NIGERIAN JOURNAL OF ADMINISTRATION AND INNOVATIVE RESEARCH (NJAIR)
Volume 1, Number 2 | December 2025 | PRINT ISSN 3141-3900 | EISSN 3141-3919
Available on: https://njaires.net/

National Environmental Policy and Public-Private Partnerships for Sustainable Natural Resource Management and Poverty Alleviation in Benue State

Justina Yator Sorkaa, PhD & Susan Tor, PhD
Department of Public Administration, Rev. Fr. Moses Orshio Adasu University, Makurdi-Nigeria

Keywords:
Environment, Policy, Poverty, Resource Management Sustainability

Abstract: This study examined the impact of Nigeria's National Environmental Policy on promoting sustainable natural resource management and poverty alleviation through public-private partnerships in Benue State. The research identifies significant community support and positive outcomes from initiatives like the Community Revolving Fund, which fostered environmental awareness, employment, and microenterprise development. Ecological modernization theory provided a framework of analysis for the study. This emerging theory was a response to the failures of traditional environmental policy, which focused on regulatory approaches to environmental protection. Methodologically, the study employed focus group discussions, project evaluations, and stakeholder interviews provided comprehensive insights into partnership structures, outcomes, and barriers. The findings suggest that while community-based models demonstrate promise, scaling effective PPPs requires strengthening institutional capacity, establishing dedicated financial mechanisms, and promoting social inclusion. The study concluded that a coordinated, inclusive approach aligned with policy, community needs, and environmental goals is essential for long-term sustainability. The study recommends enhancing government funding and technical expertise, developing green financing options, standardizing legal frameworks, and addressing land tenure and social participation issues to improve resource management and rural development in Nigeria.

Introduction

Environmental sustainability and poverty alleviation constitute two of the most pressing developmental challenges confronting Nigeria, particularly within regions heavily reliant on natural resources. The sustainable management of these resources is fundamental not only for ecological preservation but also for ensuring economic stability and social wellbeing (Akinbami, 2001). In recognition of these imperatives, the Nigerian government established the National Environmental Policy (NEP) to provide a comprehensive framework for environmental management, conservation, and sustainable development (Federal Republic of Nigeria, 2012). The policy emphasises the importance of multi-stakeholder engagement, asserting that effective natural resource management necessitates collaborative efforts among government agencies, private sector actors, civil society organisations, and local communities.

In recent years, Public-Private Partnerships (PPPs) have gained prominence as a strategic approach to address complex environmental and developmental challenges. PPPs facilitate mobilisation of resources, technological innovation, and capacity building by harnessing the strengths of both sectors (World Bank, 2017). The policy environment in Nigeria, including the NEP, actively advocates for the promotion of PPPs as mechanisms to enhance environmental governance and sustainable resource utilisation (Federal Ministry of Environment, 2015). These partnerships are particularly significant in regions such as Benue State due to its extensive agricultural productivity and reliance on natural resources such as land, water, and biodiversity.

However, despite the strategic emphasis on PPPs within national policy frameworks, there remains limited empirical evidence concerning their actual implementation, effectiveness, and impact within Benue State. The environmental challenges faced by the state soil erosion, deforestation, water scarcity, and land degradation pose substantial threats to both ecological integrity and the livelihoods of local communities (Ojo & Akinbami, 2018). Given the critical role of natural resource management in alleviating poverty, it is vital to evaluate how the NEP has influenced the formation, operation, and outcomes of public-private collaborations in Benue.

This research aims to analyse the extent to which the NEP has fostered and shaped PPP initiatives geared towards sustainable natural resource management and poverty reduction in Benue State. By examining the policy environment, partnership structures, resource allocation, and developmental outcomes, this study seeks to provide a comprehensive understanding of the successes, challenges, and gaps in current practices.

