ENVIRONMENTAL SUSTAINABILITY AND POLITICAL ECONOMY OF THE NIGER DELTA IN THE PETROLEUM INDUSTRY ACT 2021*

Abstract

Environmental sustainability is fundamental to the continuous existence of mankind in peaceable harmonious relationship with nature. Environmental sustainability deals on the ability of the environment to sustain itself against pollution or depleting activities of man without losing the potential of providing same resources to future generations. Oil and gas exploration, exploitation and marketing results in challenging environmental issues which stakeholders must consider in the light of non-renewability of petroleum and seek sustainable ways for its utilization. The paper found that environmental sustainability in the Niger Delta require higher levels of political will and commitment at the federal government levels. The article uses the fee simple theory of ownership of petroleum to propose individual ownership of resources as sure way to environmental sustainability in Niger Delta Nigeria.

Keywords: Environment, Sustainability, Political, Economy, Petroleum, Industry.

1. Introduction

The Petroleum Industry Act 2021 has significant implications for the environmental sustainability and political economy of the Niger Delta region.² The act presents an opportunity to address longstanding environmental challenges and reshape the political economy within the region, which has been a focal point of Nigeria's oil and gas industry.3 In terms of environmental sustainability, the act's provisions related to environmental protection and remediation are crucial. Given the history of environmental degradation in the Niger Delta, these provisions can potentially lead to improved environmental stewardship by oil and gas companies operating in the region. The act may introduce more stringent environmental standards, compliance requirements, and mechanisms for environmental remediation, aiming to mitigate the negative impact of oil and gas operations on the ecosystem and local communities.⁴ From a political economy perspective, the act's provisions related to revenue allocation, community engagement, and local content are important.⁵ These provisions have the potential to reshape the distribution of oil and gas revenues, enhance community participation in decision-making processes, and promote the development of local capacities and industries. By fostering greater community involvement and increasing local content requirements, the act can contribute to a more inclusive and diversified political economy within the Niger Delta.⁶ It is important to note that the effective implementation of the act's provisions will be critical in realizing its potential impact on environmental sustainability and the political economy of the Niger Delta. This may require robust regulatory frameworks, transparent governance mechanisms, and active participation from all stakeholders, including government agencies, oil and gas companies, local communities, and civil society organizations. Overall, the Petroleum Industry Act 2021 has the potential to catalyze positive changes in the Niger Delta, fostering environmental sustainability and a more inclusive political economy within the region's oil and gas industry. However, its successful implementation and enforcement will be essential to realizing these transformations conducive environment for the growth and sustainability of the entertainment industry in Nigeria.

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¹ C.L. Gadzama and T. Okeokwo, 'Sections 104 and 107 of the Petroleum Industry Act 2021 and Accelerated Genocide Concerns of the Petroleum Producing States in Nigeria' *American Journal of Public Law and Political Education* (2024) (1)(2)28-36.

² s.2 & Chapter 3, Petroleum Industry Act 2021.

³ D.O.E. Borha and O.J. Olujobi, 'An examination of the Petroleum Industry Act 2021: prospects, challenges, and the way forward' *F1000Res* (2023) (12)551 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10468656/ accessed 19th June 2024.

⁴ B. Michael and P.O. Okolo, 'Oil Politics and Environmental Remediation in Nigeria' Researchgate (2018)1-18.

⁵ S. O. Adolana, T.A. Adeosun, A.O. Adesina and M.O. Ojuroye, 'Environmental pollution and remediation: Challenges and management of oil spillage in the Niger Delta area' *American journal of scientific and industrial Research* (2011) (2)(6)834-845.

⁶ A. I. Augustin, Nigeria oil and External Exposure: The gains and pains of crude Export Dependent Economy, in S.G. Edoumiekumo (ed). Nigeria Socioeconomic Development: Essays in honour of Professor Gesiye Salo Angaye.Harey publication company, PortHarcort (2017).

⁷ L. Fatodu, Host Community Support and Net Zero Emission Top NUPRC'S Agenda, in Upstream Gaze, 'New Era of Transparency and Innovation in Licensing Bid Round' (2023) (3)5-8.

