

Sustainable Development and National Integration: A Catalyst for Enhancing Environmental Law Compliance in Nigeria

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Abstract. This study delves into the pivotal roles played by sustainable development and national integration in advancing legal compliance, environmental protection, and sustainability within Nigeria. Employing a doctrinal and conceptual legal research approach, it meticulously examines pertinent literature, international exemplars, and conducts an exhaustive analysis of primary and secondary legal sources, including the 1999 Constitution of the Federal Republic of Nigeria (as amended), the Climate Change Act of 2021, and relevant international instruments.

An effort has been made to examine extant sustainable development practices, presenting an encompassing snapshot of the nation's legal, environmental, and sustainability apprehensions, while also addressing the attendant challenges. Moreover, it undertakes a comprehensive evaluation of Nigeria's prevailing legal framework concerning environmental protection, delving into its potential for long-term sustainability. The findings resoundingly underscore the potency of sustainable development as a strategic avenue for achieving legal compliance, environmental protection, and enduring sustainability. Importantly, the study unveils that the Sustainable Development Goals (SDGs) find manifestation within Chapter II of the Constitution, albeit in a non-justiciable form, thereby impeding the stride toward their attainment. Nevertheless, it accentuates the necessity for an approach that meticulously factors in Nigeria's distinctive context and specific requisites, thereby fostering effectiveness through national integration, policy execution, effective communication, and collaborative synergy across stakeholders within both the public and private domains. Essential to the realization of SDGs' objectives is a synergistic collaboration amongst the government, academia, and non-governmental organizations.

This study illuminates the latent potential of sustainable development and national integration as efficacious strategies for propelling legal compliance, environmental protection, and sustainability. It proffers a recommendation for the assimilation of innovative paradigms that have proven successful in mitigating environmental degradation elsewhere. Ultimately, the study ardently advocates for comprehensive overhauls to systematically address Nigeria's complex entanglements encompassing legality, environment, and sustainability. Furthermore, the study ardently champions the elimination of the provision stipulated in section 6(6)(c) of the 1999 Constitution as a crucial step towards realizing the SDGs' objectives within Nigeria.

Keywords: Sustainable development, national integration, legal compliance, environmental protection, Nigeria

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1. Introduction

The Sustainable Development Goals (SDGs), commonly referred to as the Global Goals, were formally embraced by the United Nations (UN) in the year 2015, as evidenced by the United Nations Department of Economic and Social Affairs' Sustainable Development documentation for the year 2023. Designed as a comprehensive blueprint for worldwide progress, the UN has set forth an ambitious agenda to accomplish these 17 interconnected goals by the year 2030. This initiative follows in the wake of the Millennium Development Goals (MDGs), a precursor framework that was operational from 2000 to 2015.¹

The ensemble of seventeen (17) Global Goals encompasses an array of paramount objectives, including the eradication of poverty, the elimination of hunger, the enhancement of health and overall well-being, the assurance of quality education, the establishment of gender equality, the provision of clean water and adequate sanitation facilities. This ambit also extends to encompassing the facilitation of accessible and clean energy sources.² Furthermore, the scope encompasses the promotion of productive employment and robust economic advancement, the fostering of industry, innovation, and infrastructural development. Concurrently, attention is directed towards diminishing disparities, cultivating sustainability, and cultivating vibrant urban centers and communities.³ Likewise, there is an ardent commitment to fostering conscientious patterns of consumption and responsible production, alongside resolute engagement with climate-related concerns. The objectives further encompass the preservation of marine ecosystems ("life below water") and terrestrial environments ("life on land"), the cultivation of peace, the establishment of just and efficacious institutional frameworks, and the forging of cooperative alliances dedicated to the attainment of these ambitions.⁴

Since the adoption of the global goals in 2015, Nigeria has demonstrated its commitment to achieving the goals by domesticating the global goals for implementation within the context of its economic, social and ecological realities.⁵

Nigeria has also benefitted from aid from the United Nations, which has rendered assistance through the provision of technical support to the Office of the Senior Special Advisor to the President on SDGs (OSSAP-SDGs) and the relevant Ministries to ensure that planning and budgeting for development activities in the country are within the framework of the global goals. In Nigeria, several laws and policies are relevant to the implementation of global goals.⁶ Each goal will be analysed having regard to the applicable laws and policies regarding environmental protection and sustainability in Nigeria.⁷

- 1 I.N. Ague (2021), "An Appraisal of the Implementation of Sustainable Development Goals 2030 in Nigeria", *Journal of Social Sciences*, 6(2): 201-221, available at: <https://esutjss.com/index.php/ESUTJSS/article/download/100/91/>.
- 2 O.J. Olujobi et al. (2023), "Legal Responses to Energy Security and Sustainability in Nigeria's Power Sector Amidst Fossil Fuel Disruptions and Low Carbon Energy Transition", *Heliyon*, 9(7): e17912, available at: [https://www.cell.com/heliyon/fulltext/S2405-8440\(23\)05120-4](https://www.cell.com/heliyon/fulltext/S2405-8440(23)05120-4) (accessed on July 5, 2023).
- 3 O.J. Olujobi and E.T. Yebisi (2023), "Tackling Corruption in the Distribution of Covid-19 Palliatives and Public Health Facilities in Nigeria: Legal Insights and Strategic Blueprint for Future Emergencies", *Journal of Financial Crimes*, available online at: Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JFC-03-2023-0055>.
- 4 United Nations (2015), *We Can End Poverty: Millennium Development Goals and Beyond 2015*, available at: <https://www.un.org/millenniumgoals/>, last accessed on 20th May 2023; African Development Bank Group, Millennium Development Goals, available at: <https://www.afdb.org/en/topics-and-sectors/topics/millennium-development-goals-mdgs> (accessed on March 5, 2023).
- 5 K. Ezeibe (2011), "The Legislative and Institutional Framework of Environmental Protection in the Oil and Gas Sector in Nigeria – A Review", *Nnamdi Azikiwe University Journal of International Law and Jurisprudence*, 2: 54.
- 6 J. Eronmosele and Omijeh (2008), "Strategies for the Control of Desertification in Northern Nigeria", *FUTY Journal of the Environment*, 3(1): 74-75.
- 7 O.J. Olujobi (2022), "Deregulation of the Downstream Oil Sector: An Option or A Necessity for Evolution of Nigeria's Petroleum Industry?" *Pacesetter LAW Journal*, 1(1): 47-62.