Conceptual Review

Public-Private Partnerships (PPPs): are collaborative arrangements between government entities and private sector organisations aimed at delivering public services or infrastructure projects (Hodge & Greve, 2007). Rooted in the broader framework of governance and development theories, PPPs are often viewed as mechanisms to leverage private sector efficiency, innovation, and capital to address public sector deficiencies (Roehrich et al., 2014). The conceptualisation of PPPs varies across disciplines, but generally, they are characterised by shared risks, responsibilities, and resources, with the aim of achieving mutually beneficial outcomes (Akintoye & Beck, 2009).

The work by Akintoye and Beck (2009) offers a detailed exploration of risk management and opportunity identification in PPP projects, providing practical frameworks grounded in both theory and real-world application. Its strength lies in synthesising operational insights relevant to practitioners, particularly within the UK context. However, its focus on the UK limits its applicability in different institutional and regulatory environments, and it offers limited discussion on broader socio-political and environmental sustainability issues. Bovaird and Loeffler (2012) critically examine the social policy implications of PPPs in the UK, emphasizing stakeholder perspectives and social equity concerns. Their analysis advances understanding beyond purely economic considerations, highlighting the importance of social dimensions in PPP success. Nonetheless, their context-specific focus constrains the generalisability of their findings, and the work provides limited empirical evidence on the long-term social and environmental outcomes of PPP initiatives.

Hodge and Greve's (2007) extensive performance review synthesises findings from a broad range of international PPP case studies, identifying key success factors and challenges. This benchmarking approach offers valuable insights for policymakers and practitioners seeking to evaluate and improve PPP performance. However, the broad scope of the review may oversimplify sector-specific or regional nuances, and it tends to focus on performance metrics without sufficiently exploring environmental or social sustainability impacts. Klijn and Teisman (2003) contribute a nuanced analysis of institutional and strategic factors influencing PPP success, emphasising governance structures and stakeholder dynamics. Their focus on Dutch case studies provides deep insights into the complexity of PPP implementation. However, the limited geographical scope raises questions about the generalisability of their findings, and the analysis under-represents the influence of external political or economic shocks on PPP outcomes.

These works collectively offer a rich understanding of PPPs, combining theoretical insights, empirical case studies, and policy guidelines. They highlight strengths such as practical frameworks, stakeholder considerations, and performance benchmarks. However, notable gaps remain, including the limited exploration of sector-specific or longitudinal impacts, environmental considerations, and the challenges faced in developing country contexts.

Sustainable Natural Resource Management

The body of literature on sustainable natural resource management (NRM) emphasises the importance of balancing ecological integrity, economic viability, and social equity. A foundational work by Meadows et al. (1992) introduces the concept of systems thinking, highlighting the interconnectedness of ecological and human systems. Their approach underscores the necessity of viewing natural resources as part of complex, adaptive systems, which is a significant strength in promoting holistic management strategies. However, their framework remains somewhat abstract, and translating these principles into concrete policy actions can be challenging.

McShane et al. (2011) focus on the principles and practices that underpin sustainable forest management. Their work provides comprehensive guidelines for maintaining forest health, biodiversity, and local livelihoods. The strength of their contribution lies in integrating ecological science with community-based approaches, promoting participatory management. Nonetheless, their case studies predominantly originate from developed countries, which may limit applicability in developing regions facing different socio-economic and institutional contexts.

The literature also emphasises the importance of stakeholder engagement, as highlighted by Reed (2008), who explores participatory approaches in natural resource management. This work advocates for inclusive decision-making processes that incorporate local knowledge and foster community ownership. Its strength lies in recognising the social dimensions of sustainability, which are often overlooked. However, implementing participatory processes can be complex and time-consuming, and the literature offers limited guidance on overcoming practical challenges in diverse cultural settings.

In contrast, the work by Liu et al. (2007)

employs a landscape-scale perspective, emphasising integrated management of multiple resources across spatial and jurisdictional boundaries. This approach is particularly valuable in addressing issues like watershed management and ecosystem service provision. Its strength is in promoting cross-scale coordination, yet it often faces practical limitations related to data availability, institutional coordination, and policy fragmentation.

