

Review

Unpacking the Transformative Power of the Rights of Nature: Rethinking Self, Society, and Nature in Environmental Governance in Tanzania

Brown Gwambene 1,* and Halima Miigo 2

- ¹ Faculty of Science and Education, University of Iringa, Iringa P.O. Box 200, Tanzania
- ² Faculty of Law, University of Iringa, Iringa P.O. Box 200, Tanzania; halimamiigo@yahoo.com (H.M.)
- * Corresponding author. E-mail: brown.gwambene@uoi.ac.tz (B.G.)

Received: 25 July 2025; Accepted: 16 October 2025; Available online: 23 October 2025

ABSTRACT: This study examines the transformative potential of integrating the Rights of Nature (RoN) into Tanzania's environmental governance framework to address persistent ecological degradation, legal marginalization of local communities, and systemic governance gaps. Despite global progress in adopting the Rights of Nature (RoN), where ecosystems are granted legal personhood and communities serve as guardians Tanzania's legal and institutional frameworks remain predominantly anthropocentric, lacking provisions that recognize nature's intrinsic value. The primary objective of the study was to critically evaluate the extent to which Tanzania's current governance systems reflect or exclude RoN principles and to propose transformative pathways grounded in justice, inclusivity, and local knowledge. The study analyzed international legal instruments, Tanzanian statutes, scholarly literature, and case studies using a doctrinal and thematic review methodology. Findings reveal that, despite Tanzania's comprehensive environmental legislation, such as the Environmental Management Act (2004), key provisions fail to ensure procedural justice and exclude communities from meaningful participation, particularly under Strategic Environmental Assessment regulations. Conversely, local and Indigenous communities such as the Maasai, Chagga, and Zaramo have long practiced ecological stewardship grounded in relational worldviews, echoing RoN values. However, these systems are neither legally recognized nor institutionalized. The study concludes that a shift towards rights-based and transformative governance is necessary to address environmental injustice and ecological decline. It recommends revising legal frameworks to grant ecosystem rights, mandating participatory governance, and embedding Indigenous and local knowledge into environmental policy. Such reforms will not only enhance ecological integrity and local empowerment but also contribute to achieving Tanzania's commitments under Sustainable Development Goals (SDGs) 13, 15, and 16.

Keywords: Environmental governance; Rights of nature; Legal frameworks; Transformative practice; Local initiatives



© 2025 The authors. This is an open access article under the Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

The rights of nature (RoN) discourse, a significant innovation in global environmental governance, has a global impact. It challenges anthropocentric paradigms by recognizing ecosystems as rights-bearing entities rather than mere resources for human use. This movement, rooted in both Indigenous worldviews and critical legal scholarship, has gained momentum with constitutional innovations in Ecuador and Bolivia and judicial rulings in Colombia, New Zealand, and India that have granted legal personhood to rivers, forests, and glaciers. These cases demonstrate how RoN establishes a normative and enforceable framework to address ecological degradation by recognizing nature as a legal subject.

Philosophical traditions have long anticipated this paradigm shift, particularly in environmental ethics. Works such as Leopold's Land Ethic, Naess's Deep Ecology, Taylor's Respect for Nature, Rolston's ecological philosophy, and Plumwood's critique of anthropocentrism emphasize intrinsic and relational values of ecosystems, underscoring moral obligations to protect the natural world beyond instrumental concerns [1–5] Political ecology and environmental justice scholarship similarly highlight how governance models reproduce inequalities while overlooking ecological integrity

[6–9]. Linking these intellectual traditions with legal innovations, the RoN framework embodies a critique of existing governance models and a transformative proposal for alternative futures.

