

COMPARATIVE STUDY: LEGAL FRAMEWORK AND CHALLENGES IN COMMUNITY PARTICIPATION FOR RENEWABLE ENERGY PROJECTS

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ABSTRACT

This comparative study examines community participation in renewable energy projects in Tanzania and Nigeria, evaluating their legal frameworks, challenges, and proposing the Canadian model as a solution. Community involvement is essential for sustainable development and fair benefit distribution in the energy sector. However, most literature emphasises community involvement without detailing the complexities of participation. This paper aims to assess strategies, interventions, and policy measures enhancing community participation in renewable energy projects in Tanzania and Nigeria. By analysing legislation, policy documents, and case studies, the study evaluates the effectiveness of legal mechanisms in promoting meaningful community involvement. The findings highlight similarities and common challenges in the legal frameworks of both countries, such as inadequate involvement, limited capacity, and ineffective implementation of legal provisions. Addressing these findings can help policymakers and stakeholders encourage inclusive and sustainable energy sector development. The paper is limited by its reliance on existing literature, which predominantly focuses on community involvement rather than the technical aspects of participation, confining the review to available studies.

Keywords: *Canadian model, Community Participation, Participation Liberalism, Renewable Energy.*

1. INTRODUCTION

Community participation in renewable energy projects is increasingly recognised as a crucial component of sustainable development initiatives worldwide. Empowering communities to engage in decision-making processes regarding energy infrastructure strengthens inclusivity and ensures that projects align with local needs and priorities. This involvement leverages local knowledge, encourages ownership and empowerment, gains social acceptance, ensures equitable distribution of benefits, and enhances project success and longevity. Also, it promotes innovation, collaboration, and social, economic, and environmental benefits. However, the extent to which communities can effectively participate in energy projects is often shaped by the legal frameworks governing such endeavours. Multiple studies have examined community participation in renewable energy projects, focusing on engagement, acceptance, and project outcomes.¹ However, the investigation of non-participatory approaches in certain communities

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¹ Examples of key literature include O.K. Bishoge et al, 'Community Participation in the Renewable Energy Sector in Tanzania,' *International Journal of Sustainable Energy Planning and Management* (2020) (28), 121–134. In this study, the authors examined community involvement in energy projects in Tanzania, noting that local engagement ensures project acceptance and enhances outcomes by integrating local knowledge, creating jobs, and providing accurate information on renewable energy developments. However, they also identified challenges such as insufficient political will and lack of coordination, which hinder full community involvement from planning to implementation stages; In the study, 'Community Imaginaries, Participation and Acceptance of Renewable Energy Projects – Substituting the Quicksand of Development with Rocky Fundamentals' by Tsoeu-Ntokoane, published in *Cogent Social Sciences* (2024) (10) (1), the author stresses that community engagement and acceptance are crucial for the successful outcomes of renewable energy projects. It highlights that public

in Tanzania and Nigeria reveals low community acceptance due to limited participation, raising concerns about project sustainability.² For instance, the Lesotho Electric Company and Lesotho Electricity Water Authority excluded the Semonkong community from decision-making regarding the Semonkong mini-grid, leading to tensions, conflicts, and protests.³ Similarly, the Motete project consortium saw no community participation in a meaningful sense. In Nigeria, the Mambilla Hydropower project on the Mambilla Plateau in Taraba State,⁴ despite being planned for over 40 years, demonstrated a lack of real-time community involvement. The locals were excluded from the process to the extent that the host community lamented financial exploitation by surveyors who demanded payments for listing names in compensation documentation ahead of relocation.⁵

These cases highlight the importance of genuine community involvement, acceptance, and trust for project sustainability. The findings from these cases indicate that genuine community participation in renewable energy projects in Tanzania and Nigeria is minimal, leading to conflicts and protests. Consequently, low community engagement correlates with reduced project acceptance and sustainability, and instances of mistrust and financial exploitation arise due to inadequate participation. Therefore, both Tanzania and Nigeria should adopt inclusive, participatory approaches in renewable energy projects, with the Canadian model serving as a recommended best practice. Furthermore, future studies should use quantitative methods to assess the undervaluation of community participation, and further exploration of participation dynamics and their implications is necessary.

This paper aims to assess the extent of genuine community participation in renewable energy projects in Tanzania and Nigeria from both technical and economic perspectives. In

participation transforms communities from mere consumers to active participants, promoting a sense of energy citizenship. The study reveals that both the Semonkong and Motete projects in Lesotho faced significant challenges due to a lack of initial community involvement, leading to concerns about sustainability and acceptance. However, the literature seems to overlook the technical aspects of participation; In 'Mambilla: How Legal Tussle Keeps Nigeria in Darkness,' Published in the *Vanguard* online newspaper, March 14, 2024, Henry Ojelu argues that the prolonged legal disputes between Nigeria's Federal Government and Sunrise Power and Transmission Ltd. have prevented the Mambilla hydroelectric project from progressing, despite its potential to significantly enhance Nigeria's electricity supply. He stresses that community engagement and acceptance are critical for successful project outcomes, noting that the Mambilla project, like other stalled legacy projects, has faced substantial setbacks due to a lack of these elements. The project's long-term success and sustainability depend on resolving these disputes and securing active participation from all stakeholders. However, there lack of detailed examination on how effective technical participation and transparent decision-making processes among all stakeholders could have potentially mitigated the protracted legal and operational challenges the project has faced. See <<https://www.vanguardngr.com/2024/03/mambilla-how-legal-tussle-keeps-nigeria-in-darkness/>> accessed 10 May, 2024.

² O.K. Bishoge et al, 'Community Participation in the Renewable Energy Sector in Tanzania,' *International Journal of Sustainable Energy Planning and Management* (2020) (28), 121–134.

<<https://journals.aau.dk/index.php/sepm/article/view/4477>> accessed 10 April, 2024.

³ Seroala Tsoeu-Ntokoane et al, 'Community Imaginaries, Participation and Acceptance of Renewable Energy Projects – Substituting the Quicksand of Development with Rocky Fundamentals' *Cogent Social Sciences* (2024) (10) (1). <<https://doi.org/10.1080/23311886.2023.2292755>> Accessed 10 May, 2024.

⁴ Henry Ojelu, 'Mambilla: How Legal Tussle Keeps Nigeria in Darkness' *Vanguard* (14 March 2024).

<<https://www.vanguardngr.com/2024/03/mambilla-how-legal-tussle-keeps-nigeria-in-darkness/>> accessed 10 May, 2024; E.D. Orunye, 'Politics of Hydroelectric Power Development in Nigeria: A Case Study of the Mambilla Hydroelectric Power Project' *Global Journal of Interdisciplinary Social Sciences* (2015) (4)(4), 19-25.

⁵ *Daily Trust*, 'Residents Allege Extortion as Mambilla Power Project Execution Drags' *Daily trust* (20 October 2020). <<https://dailytrust.com/residents-allege-extortion-as-mambilla-power-project-execution-drags/>> accessed 10 May, 2024. In other jurisdictions such as Kenya, such non-participatory involvement of the community in the Lamu coal power plant project was suspended by the National Environmental Tribunal during the environmental impact assessment. See R. Ombur, 'Kenya Court Halts Building of Coal Plant on Coast' (2019) *VOA*. <https://www.voanews.com/a/africa_kenya-court-halts-building-coal-plant-coast/6170658.html> accessed 10 May, 2024.

doing so, it contributes to Renewable Energy Participation Liberalism literature by exploring the dynamics of community participation and its implications for the community, developers, and project sustainability. It enhances the existing scholarship by emphasising the importance of both top-down and bottom-up community participation in renewable energy projects.⁶ Low community participation leads to project unacceptability and unsustainability. Therefore, this paper concludes that there is minimal real community participation in renewable energy projects in both countries; what exists is merely a shadow of it. The paper explores the Canadian renewable energy community participation model and finds that Canada has best practices recommended for Tanzania and Nigeria. Both countries' policies need to adopt inclusive and participatory approaches in the development of renewable energy projects. However, the paper acknowledges the need for future scholarship to incorporate quantitative approaches to assess the extent to which renewable energy projects undervalue host community participation in development. This review is confined to the available literature on this subject matter.

1.1 Conceptual Analysis

This section examines the crucial concepts contained in this paper for better understanding of the challenges of community participation in the two countries under review.

