households, meaning that in more unequal societies, growth delivers smaller gains for the poorest segments of the population. The results remained robust after accounting for unemployment, inflation, government consumption, and urbanization, confirming that the inclusiveness of growth is fundamentally shaped by the distributional context within a country. Consequently, they recommended that developing economies pair economic expansion with deliberate efforts to reduce inequality and ensure that the poorest households can participate in and benefit from rising national income.

Furthermore, Pertiwi (2024) The impact of economic growth and development on inequality and poverty applied a panel regression with a fixed effect model on data from 34 Indonesian provinces to investigate the relationship between economic growth, income inequality, and poverty. The findings demonstrated that economic growth positively and significantly reduced poverty but simultaneously increased income inequality, consistent with the Kuznets hypothesis that early stages of economic growth exacerbate income disparities. The study also found that per capita expenditure negatively and significantly impacted poverty levels, implying that any policy increasing residents' incomes can reduce poverty, although the benefits are not equitably distributed. The author noted that Indonesia has not yet reached the Kuznets turning point where economic growth can significantly reduce income inequality, meaning that growth cannot yet be considered inclusive. Therefore, the study recommended improving the quality of education, health, and infrastructure while implementing fair and effective redistribution policies and increasing local government autonomy to manage resources effectively for poverty reduction.

Shifting the focus to geographical disparities, Rosida (2018) Rural and Urban Poverty in Developing Countries adopted a literature study approach to critically analyze and explore the similarities and dissimilarities of urban and rural poverty in developing countries. The study found that rural poverty is much more extensive than urban poverty due to infrastructural and basic service limitations, with the majority of impoverished residents in developing countries residing in rural areas where agriculture is the primary means of subsistence. It also revealed that rural poverty is often connected with policy biases, such as the overconcentration of urban

development in terms of infrastructure and public service provision, which neglects rural needs and perpetuates chronic impoverishment. Furthermore, the findings highlighted that urban poverty, although less extensive, is more complex due to unhealthy living conditions, high living costs, and environmental risks like pollution and slums. The study recommended improving basic infrastructure, providing financial capital, developing potential rural sectors like livestock and small-scale industries, and promoting subsidized health services and education access for both rural and urban poor.

Interestingly, rural poverty is not confined to developing nations, as Bertolini (2019) Overview of Income and Non-Income Rural Poverty in Developed Countries used a literature review and policy analysis to reveal that rural poverty remains persistent and hidden in developed countries due to demographic, education, and remoteness factors. The paper found that rural areas in high-income countries still experience higher rates of poverty than metropolitan areas, largely because of progressive ageing, weak social ties, and limited access to basic services, which are exacerbated by the continuous reduction of public expenditure in low-density areas. It also identified a recursive description of at-risk groups, including the elderly, youth, women, children, ethnic minorities, immigrants, and farmers, who often face seasonal employment, low wages, and lack of services. The study recommended better coordination between top-down and place-based policies alongside targeted infrastructure investment, human capital enhancement, and social policies tailored to the specific vulnerabilities of rural contexts to break the vicious circles of labour market decline, depopulation, low education, and remoteness.

Turning specifically to the dynamics in developing countries, Khan (2000) Rural Poverty in Developing Countries Issues and Policies utilized a policy framework analysis to demonstrate that rural poverty is caused by complex multidimensional factors involving markets, public policy, and institutional failures. The study found that poverty is not only a state of existence but a process characterized by high levels of deprivation, vulnerability, and powerlessness, with the rural poor being highly differentiated in their access to land, capital, and labor markets. It also revealed that policy biases, such as urban bias in public investment, implicit taxation of agricultural products, and subsidies for capital-intensive technologies, contribute to rural poverty by excluding the rural poor from the benefits of development. The author recommended stable macroeconomic management, the transfer of assets, and improved access to credit, jobs, and safety nets for the rural poor, alongside investment in health and education and the promotion of local involvement in infrastructure and service design.