2. Understanding of Some Key Terms in the Article

Environmental Sustainability

Environmental Sustainability refers to the responsible management and conservation of natural resources to ensure that current needs are met without compromising the ability of future generations to meet their own needs. This concept emphasizes maintaining an ecological balance and protecting global ecosystems to support health and wellbeing now and in the future⁸. There are various aspects of environmental sustainability, such as:

- i. Conserving natural resources: Using resources like water, soil, and air efficiently and responsibly.
- ii. Reducing pollution: Minimizing emissions and waste to protect the environment.
- iii. Promoting renewable energy: Using sustainable energy sources like solar, wind, and hydro power.
- iv. Ensuring equitable resource access: Making sure all communities have access to clean water, air, and other essential resources⁹.

It is about creating a balance between ecological, economic, and social goals to ensure long-term ecological stability and a healthy planet for future generations ¹⁰.

Political Economy

The political economy is the study of how economic theories and policies are influenced by political processes and how these, in turn, affect economic systems and outcomes. It examines the relationship between individuals, governments, and public policy, and how these interactions shape the distribution of resources and wealth within a society. Key areas of focus in political economy include:

- i. Economic policies: How government decisions on taxation, spending, and regulation impact the economy.
- ii. Power and influence: The role of political power and institutions in shaping economic policies and outcomes
- iii. Globalization: The effects of global economic integration on national economies and political systems.
- iv. Inequality: How economic policies affect income and wealth distribution among different groups within society.
- v. Development: The strategies and policies that promote economic growth and development in different regions.

Political economy provides a framework for understanding the complex interplay between politics and economics, helping to explain why certain policies are adopted and their broader social and economic impacts.

Petroleum Industry

The petroleum industry, also known as the oil industry, encompasses the global processes involved in the exploration, extraction, refining, transportation, and marketing of petroleum products. Here are the main components of the industry:

Upstream: This involves the exploration and extraction of crude oil and natural gas. Activities include locating oil fields, drilling wells, and bringing the oil or gas to the surface¹¹.

Midstream: This sector focuses on the transportation and storage of crude oil and natural gas. It includes pipelines, tankers, and storage facilities that move and store these resources until they are ready for refining.

Downstream: This involves refining crude oil into usable products such as gasoline, diesel, jet fuel, heating oil, and petrochemicals. It also includes the marketing and distribution of these products to consumers.

The petroleum industry is crucial to the global economy, providing energy for transportation, heating, electricity, and industrial production. It also produces raw materials for various products, including plastics, fertilizers, and pharmaceuticals.

However, the industry faces significant challenges, including environmental concerns such as pollution and greenhouse gas emissions, which contribute to climate change. Efforts are ongoing to balance the demand for petroleum with the need for sustainable and cleaner energy sources¹².

3. The Nature of Environmental Sustainability

Environmental Protection over Environmental Remediation

In the Petroleum Industry Act 2021, prioritizing environmental protection over environmental remediation is crucial to ensuring the sustainable management of the environment impacted by petroleum industry activities,

⁸ https://sphera.com/resources/glossary/what-is-environmental-sustainability/ accessed on 19th June 2024

^{9 &}lt;a href="https://www.snhu.edu/about-us/newsroom/stem/what-is-environmental-sustainability">https://www.snhu.edu/about-us/newsroom/stem/what-is-environmental-sustainability accessed on 19th June 2024

^{10 &}lt;a href="https://www.microsoft.com/en-us/sustainability/learn/environmental-sustainability">https://www.microsoft.com/en-us/sustainability/learn/environmental-sustainability accessed on 19th June 2024