1.1.1 Renewable Energy

Renewable energy encompasses sustainable energy sources that can be naturally replenished.⁷ There are various renewable energy technologies, such as solar, wind, hydroelectric, geothermal, and biomass, having diverse socio-economic and environmental implications.⁸ It involves a low-carbon economy, addressing energy security, climate change mitigation, and socio-economic development.⁹ It is derived from naturally replenished resources on a human timescale. While most renewable sources are sustainable, some biomass sources face sustainability concerns due to current exploitation rates.¹⁰ Widely utilised for electricity generation, heating, and cooling, renewable energy projects, predominantly large-scale, also benefit rural, remote, and developing regions needed for human development. The integration of renewable energy often accompanies electrification, offering efficient heat or object movement and clean consumption.¹¹

1.1.2 Community Participation

Gordon Walker and Patrick Devine-Wright,¹² in renewable energy projects refers to community participation in renewable energy project as a meaningful, inclusive, and collaborative process where community members are actively involved in all stages of the

⁶ Yemi Oke, *Nigerian Electricity Law and Practice*, (Princeton and Associates Publishing Co. Ltd: Lagos, 2021).

⁷ Caroline Banton, 'Renewable Resource: Definition, Considerations, and Examples' (2024)

<https://www.investopedia.com/terms/r/renewable_resource.asp> accessed 15 April, 2024.

⁸ Omar Ellabban *et al*, 'Renewable Energy Resources: Current Status, Future Prospects and Their Enabling Technology', *Renewable and Sustainable Energy Reviews* (2014) (39), 748–764.

⁹ *Ibid*

¹⁰ H. Chelsea and co., 'Congress Says Biomass Is Carbon Neutral but Scientists Disagree – Using wood as Fuel Source Could Actually Increase CO2 Emissions' (2018).

<<https://www.scientificamerican.com/article/congress-says-biomass-is-carbon-neutral-but-scientists-disagree/>> accessed 15 April, 2024.

¹¹ Nicola Armaroli and co., 'Towards an Electricity-Powered World' *Energy and Environmental Science* (2011) (4) (9), 3193–3222.

¹² Gordon Walker and co., 'Community Renewable Energy: What Should It Mean?' *Energy Policy* (2008) (36)(2), 497–500. <<https://www.sciencedirect.com/science/article/abs/pii/S0301421507004739>> accessed 1 August, 2024. This paper discusses the concept of community renewable energy, emphasising the importance of genuine community involvement in renewable energy projects.

renewable energy project lifecycle. This includes planning, decision-making, implementation, monitoring, and evaluation. Genuine participation goes beyond tokenistic involvement or mere consultation; it ensures that the voices and concerns of the community are integral to the project's development and execution. Community participation needs a high degree of involvement of local people in the planning, setting up and, potentially, the running of the project. It is strongly driven by normative principles of empowerment, participation, and capacity building. Projects should be essentially conceived, set up and managed by local institutions—local authorities, parish councils, national park authorities and the like—as long as they particularly benefited the local community including providing jobs, contributing to local regeneration or providing an educational resource (in addition to the wider global benefits they contributed through carbon reduction).¹³ This participation should be transparent, equitable, and free from coercion, ensuring that community members have a genuine voice and stake in the project's outcomes. It means involving the public in decisions and policies about infrastructure and renewable energy. This includes community engagement and public decision-making. It can also mean giving underserved communities a say in energy projects that affect them.¹⁴ Local communities are engaged in decision-making processes related to the development, implementation, and regulation of renewable energy initiatives such as wind farms, solar installations, hydroelectric projects, and geothermal facilities.¹⁵ The emphasis on renewable energy reflects the growing importance of transitioning towards sustainable and environmentally friendly energy sources. Community participation in renewable energy projects aims to ensure that affected communities have a voice in shaping the transition to clean energy, promoting inclusivity, transparency, and accountability. By involving local stakeholders in the planning and implementation of renewable energy projects, policymakers and energy developers can address community concerns, build trust, and develop a sense of ownership and support for sustainable energy initiatives.¹⁶

1.1.3 Participation Liberalism

Participation liberalism in renewable energy projects refers to an approach that emphasises the inclusion of various stakeholders, particularly local communities, in decision-making processes related to renewable energy development.¹⁷ Drawing on liberal democratic principles of participation, transparency, and accountability, participation liberalism ensures that affected individuals and communities have a meaningful voice in shaping energy policies and projects.¹⁸ Under this framework, renewable energy projects are not imposed from above but actively engage local stakeholders throughout the project lifecycle. This involves mechanisms such as public consultations, community advisory boards, and participatory planning processes. The goal is to democratise energy decision-making, empower communities, and promote social and environmental justice. The objectives of developing renewable energy domestic supply chains,

¹³ *Ibid*, Gordon Walker and co.

¹⁴ Paty Romero-Lankao and *et al*, 'Community Engagement and Equity in Renewable Energy Projects: A Literature Review' *National Renewable Energy Laboratory* (2023). NREL/TP-5400-87113. <<https://www.nrel.gov/docs/fy23osti/87113.pdf>> Accessed 1 August, 2024.

¹⁵ *Supra*, note 2, O.K. Bishoge *et al*.

¹⁶ Shoaib Ahmed *et al*, 'A Review of Renewable Energy Communities: Concepts, Scope, Progress, Challenges, and Recommendations' *Sustainability* (2024), 16(5), 749; <<https://doi.org/10.3390/su16051749>> accessed 1 August 2024.

¹⁷ Susan Kang *et al*, 'Climate Change and the Challenge to Liberalism', *Global Constitutionalism* (2023) (12)(1), 1-10; Matthew Burke and Co. 'Political Power and Renewable Energy Futures: A Critical Review' *Energy Research & Social Science* (2017) (35)(2).

¹⁸ Y.J. Rydin *et al*, 'Local Voices on Renewable Energy Projects: the Performative Role of the Regulatory Process for Major Offshore Infrastructure in England and Wales', *Local Environment* (2018) (23)(5); *Ibid*, note 17, Susan Kang *et al*, *supra*, note 17.

generating quality jobs, reducing carbon emissions, and ensuring public input are intrinsically linked. Achieving these goals necessitates a comprehensive community benefits plan, incorporating labour and stakeholder engagement, diversity targets, and support for marginalised groups.

1.2 Renewable Energy Development in Tanzania and Nigeria

Tanzania boasts an abundance of renewable energy potential, particularly in hydro, geothermal, and solar power.¹⁹ The government has set an ambitious target to increase the share of renewable energy in the country's power mix to 50% by 2025.²⁰ To achieve this, policies have been put in place to support the development of renewable energy projects, such as hydropower, which aims to add 600 MW, geothermal power targeting 400 MW, and solar power initiatives like the 30 MW Singida project and the 50 MW Nyumba ya Mungu project.²¹ Moreover, private enterprises, including the Africa Renewable Energy Fund, are injecting investment into Tanzanian renewable energy projects.²²

However, despite this progress, several challenges persist, primarily stemming from the absence of robust consultative mechanisms that engage local communities in the decision-making process regarding the execution of these renewable energy projects.²³ This lack of community involvement has resulted in inadequate infrastructure and technical expertise, hindering the effective implementation of renewable energy initiatives. The central issue is that local communities are often sidelined in the planning and development stages, leading to a disconnect between project goals and community needs.²⁴ By strengthening consultative mechanisms and prioritising community engagement, Tanzania can unlock its full renewable energy potential and ensure a more sustainable and inclusive energy future. This is precisely the focus of this paper – to highlight the importance of community-centric approaches in driving successful renewable energy projects.²⁵

Tanzania's energy needs are growing, driven by its expanding population and economy. The country's total energy consumption is projected to rise significantly, with an increasing demand for electricity in both urban and rural areas. The total installed power capacity is 1,264 MW, with 568 MW generated from hydropower plants, 685.4 MW from thermal energy sources, and less than 82.4 MW from other renewable energy sources. However, actual energy distribution indicates that approximately 85% of residents rely on conventional fuels for domestic energy needs.²⁶ However, a critical issue affecting the success of renewable energy projects in Tanzania is the lack of effective consultation and inclusion of local communities in decision-making processes,²⁷ which in some communities has led to several problems including resistance and conflict - projects often face opposition from local communities who feel marginalised or inadequately informed about the project's benefits and impacts and lack of local support. Without community buy-in, projects support for smooth execution, leading to

¹⁹ *Supra*, note 2, Bishoge *et al.*

²⁰ European Union in Tanzania, 'Empowering Tanzania: Energy for Growth and Sustainable Development' <https://www.eeas.europa.eu/sites/default/files/20160512_01_en.pdf> accessed 20 April, 2024.

²¹ *Ibid*, European Union in Tanzania.

²² Berkley Energy, Africa Renewable Energy Fund (AREF II) (2024) <https://www.get-invest.eu/fund/africa-renewable-energy-fund-ii-aref-ii/> accessed 20 April, 2024.

²³ Maklewa Agoundedemba *et al.*, 'Energy Status in Africa: Challenges, Progress and Sustainable Pathways', *Energies* [2023]16(23), 7708.