(See Table 1) is showing the 17 Sustainable Development Goals as follows:

Table 1
The 17 Sustainable Development Goals

S/N	17 Sustainable development goals	Global community objectives	Remarks
1.	Goal 1	Eradication of poverty in all its forms on a global scale.	Social security for vulnerable individuals in Nigeria has not been accorded the necessary priority.
2.	Goal 2	Elimination of all manifestations of hunger through the establishment of food security and the promotion of improved nutrition via sustainable agricultural practices.	Achieving food security through the implementation of sustainable and climate-smart agricultural practices represents the viable solution.
3.	Goal 3	Promotion of healthy lives and well-being for all.	The implementation of an accessible and functional Health Insurance Policy will mitigate maternal mortality rates and tackle other epidemic challenges.
4.	Goal 4	Impartial provision of excellent education and lifelong learning opportunities for all.	Providing free, equitable, and high-quality technical, vocational, and technological education or skills education up to the university level, facilitated by means of student loans, will effectively diminish the levels of illiteracy in Nigeria. The Universal Basic Education Act stands as the principal legislation pertaining to primary education, aimed at delivering uniform and high-standard fundamental education throughout Nigeria.
5.	Goal 5	Promotion of gender equality and empowerment of all women and girls.	Eradication of all types of discrimination against girls and women, including forced labour and early marriages, within Nigeria.
6.	Goal 6	Accessibility, sustainable management of water and sanitation for all.	Eradication of the disposal and discharge of hazardous chemicals into rivers, water bodies, or oceans to ensure the safety of drinking water. Therefore, there is a pressing necessity for clear and rigorous enforcement of our laws to counteract the dumping of waste materials into the sea.
7.	Goal 7	Ensuring accessibility to modern energy that is both affordable and dependable, while also being sustainable for all.	Advocating for the transition to renewable energy sources and the adoption of low-carbon energy alternatives or an energy mix stands as a viable pathway to ensure clean, efficient energy security in Nigeria
8.	Goal 8	Comprehensive and sustainable economic development to facilitate meaningful employment or decent work opportunities for everyone.	Ensuring the protection of workers' rights and the promotion of a safe and secure work environment in Nigeria are of paramount importance, facilitated through various labour laws. Additionally, addressing unemployment rates is essential. Inadequate working conditions pose obstacles to the advancement and successful realization of SDG 8.
9.	Goal 9	Establishing resilient infrastructure and fostering sustainable industrial development to incentivize innovations.	Poor infrastructure investments, leadership challenges hamper goal 9. Access to information and communications technologies, affordable internet facilities and other essential social amenities.
10.	Goal 10	Eradication of disparities within and among nations.	Promotion of social, economic and political inclusion without discrimination.
11.	Goal 11	To ensure the safety and sustainability of cities and human settlements.	Promoting social, economic, and political inclusion devoid of discrimination. Ensuring the availability of adequate, secure, and affordable housing.

(Continued)

Table 1
(Continued)

S/N	17 Sustainable development goals	Global community objectives	Remarks
12.	Goal 12	Promotion of sustainable consumption and production patterns.	Reducing waste generation, implementing recycling systems, and advocating for storage facilities are vital steps, especially for oil and gas firms operating in Nigeria, to incorporate sustainability into their operations and mitigate oil pollution.
13.	Goal 13	Addressing climate change and its challenges.	Develop measures to combat climate change such as national policies, continuous responsiveness about the adverse effect of climate change in Nigeria and enforcement of the Climate Change Act 2021.
14.	Goal 14	Conservation of oceans, seas, and marine resources for sustainable development.	To combat water pollution and safeguard marine resources, coastal areas, and ecosystems.
15.	Goal 15	Conservation, restoration, and promotion of the sustainable utilization of ecosystems, while addressing desertification, land degradation, and preventing biodiversity loss.	The government is responsible for safeguarding the ecosystem, both water and land, against pollution, including gas flaring and oil spillage resulting from the operations of oil and gas companies. This duty is outlined in section 20 of the 1999 Constitution (as amended).
16.	Goal 16	Promotion of inclusive and peaceful societies for sustainable development, ensuring unbiased access to justice for all, and fostering transparent institutions at all levels.	Section 14(2)(b) of the Constitution mandates the government with the responsibility of ensuring the welfare and security of its citizens. Section 15(5) of the 1999 Constitution (as amended) underscores the commitment to eradicating violence against individuals, curbing unlawful possession of arms, as well as addressing financial crimes ⁸ and corrupt practices. ⁹ However, it is noteworthy that these duties are not justiciable in court, as highlighted by Olujobi. ¹⁰
17.	Goal 17	Strengthening the implementation processes and fostering international cooperation for sustainable development.	Setting up autonomous institutions to ensure the enforcement of laws and the attainment of the 17 SDG goals.

Source: United Nations Department of Economic and Social Affairs, "Transforming our World: the 2030 Agenda for Sustainable Development, available online at: <https://sdgs.un.org/2030agenda> (accessed on August 2023).

The study focuses solely on Goals 6, 7, 11, 12, 13, 14, 15, and 17 as the central points of interest. It is structured into five sections. Section one introduces the topic, while section two outlines the research methodology. Section three analyzes Sustainable Development Goals 6, 7, 11, 12, 13, 14, 15, and 17. Section four presents the research findings, and section five concludes the study by providing recommendations and suggestions for future research.

2. Methodology

The study utilizes a doctrinal and conceptual legal research methodology. It involves a thorough review of pertinent literature, international best practices, and an in-depth analysis of primary and secondary legal

8 O.J. Olujobi and T.E. Yebisi (2023), "Combating the Crimes of Money Laundering and Terrorism Financing in Nigeria: A Legal Approach for Combating the Menace", *Journal of Money Laundering Control*, 26(2): 268-289, available at: <https://www.emerald.com/insight/content/doi/10.1108/JMLC-12-2021-0143/full/html?skipTracking=true>.

9 O.J. Olujobi and E.T. Yebisi (2023), "Tackling Corruption in the Distribution of Covid-19 Palliatives and Public Health Facilities in Nigeria: Legal Insights and Strategic Blueprint for Future Emergencies", *Journal of Financial Crimes*, Emerald, available online at: Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JFC-03-2023-0055>.

10 O.J. Olujobi (2021), "Recouping Proceeds of Corruption: Are There Any Need to Reverse Extant Trends by Enacting Civil Forfeiture Legal Regime in Nigeria?" *Journal of Money Laundering Control*, 24(4): 806-833.

sources. These sources include the amended 1999 Constitution of the Federal Republic of Nigeria, the Climate Change Act 2021, and relevant international agreements. The research delves into current sustainable development practices, offering insights into the nation's legal, environmental, and sustainability issues, along with the obstacles encountered.

3. Literature review

Numerous literatures discuss sustainable development and national integration; however, the existing literature lacks a focus on harnessing the SDGs as a catalyst for bolstering legal compliance, environmental protection, and sustainability within Nigeria. This study addresses this gap. Ezeabasili¹¹ contends that human activities have led to significant environmental degradation, underscoring the necessity for stringent penalties to enforce environmental compliance and ensure the optimal use and conservation of resources for future generations. He further defines sustainable development as the responsible allocation of resources to meet present human needs while safeguarding the natural ecosystem, thereby ensuring the perpetuation of these necessities not just for the present but also for the future. However, the study overlooks the strategic implementation of sustainable development as a catalyst for elevating legal compliance, environmental protection, and sustainability in Nigeria a void in the current literature that this study aims to bridge.