Within these developing contexts, the structure of rural economies plays a pivotal role, as Suttie (2019) Overview Rural Poverty in Developing Countries Issues Policies and Challenges conducted a literature review and policy analysis showing that seventy-nine percent of those in extreme poverty live in rural areas, with sub-Saharan Africa hosting the highest concentration of poor people. The paper found that although rural poverty has declined in some regions, the poorest are still at risk of being left behind, and the unique knowledge and innovations of smallholder family farmers, especially women, are inadequately considered in policies that favor large-scale actors. It also highlighted that growth originating from smallholder agriculture has both direct and indirect impacts on rural poverty reduction, promoting social equity, community well-being, and environmental sustainability. The study recommended supporting smallholder food systems, investing in rural infrastructure, strengthening the integration between rural and urban areas, and promoting inclusive agricultural development to ensure that economic opportunities are accessible to the most vulnerable populations.

Consequently, addressing these structural issues requires a shift in development strategies, prompting Rimisp (2008) World Development Report 2008 Agriculture for Development to use case studies and conceptual analysis, finding that macro and sectoral policies are insufficient to stimulate territorially balanced growth. The paper argued that territorial determinants are responsible for the large and growing gaps between richer and poorer territories, and that aggregate economic growth must be reflected in the productivity of regional and local economies through more territorial approaches. It also found that experiences in local economic and territorial development in Sub-Saharan Africa have been limited and fragmented, often failing to address the complexity of livelihood strategies that straddle urban and rural areas. The study recommended adopting territorial and local economic development approaches that focus on distinctive problems and potentials of specific areas, linking agricultural development to local economic measures, and securing integration within wider regional economic networks to reduce intra-regional disparities.

Adding to this policy discourse, United Nations (2021) Reducing poverty and inequality in rural areas key to inclusive development utilized a policy brief methodology and found that rural poverty and inequalities follow different dynamics because the same economic forces reducing poverty, such as rural development and urbanization, can also increase inequality. The brief highlighted that eighty percent of people in poverty live in rural areas, with eighteen percent of rural residents living in extreme poverty compared to around five percent of urban residents, and that the COVID-19 pandemic compounded their vulnerable position by reducing incomes and undermining food security. It also noted that success in reducing rural poverty has not always led to the reduction of rural inequalities or a closing of gaps between urban and rural areas, as wealthier rural households with educated heads are almost as well off as urban households while the poorest remain far worse off. The brief recommended investing in infrastructure and public services, promoting inclusive agricultural growth, ensuring fair distribution of land and natural resources, improving social protection coverage, and ending all forms of discrimination.

Focusing on the African continent specifically, Ganiyu et al. (2020) Poverty and Africa Development employed a historical and descriptive analysis and found that Africa suffers from abject poverty despite abundant resources due to the resource curse and weak institutions. The study revealed that poverty in Africa is multidimensional, characterized by deficiencies in purchasing power, weak political rights, lack of shelter, rural preponderance, and restricted opportunities to participate in the formal sector, with forty to fifty percent of sub-Saharan Africans living below the poverty line. It also noted that economic development in most African countries has deteriorated, propelling rising poverty levels and increasing the danger of social upheaval, which harms social security and peace. The authors recommended developing strong institutional capabilities to ensure equitable resource distribution, promoting financial inclusion to lessen inequity, investing in human capital development with emphasis on women and youth, and reducing heavy dependency on grants and loans from the developed world.

To fully grasp the dynamics of poverty in these regions, Obayelu and Edewor (2022) Economic Inequality and Poverty Dynamics What does Literature tell us employed a comprehensive literature review methodology and found that economic inequality is a critical determinant of poverty transitions, though data limitations persist in developing countries. The study revealed that the relationship between inequality and poverty is complex and multifaceted, with inequality both exacerbating poverty and being sustained by it, while the directionality of the relationship remains a subject of debate with different studies presenting conflicting views. It also highlighted that the lack of longitudinal data makes it difficult to distinguish between individuals who are persistently poor and those who cycle in and out of poverty, limiting the ability to fully understand the nuanced relationship between inequality and poverty dynamics. The authors recommended more robust context-specific data collection methods, maintaining consistent survey designs across different periods, and targeted interventions like cash transfers and improved taxation policies to address inequality and alleviate poverty.