²⁴ *Supra*, note 2, Bishoge *et al.*

²⁵ *Supra*, note 2, Bishoge *et al.*

²⁶ Buruhan Haji Shame *et al.*, 'The Renewable Energy Research Contribution of Tanzania: A Review' *Communication in Science and Technology* (2024) (9)(1), 65-86.

²⁷ *Ibid*, Buruhan Haji Shame *et al.*

delays and potential project failures.²⁸

Collaborative efforts with international organisations and the private sector are underway to address these challenges and fully tap into Tanzania's renewable energy potential. For example, the African Renewable Energy Fund (AREF) targets investments in small to medium size energy generation projects that generate energy from the following renewable and clean energy sources: hydro, wind, solar, and biomass projects, certain geothermal projects, and certain stranded natural gas projects. In addition, the Fund focuses on building technical and financial capacity of the local developers it partners with to enable them to roll out additional power projects to meet the growing demand for energy resulting from increasing urbanisation and economic growth.

Similarly, Nigeria is making significant strides in the development of renewable energy as part of its broader energy transition plan aimed at achieving net zero emissions by 2060. The plan focuses heavily on expanding solar energy capacity and integrating renewable sources into the national energy mix.²⁹ One of the central pillars of this strategy is the Nigeria Sovereign Investment Authority's (NSIA) launch of the \$500 million Renewables Investment Platform for Limitless Energy (RIPLE). This initiative, in partnership with the International Finance Corporation (IFC), is designed to develop and operate renewable energy projects across Nigeria.³⁰ The pilot project, located in the Tokarawa Industrial Hub in Kano State, aims to provide 70 MW of energy to support industrial, commercial, and residential needs.³¹ Further, Nigeria's Energy Transition Plan sets targets, including the generation of 250 GW of solar capacity by 2060 and increasing the share of renewable energy to 30% of the electricity mix by 2030.³² This plan also acknowledges the critical role of natural gas as a transitional fuel to stabilise the grid during the integration of increased solar power capacity. These measures are designed to facilitate a gradual and balanced shift towards a more sustainable energy infrastructure, ensuring both reliability and environmental benefits. Thus, Nigeria's renewable energy development is driven by substantial investments, strategic partnerships, and supportive policies aimed at reducing carbon emissions and ensuring sustainable energy for its population.³³

2. FRAMEWORK FOR RENEWABLE ENERGY IN TANZANIA AND NIGERIA

Tanzania and Nigeria are poised to harness renewable energy to fuel growth and development. A comprehensive framework for renewable energy in both countries requires policy reforms, investment, and innovative financing. However, genuine community participation is crucial to ensure policies and projects address local needs and realities. Without it, efforts risk being ineffective. Meaningful community engagement is essential for socially acceptable,

²⁸ *Supra*, note 2, O.K. Bishoge *et al.*

²⁹ N. D. Ugorji, 'Turning Emission into Opportunity: How NUPRC's Gas Flare Commercialisation Is Promoting A Sustainable Energy Future', *Upstream gaze Magazine* [2023] (5),16.

³⁰ Onyinye Nwachukwu, 'NSIA Launches \$500m Renewables Investment Platform, Signs Pact With IFC', *Business Day* (19 November, 2023) <<https://businessday.ng/business-economy/article/nsia-renewables-investment-boost-nigerias/>> accessed 10 May, 2024.

³¹ *Supra*, note 29, N. D. Ugorji.

³² Al-Amin Bugaje *et al.*, 'Nigeria's Electricity Vision 30-30-30: Exploring the Techno-Economic and Environmental Implications' (2022) ECOWAS Sustainable Energy Journal Vol. 11. <https://www.researchgate.net/publication/366423030_Nigeria's_Electricity_Vision_30-30-30_Exploring_the_Techno-Economic_and_Environmental_Implications> accessed 11 May, 2024.

³³ With global momentum shifting towards sustainability and carbon reduction, Nigeria and Tanzania recognise the imperative to curtail greenhouse gas emissions, combat climate change, and diversify energy sources. For instance, former Nigerian President Muhammadu Buhari pledged at COP26 to achieve net-zero emissions by 2060. Similarly, in Tanzania, Hon. Selemani Said Jafo (MP) committed the nation to reducing greenhouse gas emissions by 30-35% relative to the Business-As-Usual scenario by 2030, aligning with the Paris Agreement's targets. State your sources here as well.

environmentally sustainable, and economically viable renewable energy projects. By prioritising community-centric approaches, Tanzania and Nigeria can ensure energy access, create jobs, and contribute to global efforts to combat climate change.

2.1 *The Energy and Water Utilities Regulatory Authority (EWURA) Act*³⁴

Enacted in 2006, the primary purpose of *Energy and Water Utilities Regulatory Authority (EWURA) Act* is to regulate the electricity sector by establishing an autonomous regulatory authority for energy and water utilities.³⁵ This authority supersedes previous regulatory bodies and is empowered to handle various related matters. Functioning as a corporate entity under section 5, the authority possesses legal standing to litigate and be litigated against, with its documents bearing judicial recognition through a common seal. However, the Attorney-General retains the prerogative to intervene in legal affairs involving the authority. The Act endows the authority with a range of responsibilities concerning "regulated goods and services," defined in section 3³⁶. These include issuing, renewing, and revoking licenses, setting standards for goods and services, regulating rates and charges, promulgating rules to implement the Act and sector legislation, monitoring sector performance, encouraging competition, safeguarding consumer interests, ensuring suppliers' financial viability, providing universal service, enhancing public awareness, and considering environmental protection.³⁷ In carrying out its duties, the authority is mandated to consult with other regulatory bodies and the relevant sector minister, who may issue directives to ensure effective performance and compliance with policy and codes of conduct. Sections 16 to 22 outline the authority's powers, including the ability to conduct inquiries before granting, renewing, or revoking licenses (excluding class licenses).³⁸ The authority must ensure compliance with the Fair Competition Act, the Tanzania Bureau of Standards Act, and other applicable laws.³⁹ Additionally, it has the authority to delegate its powers, except for the power of delegation itself, the power to revoke or amend a delegation, and the powers specified in subsection 3 of section 20.⁴⁰

2.2 *Rural Energy Act, 2005*⁴¹

The Rural Energy Act of 2005 in Tanzania was a significant legislative initiative aimed at addressing the energy needs of rural areas in the country.⁴² The main objective was to promote the adoption of renewable energy technologies in rural areas to mitigate environmental impacts of fossil fuels and enhance energy security by focusing on sources like solar and wind power. The Act aims to attract investment and facilitate technology transfer in the rural energy sector by creating an enabling environment for sustainable energy development. It promoted the development of off-grid energy solutions to reduce dependence on traditional biomass fuels, promoting economic growth and improving living standards in rural communities. For instance, a comprehensive study on Tanzanian solar home systems (SHS) revealed that, from

³⁴ The Energy and Water Utilities Regulatory Authority Act No. 11 of 2001 of Tanzania.

³⁵ Section 4 of the EWURA Act; Tanzania Energy Sector Overview, *Energy for Economic Growth* https://assets.publishing.service.gov.uk/media/5a269a36e5274a75088c42b7/Line_37_-_EEG_Pre-Sub-Saharan_Africa_Policy_Workshop_Report.15.07.2016.pdf accessed 12 April, 2024.

³⁶ "regulated goods" means any goods produced, supplied or offered for supply or for use in a regulated sector and includes any goods the Authority declares under section 40; "regulated goods and services" means any regulated goods and any regulated services; "regulated sector" means any one or more of the following– (a) electricity..."

³⁷ Section 6 of EWURA Act.

³⁸ *Ibid*, section 19(2)(a).

³⁹ *Ibid*, section 20(2)(a).

⁴⁰ *Ibid*, section 22.

⁴¹ Rural Energy Act, 2005 (Act No. 8 of 2005), United Republic of Tanzania.

⁴² *Ibid*.

the end-user's perspective, the primary motivations for adopting SHS are driven by the economic benefits, which improve household economies by reducing energy expenses and providing opportunities for income generation. Also, solar-powered lighting enables children to study effectively, leading to better educational outcomes, and replaces traditional biomass fuels, reducing harmful indoor air pollution and promoting a healthier living environment.⁴³ Tanzania has adopted a pragmatic approach to energy regulation, exempting small-scale projects below 100 kW from regulatory requirements. This deliberate deregulation aims to promote energy access by simplifying the process for small-scale projects, promoting decentralisation, and encouraging private sector participation. By streamlining regulatory processes, Tanzania attracts private investment in small-scale energy projects, driving innovation and growth in the renewable energy sector.⁴⁴ More community participation in the whole process will offer opportunities for everyone to get involved, share their thoughts and ideas, and work together towards a common goal – sustainable electricity for Tanzania. Further, the Act facilitated partnerships between government, private sector, and communities to expand energy access and promote sustainable development.⁴⁵ Prior to the enactment of the Rural Energy Act, many rural areas in Tanzania had limited access to modern energy services.⁴⁶

This included the creation of the Rural Energy Agency (REA), which serve as the primary implementing body responsible for coordinating and overseeing rural electrification efforts. The REA was tasked with facilitating the planning, financing, and implementation of energy projects in collaboration with relevant stakeholders. The Act introduced various financial mechanisms to mobilise resources for energy projects. This included the establishment of a Rural Energy Fund (REF)⁴⁷, which provided grants, loans, and other forms of financial support to eligible projects. The REF aimed to incentivize investment in rural energy infrastructure and promote the adoption of renewable energy technologies among rural communities.