Additionally, Mensah¹² underscores the crucial constituents of sustainable development, namely the environment, economy, and society. Mensah suggests that policymakers need to be acutely aware of the interplay and interdependence among these elements. This awareness is vital to encourage responsible human conduct and endeavours across global, domestic, communal, and individual spheres. Upholding and championing the tenets of sustainable development becomes paramount in advancing human progress.

Similarly, the present study also overlooks the exploration of sustainable development's potential as a mechanism to bolster legal compliance, safeguard the environment, and enhance sustainability in Nigeria. This research seeks to rectify this gap in the existing literature by addressing this specific aspect.

3.1. Goal 6: Ensure Availability and Sustainable Management of Water and Sanitation for All

This goal strives to attain universal and equitable access to safe and affordable drinking water for all, as well as promoting investments in adequate infrastructure, sanitation facilities, and the promotion of good hygiene practices, while eradicating open defecation.¹³

Moreover, the safeguarding and restoration of water-related ecosystems are of paramount importance.¹⁴ Nigeria has enacted several laws and policies aimed at achieving clean water and sanitation, with the overarching objective of ensuring the sustainable availability and effective management of these resources for all.¹⁵

Numerous legislative and policy frameworks in Nigeria are pertinent to the development and management of the nation's water resources. These include key statutes such as the Water Resources Act 2004, the Nigerian

11 N. Ezeabasili (2009), "Legal Mechanism for Achieving Environmental Sustainability in Nigeria", *African Research Review*, 3(2): 369-380.

12 Mensah (2019), "Sustainable Development: Meaning, History, Principles, Pillars, and Implications for Human Action: Literature Review", *Cogent Social Sciences*, 5: 1653531, available at: <https://doi.org/10.1080/23311886.2019.1653531>.

13 United Nations Department of Economic and Social Affairs, Sustainable Development (2023), available at: <https://sdgs.un.org/2030agenda>, (accessed on March 10, 2023).

14 United Nations (2023), *#Envision2030 Goal 6: Clean Water and Sanitation*, available at: <https://www.un.org/development/desa/disabilities/envision2030-goal1.html>, (accessed on May 26, 2023).

15 United Nations Development Programme (UNDP), What are the Sustainable Development Goals? <https://www.undp.org/sustainable-development-goals/clean-water-and-sanitation> (accessed on August 8, 2023).

Minerals and Mining Act 2004, the National Inland Waterways Act 2004, the River Basins Development Authority Act 2004, the Nigeria Hydrological Services Agency (Establishment) Act 2004, The National Water Resources Institute Act 2004, in addition to the Land Use Act, and the Nigeria Environmental Standards and Regulations Enforcement Agency Act (NESREA), among others.¹⁶

The Water Resources Act of 2004 is designed to facilitate the optimal planning, development, and utilization of Nigeria's water resources (Water Resources (Amendment) Act¹⁷ 2016, Cap W2 Laws of the Federation of Nigeria, 2004). This Act assigns the Federal Government the authority over the use and management of both surface and groundwater, as well as any watercourse that affects more than one State, as defined in section 1 of the Act's Schedule. While water resources are vested in the Federal Government, individuals are permitted, according to section 2 of the Water Resources Act, to extract water for various purposes such as domestic needs, livestock watering, fishing, navigation, and irrigation of land where they hold rights of occupancy. Section 4 of the Act grants the Minister of Water Resources the jurisdiction to regulate the extraction or use of groundwater through various measures. This includes delineating authorized abstraction locations and methods, imposing limits on quantities withdrawn, and prohibiting the use of water from specific sources to safeguard public health. In fulfilling these responsibilities, the Minister of Water Resources is mandated, as outlined in section 5 of the Act, to consider several factors. These include ensuring adequate water supplies, flood control, land reclamation, and the protection of inland fisheries, flora, and fauna.¹⁸

Additionally, in accordance with section 6 of the Act, the Minister of Water Resources is mandated to periodically formulate a comprehensive master plan. This plan encompasses the development, utilization, regulation, protection, management, and administration of all water resources. The Act grants specific authorities to the Minister of Water Resources. These encompass the power to restrict the storage, diversion, pumping, or utilization of any water, as well as the construction and operation of boreholes or hydraulic structures. Furthermore, the Minister is empowered to demand information concerning boreholes or hydraulic structures. The Act also confers the authority to proscribe land or water uses that could potentially disrupt the quantity and quality of water resources. Under section 8 of the Act, the Minister is empowered to furnish or vend untreated water to individuals or public entities. Furthermore, a schedule appended to the Act enumerates water sources that impact more than one state.

3.2. Nigeria Environmental Standards and Regulations Enforcement Agency Act (NESREA)

The Act serves as the primary legislation for environmental protection within Nigeria. This legislation establishes the NESREA (referred to as the Agency) as outlined in section 1. Section 2 of the Act outlines the Agency's mandate, which revolves around safeguarding and enhancing the environment in Nigeria. The Agency is endowed with a range of responsibilities, including the enforcement of compliance with policies, standards, laws, and guidelines pertaining to water quality, environmental health, sanitation, and pollution control, among others, as specified in section 7 of the Act. These functions hold particular relevance to the 2030 objective of attaining universal, safe, and affordable drinking water access, equitable sanitation and hygiene access, the cessation of open defecation, and the enhancement of water quality through pollution reduction.¹⁹

Furthermore, apart from the federal regulations in place, various states in Nigeria have established Rural Water Supply and Sanitation Agencies. In addition to these legal frameworks, specific policies are also in existence to

16 D.E. Ufua et al. (2021), "Digital Transformation: A Conceptual Framing for Attaining Sustainable Development Goals 4 and 9 in Nigeria", *Journal of Management & Organization*, 1-14, doi:10.1017/mo.2021.45.

17 Water Resources (Amendment) Act 2016, Cap W2 Laws of the Federation of Nigeria, 2004, available at: <https://placbillstrack.org/8th/upload/Water-Resources-Amendment-Act-2016.pdf> (accessed on August 16, 2023).

18 United Nations (2023), *#Envision2030 Goal 6: Clean Water and Sanitation*, available at: <https://www.un.org/development/desa/disabilities/envision2030-goal1.html>, (accessed on May 26, 2023).

19 O.J. Olujobi and S.I. Oshobugie (2024), Strategies, Legal and Regulatory Measures for Combatting Illicit Mining Operations in Nigeria: A Comprehensive Legal Perspective, Resources Policy (Ranked 99th Percentile, Indexed in Scopus), available at: <https://www.scopus.com/sourceid/110031>, <https://authors.elsevier.com/tracking/article/details.do?aid=104459&jid=JRPO&surname=OLUJOBI> (accessed on December 2, 2023).

facilitate the realization of the 2030 targets. Notable among these are the National Water Resources Policy 2016 and the National Water Supply and Sanitation Policy 2004.