Applying these broader concepts to the specific context of Nigeria, Dauda et al. (2021) Poverty Inequality and Sustainable Development in Nigeria used stylized facts and a systematic review of related literature to find that high poverty and inequality prevent the attainment of sustainable development, as development has always been a problem in an unequal and poverty-driven society. The study revealed that about 44.2 percent and 47.7 percent of Nigeria's population were living on less than US$1.90 per day in 2018 and 2019 respectively, while the gender development index and Gini coefficient highlighted wide inequality gaps in education and income. It also noted that the recent outbreak of COVID-19 further aggravated the problems of poverty and inequality, making progress in the attainment of the SDGs more difficult and leading to youth protests against police brutality that later became apparent as a protest against hunger, poverty, and pervasive inequality. They recommended reducing poverty through investment in health and education with priority given to girl-child education, fighting corruption in public and private sectors, diversifying the economy, and promoting women's participation in politics and the labor market.

Further examining the Nigerian situation, Utuk (2022) The impact of poverty on sustainable economic development in Nigeria utilized an analytical and conceptual framework and found that poverty has a devastating impact on sustainable development, heavily affecting the agricultural sector and food security. The study revealed that the inability of poor people to harness resources that will improve their living conditions has dismantled their hopes of life, leading to diminishing returns in economic activities and poor adoption of modern

technology and innovative techniques in agriculture. It also highlighted that poverty-related problems like malnutrition, diseases, HIV/AIDS, unemployment, social insecurity, fraud, acute corruption, and trauma have become the order of the day, while acute poverty has resulted in high rates of illiteracy due to inadequate educational facilities and inexperienced personnel. The author recommended focusing on environmental policies, diversifying the economy away from oil to reduce overdependence on oil revenue, and improving agricultural production through the supply of improved seeds, machinery, fertilizer, and storage facilities to uplift the living standards of the masses.

Within the Nigerian rural landscape, gender disparities exacerbate the crisis as Aluko and Mbada (2021) Rural Poverty Among Women in Nigeria utilized secondary data analysis from the World Bank, ILO, and NBS to reveal that rural women suffer higher poverty due to lower literacy rates and engagement in low-income non-farm sectors. The study found that although both sexes were given equal opportunity for access to education, the literacy rate among females in rural areas is less compared to males due to dropout rates in upper secondary school, which subsequently affects their choice of employment and earning potential. It also revealed that the type of occupation of rural women correlates with poverty, as they are typically involved in subsistence farming, peasant trading, and low-scale artisanship, which are associated with low earnings and high poverty rates, and that cultural stereotypes and discrimination in the labor market further limit their economic opportunities. The authors recommended promoting informal education and training based on cultural beliefs, making the non-farm labor market more lucrative through monetary rewards and market access, and addressing inadequate access to quality education in rural areas to empower girls and actualize the SDGs.

Moreover, the socio-economic challenges of rural poverty are often exacerbated by security issues, as Sukare and Abdullahi (2025) Poverty and insecurity in Nigeria Implications for sustainable development used a descriptive research design and thematic analysis to find a cyclical interaction between poverty and insecurity driven by unemployment, inequality, corruption, and weak institutions. The study revealed that poverty increases vulnerability to insecurity as marginalized individuals seek alternative means of survival, while insecurity disrupts livelihoods, displaces populations, and destroys infrastructure, further entrenching poverty and undermining governance and socio-economic progress. It also highlighted that insecurity incidents such as Boko Haram insurgency, banditry, farmer-herder clashes, and kidnapping have caused thousands of deaths and displaced millions of people, particularly in the northern regions where poverty indices are highest. They recommended strengthening governance institutions, enhancing social protection programs, addressing youth unemployment, promoting inclusive economic growth, and implementing an integrated policy approach that coordinates poverty reduction and security strategies.

To address these multifaceted challenges, comprehensive eradication strategies are necessary, and Sylvester (2025) A Strategy for Poverty Eradication towards Sustainable Development utilized secondary research and thematic comparative data analysis to find that poverty alleviation is most effective when local needs and cultural dynamics guide policy formation. The study revealed that approaches emphasizing gender-sensitive economic empowerment, sustainable agriculture, and environmental conservation substantially enhance poverty reduction outcomes, while financial inclusion and entrepreneurial support enable marginalized populations to build resilience against economic shocks and environmental degradation. It also noted that despite documented successes, challenges persist in scaling localized interventions to a national level, highlighting the need for continuous policy adaptation and cross-sectoral collaboration to bridge immediate poverty relief with long-term sustainability goals. The study recommended enhancing community-based initiatives, integrating sustainable livelihoods into poverty reduction, strengthening financial inclusion through microfinance and enterprise development, and investigating the role of technology and innovation in poverty reduction.