The literature on sustainable natural resource management provides a rich array of frameworks, principles, and case studies that emphasise ecological integrity, stakeholder participation, and market-based incentives. Its strengths lie in promoting holistic, participatory, and cross-scale approaches. Nonetheless, significant gaps remain, including the challenges of implementation in diverse socio-economic contexts, the need for more empirical evidence on long-term outcomes, and the integration of climate change resilience into management practices.

Poverty Alleviation

Many scholars agree that poverty is a multifaceted issue requiring integrated solutions that address economic, social, and political dimensions. For instance, Sen (1999) emphasises the importance of enhancing individual capabilities and freedoms as a means to combat poverty, shifting the focus from income-based measures to broader human development indicators. His work is highly influential, providing a comprehensive framework for understanding poverty beyond material deprivation. However, critics argue that Sen's approach, while theoretically robust, offers limited practical guidance on implementation strategies, especially in low-resource settings.

Another significant strand of the literature examines targeted social protection programs, such as cash transfers, microfinance, and social safety nets. Banerjee and Duflo (2011) highlight the effectiveness of these interventions in improving household income and health outcomes, supported by rigorous randomized controlled trials. Their work demonstrates that well-designed programs can significantly reduce poverty in the short term. Nonetheless, critics point out that many of these programmes face sustainability challenges, and their long-term impacts on poverty reduction are less conclusive. Additionally, some studies raise concerns about the potential for dependency and reduced incentives for employment among beneficiaries.

Community-based and participatory approaches also feature prominently in poverty alleviation literature. Works by Chambers (1983) and Narayan et al. (2000) emphasize empowering local communities and involving the poor in decision-making processes. These approaches are praised for fostering local ownership and ensuring that interventions are culturally appropriate. However, critics note that community-driven initiatives may struggle with scalability and consistency, and they often depend heavily on local leadership and social cohesion, which can vary significantly across contexts.

Despite the extensive body of research, gaps remain in understanding the long-term impacts of poverty alleviation initiatives, particularly in fragile and conflict-affected settings. There is also limited empirical evidence on the effectiveness of integrated multidimensional approaches that combine economic, social, and environmental interventions. Furthermore, criticisms of the dominant paradigms point to the need for greater emphasis on addressing structural inequalities, power relations, and environmental sustainability in poverty alleviation strategies.

The interconnectedness of PPPs, sustainable natural resource management (NRM), and poverty alleviation lies in their shared goal of promoting sustainable development through collaboration, resource efficiency, and social equity. PPPs act as vital mechanisms to leverage private sector expertise, innovation, and investment in managing resources and delivering services that can directly benefit impoverished communities. When designed effectively, PPPs can support sustainable resource use, foster community participation, and address environmental concerns, thereby contributing to poverty reduction and long-term resilience.

Furthermore, sustainable natural resource management is essential for maintaining ecological health and supporting livelihoods, especially in resource-dependent communities. When integrated with PPP frameworks, resource management initiatives can enhance environmental sustainability while creating economic opportunities, improving infrastructure, and ensuring equitable access to vital ecosystem services. However, realizing these benefits requires careful governance, stakeholder engagement, and context-specific strategies to balance economic, social, and environmental objectives ultimately fostering inclusive growth and enduring poverty alleviation.

Theoretical Framework

The study is anchored on the theory of Ecological Modernization. The Theory of Ecological Modernization (EM) originated in the 1980s in Europe, particularly in the Netherlands and Germany. This emerging theory was a response to the failures of traditional environmental policy, which focused on regulatory approaches to environmental protection. The initial proponents of the EM theory were researchers such as Hubert Weidner, Arne Kvernbekk, and Ulrich Beck, who sought to explore innovative solutions to environmental challenges.

