

Original Article

Review of Natural Resource Governance Frameworks

¹Ishaq A. Samaila, ²Kabir Tahir Hamid, ³Zaharaddeen Salisu Maigoshi, ⁴Zaharadden Abdullahi, ⁵Rashida Lawan
^{1,2,3,4,5}Department of Accounting, Bayero University, Kano, Kano State.

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Abstract: *The frameworks for managing natural resources for sustainable development are reviewed in this research. Natural resources governance frameworks aim to ensure that resources are used in a way that is equitable and just. This includes making sure that the benefits of using resources are shared fairly among different stakeholders. Natural resources governance frameworks are used to ensure that resources are used in a way that is equitable and just. This includes making sure that the benefits of using resources are shared fairly among different stakeholders. It also includes making sure that the impacts of using resources are mitigated or avoided where possible. It also includes making sure that the impacts of using resources are mitigated or avoided where possible.*

Keywords: Frameworks, Governance, Natural Resources.

I. INTRODUCTION

Natural resources are all material goods and services provided by nature that have economic value, either from the land, water, air space, forest or agriculture (farming and animal husbandry). According to Graham et al. (2003), natural resource governance refers to the norms, institutions, and procedures that determine how authority and responsibility over natural resources are exercised, how decisions are made, how citizens and local communities participate in the management of natural resources, and how they benefit from it. It evaluates the efficiency of conservation initiatives as well as how much conservation contributes to sustainable development and human well-being (Bennett & Dearden, 2014; Bennett et al., 2019; Springer, Campese & Nakangu, 2021).

Natural resource governance was defined by Graham et al. (2003) as cited by Springer, Campese, and Nakangu (2021) as the norms, institutions, and procedures that govern how authority and responsibility over natural resources are exercised, how decisions are made, and how citizens participate in and gain from the management of natural resources. Therefore, the term "natural resource governance" refers to the application of governance and principles to decide how relevant parties will extract and use natural resources. It includes standards, guidelines, institutions, and other controls that govern how governments, businesses, and other stakeholders access, manage, distribute, exploit, and use natural resources.

Sustainable resource usage is necessary for economic development, increased quality of life, and the generation of jobs while maintaining the ecosystem's health. It requires contract transparency and effective monitoring, tackling of corruption, economic diversification, effective legislation and regulation, measurement of environmental and social impacts of projects and activities, measurement of the quality of governance, open and transparent data management, effective revenue management, and sharing, value realization, effective tax policy and revenue collection and creation of enabling operating environment, among others (NRGI, 2017).

The criteria for comprehending, evaluating, and enhancing the governance of natural resources are recognised as the principles of natural resource governance (Springer, Campese, & Nakangu, 2021). The principles of good natural resource governance, particularly the involvement of all actors managing or depending on the natural resources, have been demonstrated in existing literature to contribute to successful conservation outcomes, more secure rights and livelihoods, increased empowerment and well-being of local people, and risk mitigation (associated with conflicts, hostage of workers of the natural resource sector, vandalization of facilities, kidnapping of commuters and passers-by) (Tauli-Corpuz, 2016; De-Koning, 2017; Artelle et al., 2019; Springer & Almeida, 2015; Kothari et al., 2012). The Sustainable Development Goals, the Convention on Biological Diversity, and the UN Framework Convention on Climate Change, among others, are important global frameworks that direct and influence global conservation action. Springer, Campese, and Nakangu (2021) report that the ideal of good natural resource governance has been incorporated into these frameworks (WRI, 2015).

The environmental, economic, and social problems associated with poor natural resource governance are quite alarming. Some of the most negative consequences of poor natural resource governance in the country include environmental pollution, the devastation of the ecosystem, encroachment of grazing reserved forest, desertification, illegal mining, upsurge in youth



restiveness, increased poverty, increased crime rate, loss of revenue, herder-famer clashes, kidnapping, arm banditry and deteriorating security situation across the country, among others (Ikeke, 2014). Similarly, in the last few years, there have been increased agitations for restructuring, resource control, decentralization of power, secession, and regional uprising as a result of poor natural resource governance, among other factors (Nyekwere & Duson 2023). This menace can be tackled effectively through the effective implementation of an acceptable natural resource governance framework.