¹¹ https://en.wikipedia.org/wiki/Petroleum_industry accessed on 19th June 2024

 $^{^{12} &}lt; https://www2.deloitte.com/us/en/insights/industry/oil-and-gas/oil-and-gas-industry-outlook.html> \ accessed \ on \ 19^{th} \ June \ 2024$

particularly in the Niger Delta region.¹³ Adjusting the focus from remediation to protection entails emphasizing proactive measures to prevent environmental degradation, minimize the ecological footprint of oil exploration and production, and safeguard the natural ecosystems and communities in the region.¹⁴ Under the Act, a shift towards environmental protection involves incorporating stringent regulatory frameworks, environmental impact assessments, and the implementation of best practices to prevent oil spills, minimize pollution, and conserve biodiversity. This proactive approach aims to reduce the occurrence of environmental damage and limit the need for remediation efforts.¹⁵ Furthermore, prioritizing environmental protection within the Petroleum Industry Act 2021 necessitates the integration of sustainable practices, the promotion of eco-friendly technologies, and the enforcement of strict environmental standards to foster responsible and sustainable operations within the petroleum industry.¹⁶ By placing greater emphasis on environmental protection, the Act can contribute to preserving the Niger Delta's fragile ecosystems, protecting the livelihoods of local communities, and mitigating the adverse environmental impacts of petroleum industry activities.¹⁷ Ultimately, shifting the focus to environmental protection in the Petroleum Industry Act 2021 signifies a commitment to proactive environmental stewardship, sustainable development, and the long-term well-being of the Niger Delta region and its inhabitants.

The Fee Simple Theory of Petroleum Ownership and Environmental Sustainability

The Fee Simple Theory of Petroleum ownership offers a unique opportunity to promote environmental sustainability within the petroleum industry. This legal concept, which grants individuals ownership rights to the petroleum resources beneath their land, can be leveraged to incentivize responsible environmental stewardship and long-term sustainability. By applying the Fee Simple Theory to petroleum ownership, landowners gain a vested interest in the responsible extraction and management of petroleum resources on their property. 18 This vested interest can align with environmental sustainability goals by encouraging landowners to prioritize environmentally sound practices, minimize ecological disruptions, and proactively address environmental risks associated with petroleum extraction. Moreover, the Fee Simple Theory can empower landowners to assert greater control over the development of petroleum resources on their land, enabling them to impose environmental safeguards, demand adherence to stringent environmental standards, and even negotiate environmentally friendly production techniques with oil and gas companies. ¹⁹ Additionally, the application of the Fee Simple Theory can foster a sense of environmental stewardship among landowners, compelling them to consider the long-term environmental implications of petroleum extraction and adopt measures that promote ecological resilience, habitat conservation, and mitigation of environmental degradation.²⁰ Furthermore, governmental regulations can complement the Fee Simple Theory by imposing environmental protection requirements and incentivizing environmentally sustainable practices through tax breaks, subsidies, or other financial mechanisms for landowners who demonstrate a commitment to sustainable petroleum resource management.²¹ Ultimately, the Fee Simple Theory of Petroleum ownership, when integrated with robust environmental regulations and incentives, can serve as a powerful mechanism for advancing environmental sustainability within the petroleum industry, aligning the interests of landowners with the long-term ecological health and well-being of the surrounding environment.²²

4. Political Economy of the Niger Delta Region

The importance of political will for environmental sustainability in the Niger Delta under the Petroleum Industry Act 2021 cannot be overstated. The Act represents a significant opportunity to demonstrate a strong commitment to environmental stewardship and sustainable development in the region through concrete policy measures and regulatory frameworks. The presence of political will is paramount in ensuring that the provisions related to environmental sustainability within the Petroleum Industry Act 2021 are effectively implemented and enforced.

¹³ I.N. Azuozu, K. Sam, P. Campo and F. Coulon, 'Challenges and opportunities for low-carbon remediation in the Niger Delta: Towards sustainable environmental management' *Elsevier* (2023) (900)1-16.

¹⁴ E.L. Rylott and N.C. Bruce, 'How synthetic biology can help bioremediation?. In: Current Opinion in Chemical Biology' *Elsevier* (2020)86-95.

¹⁵ S. Remelli, P. Rizzo, F. Celico and C. Menta, 'Natural surface hydrocarbons and soil faunal biodiversity: a bioremediation perspective' *Water* (2020) (12)(9)2358.