Delving deeper into the practical policy components required for such strategies, Khan (2000) The causes of rural poverty are complex and multidimensional used a policy framework analysis and found that the rural poor require targeted support to build assets and secure land rights. The paper revealed that the causes of rural poverty involve culture, climate, gender, markets, and public policy, and that the rural poor are quite diverse in the problems they face and the possible solutions to these problems, with differences cutting across gender, ethnicity, age, location, and income source. It also highlighted that absolute poverty can be alleviated if economic growth occurs on a sustained basis and is neutral with respect to income distribution or reduces income inequality, and that the persistent poverty of a substantial portion of the population can dampen the prospects for economic

growth. The paper recommended implementing basic health care and literacy programs, providing targeted credit and flexible public works programs, establishing decentralized food initiatives, and involving the target groups in the design, implementation, monitoring, and accountability of infrastructure and services.

Ultimately, synthesizing these perspectives for a market-oriented society like Nigeria reveals that rural poverty profoundly impacts inequality through structural barriers, gender disparities, and insecurity, with policy biases often excluding the rural poor from the benefits of development. The literature collectively demonstrates that while economic growth is essential, it is insufficient on its own to reduce poverty if inequality remains high, as the benefits of growth are disproportionately captured by the wealthy, weakening its poverty-reducing power. For Nigeria to achieve inclusive development, it must move beyond fragmented short-term interventions and adopt a multidimensional policy approach that integrates inclusive agricultural development, targeted social protection, robust infrastructure investment, financial inclusion, and strong institutional governance. Furthermore, the literature emphasizes that policies must be tailored to local needs and cultural dynamics, ensuring that the rural poor, especially women and youth, are actively involved in the design and implementation of programs to create an enabling environment where they can actively participate in and benefit from economic growth. By addressing the root causes of rural poverty and inequality simultaneously, Nigeria can break the vicious cycle of deprivation and insecurity, paving the way for sustainable and equitable economic transformation.

METHODOLOGY

3.1 Research Design

The study adopts the ex-post facto research design, which is deemed fitting for the nature of this study. This design is further justified by the fact that the study investigates the impact of rural poverty on inequality in Nigeria over a span of 36 years (1990-2025), a period during which poverty levels, inequality dynamics, and agricultural policies have undergone significant transformation, thereby offering adequate variation for robust analysis. This design has been extensively utilized in comparable studies, including Dauda et al. (2021), Utuk (2022), and Sukare and Abdullahi (2025), which explored the relationship between poverty, inequality, and sustainable development using historical time series data.

3.2 Sources of Data

The study used annual time series data spanning the period from 1990 to 2025, obtained from reputable and authoritative sources. These include the National Bureau of Statistics (NBS) for rural poverty headcount ratio and Gini coefficient, the World Bank World Development Indicators (WDI) and Central Bank of Nigeria (CBN) Statistical Bulletin for rural population, literacy rate, and unemployment rate. The selection of these sources aligns with previous studies, including Dauda et al. (2021), Aluko and Mbada (2021), and Sukare and Abdullahi (2025), which depended on NBS and World Bank data for their analyses, and the data are regarded as reliable, consistent, and appropriate for econometric analysis.