The crucial aspect of the Act is its emphasis on community engagement in energy planning and decision-making processes. The Act advocates for the active participation of local communities in identifying energy needs, designing projects, and overseeing implementation, ensuring that initiatives are tailored to the specific requirements of rural areas.⁴⁸ By empowering communities to take ownership of energy projects, the Act aims to enhance their sustainability and long-term impact. However, despite the enactment of the Renewable Energy Act 2005 and subsequent efforts by the government, community involvement in renewable energy initiatives remains limited, and awareness about renewable energy technologies, institutional frameworks, and regulatory structures is still lacking. This knowledge gap persists despite the renewable energy sector offering employment opportunities and poverty alleviation

⁴³ Liljefors, Pontus and Jakob Sahlin, 'Drivers and Barriers for Solar Home Systems (SHS) in Rural Communities: A Case Study in Kyerwa, Tanzania', (PhD Thesis of University of Stockholm 2014) <<http://www.diva-portal.org/smash/get/diva2:741679/FULLTEXT01.pdf>> accessed 1 August, 2024.

⁴⁴ IFAD, 'Renewable Energy and Rural Development' *Journal of Law and Development*, Issue 2, https://www.ifad.org/documents/38714170/39258414/leg_journal_2.pdf/ce0e3ca0-ddad-46fa-81d2-7b8745efb0de accessed 2 August, 2024.

⁴⁵ Section 3 of the Rural Energy Act, "Development Partner" means governments, national and international, bilateral and multilateral institutions and organisations, contributing to Tanzanian's Development."

⁴⁶ H. Edsand and L. Bångens, 'Power struggles: Advances and roadblocks of solar powered mini grids in Tanzania' *Energy Reports* Vol. 11, 342–354. Dependence on traditional biomass fuels such as firewood and charcoal was widespread, leading to environmental degradation and health hazards. The government recognised the urgent need to improve energy access in rural communities to stimulate socio-economic development and reduce poverty.

⁴⁷ Section 17 of the Rural Energy Act 2005.

⁴⁸ Section 4(b) of the of the Rural Energy Act provides, "The principles of Rural Energy Development shall be as follows that- (a) sustainable development shall be achieved when modern energy services in rural areas are promoted, facilitated and supported through private and community initiative and involvement..."

benefits to local communities. This paper argues that meaningful community participation in energy planning and decision-making processes necessitates a deep understanding of renewable energy technologies and the associated institutional and regulatory framework. By bridging this knowledge gap, communities can effectively engage in the development of sustainable energy solutions that address their specific needs and promote inclusive energy development.

Since its enactment, the Rural Energy Act has contributed significantly to rural electrification and the adoption of renewable energy technologies in Tanzania. However, challenges such as limited financing, infrastructure constraints, and capacity gaps continue to hinder its full potential. The Mwenga Hydro Power and Miombo Hewani Wind Farm projects are prime examples of renewable technologies promoted by the Act. For the Mwenga Hydro Power Project, initiated by Rift Valley Energy and the Tanzanian government, local community involvement was crucial. The community participated in environmental impact assessments,⁴⁹ planning meetings,⁵⁰ and decision-making regarding electricity distribution. This participation ensures the project meets local needs, supports economic activities like small-scale industries, and improves overall quality of life for over 32 villages.⁵¹ Similarly, the Miombo Hewani Wind Farm project, initiated by the Australian company Windlab Limited, emphasises community involvement. Local communities engaged in discussions about the project's impacts and benefits through public meetings, surveys, and focus groups.⁵² This project not only generates clean, renewable electricity but also creates jobs, develops infrastructure, and provides educational opportunities. Despite these successes, there is a pressing need for more practical local community involvement to address financing and capacity challenges. By strengthening community participation, projects can better align with local needs, ensuring sustainable and impactful outcomes.

2.3 *The Electricity Act, 2008*⁵³

The Electricity Act 2008 of Tanzania is a key legislative framework that governs the generation, transmission, transformation, distribution, supply and use of electric energy, it provides for cross-border trade⁵⁴ in electricity and the planning and regulation of rural electrification in Mainland Tanzania.⁵⁵ It plays a significant role in shaping the country's energy sector, particularly with respect to promoting renewable energy projects and facilitating community participation.⁵⁶ The Act emphasises the importance of expanding electricity access to rural areas, where a significant portion of the population resides. This is facilitated through the Rural Energy Agency (REA)⁵⁷, which promotes renewable energy projects that can be

⁴⁹ *Ibid*, <<https://2017-2020.usaid.gov/energy/mini-grids/case-studies/tanzania-hydropower>> accessed 4 August 2024. The Mwenga Hydro Power Project was constructed using contracted labour, while local electricity users took charge of installing their own household interior wiring. The project employs Tanzanian engineers and administrators in renewable energy technologies and mini-grid development from various regions.

⁵⁰ USAID, 'Hydropower in Tanzania's Rural Highlands' <<https://2017-2020.usaid.gov/energy/mini-grids/case-studies/tanzania-hydropower>> accessed 4 August 2024.

⁵¹ *Ibid*, <<https://2017-2020.usaid.gov/energy/mini-grids/case-studies/tanzania-hydropower>> accessed 4 August 2024.

⁵² SERITI Green, Miombo Hewani Wind Farm <<https://seritigreen.com/emarti-hewani-wind-energy-farm-2/>> accessed 5 August, 2025.

⁵³ No. 10 of 2008.

⁵⁴ The Act allows for the import and export of electricity between Tanzania and neighboring countries. It promotes regional energy trade and cooperation.

⁵⁵ Section 37(1) of the Electricity Act, 2008. *Electricity Act 2008*, Long Title, <https://www.ppiaf.org/sites/default/files/documents/2008-07/Tanzania_10-2008.pdf>

⁵⁶ *Ibid*, section 38(2),

⁵⁷ *Ibid*, established under section 37.

managed and maintained by local communities.⁵⁸ The Act mandates public consultations and stakeholder involvement in the planning and implementation of energy projects.

2.4 The National Energy Policy, 2015

The Tanzanian National Energy Policy of 2015 aims to deliver reliable and affordable modern energy services sustainably. Key drivers include expanding energy infrastructure and ensuring equitable benefit sharing among Tanzanians.⁵⁹ The policy provides a framework for sustainable energy resource development to maximize national benefits and boost economic transformation. Despite achievements, challenges like skilled labour shortages and limited local involvement in renewable energy projects persist.⁶⁰ Addressing these is essential for sustainable development and efficient energy resource utilisation. The policy emphasises improving investment conditions and capacity building to promote an inclusive and strong energy sector.

In summary, for the proper working of the above Tanzania framework and to encourage the growth of renewable energy within the country, the government has established several key institutions, including Tanzania Electric Supply Company Limited (TANESCO)⁶¹, Rural Energy Agency (REA)⁶², and the Energy and Water Utilities Regulatory Authority (EWURA)⁶³. Together, these agencies⁶⁴ work in tandem to support the development and implementation of sustainable energy projects throughout the country.

2.5 The Electricity Act, 2023

The most prominent energy law in Nigeria is the Electricity Act of 2023⁶⁵ which has recently repealed the Power Sector Reform Act of 2005 (EPSR Act 2005)⁶⁶. The new Electricity Act serves to consolidate legislation pertaining to the Nigerian Electricity Supply Industry (NESI), with the goal of reforming the electricity sector.⁶⁷ The Act provides for an integrated resource plan and policy that recognises all sources for the generation, transmission and distribution of electricity, including the integration of renewable energy sources into Nigeria's energy mix and the facilitation of necessary investments for industry development.⁶⁸ Similar to the Electricity Act, 2008 of Tanzania, the Electricity Act of Nigeria provides a clear framework for cross-

⁵⁸ *Ibid*, section 38(2). Rural Energy Act, provides grants to developers of qualified projects.

⁵⁹ *Ibid*, Dar es Salaam, National Energy Policy, 2015, December, 2015 <[https://www.nishati.go.tz/uploads/documents/en-1622283004-National%20Energy%20Policy%20\(NEP\),%202015.pdf](https://www.nishati.go.tz/uploads/documents/en-1622283004-National%20Energy%20Policy%20(NEP),%202015.pdf)> accessed 5 August 2021.