The proponents of the Environmental Management (EM) theory, including researchers and policymakers, maintain that environmental challenges can be addressed through technological innovation, efficient resource management, and the adoption of sustainable practices. According to World Business Council for Sustainable Development (2020), organizations can significantly contribute to sustainable development by integrating environmentally friendly practices and investing in sustainable technologies. Similarly, Michael Porter and Claas van der Linde (1995) argued that environmental sustainability and economic growth are not mutually exclusive, as firms can improve competitiveness and organizational performance through innovation-driven environmental practices. The theory therefore emphasizes that the combined influence of technology, market mechanisms, and sustainable organizational strategies can help societies reduce environmental degradation while sustaining growth and development.

Over the years, the EM theory has undergone significant development and refinement. Several researchers have examined different dimensions of the Environmental Management (EM) theory, particularly its application across various sectors and countries, its connection with other environmental and sustainability theories, as well as its limitations and criticisms. According to Bansal (2018), the growing relevance of environmental management practices in organizations has been shaped by globalization, increased concern for sustainability, and rising awareness of environmental problems such as climate change and biodiversity loss. Similarly, Hart (1995) argued that environmental management theories evolved as organizations increasingly recognized the need to balance economic growth with environmental protection and sustainable development.

The EM theory is based on several key assumptions, including the idea that technological innovation can solve environmental problems, that market forces can be harnessed to promote sustainability, and that business can play a key role in promoting sustainable development. The theory also assumes that environmental problems can be decoupled from economic growth and that sustainable development can be achieved through a combination of technological innovation and market-based solutions.

Despite its popularity and influence, the EM theory has faced significant criticisms from researchers and policymakers. Some critics argue that the theory overemphasizes the role of technology and market forces in solving environmental problems, while underemphasizing the need for regulatory approaches and collective action. Others argue that the EM theory is based on unrealistic assumptions about the ability of companies to prioritize sustainability and that it ignores the role of power and inequality in shaping environmental outcomes. Additionally, some critics have raised concerns about the potential for "greenwashing" and the use of the EM theory as a marketing tool to promote unsustainable practices.

Despite its criticisms, the EM theory remains relevant in today's world. The theory has influenced the development of policies and practices aimed at promoting sustainable development, including the adoption of sustainable technologies, the implementation of environmental management systems, and the promotion of corporate social responsibility. The EM theory has also shaped the way businesses and governments approach environmental challenges, highlighting the need for innovation and the importance of market-based solutions. As the world continues to grapple with environmental challenges such as climate change and biodiversity loss, the EM theory remains a relevant and influential framework for understanding and addressing these challenges.

Ecological Modernization is highly relevant to the topic of National Environmental Policy and Public-Private Partnerships (PPPs) for Sustainable Natural Resource Management and Poverty Alleviation in Benue State, as it emphasises the role of technological innovation, market mechanisms, and stakeholder collaboration in achieving sustainability. EM supports integrating environmental concerns into economic development, advocating for private sector involvement through PPPs to promote sustainable resource use and poverty reduction. Its focus on societal change, capacity-building, and inclusive partnerships aligns with the need for effective, multi-stakeholder efforts to balance conservation and development in Benue State, making it a valuable framework for fostering sustainable growth and environmental protection simultaneously.

Methodology

This study employed a descriptive survey design, which involved studying a representative sample of the entire population to gather data on specific problems, conditions, attitudes, and beliefs related to the impact of NNEP on poverty reduction in Benue State. The method was suitable because many respondents were not literate, and data collection was conducted through focus group discussions with beneficiaries involved in programmes like the Direct Town Cleaning and Community Cash Revolving Fund across selected local governments. The population comprised 1,154 beneficiaries from these programmes and a sample size of 297 was obtained using Yamane's formula, the sample was proportionally allocated across the different local government areas. Furthermore, the sample was divided into focus groups consisting of at least eight participants each to facilitate effective discussions.

Data was collected both primary sources, mainly from focus group interviews and secondary sources such as government reports, journals, and academic works. The research instruments were validated by experts and supervisors to ensure their validity. Thematic analysis was used to analyse the qualitative data obtained from the interviews, while statistical tools such as descriptive statistics and charts were used to present and interpret the findings, thereby providing a comprehensive understanding of the programmes' impact on poverty alleviation and environmental management at the grassroots level in Benue State.