3.3 Model Specification

The model for this study is formulated based on the theoretical framework provided by the Capability Approach, which posits that poverty should be understood as a deprivation of basic capabilities that prevent individuals from achieving the lives they have reason to value, and that inequalities in these dimensions perpetuate poverty across generations. The model draws from the works of Dauda et al. (2021), Ochichi et al. (2023), and Pertiwi (2024), with suitable modifications to align with the objectives of this study. The functional relationship between inequality and rural poverty is expressed as:

$$GINI = f(RPOV, RPOP, LIT, UNEMP) \quad (1)$$

However, the econometric form of the model, which incorporates the stochastic error term, is specified as:

$$GINI_t = \beta_0 + \beta_1 RPOV_t + \beta_3 RPOP_t + \beta_4 LIT_t + \beta_5 UNEMP_t + \mu_t \quad (2)$$

Where:

$GINI_t$ = Gini coefficient (measure of income inequality) at time t

$RPOV_t$ = Rural poverty headcount ratio (% of rural population below poverty line) at time t

$RPOP_t$ = Rural population (% of total population) at time t

LITt = Literacy rate (% of population aged 15 and above) at time t

$UNEMP_t$ = Unemployment rate (%) at time t

B_0 = Constant term (intercept)

B_1, β_2, β_3, β_4, β_5 = Coefficients of the independent variables

μ_t = Stochastic error term at time t

3.4 Estimation Technique

The study employs rigorous estimation techniques, commencing with descriptive statistics (mean, median, range, standard deviation, skewness, kurtosis, and Jarque-Bera normality test) to summarize the characteristics of the data. Subsequently, unit root tests are conducted using the Augmented Dickey-Fuller and Phillips-Perron tests to ascertain stationarity. The stationarity results confirm the order of integration and provide justification for the adoption of the ARDL model, which is appropriate for variables integrated of order I(0), I(1), or a combination of both. The study also include a range of post estimation test to ensure a robust estimation results.

3.5 Autoregressive Distributed Lag (ARDL) Model Specification

The model is specification is shown below;

$$\Delta Ln\mathrm{GINI}_t = \beta_0 + \beta_1 Ln\mathrm{GINI}_{t-1} + \beta_2 Ln\mathrm{RPOV}_{t-1} + \beta_3 \mathrm{AGDP}_{t-1} + \beta_4 Ln\mathrm{RPOP}_{t-1} + \beta_5 Ln\mathrm{LIT}_{t-1} + \beta_6 Ln\mathrm{UNEMP}_{t-1} + \sum_{i=0}^{p} \beta_7 \Delta\mathrm{GINI}_{t-1} + \sum_{i=o}^{P} \beta_8 \Delta\mathrm{RPOV}_{t-1} + \sum_{i=0}^{p} \beta_9 \Delta\mathrm{AGDP}_{t-1} + \sum_{i=0}^{p} \beta_{11} \Delta\mathrm{RPOP}_{t-1} + \sum_{i=0}^{p} \beta_{10} \Delta\mathrm{LIT}_{t-1} + \sum_{i=0}^{p} \beta_{11} \Delta\mathrm{UNEMP}_{t-1} + ECM + \mu_t \quad (3)$$

Where the variables remain as previously described, Δ stands for the difference (or change) in respective variables. To satisfy the long-run relationship, ARDIL bound test requires a null hypothesis for no co-integration *H_0:* $\square_{\square} = \square_{\square} = \square_{\square} = \square_{\square} =_{\square} 0$; for equations

RESULTS AND DISCUSSION

4.1 Preliminary Results

The results on the descriptive statistics for the variables used in this study is presented in table 1

Table 1: Descriptive Statistics of the Variables

Statistics	GINI	LIT	RPOP	RPOV	UNEMP
Mean	39.93333	60.54500	50.48139	59.53333	4.098333
Median	35.90000	60.05500	50.47500	56.60000	3.960000
Maximum	51.90000	70.41000	64.81000	75.50000	5.710000
Minimum	33.90000	54.77000	36.22000	52.80000	3.050000
Std. Dev.	6.379163	5.245353	8.618653	8.817515	0.587754
Skewness	0.933741	0.377010	0.003275	1.204487	0.777391
Kurtosis	2.453149	1.778891	1.795105	2.653395	3.938862
Jarque-Bera	5.679800	3.089478	2.177721	8.884934	4.948213

Probability	0.058432	0.213368	0.336600	0.011767	0.084238
Sum	1437.600	2179.620	1817.330	2143.200	147.5400
Sum Sq. Dev.	1424.280	962.9805	2599.841	2721.200	12.09090
Observations	36	36	36	36	36