⁶⁰ *Ibid*, Dar es Salaam,

⁶¹ The United Republic of Tanzania Investment Centre, 'Tanzania, Electric Supply Company (TANESCO)' <<https://www.tic.go.tz/pages/tanESCO>> accessed 20 April, 2024.

⁶² *Supra*, *Ibid*, Dar es Salaam.

⁶³ *Supra*, *Ibid*, Dar es Salaam.

⁶⁴ TANESCO, wholly owned by the Tanzanian government, operates with governmental control but maintains a separate legal identity and management. As a utility company, it commercially generates and sells electricity, distinguishing it from traditional government agencies. See Mary Dominick Kabakuzi, *Influence of Human Resource and Electricity Tariff on Operation and Maintenance in Reducing Power Outages: Case of TANESCO, Dar Es Salaam-Tanzania* (MSc Programme in Urban Management and Development, Rotterdam Netherlands September 2018). <<https://thesis.eur.nl/pub/46529>> accessed August 5, 2024.

⁶⁵ An Act to repeal the Electric Sector Reform Act, 2005. It was signed into law by President Bola Ahmed Tinubu on 6 June 2023.

⁶⁶ No. 6, 2005. See the Long Title. The new Electricity Act also amalgamates statutes about the Nigerian Electricity Supply Industry (NESI). It establishes a thorough institutional framework for the Nigerian power sector, encompassing facets such as electricity generation, transmission, distribution, supply, trading, system operations, electricity-related offences, and the enforcement of consumer rights and obligations.

⁶⁷ See the Long Title to the Act.

⁶⁸ *Ibid*, Long Title to the Act.

border electricity trade in the interest of national security and energy self-sufficiency.⁶⁹ The Act aims to introduce new policies and regulatory measures to address current challenges, including inefficiencies, inadequate infrastructure, and a lack of investment⁷⁰ in the electricity sector and attract private sector investments across the NESI value chain, promoting a self-sustaining, profitable, and sufficient industry. It provides a framework to stimulate the development and utilisation of renewable energy sources⁷¹, using policy and regulatory measures to eliminate barriers to investments in generation, transmission, distribution, and related sub-sectors.⁷² Further, it encourages indigenous capacity in renewable energy technology through a local content framework and strengthens the relationship between the Federal and State electricity markets.⁷³

Most importantly, the Act grants the State Integrated Electricity Policy and Strategic Implementation Plan (SIEPSIP) authority to regulate state electricity markets. It mandates the Federal Government to prepare and publish National Integrated Electricity Policy and Strategic Implementation Plan (NIEPSIP) in the Federal Gazette within a year⁷⁴, guiding Nigeria's electric development, energy sources, rural electrification, public-private partnerships⁷⁵ for provision of access to electricity to all areas including villages, hamlets through rural electricity infrastructure and electrification of households.⁷⁶ The Nigerian Electricity Act 2023 mentions community involvement mainly in Section 34(1)(k), which tasks the Nigeria Electricity Regulatory Commission with promoting local content in the electricity industry. This includes using local resources, goods, and services, thus promoting local skills and expertise. Section 147(2)(c) mandates the Rural Electrification Agency, with the Minister, to create a transparent process for disbursing funds, considering community and investor commitment. However, the Act's provisions suggest limited encouragement for community participation in renewable energy projects. This paper recommends amending the Act to clearly define community involvement levels.

2.6 The National Renewable Energy and Energy Efficiency Policy, 2015

The National Renewable Energy and Energy Efficiency Policy (NREEEP), established in 2015, serves as Nigeria's strategic blueprint for harnessing renewable energy and improving energy efficiency to support sustainable development.⁷⁷ Aligned with the broader national energy policy,⁷⁸ NREEEP delineates various governmental initiatives to encourage the adoption of renewable energy and efficiency technologies, addressing existing barriers. It encompasses a

⁶⁹ *Supra*, note 60, section 1(q) of the 2023 Act. The Act allows for the import and export of electricity between Tanzania and neighbouring countries. It promotes regional energy trade and cooperation.

⁷⁰ A.C. Oloko, 'Exploring Legal Solutions for Energy Poverty Effects on Consumers in Nigeria and South Africa: A Comparative Analysis' *Journal of Department of Jurisprudence and International Law* (2023) (1) (11).

⁷¹ Section 1(l) of the Electricity Act, 2023.

⁷² Section 1(j), *ibid*.

⁷³ Section 1(n), *ibid*.

⁷⁴ Section 3(1), *ibid*.

⁷⁵ Section 3(2)(d) mandates the inclusion of public-private partnerships in the National Electricity Policy and Strategic Implementation Plan for extending electricity access to all areas, including rural communities, in Nigeria. Additionally, section 112 permits Federal or State Governments to engage in public-private partnerships with private entities for investment in the transmission network, aligning with infrastructure concession frameworks.

⁷⁶ Both Tanzania and Nigeria have Environmental Impact Assessment Act (EIA Act), a legislation designed to evaluate the potential environmental consequences of proposed projects or activities. The National Environmental Management Council (NEMC) and the Federal Environmental Protection Agency (FEPA) serve as the primary Environmental Impact Assessment (EIA) authorities in Tanzania and Nigeria respectively.

⁷⁷ Ministry of Power, Federal Republic of Nigeria, *The National Renewable Energy and Energy Efficiency Policy, 2015*.

⁷⁸ *Ibid*, Ministry of Power.

diverse range of energy sources, including hydropower, biomass, solar, wind, geothermal, wave, tidal energy, and co-generation plants.⁷⁹ The policy aims to diversify Nigeria's energy mix, thereby enhancing national energy security and efficiency. Also, it focuses on accelerating technology acquisition, boosting indigenous participation,⁸⁰ and attracting investments in the renewable energy and efficiency sectors, while also promoting international cooperation. This comprehensive approach surpasses a mere policy directive, aiming instead to create a comprehensive regulatory framework that integrates legal and institutional mechanisms to ensure effective implementation and sustainability of renewable energy initiatives in Nigeria.

2.7 The Nigerian Electricity Regulatory Commission (NERC)

The Nigerian Electricity Regulatory Commission (NERC) is a corporate entity established under the Electricity Act 2023.⁸¹ It serves as the principal regulator of the Nigeria Electricity Supply Industry (NESI), that is, electricity generation, transmission, distribution, and trading. NERC's mandate includes licensing and regulating entities involved in electricity generation, transmission, system operation, distribution, supply, and trading. Nigeria's renewable energy transition plan, guided NERC, emphasises stakeholder engagement, transparency, inclusivity, capacity building, and conflict resolution. It promotes competition and private sector involvement, ensuring diverse perspectives through public consultations.⁸² However, there is still a low level of local participation in renewable energy projects.⁸³ NERC's inclusive policies aim to promote a sustainable and equitable energy future.

2.8 Rural Electrification Agency

Section 142 of the Electricity Act establishes the Rural Electrification Fund (REF). Monies allocated to the REF include any operating surplus of the Commission, determined after the annual audit of the Commission's accounts. These funds must be paid directly into the REF within 30 days following the audit, as mandated by section 56 of the Act. Additionally, the REF can receive donations, grants, gifts, assistance, or loans from local or international, bilateral or multilateral agencies, non-governmental organisations, the private sector, Federal or State Governments, local communities, businesses, or other entities.⁸⁴ Section 143 states that the purpose of the Fund is to promote, support, and provide sustainable and renewable rural electrification programmes and projects for underserved and unserved communities.

This involves public and private sector participation to achieve more equitable regional access to electricity and to implement programs that adopt international best practices regarding renewable energy utilisation.⁸⁵ According to Section 129 of the Act, the powers of the Agency include: Promoting universal access to affordable and sustainable electricity, thereby improving the quality of life and economic opportunities for rural, unserved, and underserved communities; and (e) Providing learning opportunities to educate interested

⁷⁹ *Ibid*, Ministry of Power.

⁸⁰ *Guideline 1.12 paragraph (iii) provides*, "The overall objective of this policy is summarised as follows ... "To accelerate the process of acquisition and diffusion of technology, managerial expertise and indigenous participation in the renewable energy and energy efficiency sector industries, for stability and self-reliance." *Supra*, note 77, NREEEP.

⁸¹ NERC operates as a perpetual corporate entity with the authority to litigate, functioning independently in accordance with Section 34. See the analysis of the Electricity Act, 2023 above, *supra*, note 65?

⁸² NERC involves various stakeholders, including government agencies, private sector participants, civil society organisations, and local communities, in the decision-making process. Public consultations and hearings are conducted to gather input and feedback from different interest groups, ensuring that diverse perspectives are considered. See generally Part III of the Electricity Act, 2023.