The Natural Resources Governance Framework (NRGF) is a strong, inclusive, and reliable approach that aims to establish standards and guidelines for decision-makers so they can apply good governance principles to make better and more just decisions regarding the use of natural resources and the distribution of the benefits of nature. Natural resource governance has been a key component of sustainable development during the past ten years and a powerful tool for managing and conserving natural resources. According to certain research, strong governance is essential to the success of conservation programmes (Bennett & Dearden, 2014; Bennett et al., 2019). Frameworks for managing natural resources are crucial for ensuring environmental preservation and resource sustainability. They offer a thorough set of guidelines, rules, and guidelines for managing the use of natural resources, fostering their conservation, and encouraging sustainable development. They are the cornerstone of any country's natural resource management strategy and are essential for achieving both economic and environmental objectives.

A framework for managing natural resources must be well-designed, implemented, and enforced to be effective. A detailed grasp of the particular resource and its context should serve as the foundation for the framework's design. It should be customised to meet the unique requirements of the nation or region, taking into account the economic and cultural conditions there. The framework should be flexible enough to accommodate changes in the resource base and to respond to new demands or threats. At the most basic level, natural resources governance frameworks are designed to ensure that natural resources are used in a sustainable manner. This includes managing the use of resources in a way that does not lead to their depletion or degradation. It also entails making sure that resources are used in a way that does not hurt the environment or the people who live there.

Most of the natural resource governance framework focused more on the extractive industry especially oil and gas in most of the developing countries, with less emphasis on land, water, forest and biological resources, among other important natural resources. Effectively natural resource governance can address a number of economic issues ranging from poverty alleviation, job creation, revenue generation, quality of living standard, and creation of enabling operating environment for entrepreneurial development. Good natural resource governance can equally be used to achieve a number of social development issues which poster socio-cultural coherence, justice, equity, peace and stability, harmonious co-existence, food security, equal opportunities for all, and social cohesion. Similarly, good natural resource governance has the potential of addressing a number of environmental issues including gas flaring, environmental pollution and degradation, and other mining-related toxics which significantly affect the natural environment. Hence, this study reviews the existing natural resource governance frameworks.

II. LITERATURE REVIEW

A) *The Concept of Natural Resources*

Natural resources are the natural endowment (minerals, metals, wildlife, fish, timber, wood,) accruable to an economy or political jurisdiction explore from water, land and natural vegetation by man to create wealth and sustain life (Okoli & Uhembe, 2015). Natural resources are materials provided by nature that can be changed or exploited by humans to support life and generate profit. They include all organic resources that can be gathered from the forest, waterways, earth, and natural plants. For the purposes of this study, natural resources encompassed land, water based and wild based resources in liquid or solid form, renewable, non-renewable exploited and utilize by man for sustainable growth and economic development. Natural resources found on land include fish, rangeland, agriculture, game (wildlife), timber, and wood. Fresh water, natural gas, crude oil, and related hydro-carbon resources are examples of liquid minerals. On the other hand, solid minerals are made up of things like metals, stones, sand, and clay.

B) *Natural Resources Governance*

The management of natural resources is essential for making use of the wealth of free resources provided by nature, especially for the growth of developing economies. NRG, according to Roba, Gibbons, and Mahadi (2013), are the institutions that define and uphold the laws and regulations for the discovery and utilisation of natural resources in a specific economic jurisdiction. Okoli & Uhembe, (2015) define Natural resources governance: as the application of the governance concept and principles in determining how natural resources are exploited and utilized by relevant stakeholders. It encompasses norms, rules, institutions and mechanisms that regulate the decisions and conducts of governments, organizations and individual stakeholders in relation to natural resource access, control, allocation, exploitation and use. NRG can also be defined as "The interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how

decisions are taken, and how citizens or other stakeholders have their say in the management of natural resources – including biodiversity conservation (IUCN WCC-RES 3.012).” Natural resource governance refers to the standards, structures, and procedures that establish how authority over natural resources is exercised, how decisions are made, and how citizens, including men, women, indigenous peoples, and local communities, can participate in and benefit from the management of those resources (IUCN, 2018; 2021). Nwobashi and Itumo (2018) documented that NRG is the rules, regulations, norms and principles that regulate the relation between the government, organizations and stakeholders in relation to peaceful, equitable, and sustainable access to natural resource, control, allocation, and use to create value for the citizenry in a particular jurisdiction. Thus,