¹⁶ s.2, PIA 2021

¹⁷ O.Y. Omotuyi, O. Mohammed and A.P. Adebanwo, 'A review of the legal framework for marine environmental protection and sustainable development in Nigeria: Case study of the Niger Delta region and upstream petroleum development' *Humanus Discourse* (2024) (4)(1)1-22.

¹⁸ J.N. Agada, 'A critical appraisal of the Theories of Ownership and Control of Petroleum and Other Natural Resources in Nigeria' *MUNFOLLIJ* (2021) (1)107-122.

¹⁹ D. Suryandari and E. Andhika, 'Corporate Governance Mechanism, Firm Size and Its Effects on Acceptance of Qualified Audit Opinion' *KnE Social Sciences* (2020)509-527.

²⁰ L. Aladeitan, 'Ownership and control of oil, gas, and mineral resources in Nigeria: between legality and legitimacy' *T. Marshall L. Rev.* (2012) (38)159.

²¹ J.A. Adoga-Ikong and A.F. Ibekwe, 'Ownership of Oil and Gas in Nigeria: A Need for Paradigm Shift?' *Pinisi Discretion Review* (2021) (5)(1)21-28.

²² A. Zuru, The Nigeria's upstream oil and Environmentalism: Government, the Niger Delta and oil multi-national oil industry (Faith printers International, 2009).

This includes the allocation of necessary resources, the establishment of monitoring and compliance mechanisms, and the prioritization of environmental considerations in decision-making processes.²³ Moreover, political will plays a pivotal role in fostering inter-agency collaboration, stakeholder engagement, and transparent governance to effectively address environmental challenges in the Niger Delta. By demonstrating a firm resolve to uphold environmental standards and regulations, policymakers can instill confidence in local communities, industry stakeholders, and environmental advocates regarding the government's commitment to environmental sustainability.²⁴ Furthermore, political will is essential for promoting accountability and transparency in the management of environmental issues within the petroleum industry. This can involve robust oversight, reporting requirements, and measures to ensure that environmental protection is integrated into the core objectives of petroleum operations in the Niger Delta.²⁵ Ultimately, the demonstration of political will²⁶ for environmental sustainability under the Petroleum Industry Act 2021 underscores the government's recognition of the environmental challenges in the Niger Delta and its proactive approach to addressing these challenges.²⁷ It sends a clear message that environmental protection is a top priority, aligning with sustainable development goals and the well-being of the region's ecosystems and communities.²⁸

Healthcare and Education Infrastructure for Settlor/Host Communities under PIA

The Petroleum Industry Act 2021 provides an opportunity to address the healthcare and education infrastructure in settler/host communities impacted by petroleum industry activities.²⁹ It is essential to prioritize the well-being and development of these communities by integrating provisions that ensure access to quality healthcare and education services. Under the Act, there is a need to establish clear mandates and mechanisms for the petroleum industry operators to contribute to the development and enhancement of healthcare infrastructure in settler/host communities.³⁰ This may involve direct investments in healthcare facilities, the provision of medical equipment, and the support of healthcare programs aimed at improving the health outcomes of community members. Similarly, addressing the education infrastructure in settler/host communities through the Petroleum Industry Act 2021 requires the incorporation of provisions that promote access to quality education, the construction and maintenance of schools, and the provision of educational resources to support learning and skill development among community residents, especially children and youth.³¹ Furthermore, it is essential to emphasize community participation and engagement in the planning and implementation of healthcare and education initiatives under the Act.³² This can foster a sense of ownership and empowerment within the settler/host communities, ensuring that the infrastructure development aligns with their specific needs and priorities. Additionally, transparency and accountability in the allocation and utilization of funds for healthcare and education infrastructure within settler/host communities are crucial. The Act should include mechanisms for monitoring and reporting on the implementation of these initiatives to ensure that resources are effectively utilized and that the intended benefits reach the communities as intended.³³ By integrating provisions for healthcare and education infrastructure in settler/host communities, the Petroleum Industry Act 2021 can contribute to creating a more sustainable and inclusive environment for these communities, aligning with broader objectives of social responsibility and community development within the petroleum industry.