⁸³ Example is seen in Devery Solar Home System, *infra* note 89.

⁸⁴ Section 142(a) and (b) of the Electricity Act, 2023.

⁸⁵ Section 143(a)(g) of the Electricity Act, 2023.

communities, students, and individuals about opportunities for rural, unserved, and underserved electrification business ventures.⁸⁶ Section 129(2) further mandates that the Agency, in discharging its functions, consult with persons or groups likely to be affected by its projects or programmes, including investors, renewable energy companies, interested parties, and other stakeholders.

The Governing Board of the REA consists of seven members, with six members representing the six geopolitical zones of Nigeria, and the Managing Director and Chief Executive Officer of the Agency. All Board members are appointed by the President on the recommendation of the Minister, who holds supervisory powers as per Section 151 of the Act. However, despite clear provisions for community involvement in rural electrification projects in Nigeria, actual participation remains low. For instance, in Kwara State in 2023, community participation in rural electrification projects was only 34.2%.⁸⁷ The local population was minimally involved in key decision-making processes for the project. This paper finds that host communities are more likely to be satisfied with renewable energy project decisions when they are engaged in the decision-making process, regardless of whether their involvement changes the outcome or aligns with their stated preferences. In other words, the act of participation itself, rather than the actual outcome, increases satisfaction among host communities.⁸⁸

In summary, the preceding discussion indicates that the renewable energy frameworks in Tanzania and Nigeria have facilitated the development of renewable energy projects within their respective communities. These frameworks promote indigenous capacity in renewable energy technology through a local content framework aimed at sustainable electricity generation. However, several challenges, including limited financing, infrastructure constraints, and capacity gaps, continue to impede the full realisation of the frameworks' objectives. Further and more importantly, the frameworks do not appear to grant explicit authority to regulatory agencies, such as the Energy and Water Utilities Regulatory Authority (EWURA) and the Nigerian Electricity Regulatory Commission (NERC), to ensure that renewable energy projects engage in genuine community participation. This lack of authority should be considered a valid reason for the revocation of developers' licenses by these regulatory bodies during their review and revocation processes.

3. COMMUNITY PARTICIPATION IN RENEWABLE ENERGY PROJECTS IN TANZANIA AND NIGERIA

In the realm of renewable energy, nations globally are increasingly focused on the extent of community involvement in renewable energy projects. As developing countries in Africa, Tanzania and Nigeria have yet to witness substantial community participation in this sector. Beginning with companies in Tanzania, Devergy Solar Home System⁸⁹ is a pioneering company focusing on providing renewable energy solutions, particularly in rural and off-grid

⁸⁶ Section 129(e)

⁸⁷ Yusuf Olayinka Jelili *et al*, 'Community Participation and Sustainability of the Community and Social Development Projects in Kwara State', *Nigeria Journal of Agricultural Extension* (2020) Vol. 24 (1). <<https://dx.doi.org/10.4314/jae.v24i1.14>> accessed 5 August, 2024.

⁸⁸ *Ibid*, Yusuf Olayinka Jelili *et al*.

⁸⁹The company specialises in developing and implementing sustainable energy projects, with a primary focus on solar power. Devergy's projects typically involve the installation of solar micro-grids, providing clean and reliable electricity to communities that are not connected to the national grid. These micro-grids power homes, schools, businesses, and community facilities, significantly improving the quality of life for local residents and fostering economic development. One of Devergy's key innovations is its pay-as-you-go (PAYG) system, which allows customers to access electricity through a flexible and affordable payment plan. This model makes renewable energy more accessible to low-income households, as customers can pay for energy in small increments using mobile money services. See USAID, *Adaptive Solar PV Mini-Grids in Tanzania*. see <<https://www.usaid.gov/energy/mini-grids/case-studies/tanzania-smart-solar>> accessed 21 April, 2024.

areas. Devergy's projects typically involve installing solar micro-grids to provide clean and reliable electricity to communities not connected to the national grid.⁹⁰ Although Devergy consults with local community members during the design phase of the project, seeking their input on various project details, it retains ownership and responsibility for project operations and maintenance.⁹¹ While community members are employed in various project roles, Devergy manages the project independently, without sustained community involvement beyond the design phase.⁹² Another project is Semonkong installation⁹³ which was constructed with Norwegian development assistance and commissioned in 1989. It serves a small community through an isolated mini-grid in the rural areas of the Maseru district in Tanzania.⁹⁴ Despite its capacity of 180 kW hydropower supplemented by a 120-kW diesel generator, community participation in the project remains limited. While initially included in a World Bank-funded electricity sector restructuring project to assess private sector operations, the system returned to the operation and maintenance of Lesotho's national utility,⁹⁵ the Lesotho Electricity Company, after the project's conclusion.

In Nigeria, the Mambila Hydropower Project in Nigeria entails the development of a significant hydroelectric power plant located on the Mambila Plateau within Taraba State.⁹⁶ The primary objective of this initiative is to exploit the hydroelectric potential of the Mambila River for electricity generation. The generated electricity is intended to be integrated into the national grid via four 500kV DC transmission lines originating from Makurdi and one 330kV DC transmission line originating from Jalingo. Despite its strategic importance, the project has encountered various delays and challenges, including issues related to funding and contractual obligations. Of particular concern is the lack of community involvement in the project, exemplified by instances such as the unannounced arrival of Chinese officials via helicopters, which has fuelled tensions and eroded local confidence in the project.⁹⁷ Interconnected Solar Hybrid Mini Grid in Toto Community, Nasarawa State by PowerGen is initiated and commissioned by the Rural Electrification Agency (REA) in collaboration with Powergen Nigeria Limited and Abuja Electricity Distribution Plc (AEDC) on 9 November, 2023 as the Nigeria's first Interconnected Solar Hybrid Mini Grid⁹⁸ in Toto community, Nasarawa State.⁹⁹ The project is funded by the World Bank through the Nigeria Electrification Project (NEP) and designed to provide reliable, renewable electricity in the area. The project aligns with the Federal Government's goal of achieving universal electricity access by 2030.¹⁰⁰ It is a *community-centred* intervention in *Mini grid* development. However, according to PowerGen's

⁹⁰ These micro-grids power homes, schools, businesses, and community facilities, significantly improving the quality of life for local residents and fostering economic development. One of Devergy's key innovations is its pay-as-you-go (PAYG) system, which allows customers to access electricity through a flexible and affordable payment plan. This model makes renewable energy more accessible to low-income households, as customers can pay for energy in small increments using mobile money services.

⁹¹ *Supra*, note 2, Seroala Tsoeu-Ntokoane.

⁹² *Supra*, note 2, Seroala Tsoeu-Ntokoane.

⁹³ *Supra*, note 2, Seroala Tsoeu-Ntokoane.

⁹⁴ *Supra*, note 2, Seroala Tsoeu-Ntokoane.

⁹⁵ *Supra*, note 2, Seroala Tsoeu-Ntokoane.

⁹⁶ E.D. Orunye, 'Politics of Hydroelectric Power Development in Nigeria: A Case Study of the Mambilla Hydroelectric Power Project' *Global Journal of Interdisciplinary Social Sciences* (2015)(4)(4), 19-25.

⁹⁷ *Supra*, note 4, Henry Ojelu,

⁹⁸ 352kWp.

⁹⁹ Press Release, 'First Interconnected Hybrid Solar Mini-Grid Plant Commissioned in Toto' (November 9, 2023) <<https://nep.rea.gov.ng/first-interconnected-hybrid-solar-mini-grid-plant-commissioned-in-toto/>> accessed 26 April, 2024.

¹⁰⁰ *Ibid*.

Health, Safety, Environmental & Social Management System Manual June 2023,¹⁰¹ Community participation in their renewable energy project appears to be limited. Guideline 6.3 specifies that PowerGen will ensure that all individuals involved in the project have the necessary competence to maintain Health, Safety, Environmental & Social (HSES) Policy, but does not explicitly mention community involvement. Similarly, guideline 6.5 focuses on operational control procedures to manage HSES risks without mentioning community participation. Although guideline 6.16 acknowledges the importance of stakeholder consultation and participation, it only specifies that stakeholders will be consulted and involved in the development, implementation, and monitoring of the HSES Management System on a project-by-project basis, without outlining a comprehensive approach to community participation.