3.3. Goal 7: Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for all

This goal aims to facilitate the availability of affordable, reliable, and modern energy while substantially increasing the integration of renewable energy into the energy landscape. Nigeria has enacted several laws and policies with the intention of ensuring universal access to affordable, reliable, sustainable, and contemporary energy for all. Notable among these legal frameworks are:

The Electric Power Sector Reform Act of 2005, which has since been repealed by the Electricity Act of 2023. This legislation sought to revitalize Nigeria's power sector and encourage private sector involvement, investments, and decentralization within the sector. An important innovation introduced by the Electricity Act of 2023 is the establishment of state electricity markets, granting states the legislative autonomy to regulate electricity-related activities through regulatory boards within their jurisdictions, as delineated in sections 2(2), 63(1), and 230(2–9) of the Act. This move is designed to promote a sustainable energy future.

Section 31(1) of the previously repealed Electric Power Sector Reform Act of 2005 established the Nigerian Electricity Regulatory Commission (referred to as 'the Commission') and defined its objectives and functions in section 32(1) and (2) of the Act, respectively. Additionally, section 62(1) of the Act imposed licensing requirements on individuals or entities intending to construct, own, operate, or engage in the business of electricity generation, transmission, system operation, electricity distribution, or trading in electricity, excluding captive generation, as detailed in section 62(2) of the Act.

Furthermore, section 64(1) of the Act conferred authorization upon licensees to construct, own, operate, and maintain generation stations for electricity production and supply, operating within the framework set forth in the Act.²⁰

The possessor of a generation license is also granted the authority, as outlined in section 64(2) of the Electric Power Sector Reforms Act of 2005 (which has been repealed by the Electricity Act of 2023), to vend power or ancillary services to the categories of individuals specified within the license.

The Act established a Power Consumer Assistance Fund, intended to offer subsidies to disadvantaged power consumers, a classification determined by the Minister as stipulated in section 84(1) and (2) of the Act (which has been repealed). Subsidies allocated from the Power Consumer Assistance Fund were to be disbursed by the Commission to distribution companies, benefitting designated consumers or consumer groups in accordance with section 86 of the Act.

Furthermore, the Act introduced the establishment of the Rural Electrification Agency (REA) as a dedicated institution to advance rural electrification and the growth of renewable energy sources in Nigeria, as delineated in sections 88(1), (11), (12), and (13) of the Act. However, it's important to note that the Electricity Act of 2023 has since repealed this Act.

The Electricity Act of 2023, which supersedes the previous legislation, serves the purpose of revitalizing Nigeria's power sector and encouraging private sector engagement, investments, and the decentralization of the power industry. A significant aspect of this Act is the creation of state electricity markets, granting individual states legislative autonomy to oversee electricity activities through regulatory boards, in accordance with sections 2(2), 63(1), and 230(2–9) of the Electricity Act 2023. This strategic move aims to foster a sustainable energy future.²¹

3.4. Regulations on Feed-in Tariff for Renewable Energy Sourced Electricity in Nigeria

Regulation 3, which holds significance in the pursuit of global goal 7, encompasses various objectives. These objectives aim to enhance the power supply within the country, amplify the realization of national targets regarding

20 O.J. Olujobi et al. (2022), "Conversion of Organic Wastes to Electricity in Nigeria: Legal Perspective on the Challenges and Prospects", *International Journal of Environmental Science and Technology*, 939-950, available at: <https://doi.org/10.1007/s13762-020-03059-3>.

21 O.J. Olujobi (2021), "Combating Insolvency and Business Recovery Problems in the Oil Industry: Proposal for Improvement in Nigeria's Insolvency and Bankruptcy Legal Framework", *Heliyon*, 7: e06123.

electricity sourced from renewable energy, and stimulate increased private sector engagement in power generation through renewable energy technologies. This is achieved by offering investors investment security and ensuring market stability, as articulated by Olujobi in 2020.²²

The overarching goals of Regulation 3 include the development, promotion, and effective utilization of the nation's Renewable Energy (RE) resources. It seeks to integrate all viable resources into the country's overall energy mix. Furthermore, the regulation aims to incentivize private investors to operate their power plants judiciously and with optimal efficiency to maximize their returns. Key mechanisms outlined in Regulation 3 involve the establishment of guaranteed pricing for electricity derived from renewable sources over a defined period, creating a reliable income stream and ensuring satisfactory returns on investment. Additionally, the regulation prioritizes granting renewable energy-based electricity access to the grid, implementing an obligation to purchase power produced from qualifying renewable sources, and establishing equitable conditions for both renewable and conventional electricity generation. The ultimate goal is to foster a level playing field that encourages private sector investment, thereby supporting the establishment of a self-sustaining renewable energy market.

3.5. Goal 11: Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable

This goal strives to cultivate inclusive, secure, resilient, and sustainable urban environments and human settlements. Its objectives encompass providing universal access to affordable and secure housing, fundamental services, and establishing accessible and sustainable transportation systems by 2030. Within the Nigerian context, pertinent legislative measures include The Research Institutes (Establishment, etc.) Order of 1972, the National Housing Fund Act, and the National Environmental Standards and Regulations Enforcement Agency Act. These legislations play a role in advancing the goal's aspirations.

The Research Institutes (Establishment, etc.) Order of 1972 establishes significant institutions such as the Federal Institute of Research and the Nigerian Building and Road Research Institute (NBRRI). Notably, Order 1(1)(a) and (c) within this legislation sets comprehensive standards pertaining to building materials, designs, and construction techniques. Specifically, the NBRRI, as stipulated by Order 6, is entrusted with the responsibility of conducting research and fostering development within Nigeria's building and construction sectors.

Another instrumental legal framework is the National Housing Fund Act. This legislation, under section 1, creates a fund known as the National Housing Fund (the Fund). The Act's overarching objectives include facilitating the mobilization of resources from the Fund to offer affordable housing to Nigerians, ensuring a steady stream of loans for Nigerians to build, purchase, and enhance residential properties, as well as stimulating the capital market's involvement in property development.²³

Furthermore, section 2 of the National Housing Fund Act underscores the Act's intent to promote specific programs that facilitate effective financing for housing development, particularly targeting low-cost housing solutions for low-income workers. The Fund's financial resources are derived from contributions by individuals in both the public and private sectors, investments from commercial and merchant banks, contributions from insurance companies registered under the Insurance Act, and financial allocations from the Federal Government for long-term housing loans, all outlined in section 1 of the Act.