Source: Author's computation

Table 1 summarises the descriptive statistics for the five variables used in the analysis, based on 36 observations. The mean GINI is 39.93 and its median is 35.90, with values ranging from 33.90 to 51.90 and a standard deviation of 6.38. Its skewness is 0.934 and kurtosis is 2.453; the Jarque-Bera probability of 0.0584 is only marginally above the 5% threshold, so normality is not rejected but is close to the boundary. LIT has a mean of 60.55, a median of 60.06, a range of 54.77 to 70.41, and a standard deviation of 5.25; with skewness of 0.377, kurtosis of 1.779, and a Jarque-Bera probability of 0.2134, its distribution is consistent with normality. RPOP has a mean of 50.48 and a median of 50.48, ranging from 36.22 to 64.81, with a standard deviation of 8.62; skewness is 0.003, kurtosis is 1.795, and the Jarque-Bera probability is 0.3366, indicating approximate normality. RPOV has a mean of 59.53, a median of 56.60, a range of 52.80 to 75.50, and a standard deviation of 8.82; its skewness of 1.204, kurtosis of 2.653, and Jarque-Bera probability of 0.0118 indicate a right-skewed and non-normal distribution. Finally, UNEMP has a mean of 4.10, a median of 3.96, a range of 3.05 to 5.71, and a standard deviation of 0.588; skewness is 0.777, kurtosis is 3.939, and the Jarque-Bera probability is 0.0842, suggesting approximate normality at the 5% level, although the evidence is relatively weak. Overall, LIT and RPOP are clearly approximately normal, GINI and UNEMP are marginally normal.

4.2 Unit Root Test Result

Table 2 presents the Augmented Dickey-Fuller (ADF) and Phillips–Perron (PP) unit root test results for the variables under examination. The optimal lag length was selected automatically using the Schwarz Information Criterion (SIC). The findings reveal a mixed order of integration among the variables, providing justification for examining the possibility of a long-run relationship.

Table 2: Summary of unit root test results

Series	ADF Level	ADF First Diff.	ADF I(d)	PP Level	PP First Diff.	PP I(d)
GINI	---	-5.755255* (C)	I(1)	---	---	---
LIT	-2.731719* (N)	---	I(1)	-2.489656** (C)	---	I(1)
RPOP	-1.882650*** (C)	---	I(0)	-16.40517* (N)	---	I(0)
RPOV	---	-5.772499* (C)	I(1)	---	-5.772470* (C)	I(0)
UNEMP	-3.307841** (C)	---	I(0)	-3.162076** (C)	---	I(1)

Note: Values are presented as provided. Missing values are indicated by (---).

Source: Author's computation, Note: I(d) denotes the order of integration; C = test equation with constant; N = test equation with none; *, **, *** indicate significance at 1%, 5%, and 10% levels, respectively.

Table 2 reports the t-statistics for testing the null hypothesis that each variable contains a unit root. The results show that real population (RPOP) is stationary at level under both the ADF test (with no deterministic terms, at the 10% level) and the PP test (with no deterministic terms, at the 1% level), and is therefore integrated of order zero, I(0). Unemployment (UNEMP) is stationary at level under the ADF test with a constant at the 5% level, I(0); however, under the PP test it only becomes stationary after first differencing at the 5% level, I(1), indicating some ambiguity across the two tests. Literacy (LIT) is not stationary at level under either test but becomes stationary at first difference under the ADF test with no deterministic terms at the 1% level and under the PP test with no deterministic terms at the 5% level and is therefore I(1). Poverty (RPOV) is likewise stationary only at first difference under both the ADF and PP tests with a constant at the 1% level, I(1).

Regarding inequality (GINI), the variable is not stationary at level under the ADF test, and it also fails to achieve stationarity at first difference under the ADF framework. However, it is stationary at first difference under the

Phillips-Perron test statistic with a constant at the 1% level, and is therefore treated as I(1) based on the PP results. Taken together, the variables exhibit a mixture of I(0) and I(1) orders of integration, with none integrated of order two, I(2). This mixed order of integration provides a strong basis for applying the ARDL bounds testing approach to cointegration.