4. CANADA AS A MODEL FOR COMMUNITY ENGAGEMENT AND PARTICIPATION

Canada serves as a model for community participation in renewable energy initiatives, boasting diverse sources such as biomass, geothermal, solar, hydro, and wind energy.¹⁰² By 2035, these sources are projected to contribute 12% to the nation's total power generation.¹⁰³ Notably, Canada leads in indigenous involvement in renewable energy projects, stressing local community agency and partnership through Free, Prior, and Informed Consent principles and financial equity. The nation's commitment is evident in its Nationally Determined Contribution (NDC),¹⁰⁴ which focuses on indigenous climate leadership and self-determined climate action to advance reconciliation efforts.¹⁰⁵ With indigenous communities controlling a significant number of renewable energy assets, including 197 green energy initiatives, and with 41 projects demonstrating full or majority indigenous ownership, Canada aligns with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).¹⁰⁶ Various ownership models facilitate indigenous participation, including General Partnerships with developers and coalitions forming corporations to share ownership with large utilities.¹⁰⁷ Provincial policies play central role in financing and accelerating renewable energy projects, with initiatives like development grants and diesel reduction programmes. Long-term engagement and trust between developers/utilities and indigenous communities are crucial for successful partnerships, stressing the need for genuine collaboration and respect for indigenous self-determination. Canada's funding programmes and initiatives, such as the BC First Nations Clean Energy Business Fund and Natural Resources Canada's Clean Energy for Rural and Remote Communities Programme, underlines its commitment to promoting indigenous participation in the clean energy sector. With a goal of reaching net-zero emissions by 2050

¹⁰¹ PowerGen, *Health, Safety, Environmental & Social Management System Manual June 2023* <<https://www.afdb.org/sites/default/files/powergen-hses-policy-website-copy.docx.pdf>> accessed 12 May, 2024.

¹⁰² Institute for Human Rights & Business (IHRB), 'Community Ownership of Renewable Energy: How it Works in Nine Countries, Just Transitions' (Report 21 February 2023) <<https://www.ihrb.org/focus-areas/just-transitions/community-ownership-of-renewable-energy-how-it-works-in-nine-countries>> accessed 12 May, 2024.

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

¹⁰⁵ Canada's 2021 Nationally Determined Contribution under the Paris Agreement <https://unfccc.int/sites/default/files/NDC/2022-06/Canada%27s%20Enhanced%20NDC%20Submission1_FINAL%20EN.pdf> accessed 8 May, 2024.

¹⁰⁶ *Ibid.*

¹⁰⁷ Aethur Bledsoe, 'Project Ownership Models for Remote Renewable Energy Development in Partnership with Indigenous Communities' (2021) *UBC Sustainability Scholars*. Prepared for Emilia Belliveau, Sean LeRoy BC Ministry of Energy Mines and Low Carbon Innovation Community Clean Energy Branch April, 2022. <https://sustain.ubc.ca/sites/default/files/2021-066_Remote%20Energy%20Project%20Ownership%20Models_Bledsoe.pdf> Accessed 8 may, 2024.

and making its electrical system entirely emission-free by 2035, Canada aims to reduce emissions by 40-45% below 2005 levels by 2030.¹⁰⁸ Legally, Canada's recognition of indigenous peoples' right to self-government, enshrined in the Constitution¹⁰⁹, and crucial cases such as *Delgamuukw v. British Columbia*¹¹⁰ and *Haida Nation v. British Columbia*¹¹¹, establish indigenous traditional title as a legal right to land and mandate federal and provincial governments to consult indigenous peoples on matters affecting their interests or treaty rights. Canada's approach to negotiating treaties and acknowledging traditional and historical claims serves as a global role model, with numerous laws, policies, and programs addressing indigenous rights and concerns.

5. CASE ANALYSIS

In *Association of Energy Conservation Professionals, et al. v. Virginia State Air Pollution Control Board, et al.*,¹¹² the Virginia State Air Pollution Control Board's decision to adopt regulations limiting Virginia's participation in the Regional Greenhouse Gas Initiative (RGGI) was challenged. The Association of Energy Conservation Professionals (AECF) argued that the Board's decision was arbitrary and capricious, contending that joining RGGI was the most effective way for Virginia to achieve its carbon reduction goals. The district court ruled in favour of the Virginia State Air Pollution Control Board, a decision upheld by the Supreme Court of Virginia, which found that the Board's decision was within its authority and not arbitrary or capricious, noting that the Virginia Clean Economy Act did not specifically mandate participation in RGGI. This paper argues that the court's decision not to allow the host state to participate in the Regional Greenhouse Gas Initiative (RGGI) can be said to have limited Virginia's participation in RGGI, thus, may have hindered the state's ability to effectively combat climate change. It is like they say, "He who wears the shoes knows where it pinches." Only the people of Virginia truly understand the issues they face and what needs to be addressed in their state. RGGI is a proven programme for reducing greenhouse gas emissions, and by not participating, Virginia may miss out on significant environmental and economic benefits. Also, the decision may have disregarded the intent of the Virginia Clean Economy Act, which directed the Virginia State Air Pollution Control Board to implement regulations to limit carbon dioxide emissions. Participating in RGGI could have been a crucial step in fulfilling the goals of this Act. Finally, the court's decision may have failed to adequately consider the potential adverse effects on businesses and weatherization projects funded by RGGI. By not participating, Virginia may have missed out on worthwhile opportunities for economic growth, capacity building and job creation in the clean energy sector.

In the context of Executive Order 12,898,¹¹³ the Environmental Protection Agency's (EPA) recognition of the principle of environmental justice, and the legislation-backed position

¹⁰⁸ *Ibid.*

¹⁰⁹ See section 35 of the *Constitution Act, 1982*, which entrenches on the range of "aboriginal and treaty rights" including Aboriginal rights, Aboriginal title, treaty rights, and the Crown's duty to consult. <<https://caid.ca/ConstAct010208.pdf>> accessed 8 May, 2024. While the specifics of these rights may vary among Aboriginal groups, they generally encompass rights to land, subsistence resources, and related activities, as well as the rights to self-determination, self-government, and the preservation of one's culture, customs, language, and religion.

¹¹⁰ Also known as *Delgamuukw v. The Queen*, [1997] 3 SCR 1010.

¹¹¹ *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511 stands as a pioneering decision by the Supreme Court of Canada concerning the Crown's duty to consult with Aboriginal groups before engaging in activities that may affect lands subject to potential Indigenous claims.

¹¹² *Association of Energy Conservation Professionals v. Virginia State Air Pollution Control Board*, No. CL-2023-12061 (Va. Cir. Ct. Nov. 3, 2023).

¹¹³ Federal Register/Vol. 59, No. 32/Wednesday, February 16, 1994/Presidential Documents <<https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>> accessed 6 August 2024.

on environmental justice in the US, the Virginia case highlights several pertinent issues.¹¹⁴ Executive Order 12,898 mandates that federal agencies address disproportionately high and adverse human health or environmental effects on minority and low-income populations.¹¹⁵ The EPA's commitment to environmental justice involves ensuring that all people, regardless of race or income, have equal protection from environmental hazards and equal access to the decision-making process to have a healthy environment. In this case, the Virginia State Air Pollution Control Board's decision to limit participation in the Regional Greenhouse Gas Initiative (RGGI) potentially undermines the principles of environmental justice. The RGGI aims to reduce greenhouse gas emissions, which have a broad impact on environmental health. By not participating, Virginia may have inadvertently imposed greater environmental burdens on vulnerable communities, contrary to the goals of Executive Order 12,898 and the EPA's principles. The legislation-backed position on environmental justice in the US supports inclusive and participatory decision-making processes for environmental policies. The decision of the Virginia court to uphold the Board's action could be seen as a lack of engagement with community voices and the broader environmental justice framework, potentially neglecting the concerns of affected communities. In this comparative study, the instant case illustrates the challenges of aligning state decisions with federal environmental justice principles. It shows the importance of community participation and the need for state decisions to reflect the broader goals of environmental justice, ensuring that vulnerable populations are not disproportionately affected by environmental policies.

In the case of *City of Cape Town v. National Energy Regulator of South Africa*¹¹⁶, local participation was crucial. The City sought approval to procure renewable energy from Independent Power Producers (IPPs) but faced delays and a lack of response from the Minister of Energy.¹¹⁷ Despite providing all necessary details and legal opinions, the Minister did not respond adequately. The City, feeling it had exhausted its options, initiated legal proceedings. The Minister argued that the City should have exhausted dispute resolution mechanisms before resorting to legal action. The principle of cooperative government,¹¹⁸ as outlined in the Constitution,¹¹⁹ was emphasised by the Court¹²⁰, stating that the Framework Act¹²¹ mandates cooperation among government spheres to address developmental challenges. The City's failure to adhere to constitutional discipline and attempt to settle disputes politically before

¹¹⁴ United States Environmental Protection Agency, 'Summary of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations' <<https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>> accessed 6 August 2024.

¹¹⁵ *Ibid*, United States Environmental Protection Agency.

¹¹⁶ (51765/17) [2020] ZAGPPHC 800 (11 August 2020).