The NESREA stands as a pivotal legislation, establishing the National Environmental Standards and Regulations Enforcement Agency (the Agency) as a cornerstone institution. Endowed with the solemn duty of safeguarding and fostering the environment within Nigeria, the Agency's mandate is deeply enshrined in section 2 of the Act. This overarching responsibility is underscored by the multifaceted functions entrusted to the Agency, including: Vigilantly enforcing compliance with laws, guidelines, policies, and standards governing environmental matters. Navigating the intricate landscape of environmental standards, regulations, and enforcement through coordinated engagement with stakeholders, both within and beyond

22 O.J. Olujobi and T. Olusola-Olujobi (2020), "Nigeria: Advancing the Cause of Renewable Energy in Nigeria's Powers Sector Through its Legal Framework", *Environmental Policy and Law*, 433-444.

23 O.J. Olujobi (2020), "The Legal Sustainability of Energy Substitution in Nigeria's Electric Power Sector: Renewable Energy as Alternative", *Protection and Control of Modern Power System*, 5(32): 1-12, available at: <https://doi.org/10.1186/s41601-020-00179-3>.

Nigeria's borders. Diligently upholding adherence to policies, standards, legislation, and guidelines concerning the quality of water, the health of the environment, sanitation practices, and the pivotal task of curbing pollution.²⁴

Exercising unwavering vigilance in enforcing guidelines and legislations that pertain to the sustainable management of ecosystems, the preservation of biodiversity, and the judicious development of Nigeria's invaluable natural resources. Equally crucial is the Agency's steadfast commitment to enforcing legislation pertaining to sound chemical management, prudent pesticide utilization, and the responsible disposal of associated packaging, as eloquently detailed in section 7 of the Act.

Yet, amidst this mandate that champions the protection and development of Nigeria's environment, it's paramount to recognize the nuanced provisions of the Act. Notably, section 7(g) introduces an ouster clause that curtails the Agency's jurisdiction, excluding the oil and gas sector from its purview. This discerning provision aptly underscores the Act's focus and reaffirms the Agency's dedication to its core mission.

The Agency is vested with the authority to engage in collaborative efforts with pertinent agencies, thereby regulating substances, practices, processes, or activities that possess the potential to impact the stratosphere, particularly the ozone within it, as stipulated by section 21(2) of the Act. Furthermore, the Agency is endowed with the power to institute regulations aimed at safeguarding public health and fostering environmentally sound sanitation practices, as articulated in section 25(1) of the Act.

3.6. Goal 12: Ensure Sustainable Consumption and Production Patterns

This goal is dedicated to establishing sustainable consumption and production patterns. An integral part of this endeavour involves the execution of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns. This initiative envisions the active involvement of all nations, with developed countries leading the charge, while simultaneously considering the unique developmental capacities of developing nations. Within Nigeria, a multitude of laws and regulations resonate with this objective. These include the NESREA Act, the National Biosafety Management Agency Act, the National Oil Spill Detection and Response Agency Act, and the Environmental Impact Assessment Act.²⁵ The National Biosafety Management Agency Act, through section 1, heralds the establishment of the National Biosafety Management Agency (referred to as 'the Agency'). Among its objectives, the Agency is driven to safeguard human health, biodiversity, and the environment from any possible adverse implications of genetically modified organisms, encompassing concerns of food safety. These objectives are expounded upon in section 3 of the Act, which itemizes the Agency's functions.

Moreover, section 24(1) of the Act assumes a pivotal role by imposing the obligation of seeking approval upon individuals endeavouring to import, export, transit, or commercialize genetically modified organisms or products intended for use as food, feed, or processing. This requirement can only be waived with the explicit endorsement of the Agency.²⁶

The Environmental Impact Assessment Act serves the objective, among others, of ensuring that all entities, whether juristic or juridical, identify factors that could potentially impact the environment, as outlined in section 1 of the Act. Both the private and public sectors of Nigeria's economy are obligated to assess the environmental repercussions of their projects in advance, as stated in section 2 of the Act. Section 4 of the Act prescribes the minimum requirements for an environmental impact assessment.

24 O.J. Olujobi et al. (2022), "The Conundrums of Illicit Crude Oil Refineries in Nigeria and Its Debilitating Effects on Nigeria's Economy: A Legal Approach", *Energies*, 15(17): 6197, available online at: <https://www.mdpi.com/1996-1073/15/17/6197/htm>, <https://doi.org/10.3390/en15176197>.

25 O.J. Olujobi and A.O. Oyewunmi (2017), "Annulment of Oil Licences in Nigeria's Upstream Petroleum Sector: A Legal Critique of the Costs and Benefits", *International Journal of Energy Economics and Policy*, 7(3): 364-369.

26 O.J. Olujobi et al. (2022), "COVID-19 Pandemic: The Impacts of Crude Oil Price Shock on Nigeria's Economy, Legal and Policy Options", *Sustainability*, 14(18): 11166, available online at: <https://doi.org/10.3390/su141811166>.

Furthermore, the Act designates circumstances under which an environmental impact assessment is mandatory, detailed in sections 13 and 14. Additionally, the Act outlines situations exempt from the requirement for an environmental impact assessment.

Non-compliance with the Act results in penalties. Individuals may face a fine of NGN100,000 or imprisonment for up to five years, while firms or corporations could incur a fine ranging from NGN50,000 to N100,000, as established in section 60 of the Act. A public registry for projects necessitating environmental impact assessments is established by section 55(1) of the Act. This repository contains pertinent records and information concerning the environmental evaluations of the projects.²⁷

Initially administered by the Federal Environmental Protection Agency (FEPA), the responsibility for overseeing the Act was transferred to the National Environmental Standards and Regulations Enforcement Agency due to the repeal of the FEPA by section 36 of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.

3.7. Goal 13: Climate Action: Take Urgent Action to Combat Climate Change and Its Impacts

Climate change holds a paramount position on the global agenda, having been designated a pivotal Sustainable Development Goal by the United Nations. Within this framework, United Nations Sustainable Development Goal 13 centres on climate action, urging swift measures to confront the challenge of climate change and its far-reaching consequences. The ramifications of climate change are both far-reaching and deeply detrimental. One of the strategies adopted to combat this issue involves the formulation and implementation of legislation and policies. This multifaceted approach is instrumental in addressing climate change and its multifarious impacts. Within Nigeria, an array of statutes comprises the legislative foundation for proactive climate action. These include:

Constitution of the Federal Republic of Nigeria 1999: This foundational document vests the legislative powers of the Federal Republic of Nigeria in the National Assembly, as stipulated under section 4(1) of the Constitution. Specifically, the National Assembly wields the authority to enact laws for the overall peace, order, and effective governance of the Federation, particularly in matters delineated within the Exclusive Legislative List, as expounded in section 4(3). The purview of climate change-related legislation unequivocally falls under the exclusive jurisdiction of the National Assembly. This legal allocation finds its basis in the combined provisions of Item 37 (pertaining to meteorology) of the Exclusive Legislative List, and the overarching ambit of Section 4(1), (2), and (3) of the Constitution. Notably, matters encompassed within Items 39 (mines and minerals, including oil fields, oil mining, geological surveys, and natural gas) and 41 (nuclear energy) of the Exclusive Legislative List similarly rest within the sole dominion of the National Assembly.