Right to Unpolluted Environment and Clean Drinkable Water

Under the Petroleum Industry Act 2021, the right to an unpolluted environment and access to clean, drinkable water in the Niger Delta is a fundamental consideration that must be upheld to ensure the well-being and quality of life for the

²³ J. Awewomom, et al., 'Addressing global environmental pollution using environmental control techniques: a focus on environmental policy and preventive environmental management' *Discover Environment* (2024) (2) (8)1-20.

²⁴ C.M. Raymond, et al. 'Integrating local and scientific knowledge for environmental management' *Journal of Environment Management* (2010) (91) (8)1766.

²⁵ E. Giovannoni and G. Fabietti, 'What is sustainability? A review of the concept and its applications In: C. Busco, M. Frigo, A. Riccaboniand P. Quattrone, (ed) Integrated reporting: concepts and cases that redefine corporate accountability' *Cham: Springer* (2013)21-40.

²⁶ U.V. Obi, 'Mainstreaming Distributive Justice into Resources Management in Nigeria: The Extent of the Petroleum Industry Act 2021' *The Journal of Sustainable Development Law and Policy* (2024) (15) (1)1-25.

²⁷ G.O. Zekeri and T. Okeokwo, 'Ecological Sustainability of Petroleum Resources Utilisation in Nigeria' *American Journal of Public Law and Political Education* (2024) (1)(2)21-27.

²⁸ Obi. (n20).

²⁹ P. Ogundu and T.A. Abbiyesuku, 'An examination of the Petroleum Industry Act with the Issues Relating to the Host Communities in Focus' *Journal of Environmental and Human Right Law* (2023) (3)(2) 63.

³⁰ SDN Policy Brief, Opportunities to improve the Host Community Development Trust under Nigeria's Petroleum Industry Act (2023)1-23 https://www.stakeholderdemocracy.org/wp-content/uploads/2023/05/PIA-and-HCDT-Report.pdf accessed 18 June 2024.

³¹ M.I. Amedari and I.C. Ejidike, 'Improving access, quality and efficiency in health care delivery in Nigeria: a perspective' *Pan Africa Medical Journal* (2021) (5) (3)28204.

³² H. Isallah, 'The Impact of the Petroleum Industry Act on Corporate Social Responsibility and Taxation in Nigeria's Upstream Oil and Gas Sector: A Path towards Sustainable Development' Sustainability (2023) (15) (21)15538.

³³ V. Haldane, et al., 'Community participation in health services development, implementation, and evaluation: A systematic review of empowerment, health, community, and process outcomes' *PLoS One* (2019) (14)(5)e0216112.

region's inhabitants. The Act should explicitly recognize and safeguard the right of individuals in the Niger Delta to live in an environment that is free from pollution resulting from petroleum industry activities.³⁴ This entails incorporating provisions that promote environmental protection, pollution prevention, and the mitigation of adverse environmental impacts, particularly those affecting air and water quality in the region. Additionally, the Act should emphasize the provision of clean and drinkable water to communities in the Niger Delta, recognizing access to safe drinking water as a fundamental human right.³⁵ This necessitates measures to address water pollution resulting from petroleum-related activities, as well as initiatives to ensure that communities have reliable access to clean water sources for their daily needs. Furthermore, the Act should establish clear responsibilities for petroleum industry operators to uphold these rights, including the implementation of measures to prevent water pollution, the remediation of contaminated water sources, and providing access to clean water for communities affected by industry activities.³⁶ Incorporating these provisions into the Petroleum Industry Act 2021 aligns with principles of environmental justice, human rights, and sustainable development. It underscores the importance of protecting the well-being of communities in the Niger Delta and ensuring that their right to an unpolluted environment and clean, drinkable water is respected and upheld within the framework of petroleum industry operations.³⁷