African scholarship has made significant contributions to the RoN discourse, emphasizing relational worldviews such as Ubuntu and Indigenous ecological stewardship. This is demonstrated by [10,11], who show how African ethical traditions stress interdependence between humans and nature. Refs. [12–14] highlight ongoing struggles over land rights, conservation, and environmental justice across the continent. In Tanzania, traditional institutions such as sacred forest custodianship and community-based water management systems offer practical examples of relational governance, despite remaining marginalized in statutory frameworks. These insights not only enrich the RoN debate but also underscore the importance of incorporating African perspectives into global legal innovations.

The global discourse increasingly acknowledges that environmental challenges cannot be addressed solely through technocratic or market-based solutions. Instead, transformative approaches must integrate Indigenous knowledge systems, relational ethics, and ecocentric legal frameworks [15–19]. This study builds on this literature by examining the prospects and challenges of institutionalizing RoN within Tanzania's environmental governance structures, situating the analysis within African philosophical perspectives and global legal debates.

Environmental governance has undergone significant transformation since the landmark 1972 Stockholm Conference, which laid the foundation for coordinated international action to protect the environment [20]. Since then, numerous treaties, policies, and institutions have emerged to address environmental degradation, yet the world still grapples with growing ecological crises, including climate change, biodiversity loss, and pollution. Recent scholarship further emphasizes that ecological crises are not confined to rural or wilderness spaces but are profoundly shaped by urbanization processes. Urban expansion has been shown to drive a rise in land surface temperature, alter carbon emissions, and undermine ecological resilience in rapidly developing regions [21–24]. Studies from China's metropolitan areas reveal that collaborative governance in urban agglomerations can enhance resilience to climate-related disasters and improve ecological outcomes [25–27]. These findings underline the importance of considering global climate change and urban heat environments alongside biodiversity loss and pollution when assessing environmental governance challenges. Integrating these perspectives situates Tanzania's experience within broader global dynamics where rural and urban ecological vulnerabilities demand transformative governance solutions.

Emerging evidence demonstrates how urban expansion contributes to land surface temperature rise, altered carbon balance, and weakened resilience in metropolitan ecosystems [24,28]. These global dynamics highlight the urgent need for governance frameworks addressing rural and urban ecological vulnerabilities. Notably, the World Bank [29] identifies poverty as a cause and consequence of environmental degradation, forming a vicious cycle that undermines global sustainability goals. In this context, the call for transformative environmental governance that embraces the Rights of Nature recognizing ecosystems as legal entities with intrinsic rights, has gained global traction [15,30]. Such an approach seeks to correct anthropocentric governance paradigms by reframing nature as a rights-holder capable of legal protection beyond human interests. This debate resonates with critiques of rights-based environmentalism that explore both its potential and its limitations in diverse contexts [31–33].

The global discourse increasingly acknowledges that effective environmental governance must transcend technocratic solutions and adopt inclusive, rights-based frameworks that empower marginalized communities [18,34]. The Rights of Nature movement, emerging from Indigenous and Latin American legal innovations (e.g., Ecuador and Bolivia), advocates for the intrinsic value of ecosystems, urging their integration into mainstream legal and institutional systems [10,35]. Scholars argue that integrating these rights can address governance failures rooted in state-centric and extractivist models that have fueled ecological harm and social injustice [36,37]. However, the global implementation of such frameworks remains inconsistent and politically contested, especially where sovereignty concerns hinder transboundary cooperation [38,39].

In Tanzania, environmental governance is shaped by a range of legal instruments, including the Environmental Management Act (EMA) of 2004 [40], the Constitution of the United Republic of Tanzania (Article 27), and strategic environmental regulations. While these frameworks emphasize public participation and sustainability, implementation gaps persist. For example, although the EMA promotes access to environmental information and participatory governance [40] (Section 7), the *Strategic Environmental Assessment Regulations* (GN 153 of 2008) grant discretionary power to sectoral ministers, potentially undermining transparency and inclusive decision-making (Regulation 9(2)). This reveals a critical disjuncture between the legal ambition for participatory governance and the practical mechanisms that often exclude communities from environmental decisions, thereby weakening accountability and stewardship [41,42].