4.3 Bound Test Results

Following the establishment of the unit root properties of the variables, the ARDL bounds testing procedure proposed by Pesaran et al. (2001) was applied to determine whether the series share a common long-run equilibrium relationship. The decision rule compares the computed F-statistic with the asymptotic lower bound I(0) and upper bound I(1) critical values. Where the F-statistic exceeds the upper bound, the null hypothesis of no levels relationship is rejected; where it falls below the lower bound, the null is not rejected; and where it lies between the two bounds, the result is inconclusive.

Table 3: Bound F-Test for Cointegration

Test Statistic	Value	Significance	I(0)	I(1)
F-statistic	4.59366	10%	2.20	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Author's computation, Note: k denotes the number of regressors.

The bounds test yields a computed F-statistic of 4.59366 for the model. The F-statistic is greater than both the lower and upper critical bounds at the 10%, 5%, and 2.5% significance levels. More importantly, it also exceeds the 1% upper bound of 4.37, which is the most stringent threshold reported. Consequently, the null hypothesis of no long-run relationship is rejected at all conventional significance levels, and the alternative hypothesis of cointegration is accepted. The result therefore provides robust evidence of a long-run equilibrium relationship among the variables in the model. This confirms that the series move together over the long run and that both short-run and long-run dynamics can be validly examined within the ARDL framework. The unambiguous rejection of the null at the 1% level strengthens the reliability of the cointegration finding and supports the subsequent estimation of error-correction and long-run models.

4.4 Long Run Impact of the Determinants on Income Inequality

The table below presents the long-run coefficients of the explanatory variables on income inequality.

Table 4: Estimated Long Run Coefficients Using ARDL Approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LLIT	1.919695	0.536354	3.579159	0.0034
LRPOP	10.64846	2.789217	3.817722	0.0021
LRPOV	1.169537	0.406601	2.876375	0.0130
LUNEMP	-0.178252	0.237036	-0.752003	0.4654
C	-59.72149	14.71258	-4.059212	0.0014

Source: Author's computation

Table 4 shows that literacy (LLIT) exerts a positive and statistically significant long-run effect, with a coefficient of 1.919695 (t = 3.579159; p = 0.0034), significant at the 1% level. Holding other factors constant, a one percent rise in literacy raises inequality by roughly 1.92 percent in the long run. The positive sign suggests that where access to education is unevenly distributed, the returns to schooling may accrue disproportionately to already advantaged groups. Rural population (LRPOP) is likewise positive and significant at the 1% level, with a coefficient of 10.64846 (t = 3.817722; p = 0.0021), implying that a one percent increase raises inequality by

about 10.65 percent in the long run plausibly reflecting the concentration of deprivation and limited opportunity in rural areas. Poverty (LRPOV) is also positive and significant at the 5% level (coefficient = 1.169537; t = 2.876375; p = 0.0130), indicating that a one percent increase in poverty widens inequality by approximately 1.17 percent. By contrast, unemployment (LUNEMP) carries a negative but statistically insignificant coefficient (-0.178252; p = 0.4654), implying no discernible long-run effect. The constant term is negative and highly significant (-59.72149; p = 0.0014), indicating an autonomous component of inequality unexplained by the model's regressors.

4.5 Short Run Impact of the Determinants on Income Inequality

Table 5: Short Run Analysis of the Determinants on Income Inequality

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LLIT)	0.385769	0.211239	1.826222	0.0909
D(LLIT(-1))	-0.831232	0.260381	-3.192368	0.0071
D(LLIT(-2))	-0.289709	0.302814	-0.956722	0.3562
D(LLIT(-3))	-2.104880	0.300748	-6.998826	0.0000
D(LRPOP)	141.3329	55.47983	2.547465	0.0243
D(LRPOP(-1))	233.1335	70.47965	3.307813	0.0057
D(LRPOP(-2))	-720.9136	75.75006	-9.517005	0.0000
D(LRPOV)	0.108519	0.082165	1.320742	0.2094
D(LRPOV(-1))	-0.602284	0.111333	-5.409743	0.0001
D(LRPOV(-2))	0.006780	0.085430	0.079361	0.9380
D(LRPOV(-3))	-0.295820	0.084722	-3.491658	0.0040
D(LUNEMP)	0.663768	0.094822	7.000129	0.0000
D(LUNEMP(-1))	0.237979	0.086009	2.766918	0.0160
CointEq(-1)*	-0.579484	0.052628	-11.01089	0.0000

Source: Author's computation

The error correction term is negative and highly significant (-0.579484; t = -11.01089; p = 0.0000), confirming cointegration among the variables. Its magnitude implies that roughly 57.95 percent of any deviation from long-run equilibrium is corrected within one year, indicating a relatively fast speed of adjustment.