Data Presentation and Analysis

Focus Group Discussions (FGDs) were conducted across the sixteen communities; revealed a strong convergence of opinion on the pivotal role played by the Community Revolving Fund (CRF) programme in fostering meaningful public-private sector partnerships geared towards sustainable natural resource management and poverty reduction. Collectively, the participants across these locations affirmed that the CRF initiative was not only well implemented but also strategically aligned with the objectives of environmental sustainability and grassroots economic empowerment. Through this programme, the government successfully created a platform that mobilized rural cooperatives as agents of development, facilitating access to capital while embedding ecological awareness within local livelihoods. This aligns with the assertions of Agrawal and Gibson (1999), who argued that successful natural resource governance often depends on local institutions empowered to engage with broader policy frameworks.

Participants in the FGDs collectively acknowledged that the CRF initiative effectively bridged the gap between public intent and private initiative. By channelling resources through community associations, the government facilitated a model in which local actors assumed responsibility for both economic productivity and environmental conservation: "the government has created jobs for us. And we in-turn creating jobs for others through granting them loans from our purse of association to do farming or business" (New Bridge Women Rice Sellers FGD, 2025). This echoes findings by Ostrom (1990), who emphasized the importance of community-based institutions in managing common-pool resources sustainably. Moreover, as the chart below illustrates, over 85% of the respondents agreed that such partnerships directly contributed to job creation, financial inclusion, and adoption of eco-friendly practices in the cooperatives.

A recurring theme in the discussions was the training provided to groups on environmentally sustainable farming and business practices. Participants from all sixteen locations consistently highlighted how the programme trained beneficiaries on the sustainable use of natural resources, these included the shift from bush burning, deforestation and chemical fertilizers to organic soil enrichment techniques: " we were trained to protect the environment that; we should stop burning the bush, we should stop cutting down trees, we should learn how to use organic fertilizer to improve soil health than the inorganic fertilizers which are chemically synthesized" (Wantorbem Wealthy Widows, 2025). The impact of these practices was evident, with participants reporting improved soil quality and better agricultural yields. This is consistent with empirical findings by Pretty (2008), who highlighted the ecological and economic benefits of organic agriculture in rural development. Furthermore, tree planting, waste control, and home sanitation were identified as emerging cultural norms among participants, signifying a transformation in environmental consciousness. Such behavioural changes are indicative of what Leach, Mearns, and Scoones (1999) term as "environmental entitlements," where communities enhance their adaptive capacities through policy-supported knowledge systems.

Equally important is the way CRF beneficiaries became secondary agents of change by redistributing loans within their associations, thereby creating a ripple effect of microenterprise and cooperative-led investment "the government has created jobs for us. And we in-turn creating jobs for others through granting them loans from our association purse to go into farming or businesses" (Kentos multipurpose cooperative FGD, 2025). This self-sustaining model illustrates a dynamic form of public-private partnership that fosters both autonomy and accountability within local institutions (World Bank, 2013). It affirms the principle that poverty alleviation strategies are most effective when communities not only benefit from public investment but are also empowered to manage and multiply those benefits independently.

In view of the above, the FGDs reinforce the view that the integration of environmental sustainability with livelihood support under government facilitation has yielded measurable gains. The partnership approach adopted by the government in Benue State aligns with global best practices for community-based natural resource management. These practices should be further institutionalized, scaled, and monitored to ensure continued effectiveness in both environmental preservation and poverty eradication. By empowering communities economically and equipping them with knowledge for responsible environmental management, the CRF initiative bridged the often-separated domains of development and conservation. These findings reinforce the notion that integrated policy implementation anchored on collaboration between state agencies and community institutions can yield synergistic benefits in rural development. Thus, the CRF programme exemplifies a successful model of localized public-private sector partnership, with the potential for replication and scaling in other regions facing similar developmental and environmental challenges.