In essence, the Constitution firmly situates the National Assembly as the key architect of legislative measures requisite for addressing climate change, underlining the gravity of the issue within the national governance framework.

Additionally, the Climate Change Act 2021, enacted as a comprehensive local statute, has positioned itself as a pivotal instrument in Nigeria's battle against climate change. Crafted in 2021, this legislation is designed to establish a resilient domestic framework for tackling the challenges posed by climate change within the nation's borders. A central tenet of this Act is the aspiration to curtail greenhouse gas emissions significantly, coupled with the ambitious goal of achieving net-zero greenhouse gas emissions between 2050 and 2070. By instating a concrete target and clear parameters, the Act furnishes a robust legal and institutional groundwork to facilitate the reduction of greenhouse gas emissions into the atmosphere. Central to this endeavour is the meticulous development of programs and policies geared towards this purpose²⁸

27 O.J. Olujobi (2023), "Comprehensive Legal Analysis of Subsidized Petrol Payments in Nigeria: Evaluating Impact, Legitimacy, and Exploring Alternatives", *Journal of Infrastructure, Policy and Development*, En-Press Publisher, LLC, (in Press).

28 O.J. Olujobi et al. (2022), "Carbon Emission, Solid Waste Management, and Electricity Generation: A Legal and Empirical Perspective for Renewable Energy in Nigeria", *International Environmental Agreements: Politics, LAW and Economics*, Springer Nature, Netherlands, DOI 10.1007/s10784-021-09558, available online at: <https://link.springer.com/article/10.1007%2Fs10784-021-09558-z#cite> (accessed on August 8, 2023).

Emanating from the Climate Change Act is the establishment of a pivotal institution known as the National Council on Climate Change, hereinafter referred to as “the Council.” Endowed with juridical capacity, the Council is entrusted with the prerogative to formulate impactful policies and make informed decisions germane to climate change matters within Nigeria. The locus of this authority is situated in section 3 of the Act. Among the diverse responsibilities borne by the Council, several noteworthy mandates come to the fore. These encompass (a) coordinating the effective implementation of sector-specific targets and guidelines that pertain to the regulation of greenhouse gas emissions and other anthropogenic causes of climate change; (b) endorsing and supervising the execution of the National Climate Change Action Plan; (c) diligently embedding climate change considerations within the national development plans and programs; and (d) judiciously administering the Climate Change Fund, as articulated in section 4 of the Act. At its essence, the Climate Change Fund, established by the Act, represents a financial reservoir to be steered by the Council. The resources amassed in this fund are to be allocated towards covering the operational expenses of the Council, as elucidated in section 15 of the Act.

Aiming to fulfil the commitments outlined within the international climate framework, the Federal Ministry of Environment and Land Use Planning shoulders a critical mandate. It is tasked with developing a comprehensive carbon budget designed to cap the average global temperature rise at 2 degrees Celsius, with a concerted effort to further limit this rise to 1.5 degrees Celsius above pre-industrial levels.

Underscoring the Act’s proactive approach is the provision for a National Climate Change Action Plan. This strategy, which is slated to be formulated every five years, is meticulously crafted by the Secretariat of the Council in close consultation with the pertinent Federal Ministries, notably those responsible for Environment, as well as Budget and National Planning. This pivotal mechanism is enshrined within section 20 of the Act.

The Act establishes a significant obligation for ministries, departments, and agencies (MDAs) to institute a dedicated climate change desk, overseen by an officer not below the Directorate cadre. This appointed officer assumes the pivotal responsibility of guaranteeing the seamless integration of climate change initiatives into the core mandates of their respective entities, as stipulated by section 22 of the Act. Notably, the Council is bestowed with the authority to institute, modify, or revoke obligations concerning climate change across public entities, a jurisdiction underscored in section 23 of the Act.

Turning attention to private entities with a workforce of fifty (50) employees or more, they are mandated to devise strategies aimed at attaining the annual targets for carbon emission reduction, as outlined in the Action Plan and further elaborated upon in section 24(1)(a) of the Act²⁹

The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007 stands as the primary legal cornerstone underpinning environmental protection within Nigeria. This legislation formally instates the National Environmental Standards and Regulations Enforcement Agency (the Agency) as a pivotal entity, a creation enabled by section 1 of the Act. The Agency’s mandate extends to the safeguarding and advancement of Nigeria’s environmental interests. A rich tapestry of responsibilities shapes the Agency’s role, which notably encompasses (a) enforcing adherence to environmental laws, guidelines, policies, and standards; (b) orchestrating harmonious coordination and collaboration with stakeholders, both domestic and international, in realms concerning environmental standards, regulations, and their diligent enforcement. It is imperative to acknowledge that although the Agency shoulders the monumental task of shielding and nurturing Nigeria’s environment, an exception is enshrined in section 7(g) of the Act. This provision serves to exclude the oil and gas sector from the Agency’s jurisdiction, thus carving a distinct boundary. The conjuncture of these regulations and statutes demonstrates a concerted commitment towards addressing the multifaceted challenges posed by climate change and environmental protection within the Nigerian context.

The Agency holds the authority to collaborate with other pertinent bodies in order to regulate any substance, practice, process, or activity that has the potential to impact the stratosphere, with particular emphasis on the ozone layer, as delineated in section 22(2) of the Act. As stipulated by section 27(1) of the Act, any discharge of hazardous substances into the air, land, waters of Nigeria, or adjacent shorelines is explicitly prohibited and deemed a criminal offense. To fortify public health and advocate for robust environmental sanitation practices, the Agency is empowered to formulate regulations as outlined in section 25(1) of the Act.

29 O.J. Olujobi et al. (2022), “The Legal Framework for Combating Gas Flaring in Nigeria’s Oil and Gas Industry: Can It Promote, Sustainable Energy Security?” *Sustainability*, 14(13): 7626, available at: <https://doi.org/10.3390/su14137626> (accessed on August 8, 2023).

Under the National Oil Spill Detection and Response Agency Act, the establishment of the National Oil Spill Detection and Response Agency (hereinafter referred to as “the Agency”) is a pivotal development. This Act sets forth comprehensive objectives for the Agency, anchored in preparedness, detection, and rapid response to all instances of oil spillages within Nigeria’s purview, as laid out in sections 1(1) and 5 of the Act. A pivotal dimension of the Agency’s role is its commitment to adhere to prevailing environmental legislation while concurrently assuming the crucial task of identifying and responding to oil spillages within the petroleum sector, as delineated in section 6 of the Act.