4.6 Diagnostic Test Results for the Estimated Model

To assess the adequacy of the estimated model, post-estimation diagnostic checks were conducted on the residuals. The tests reported in Table 6.

Table 6: Result of the Diagnostic Test

Test Statistics	Statistic Value	Probability
Breusch-Godfrey Serial Correlation LM Test	0.001576	0.9483
Breusch-Pagan-Godfrey: Heteroskedasticity	0.661204	0.6555
Normality test Cusum test		0.3352 Stable
Cusum of square		Stable

Source: Author's computation.

The diagnostic checks indicate that the estimated model is statistically sound. The Breusch-Godfrey serial correlation test confirms that the residuals are free from serial dependence, while the Breusch-Pagan-Godfrey heteroskedasticity test shows the residuals to be homoscedastic. The Jarque-Bera statistic likewise indicates that the residuals are normally distributed. In addition, both the CUSUM and CUSUM-of-squares plots remain within

their critical bounds, providing evidence that the parameters are stable over the sample period. Taken together, these results suggest the model is well specified and its estimates reliable for inference and forecasting.

DISCUSSION OF FINDINGS

The result shows that rural poverty impose a positive and statistically significant impact on income inequality in Nigeria, aligning with Dauda et al. (2021) and Ochichi et al. (2023), who reported that high poverty levels deepen inequality by limiting the poor's access to opportunities. Similarly, rural population share has a positive and significant impact on inequality, consistent with Rosida (2018) and Khan (2000), who argued that rural populations face structural disadvantages including inadequate infrastructure and policy biases favoring urban development. These findings suggest that rural deprivation widens the gap between rich and poor.

Turning to literacy, the result indicates a positive and significant impact on income inequality, which is counterintuitive since education is traditionally viewed as an equalizer. This aligns with Aluko and Mbada (2021), who observed that where access to education is unevenly distributed, returns to schooling accrue disproportionately to already advantaged groups. It also resonates with Khan (2000), who argued that education benefits depend on equitable distribution and quality, leaving the rural poor excluded.

Finally, unemployment has a negative but statistically not significant impact on inequality, implying no discernible effect in the Nigerian context, possibly because the informal sector absorbs many unemployed persons. This contrasts with Sukare and Abdullahi (2025), who argued that unemployment and inequality are deeply intertwined. The insignificance suggests that inequality is driven more by structural factors such as rural poverty and unequal access to education than by unemployment per se.

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study concludes that rural poverty and its associated structural factors play a critical role in shaping income inequality in Nigeria, though the impact varies depending on the variable examined. While rural poverty and rural population share exacerbate inequality, literacy and unemployment exhibit differing effects, with the former widening inequality due to skewed access to education.

5.2 Recommendations

Based on the findings and conclusions of this study, the following recommendations are made:

i. Rural Poverty and Income Inequality: Government should intensify targeted poverty alleviation programmes reaching rural households through conditional cash transfers, microcredit for smallholder farmers, and rural infrastructure investment, ensuring transparency in fund disbursement.
ii. Rural Population and Income Inequality: Government should promote balanced territorial development by decentralizing public investment to prioritize rural healthcare, education, and market infrastructure, thereby creating economic opportunities outside urban centers.
iii. Literacy and Income Inequality: Government should ensure equitable access to quality education in rural areas through increased funding for rural schools, recruitment of qualified teachers, scholarships for disadvantaged children, and prioritization of girl-child education alongside adult literacy programmes.
iv. Unemployment and Income Inequality: Government should strengthen labour market policies to expand formal employment in rural areas by supporting small and medium-sized enterprises, promoting agricultural value addition, and providing vocational training for the rural workforce.

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