5. Conclusion and Recommendations

The intersection of environmental sustainability and the political economy of the Niger Delta within the framework of the Petroleum Industry Act 2021 holds significant implications for the region and the petroleum industry as a whole. Environmental sustainability in the Niger Delta has long been a contentious issue due to the adverse impacts of oil exploration and production on the region's ecosystems and communities.³⁸ The Petroleum Industry Act 2021 presents an opportunity to address these challenges by incorporating provisions for environmental protection, mitigation of environmental degradation, and sustainable practices within the petroleum industry. Moreover, the political economy of the Niger Delta, characterized by historical grievances, socio-economic disparities, and governance issues, intertwines with the petroleum industry, reflecting the need for equitable distribution of benefits and resources from oil extraction activities. 39 Under the Petroleum Industry Act 2021, it is crucial to ensure that environmental sustainability is prioritized through provisions for environmental impact assessments, stringent regulations on oil spillage and pollution, as well as mechanisms for environmental restoration and remediation. This would contribute to mitigating the negative environmental externalities associated with petroleum operations in the Niger Delta. 40 Simultaneously, addressing the political economy of the Niger Delta within the framework of the Act necessitates equitable revenue sharing, community participation in decision-making processes, and the promotion of local content development to foster inclusive growth and development in the region. Balancing environmental sustainability and the political economy of the Niger Delta within the Petroleum Industry Act 2021 requires a comprehensive and integrated approach that acknowledges the interconnectedness of these issues.⁴¹ By doing so, the Act can contribute to fostering a more sustainable, equitable, and responsible petroleum industry that aligns with the region's environmental and socioeconomic needs. Following the fee simple theory of petroleum resources ownership, it is recommended that all Nigerians be allowed to mine or explore/exploit the natural resources beneath their lands and pay tax to government. 42 Since, the people, where they own their natural resources, would ensure that the use of such resources would not destroy their lives and livelihood. The fee simple theory puts the destiny of Nigerians in their hands and eliminates corruption in petroleum resources management. It will increase environmentally sustainable methods of exploitation and production of petroleum in the country.

³⁴ O.J. Olujobi, et al., 'The Legal Framework for Combating Gas Flaring in Nigeria's Oil and Gas Industry: Can It Promote Sustainable Energy Security?' *Sustainability* (2022) (14)(13) su14137626.

³⁵ J. Nriagu, et al., 'Health Risks Associated with Oil Pollution in the Niger Delta Nigeria' *Int J Environ Res Public Health* (2016) (13) (3)346.

³⁶ J.H. Diaz, 'The legacy of the Gulf oil spill: Analyzing acute public health effects and predicting chronic ones in Louisiana' Am. J. Disaster Med. (2011) (6)5-22.

³⁷ S.M. Taylor, et al., 'Community health effects of a petroleum refinery' *Ecosyst. Health.* (1997) (3)27-43.

³⁸ A.T. Bello and T. Nwaeke, 'Impacts of Oil Exploration (Oil and Gas Conflicts; Niger Delta as a Case Study)' *Journal of Geoscience and Environmental Protection* (2023) (3) (11)189-200.

³⁹ G. R. Ana, 'Air Pollution in the Niger Delta Area: Scope, Challenges & Remedies, In M. Khallaf (ed) The Impact of Air Pollution on Health, Economy, Environment and Agricultural Sources' *IntechOpen* (2011) https://doi.org/10.5772/16817> accessed on 19th June 2024.

⁴⁰ J.F. Wansah, et al., 'Environmental impact analysis of Oil Exploration in the Niger Delta Region, Nigeria' *Asian Journal of Science and Technology* (2019) (10) (10)10282-10286.

⁴¹ A.M. Kolawole and B.M. Ayodele, Oil Exploration in the Niger-Delta Region and Environmental Degradation: Implication for Social Peace, Security and Public Policy (2016) accessed on 19th June 2024.

⁴² J.F. Wansah and C. Iyen, Environmental Impact Analysis of Oil Exploitation in the Niger Delta Region, Nigeria (2024)
https://www.researchgate.net/publication/379727304_ENVIRONMENTAL_IMPACT_ANALYSIS_OF_OIL_EXPLOITATION_IN_THE_NIGER_DELTA_REGION_NIGERIA accessed on 19th June 2024