Given the notable exclusion of the petroleum sector from the regulatory oversight of the National Environmental Standards and Regulations Enforcement Agency, as specified by section 7(g) of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007, a logical deduction can be drawn. With reference to the provisions contained in section 6 of the National Oil Spill Detection and Response Agency Act, the Agency emerges as the primary custodian of oversight in the oil and gas industry, particularly concerning climatic considerations.³⁰ This assertion finds further substantiation in the findings drawn from the public hearing, as encapsulated within the Report of the Senate Committee on Environment concerning a Bill for An Act to Amend the National Oil Spill Detection and Response Agency Act 2006, and pertinent matters connected therewith.³¹

The Act establishes a National Control and Response Centre, endowed with several pivotal functions encompassing the following: serving as a hub for processing reports and coordinating responses to all incidents of oil spillage within Nigeria; receiving reports of oil spillages from the Agency’s zonal offices and control units; assuming the role of a command-and-control center for monitoring compliance with prevailing environmental regulations; overseeing surveillance for the detection of oil spills, along with monitoring and orchestrating responses mandated in plan activations, as prescribed in section 18 of the Act.

As the apex authority in all matters concerning oil spill response management, the Agency takes on the role of a lead agency. It also forges collaboration with other relevant agencies to execute the provisions detailed in the plan outlined in the Second Schedule to the Act, as elucidated by section 19 of the Act.

3.8. *Goal 14: Conserve and Sustainably Use the Oceans, Seas and Marine Resources for Sustainable Development*

This goal is oriented towards the sustainable management and safeguarding of marine and coastal ecosystems from pollution, while also addressing the repercussions of ocean acidification. The augmentation of conservation efforts and the sustainable utilization of ocean-related resources through international legal frameworks contributes to alleviating the myriad challenges confronting our oceans. Within Nigeria, a suite of laws and regulations are closely tied to the realization of this goal.³² Notably among them are the following legislations: the Oil in Navigable Waters Act 2004, the Nigerian Maritime Administration and Safety Agency Act 2007, the Sea Fisheries Act 2004, and the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.

3.9. *Goal 15: Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, Halt and reverse Land Degradation and Halt Biodiversity Loss*

This goal is oriented towards diminishing the depletion of natural habitats and biodiversity, integral components of our shared heritage. These resources underpin critical facets such as global sustenance of food

30 O.J. Olujobi et al. (2018), “Oil Spillage in Nigeria’s Upstream Petroleum Sector: Beyond the Legal Frameworks” *International Journal of Energy Economics and Policy*, 8(1): 220-226.

31 The Senate, Federal Republic of Nigeria (2018), Report of the Senate Committee on Environment on a Bill for An Act to Amend the National Oil Spill Detection and Response Agency Act, 2006 and for other Matters Connected Therewith (SB 557), available at: <https://placng.org/i/wp-content/uploads/2019/12/Report-of-the-Senate-Committee-on-Environment-on-National-Oil-Spill-Detection-and-Response-Agency-Act-Amendment-Bill-2017.pdf> (accessed on 20 November 2022).

32 O.J. Olujobi (2020), “Nigeria’s Upstream Petroleum Industry Anti-Corruption Legal Framework: The Necessity for Overhauling and Enrichment”, *Journal of Money Laundering Control*, 24(4): 806-833, available at: <https://www.emerald.com/insight/1368-5201.htm>.

and water security, the mitigation and adaptation of climate change, as well as fostering peace and security.

Within Nigeria, a tapestry of laws, regulations, and policies aligns with the pursuit of this goal. Among them feature the National Parks Service Act and the Endangered Species (Control of International Trade and Traffic) Act.

3.10. Goal 17: Strengthen the Means of Implementation and Revitalize the Global Partnership for Sustainable Development

The overarching objective is to bolster both North-South and South-South cooperation by bolstering national strategies geared toward the realization of all outlined targets. Facilitating international trade and assisting developing nations in augmenting their exports is a pivotal facet of establishing a universal, principles-driven, and impartial trading framework that fosters equity, openness, and mutual benefit. Within Nigeria's context, a gamut of laws and regulations resonate with the pursuit of this goal. Notable among them are The Nigerian Investment Promotion Commission Act, the Nigerian Export Promotion Council (NEPC) Act, the Infrastructure Concession Regulatory Commission (Establishment, etc.) Act, 2005, and the National Policy on Public-Private Partnership.

4. Discussion of Results

The primary finding of this study underscores the National Environmental Standards Regulatory and Enforcement Agency (Establishment) Act of 2007 as the foundational cornerstone of environmental protection in Nigeria, effectively operating as a catalyst for sustainable development within the country. Moreover, the research unearths a notable gap in available data concerning the adherence to sustainable development, thus hindering the integration of this crucial concept into the national framework. This deficiency subsequently impedes the potential for augmenting legal compliance, fortifying environmental preservation efforts, and fostering sustainability across Nigeria.³³ Importantly, the study reveals an apparent scarcity of comprehensive information and scholarly inquiry into the symbiotic relationship between sustainable development, national integration, and their pivotal role in propelling legal adherence, environmental safeguarding, and sustainability endeavours within the Nigerian context.³⁴

These findings harmonize harmoniously with previous scholarly investigations within the existing literature. Noteworthy among these is the research conducted by Ufua, Olujobi, et al. (2021) in their study titled "Digital Transformation: A Conceptual Framing for Attaining Sustainable Development Goals 4 and 9 in Nigeria, 2021." Similarly, the work undertaken by Babalola and Olawuyi³⁵ titled "Advancing Environmental Education for Sustainable Development in Higher Education in Nigeria: Current Challenges and Future Directions Roles of Environmental Education (EE) as a tool for advancing the United Nations Sustainable Development Goals (SDGs 2021)" underscores the pivotal role of environmental education initiatives in ensuring robust environmental preservation and sustainability strategies in Nigeria.

33 C.M. Elikwu et al. (2023), "The Legal and Institutional Framework for the Protection of Religious Rights in Nigeria and the Right to Wear Hijab in Public Institutions", *F1000Research*, 12: 537, available at: <https://doi.org/10.12688/f1000research.132637>.

34 A.D. Aina-Pelemo and O.J. Olujobi (2023), "Sexual Exploitation and Vulnerability of Followers in Nigerian Religious Circles: A Legal Approach", *Journal of Human Rights and Social Work*. Springer Nature, Switzerland AG, (Ranked 66th Percentile, Indexed in Scopus). DOI: 10.1007/s41134-023-00269-w, available online at: https://trebuchet.public.springernature.app/get_content/5a553cc5-ab04-47bb-986a0be94bc12986?utm_source=rct_congratemail&utm_medium=email&utm_campaign=nonoa_20231201&utm_content=10.1007/s41134-023-00269-w.

35 A. Babalola and D.S. Olawuyi (2021), "Advancing Environmental Education for Sustainable Development in Higher Education in Nigeria: Current Challenges and Future Directions", *Sustainability*, 13: 10808, available at: <https://doi.org/10.3390/su131910808>.