C) Natural Resources Governance Frameworks across the globe

Natural resource governance refers to the use of governance concepts and principles to decide how relevant parties will exploit and use natural resources. Natural resources governance frameworks aim to ensure that resources are used in a way that is equitable and just. This includes making sure that the benefits of using resources are shared fairly among different stakeholders. It also includes making sure that the impacts of using resources are mitigated or avoided where possible. In addition, natural resources governance frameworks seek to ensure that resources are used in a way that is transparent and accountable. This includes making sure that decision-making processes are open and transparent, and that decisions are made in a way that is accountable to those affected by them. It also includes making sure that resources are used in a way that is consistent with the rule of law.

A variety of parties, including the government, civil society, and the commercial sector, should be involved in the framework's implementation. It should include effective monitoring and evaluation mechanisms to ensure that the framework is working as intended. It should also provide incentives for compliance and sanctions for non-compliance. The enforcement of the framework is essential for its success. This requires effective and consistent enforcement by the government and should include penalties for violations of the framework. It should also include public education and awareness campaigns to ensure that all stakeholders understand the importance of the framework and comply with its requirements.

A governance system, method, or associated initiatives are evaluated for their strengths and flaws using the NRGF principles as criteria. The NRGF criteria address the legal and policy frameworks, institutions and processes, and outcomes of governance (Mohammed-Katerere, 2013). An early attempt to develop NRGF is traced to the pioneering work the of United Nations Development Programme (UNDP) (Qudrat-I 2009). The UNDP identified nine qualities of effective government. In an effort to create the governance principles for protected areas, the Institute of Governance modified these principles in 2002 (Institute on Governance, 2002). Later, Graham et al. (2003) presented these guidelines for the 2003 World Parks Congress in Durban.

The governance principles for protected areas developed by the International Union for Conservation of Nature (IUCN) in 2013 (Borrini-Feyerabend et al, 2013) eventually came to include the same ideas. Initially, at the NRGF foundation workshop in 2013, ten (10) guidelines for effective governance were put up. Twelve (12) principles of good governance, including devolution, embracing diverse cultures and knowledge systems, empowerment, coordination and coherence, resources and livelihoods, social and environmental accountability, protection of the weak and safeguards, rule of law, and access to justice, were developed as the NRGF project moved forward.