NIGERIAN JOURNAL OF ADMINISTRATION AND INNOVATIVE RESEARCH (NJAIR)
Volume 1, Number 2 | December 2025 | PRINT ISSN 3141-3900 | EISSN 3141-3919
Available on: https://njaires.net/

Figure 1: Perceived Impact of Government Public Partnerships in Natural Resource Management

Thematic Areas of Government Encouragement	Percentage Agreement
Job creation	90
Loan Disbursement by Association	88
Environmental Training	85
Increased Environmental Awareness	82
Use of Organic Fertilizers	80
Tree Planting & Sanitation	75

Source: Field work, 2025

The table above illustrates the collective level of agreement among FGD participants regarding how the government, through the CRF programme, encouraged public-private partnerships in sustainable natural resource management for poverty reduction.

Fieldwork conducted in Benue State identified eleven active or recently completed Public-Private Partnership (PPP)-related initiatives across major natural resource sectors, forming the basis for the study's analysis. These included agro-processing partnerships, irrigation schemes, community forestry arrangements, ecotourism ventures, and solid minerals exploration projects. However, only the irrigation and community forestry initiatives had formal agreements containing environmental protection and community benefit-sharing provisions, indicating weak institutional and contractual frameworks in most partnerships. Findings further revealed mixed outcomes across the projects. While the irrigation schemes improved dry-season agricultural production and reduced food insecurity, concerns were raised regarding poor stakeholder consultation, limited employment generation, and possible environmental impacts associated with water use. In contrast, the community forestry initiative recorded more positive outcomes, including improved forest restoration, increased income opportunities, and enhanced community participation in environmental monitoring.

The study also identified several barriers affecting the development and implementation of National Environmental Policy (NEP)-driven PPPs in Benue State. Major institutional challenges included inadequate funding, weak technical capacity, and poor inter-ministerial coordination among relevant government agencies. The Benue State Ministry of Environment was found to be largely reactive, with limited capacity for effective project planning, monitoring, and contract management. Financial constraints such as; limited access to co-financing opportunities and absence of specialized environmental financing mechanisms further discouraged private sector participation in long-term environmental partnerships. At the community level, insecure land tenure systems and limited involvement of women and youth in resource governance weakened inclusive participation and sustainability of the partnerships.

Summary of Major Findings

i. The study found strong community support for the Community Revolving Fund (CRF) programme as a mechanism for promoting sustainable natural resource management and poverty reduction through rural cooperative development.

ii. The CRF programme contributed to increased employment opportunities, improved financial inclusion, and adoption of environmentally friendly practices such as tree planting and organic farming, leading to both economic and ecological benefits.

iii. Findings revealed that the integration of environmental sustainability with livelihood support under the CRF model enhanced community participation and demonstrated potential for replication in other rural communities.

iv. The study identified eleven PPP-related initiatives across sectors including agro-processing, irrigation, forestry, ecotourism, and mineral exploration; however, only a few had formal environmental and community benefit-sharing agreements.

v. Institutional weaknesses, financial limitations, weak policy coordination, insecure land tenure, and limited community inclusion were identified as major constraints affecting effective implementation of NEP-related PPP initiatives in Benue State.

Conclusion

In conclusion, Nigeria's National Environmental Policy provides an important framework for promoting sustainable natural resource management and poverty reduction through Public-Private Partnerships (PPPs). Findings from the study revealed that community-based initiatives in Benue State have demonstrated significant potential in improving livelihoods, enhancing environmental sustainability, and strengthening local participation in resource management. Programmes such as the Community Revolving Fund (CRF), irrigation partnerships, and community forestry initiatives showed that effective collaboration between government, private organizations, and local communities can contribute positively to economic development and environmental conservation. These initiatives also highlighted the importance of integrating environmental objectives with livelihood support in order to achieve sustainable rural development.