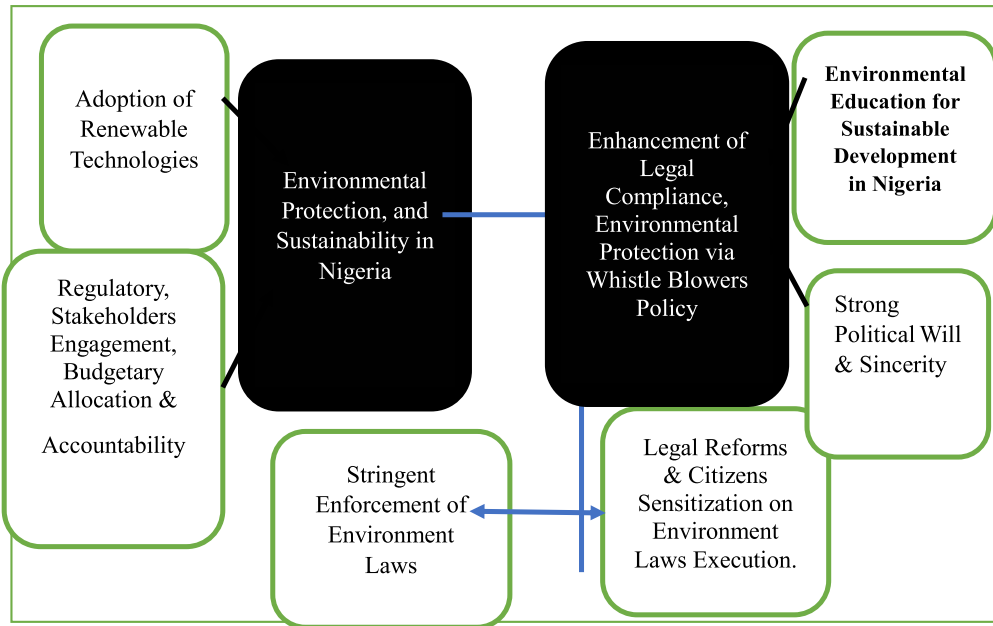


Fig. 1. Hybrid model designed to promote sustainable development and national integration being a catalyst for enhancing legal compliance, environmental protection, and sustainability in Nigeria. Source: Authors.

However, a significant challenge emerges in the form of the absence of stringent sanctions, which could serve as a potent deterrent against non-compliance at the national level. This absence is compounded by inadequate funding, limited capacity, insufficient infrastructure, and a lack of comprehensive information regarding ongoing and historical environmental protection initiatives, compliance measures, and sustainability efforts within Nigeria.³⁶ Addressing these challenges is imperative for steering the nation towards a more sustainable and environmentally responsible path.³⁷

5. Conclusion

In conclusion, the pursuit of sustainable development and national integration in Nigeria stands to be significantly fortified through the amendment of section 6(6)(c) of the 1999 Constitution. This pivotal change can serve as a potent catalyst for elevating legal compliance, augmenting environmental protection, and nurturing a culture of sustainability across the nation. The legislative frameworks, namely the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007, the National Oil Spill Detection and Response Agency Act 2006, and the Climate Change Act 2021,³⁸ underscore the vision of fostering accountability, environmental justice, and sustainability.

Furthermore, the study underscores the paramount importance of crafting an effective and comprehensive strategy, policy, or framework that revolves around sustainable development and national integration. To concretize these aspirations, the Federal Government should take proactive measures such as formulating

36 A.D. Aina-Pelemo et al. (2023), "A Socio-Legal Imperative of Domestic Violence Prohibition in Africa vis-a-vis Nigerian Legal Structure for Sexually Abused Women", *F1000Research*, 12: 397, available at: <https://doi.org/10.12688/f1000research.132413.1>.

37 Bifatife Olufemi Adeseye and Innocent Afolabi Ariremako (2019), "A Congenial Communication Climate: The Catalyst and Panacea for Effective Organizational Communication", *EJOTMAS: Ekpoma Journal of Theatre and Media Arts*, 7(1-2): 386-402.

38 O.A. Oyewunmi and O.J. Olujobi (2016), "Transparency in Nigeria's Oil and Gas Industry: Is Policy Re-engineering the Way Out?" *International Journal of Energy Economics and Policy*, 5(4): 630-636.

robust national environmental education plans, devising sustainable funding mechanisms, and establishing dedicated Directorate on Sustainable Development centres. These entities would play a pivotal role in monitoring and refining strategies and plans while ensuring adherence to environmental protection and sustainability goals.

To bolster these efforts, the enactment of comprehensive laws pertaining to environmental protection and sustainability becomes a necessity. Specifically, section 20 of the 1999 Constitution should be rendered enforceable in court, allowing for the accountability of entities that violate environmental standards. Simultaneously, stringent scrutiny and oversight of activities in the oil and gas sectors are imperative to curb ecosystem contamination. Offering incentives or tax rebates for firms that invest in pollution control mechanisms could serve as a powerful motivator.

Additionally, the collaborative engagement of Non-Governmental Organizations and civil society within Nigeria is pivotal. These stakeholders can contribute significantly by actively participating in the implementation of the Sustainable Development Goals (SDGs). By consistently providing evaluation reports, they can hold responsible entities accountable for their role in environmental protection and sustainability, effectively preventing the degradation of vital ecosystems.

Moreover, in the pursuit of energy security and sustainability, transitioning to alternative clean energy sources, such as solar, wind, and biomass, becomes paramount. These alternatives stand as potent means of reducing reliance on fossil fuels for electricity generation.

In essence, by addressing legal frameworks, promoting comprehensive strategies, and fostering collaboration, Nigeria can pave the way for an environmentally conscientious, sustainable, and integrative future.

Acknowledgement: Limitations of the Study

The study is marked by certain limitations that warrant acknowledgment. Firstly, due to the prevailing security concerns in Nigeria, the research heavily relies on existing literature and secondary sources. This limitation arises from the challenging security situation in the country, which has hindered access to primary data and restricted fieldwork. Despite this constraint, the study adeptly utilizes available scholarly resources and pertinent legal documents to construct a comprehensive analysis.

Another limitation is linked to the current global pandemic, COVID-19. The study's data collection process was hindered by the pandemic's impact, particularly in terms of restricted physical interactions and gatherings. The necessary precautions, such as social distancing and mask-wearing, impeded face-to-face consultations, including those with oil and gas companies. The study's effectiveness was influenced by these limitations in data collection methods.

Furthermore, the ongoing security issues within the country posed additional challenges. The prevalence of insecurity has affected the feasibility of certain data collection efforts, potentially limiting the depth and scope of the study's insights. Given these limitations, there arises a clear need for further research, particularly in the realm of low-carbon energy within Nigeria's energy sector. Exploring this area could shed more light on sustainable energy solutions and address the gaps imposed by the present constraints.

In summary, while the study skillfully navigates the challenges of restricted data collection due to security concerns and the pandemic, these limitations do prompt consideration for future research directions. A deeper exploration of the low-carbon energy landscape in Nigeria's energy sector could provide valuable insights into sustainable energy practices that align with broader environmental goals.