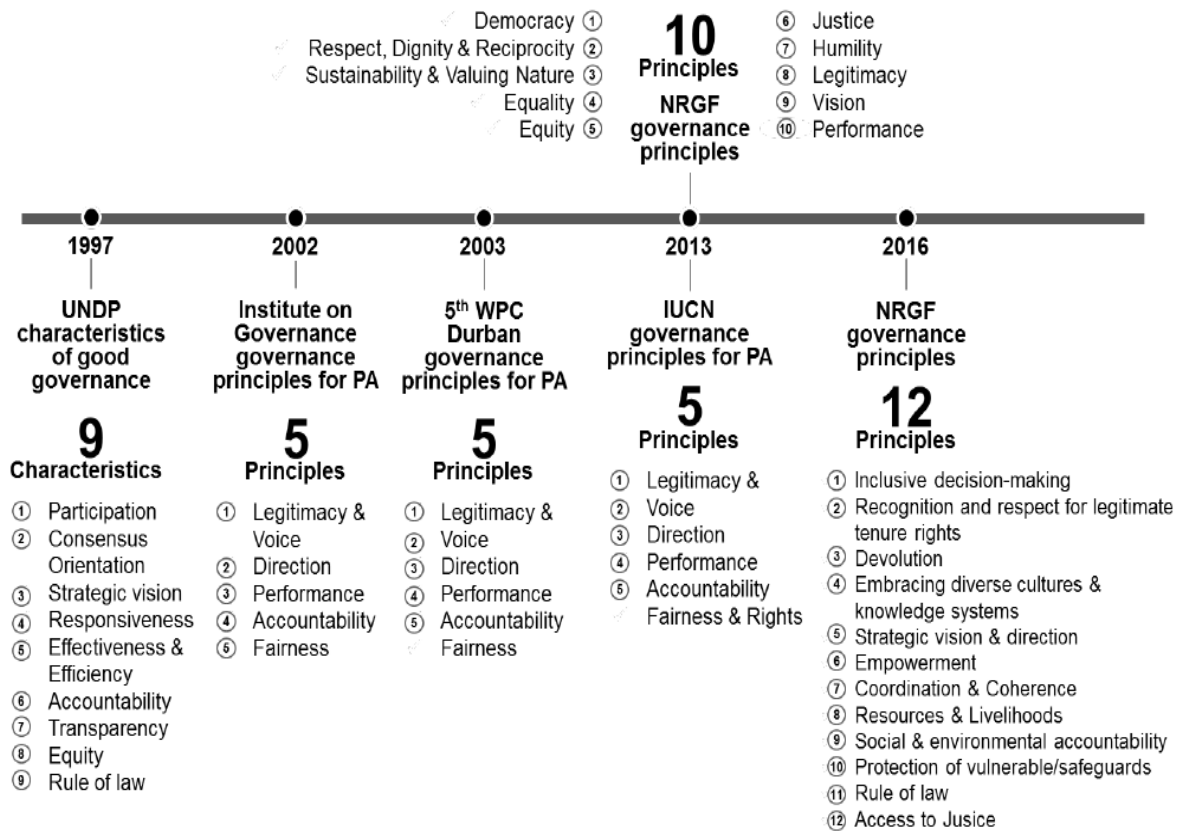


Figure 1 Major milestones in the development of good governance

Springer, Campese, and Nakangu (2021) outlined ten (10) essential elements for just and efficient governance. These values include the first inclusive decision-making, which bases decisions on practises and policies relating to natural resources on the full and effective participation of all relevant stakeholders, with special attention to the voice and inclusion of right-holders and groups at risk of marginalisation. The rights to lands, resources, and seas must also be identified and respected, with a focus on the collective rights of indigenous peoples and local communities, customary rights, and the tenure rights of women. The third guiding principle is the acceptance of and respect for other cultures, where valid and varied kinds of knowledge are taken into account, as well as respect for diverse cultures, values, and practises. The fourth principle is devolution, which emphasises the roles and authority of indigenous peoples and local communities in the management of natural resources. Decisions are made at the lowest level feasible that is suited to the social and ecological systems being managed.

The fifth is strategic vision, direction, and learning, where the management of natural resources is governed by a broad vision of the desired social and environmental goals and permits adaptation in response to new information and changing circumstances. The sixth principle is coherence and coordination. A coordinated set of tactics and management techniques is used by parties participating in or having an impact on the governance of natural resources. The seventh principle states that players who are in charge of managing and governing natural resources must have the tools necessary to do so, including from an equal distribution of the profits derived from those resources. Accountability is the eighth natural resource governance concept. Actors must take responsibility for their behaviour as well as the environmental and social effects it causes. The ninth principle, which calls for a scenario in which laws relating to natural resources and their application are fair and effective and guarantee fundamental rights, is known as the "fairness and effective rule of law" principle. The tenth and final item is access to justice and dispute settlement. It necessitates a setting where anyone who feels wronged can look for and achieve redress and settle disputes over land and natural resources. Actions intended to achieve beneficial environmental outcomes can have detrimental social repercussions and are less likely to be effective where important components of good governance are deficient or absent (Tauli-Corpuz, 2016). So, in order to effectively manage natural resources and promote sustainable development, these essential components are required.