However, the study further revealed that the effective implementation and expansion of NEP-related PPPs continue to face major challenges, including institutional weaknesses, inadequate funding, poor policy coordination, insecure land tenure systems, and limited inclusion of women and youth in decision-making processes. These constraints reduce the efficiency, sustainability, and scalability of partnership arrangements within the state. Therefore, there is a need for stronger institutional capacity, improved financing mechanisms, enhanced stakeholder participation, and effective policy implementation to strengthen PPP-driven environmental programmes. A coordinated and inclusive approach that aligns government policies, community interests, and environmental sustainability goals is essential for achieving long-term ecological, economic, and social development in Benue State and Nigeria at large.

Recommendations

To improve natural resource management and PPPs, Nigeria needs to strengthen institutional capacity by increasing funding and technical expertise within the Ministry of Environment and other agencies. Better inter-ministerial coordination is also essential to ensure environmental priorities are integrated into overall development plans.

Developing dedicated financial mechanisms, such as a green PPP fund and co-financing options, can attract private investments and make projects more sustainable. Additionally, standardizing legal agreements with clear environmental and benefit-sharing clauses will promote accountability and long-term success.

At the community level, addressing land tenure issues and promoting social inclusion especially involving women and youth are vital for sustainable resource stewardship. Scaling successful models like the CRF across regions, coupled with continuous monitoring and stakeholder capacity-building, will help replicate best practices and enhance Nigeria's environmental and rural development outcomes.

References

Akintoye, A., & Beck, M. (2009). Risk management and an analysis of insurance in public-private partnerships. *International Journal of Project Management*, 27(7), 722-731.

Akinbami, J. F. (2001). Environmental degradation and sustainable development in Nigeria: The way forward. *The Journal of Environmental Science and Technology*, 2(1), 1-12.

Banerjee, A., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty.* PublicAffairs.

Bovaird, T., & Loeffler, E. (2012). Public management and governance. In E. Ferlie, L. E. Lynn Jr., & C. Pollitt (Eds.). *The Oxford handbook of public management* (pp. 85-105). Oxford University Press.

Chambers, R. (1983*). Rural development: Putting the last first*. Longman.

Federal Republic of Nigeria. (2012). National Environmental Policy. Federal Ministry of Environment.

Federal Ministry of Environment. (2015). Nigeria's strategy for sustainable development. National Environmental Policy Implementation Report.

Hodge, G. A., & Greve, C. (2007). Public–private partnerships: An international performance review. *Public Administration Review*, 67(3), 545-558.

Klijn, E. H., & Teisman, G. R. (2003). Institutional and strategic barriers to public–private partnership: An analysis of Dutch cases. *Public Money & Management*, 23(3), 137-146.

Leach, M., Mearns, R., & Scoones, I. (1999). Environmental entitlements: A framework for understanding the institutional dynamics of environmental change. *Ecology and Society*, 4(2), 2.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1992). *Limits to growth: The 30-year update*. Chelsea Green Publishing.

McShane, T., PhD, et al. (2011). *Sustainable forest management: From principles to practice*. Earthscan.

Narayan, D., Patel, R., Schafft, K., Rademacher, A., & Koch-Schulte, S. (2000). *Voices of the poor: Can anyone hear us*? Oxford University Press.

Ojo, O., & Akinbami, J. F. (2018). Environmental challenges and sustainable development in Nigeria. *African Journal of Environmental Science and Technology*, 12(5), 150-160.

Pretty, J. (2008). Agricultural sustainability: Concepts, principles and evidence. Philosophical Transactions of the Royal Society. *Biological Sciences,* 363(1491), 447-465.

Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation*, 141(10), 2417-2431.

Roehrich, J. K., Grosvold, J., & Bode, C. (2014). Delivering sustainability through supply chain management: Challenges and opportunities. *Supply Chain Management: An International Journal,* 19(6), 643-652.

Ulrich Beck (1986). *Risk society: Towards a new modernity*. Sage Publications.

World Bank. (2013). *Public-private partnerships in infrastructure: A review of the evidence.* World Bank Publications.

World Bank. (2017). Public-private partnerships overview. Retrieved from https://www.worldbank.org/en/topic/public privatepartnerships