¹¹⁷ The City of Cape Town formally requested the Minister to make a determination under section 34 of the Electricity Regulation Act, No. 4 of 2006, allowing the City to procure up to 150MW of solar power and up to 280MW of wind power from an Independent Power Producer (IPP). See Section 34 of the Electricity Regulation Act, No. 4 of 2006.

¹¹⁸ The Constitution of the Republic of South Africa, Act 108 of 1996, Chapter 3 of the South African Constitution (sections 40-41) establishes the principles of cooperative governance. Section 40(1) outlines the structure of government as national, provincial, and local spheres, which are distinctive, inter-dependent, and inter-related. Section 41(1)(h) mandates that all spheres of government and organs of the state within each sphere must: foster friendly relations; assist and support one another; inform and consult one another on matters of common interest; coordinate their actions and legislation; adhere to agreed procedures; and avoid legal proceedings against one another.

¹¹⁹ The Constitution of the Republic of South Africa, Act 108 of 1996.

¹²⁰ The High Court Gauteng Division, Pretoria.

¹²¹ Intergovernmental Relations Framework Act 13 of 2005 ("the Framework Act").

litigation was noted. The Court, in accordance with previous rulings,¹²² emphasised fidelity to the Constitution and the rule of law. Consequently, the application was postponed indefinitely, and disputes were referred back to the parties for resolution as per constitutional provisions. Costs of the hearing were to be borne by the applicant, with other costs reserved.¹²³

The decision in the instant case offers deep understanding into participatory decision-making in the implementation of renewable projects. The court emphasised cooperative governance, requiring different government levels to collaborate and exhaust internal dispute resolution mechanisms before litigation. This aligns with the framework of stakeholder engagement and cooperation. The City of Cape Town's attempt to procure renewable energy from IPPs faced delays due to the Minister of Energy's inadequate response, highlighting challenges in bureaucratic responsiveness and the need for efficient government communication and cooperation. The court's decision to refer the disputes back to the parties for resolution under constitutional provisions reinforces the importance of participatory governance, urging government bodies to engage in meaningful dialogue, resolve conflicts internally, and adhere to constitutional mandates. This aligns with principles of environmental justice and community participation, ensuring inclusive and lawful renewable energy project implementation. This case exemplifies the intersection of legal frameworks and participatory governance, highlighting the need for clear protocols and responsive governance structures to facilitate, not hinder, the transition to renewable energy. Effective participatory decision-making requires stakeholder involvement and a cooperative approach among government levels to overcome administrative and procedural barriers. However, the High Court's decision appears to have overlooked the critical need for the City of Cape Town to engage in procuring renewable energy sources, essential for both sustainability and environmental conservation. Relying predominantly on Eskom for electricity exposes the city to reliability and environmental risks. In this regard, the Court should not have shied away from the principle of public policy, which encompasses the broader goals and objectives that a government pursues in the interest of the public. The City, as the entity directly affected, should have the autonomy to participate in the procurement of its own power. As the African proverb wisely states, "It is the one who lives in the house who knows where the roof leaks." Hence, the city should be empowered to address its energy needs, particularly given the shortcomings of the state-owned electricity provider.

In *NVT Power & Energy Ltd. v. Opu-Benibo Granville Community and 7 Ors.*¹²⁴, the communities in seeking fair involvement in their lands and resources, sought legal recourse to compel the firm to negotiate with them and promptly pay all agreed-upon dues, benefits, and compensation owed to them due to the defendant's activities within their lands. After negotiations, a settlement was reached and adopted as a consent judgment by the Court. The terms of the settlement stipulated that the communities, as independent entities, are entitled to directly benefit from the activities and facilities of the defendant within Abonnema Kingdom.

¹²² E.g., *Economic Freedom Fighters v. Gordhan and Others; Public Protector and Another v. Gordhan and Others* CCT 232/19; CCT 233/19 [2020] ZACC 10 (29 May 2020). "...it must at all times be remembered "that courts must show fidelity to the text, values and aspirations of the Constitution. A court should not be moved to ignore the law and the Constitution, and merely make a decision that would please the public. The rule of law, as entrenched in the Constitution, enjoins the judiciary, as well as everyone within the Republic, to function and operate within the bounds of the law. This means that a court cannot make a decision that is out of step with the Constitution and the law of the Republic. It must impartially apply the law to the prevailing set of facts, without fear, favour or prejudice." See South African Legal Information Institute, 'South Africa: North Gauteng High Court, Pretoria' <<https://www.saflii.org/za/cases/ZAGPPHC/2020/800.html>> accessed 7 May, 2024

¹²³ Per Justice L. WINDEL, Judge of the High Court Gauteng Division, Pretoria.

¹²⁴ SC/CV/849/2022. See Supreme NAN, Court dismisses appeal by Energy company against 8 Rivers community' (16 December 2022) *TheGuardian* <<https://guardian.ng/news/supreme-court-dismisses-appeal-by-energy-company-against-8-rivers-communities/>>accessed 7 May, 2024.

Additionally, they were to be included in all agreements and Global Memoranda of Understanding between the defendant and its host communities. Subsequently, Justice Enebeli ordered NVT to negotiate with the communities through their legal representatives and promptly pay all agreed-upon dues, benefits, and compensation. However, NVT appealed against the aspect of the consent judgment requiring it to pay each of the eight communities N1 million. The Court of Appeal in Port-Harcourt dismissed NVT's appeal, ruling it as incompetent because it was filed without first seeking the court's leave. NVT then appealed to the Supreme Court, but later withdrew its appeal, which was subsequently dismissed by the apex court.

Nigeria requires a Community Development Agreement (CDA) between operators and host communities before International Oil Companies (IOCs) commence operations.¹²⁵ The Environmental Impact Assessment (EIA)¹²⁶ process mandates that any proposed project likely to have significant environmental effects must undergo an EIA, ensuring that public participation is integrated into environmental decision-making. This process requires that the opinions and concerns of potentially affected communities be considered before project approval. In the instant case, the community sought legal recourse for fair involvement and compensation, reflecting the necessity of these agreements. Enhanced negotiation processes and community consultations, as well as transparent information sharing, could further promote inclusive decision-making and equitable benefits, aligning with CDA and EIA provisions.

Thus, this paper observes that to better assist community participation, the Court could have mandated a more robust and inclusive negotiation process between NVT Power and the affected communities. This could have involved mandatory community consultations requiring NVT Power to conduct regular and meaningful consultations with the affected communities before making any decisions regarding its operations within their territories, and the establishment of a community advisory board comprising representatives from the affected communities. This board would have a direct line of communication with NVT Power and would be involved in decision-making processes affecting the communities; transparency and information sharing on the part of NVT Power to provide regular updates and information to the communities regarding its operations, including any potential environmental impacts and proposed compensation packages.

6. CONCLUSION AND RECOMMENDATIONS

The review of multiple studies on community participation in renewable energy projects highlights the critical importance of engagement, acceptance, and project outcomes. The investigation finds out that both countries have made strides in promoting community involvement in energy initiatives. They have complex governance structures and varying degrees of community engagement, with partial successful case studies such as seen in Motete project consortium which experienced higher social acceptance due to its higher level of community involvement. However, generally, the examination of non-participatory approaches in Tanzania and Nigeria reveals a significant issue: low community acceptance due to limited participation, which jeopardizes the sustainability of these projects. Examples such

¹²⁵ The Community Development Agreement (CDA) in Nigeria is mandated by the Nigerian Minerals and Mining Act, 2007, specifically under Section 116. This section requires mining operators to enter into a CDA with the host community before commencing operations, ensuring that the community benefits from the mining activities and that their development needs are addressed. For the oil and gas sector, the Petroleum Industry Act (PIA) 2021 also emphasises host community development. Part III of the PIA mandates the establishment of a Host Communities Development Trust, which ensures that oil companies provide direct social and economic benefits to the host communities.

¹²⁶ Environmental Impact Assessment Act, CAP E12 LFN 2004.

as the Semonkong mini-grid project in Lesotho and the Mambila Hydropower project in Nigeria emphasize the detrimental effects of excluding local communities from decision-making processes.

The Canadian model of community participation in renewable energy projects is identified as a best practice and recommended for adoption by Tanzania and Nigeria. Renewable energy developers in Tanzania and Nigeria should establish energy development partnerships with indigenous communities, as seen in Canada, where indigenous communities are entering into partnerships with developers or utilities, adopting various ownership models. These models offer increased flexibility for financing, shared responsibility, and improved collaboration between industry stakeholders and communities.

Further, this paper recommends that legislative bodies amend the principal renewable energy Acts to include a clear mandate for 100 percent community participation in renewable energy projects. Failure to meet this requirement should result in the revocation of the project license. It is crucial that this provision be enforced zealously and without bias to ensure that future developers fully involve local communities in their projects.