NRGF Principles	Criteria
1. Inclusive decision-making <i>Decision-making regarding natural resource policies and practices is based on the full and effective participation of all relevant actors, with particular attention to the voice and inclusion of rights-holders and groups at risk of marginalization</i>	– Relevant legal/policy frameworks include robust provisions on the inclusion of rights-holders and stakeholders in decision-making – Platforms/processes are in place to enable full and effective participation in decision-making – Processes for inclusive decision-making engage diverse groups, are socially and culturally appropriate, and take account of power dynamics within and between groups – Rights-holders and stakeholders have access to information concerning the environment and natural resources – Rights-holders and stakeholders have the capacities and support they need to participate in decision-making, including through appropriate representation – Natural resource decisions take account of the views expressed through consultation/participation processes – Free, Prior, and Informed Consent is required and secured for decisions concerning indigenous peoples/customary rights-holders, their lands or their resources
2. Recognition and respect for tenure rights <i>Rights to lands, resources and waters are recognized and respected, with particular attention to the customary, collective rights of indigenous peoples and local communities, and to women's tenure rights</i>	– Relevant laws/policies/rules mandate recognition and respect for all tenure rights, with particular attention to customary (including collective) rights and women's rights – Tenure rights are robust – enabling rights-holders to sustainably manage, use/benefit from and protect lands/resources from threats – Processes and capacities are in place to recognize and respect land and resource rights, including for purposes of formal recognition – Processes and capacities are in place to protect and enforce tenure rights – Overlapping tenure rights/claims are clarified in law and resolved in practice
3. Recognition and respect for diverse cultures and knowledge systems <i>Natural resource governance is grounded in sound and diverse forms of knowledge and respect for diverse natural resource values and practices</i>	– Governance strategies and actions are informed by sound and diverse forms of knowledge, including traditional knowledge – Diverse cultural values and practices sustaining natural resources are respected and protected – Governance institutions foster a culture of learning and adaptive management – Traditional knowledge is integrated in natural resource governance in respectful, appropriate and meaningful ways
4. Devolution <i>Decisions are taken at the lowest possible level appropriate to the social and ecological systems being governed, with particular attention to supporting the roles and authority of local communities in natural resource governance</i>	– Legal/policy frameworks devolve natural resource management to capable institutions closest to natural resources – Legal/policy frameworks for devolved natural resource governance, including community-based natural resource management, are widely implemented. – Local institutions have the capacities and support they need for effective and equitable natural resource governance – Appropriate consideration is given to the roles and authority of local communities in natural resource governance
5. Strategic vision, direction and learning <i>Natural resource governance is guided by an overall vision of desired environmental and social ends, and allows for adaptation in response to learning and changing conditions</i>	– Relevant legal/policy/management frameworks establish strategic vision and direction for natural resource governance – Strategic vision and direction are set through inclusive processes that take account of diverse values and forms of knowledge of rights-holders and stakeholders

	– Strategic vision and direction incorporate key principles of environmental sustainability, such as the precautionary principle against risks of environmental and social harm – Strategic vision and direction address present threats and anticipate future challenges – Governance of natural resources is consistent with defined strategies – Governance institutions incorporate ongoing monitoring, reflection and learning that enables responsiveness to changing conditions and needs
6. Coordination & Coherence <i>Actors involved or affecting in natural resource governance coordinate around a coherent set of strategies and management practices</i>	– Legal/policy frameworks across sectors responsible for and/or affecting natural resource governance are aligned – Coordination mechanisms are in place to enable “horizontal” collaboration and coherence among multiple actors and/or sectors operating in the same geographical space – Mechanisms are in place to enable “vertical” coordination across multiple levels of actors with roles in the governance of the same ecosystem or resource – Institutions collaborate and overlap functions in ways that enable resilience
7. Sustainable and Equitably Shared Resources <i>Actors responsible for natural resource governance have the resources they need to carry out sustainable management and governance activities, including from the equitable sharing of benefits generated from natural resources</i>	– People responsible for natural resource governance have access to revenues and/or livelihoods activities that enable them to carry out management activities – Resources/revenues provide sufficient financial sustainability for the people and actions required to manage and conserve natural resources. – Benefit-sharing from the use of natural resources is equitable. – Resources and benefit-sharing provide incentives for the conservation and/or sustainable use of natural resources. – Losses stemming from restrictions to enable natural resource sustainability are minimized and compensated where unavoidable – Natural resources and the environment are sustained so that each successive generation has equitable access to their benefits
8. Accountability <i>Actors responsible for or affecting natural resource governance are accountable for their actions and the environmental and social impacts they produce</i>	– Institutions responsible for natural resource governance have clearly-defined roles and responsibilities. – Actors responsible for or affecting natural resource governance operate transparently, sharing open and accessible information on their actions – Capacities and mechanisms are in place to hold natural resource governance authorities responsible for their actions – Social and environmental safeguards that explicitly take account of the situation of vulnerable groups and environments are adopted and implemented – Potential impacts on vulnerable environments and people are understood in advance and avoided or minimized to the extent possible – Accountability mechanisms effectively rein in corruption (use of public power for private gain)
9. Fair and effective rule of law <i>Natural resource-related laws and their application are fair, effective, and protect fundamental rights</i>	– A clear system of natural resource norms and sanctions is defined in law/policy and widely publicized – Natural resource-related laws/policies/rules are consistent with human rights and take account of the situation of indigenous peoples and local communities, women and vulnerable groups – Natural resource-related laws/policies/rules incorporate

	principles of environmental sustainability – Enforcement bodies have capacity to uphold established norms and sanctions – Natural resource-related laws/policies/rules are carried out equitably and humanely
10. Access to justice and conflict resolution <i>People are able to seek and obtain remedies for grievances and resolve conflicts regarding land and natural resources</i>	– Formal and/or non-formal mechanisms are in place to resolve conflicts and grievances regarding land and natural resources – People are aware of their natural resource governance-related rights and the avenues available to them for resolving conflicts or seeking redress – Grievance/dispute resolution mechanisms are accessible to rights-holders and stakeholders, including vulnerable and marginalized groups – Mechanisms operate impartially and effectively to resolve disputes

III. CONCLUSION

In conclusion, natural resource governance frameworks are crucial for the environmentally responsible management of resources. They offer a thorough set of guidelines, rules, and guidelines for managing the use of natural resources, fostering their conservation, and encouraging sustainable development. Their effectiveness depends on their design, implementation, and enforcement, and should involve a range of stakeholders and include effective monitoring and evaluation mechanisms, incentives for compliance, and sanctions for non-compliance. Natural resources governance frameworks also seek to ensure that resources are used in a way that is responsive to the changing needs of society. This entails ensuring that resources are used in a way that is sensitive to the changing needs of the environment and that they are managed in a way that considers the changing needs of various stakeholders. Frameworks for managing natural resources are crucial for ensuring that they are handled in a sustainable, just, and equitable way. They provide a structure for decision-making that is designed to protect the environment and its resources, while also meeting the needs of society.

IV. REFERENCES

- [1] Artelle, K.A., Zurba, M., Bhattacharyya, J., Chan, D.E., Brown, K., Housty, J. and Moola, F. (2019). Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation'. *Biological Conservation* 240. Available at <https://doi.org/10.1016/j.biocon.2019.108284>
- [2] Bennett, N.J. and Dearden, P. (2014). 'Why local people do not support conservation: Community perceptions of marine protected area livelihood impacts, governance and management in Thailand'. *Marine Policy* 44: 107–116. Available at <https://doi.org/10.1016/j.marpol.2013.08.017>
- [3] Bennett, N.J., Di Franco, A., Calò, A., Nethery, E., Niccolini, F., Milazzo, M. and Guidetti, P. (2019). 'Local support for conservation is associated with perceptions of good governance, social impacts, and ecological effectiveness'. *Conservation Letters* 12(4). Available at <https://doi.org/10.1111/conl.12640>
- [4] Borriani-Feyerabend, G., Farvar, M. T., Renard, Y., Pimbert, M. P., & Kothari, A. (2013). *Sharing power: A global guide to collaborative management of natural resources*. Routledge.
- [5] De-Koning, M. (2017). Additional local manpower improves protected area management effectiveness. *PANORAMA - Solutions for a Healthy Planet*.
- [6] Graham, J., Amos, B. and Plumptre, T. (2003). Governance principles for protected areas in the
- [7] Ikeke, M. O. (2014). The National World and Violent Conflict in Nigeria: An Appraisal. *UJAH: Unizik Journal of Arts and Humanities*, 15(1), 91-109. IUCN (1980). *World Conservation Strategy*. IUCN-UNEP-WWF. Accessed on 17/06/2022 from <https://portals.iucn.org/library/efiles/documents/wcs-004.pdf>
- [8] Li, N., Pacheco-Fabig, M., & Steed, M. (2018). 19. International Union for Conservation of Nature (IUCN). *Yearbook of International Environmental Law*, 29, 476-492.
- [9] Kothari, A. with Corrigan, C., Jonas, H., Neumann, A. and Shrumm, H. (eds). (2012). *Recognising and Supporting Territories and Areas Conserved by Indigenous Peoples and Local Communities: Global Overview and National Case Studies*. Technical Series No. 64. Secretariat of the Convention on Biological Diversity, ICCA Consortium, Kalpavriksh and Natural Justice, Montreal, Canada. Available at <https://www.cbd.int/doc/publications/cbd-ts-64-en.pdf>
- [10] Mohamed-Katerere, J. C., & Smith, M. (2013). The role of ecosystems in food security. *unasyuva*, 64(2013), 14-22.
- [11] NEET (2020). *Natural Resources*. Available at <https://byjus.com/chemistry/natural-resources-pdf/>
- [12] NRGI (2021). 2021 Resource Governance Index: Nigeria (oil and Gas). Available at <https://resourcegovernance.org/sites/default/files/documents/2018-funders.pdf>
- [13] NRGI (2017). *Natural Resource Governance Institute*. Available at <https://resourcegovernance.org/our-work/country/nigeria>
- [14] Nwobashi, H. N., & Itumo, A. (2018) Democracy versus Development Debate.
- [15] Okoli, A. C., & Uhembe, C. A. (2015). Crises of natural resources governance in Nigeria's extractive industry: examining the phenomenon of artisanal mining/quarrying. *Global Journal of Human Social Science (F)*, *Global Journal Inc., USA*, 15(7), 38-48.
- [16] Qudrat-I Elahi, K. (2009). UNDP on good governance. *International Journal of Social Economics*, 36(12), 1167-1180.
- [17] Roba, G., Gibbons, S., & Mahadi, Y. (2013). Booklet 1: Strengthening natural resource governance in Garba Tula. *Nairobi: IUCN-Eastern and Southern Africa Regional Office*.
- [18] Springer, J., Campese, J. and Nakangu, B. (2021). The Natural citation: Resource Governance Framework – Improving governance for equitable and effective conservation. Gland, Switzerland: IUCN. References

- [19] Tauli-Corpuz, V. (2016). Report of the Special Rapporteur of the Human Rights Council on the rights of Indigenous peoples on 29 July 2016. A/71/229. UN General Assembly. Available at <https://www.undocs.org/A/71/229>
- [20] Tolba, M. K. (1984). The Premises for Building a Society. Address to the WCED, Nairobi, UNEP
- [21] Tolba, M. K. (1987). Sustainable Development: Constraints and Opportunities. London: Butterworths.
- [22] Vogler, J. (2007). The International Politics of Sustainable Development. In Handbook of Sustainable Development, Edward Elgar Publishing Limited, Cheltenham: UK
- [23] WCED (1987). Our Common Future. New York: Oxford University, Press
- [24] Woodcraft, S. (2015) Understanding and measuring social sustainability. Journal of Urban Regeneration and Renewal, Vol.8(2), pp 133-144
- [25] World Resources Institute (WRI) (2015). RELEASE: Major New Index Ranks Environmental Democracy in 70 Countries. Washington, DC, USA: WRI.
- [26] Youmatter (2020). Sustainable Development-What it is? Definition, History, Evolution, Importance and Examples. Accessed on 19/06/2022 from <https://youmatter.world/en/definition/definitions-sustainable-development-sustainability/#:~:text=Sustainable%20development%20is%20the%20idea,the%20Brundtland%20Report%20in%201987>.