The disconnect between legal frameworks and transformative practice highlights a deeper governance challenge: the absence of a rights-based approach that recognizes both people and ecosystems as agents in environmental

management. While Tanzania has made progress in incorporating environmental principles into law, the Rights of Nature remain absent from the country's statutory and policy framework. Local initiatives, such as community-based forest and wildlife management programs, demonstrate potential for grassroots governance [19,43]. However, their impact is often constrained by weak institutional support and limited legal authority. As a result, current governance mechanisms often fall short of ensuring ecological integrity, justice, and long-term sustainability, particularly for vulnerable populations affected by land degradation, extractive industries, and climate-related risks [44,45]. Key governance challenges in Tanzania include the predominance of anthropocentric legal frameworks, the weak enforcement of procedural rights under the Environmental Management Act (2004), the discretionary powers of ministers under the SEA Regulations (2008), and the marginalization of Indigenous and community-based knowledge systems. Collectively, these obstacles undermine accountability, inclusivity, and the achievement of sustainable and just environmental outcomes.

This study seeks to address the existing gap by critically examining how the integration of the *Rights of Nature* into Tanzania's environmental governance could foster more inclusive, just, and sustainable outcomes. Specifically, the study aims to explore the transformative potential of embedding nature's rights within national legal frameworks, enhancing local participation, and reimagining institutional arrangements. By doing so, it contributes to global and regional discourses on environmental justice, responds to Sustainable Development Goals (SDGs) such as SDG 13 (Climate Action), SDG 15 (Life on Land), and SDG 16 (Peace, Justice, and Strong Institutions), and offers pathways for aligning environmental governance with the ethical imperative of living in harmony with nature [46–48].

2. Methodology

This study employed a doctrinal and thematic review approach to unpack the transformative power of the Rights of Nature in rethinking self, society, and nature within the context of environmental governance in Tanzania. The methodology focused on critical analysis and synthesis of existing literature, legal instruments, policies, and case studies from global and Tanzanian contexts. The doctrinal method facilitated the examination of legal frameworks, judicial interpretations, and rights-based environmental laws to understand how the Rights of Nature are embedded (or absent) in formal environmental governance systems. Simultaneously, the thematic review enabled the categorization of literature into core themes, including *Environmental Governance*, *Rights of Nature*, *Legal Frameworks*, *Transformative Practices*, and *Local Initiatives*. The reviewed sources included peer-reviewed journal articles, national and international environmental policy documents, court cases, NGO reports, and scholarly books.

The study organized the review under thematic sections to capture cross-cutting insights on how environmental governance in Tanzania is evolving in light of the Rights of Nature discourse. The thematic analysis explored the role of legal and institutional frameworks, community-based environmental protection efforts, and the transformative potential of indigenous and local knowledge systems. In identifying gaps, the methodology emphasized what is missing in the current governance structure, particularly the lack of legal recognition of nature's intrinsic rights and the minimal incorporation of transformative practices at the grassroots level. Through this approach, the study not only synthesizes key debates and practices but also offers critical understandings into pathways for reimagining environmental governance in Tanzania with a rights-based and transformative lens.

3. Results and Discussion

3.1. Legal and Institutional Frameworks on Rights of Nature and Environmental Governance

3.1.1. Rights of Nature

Legal frameworks on the Rights of Nature (RoN) have gained prominence globally as an innovative mechanism for addressing environmental degradation by recognizing ecosystems as rights-bearing entities. Ecuador and Bolivia are notable examples, having enshrined the rights of nature into their constitutions, granting legal personhood to rivers, forests, and other ecosystems [20,49,50]. This legal shift redefines the human–nature relationship from one of dominion to one of coexistence and responsibility [51–53]. These frameworks establish enforceable legal standards, allowing individuals or communities to act as guardians and litigants on behalf of nature. In jurisdictions such as New Zealand, the Whanganui River has been granted legal personhood, allowing Māori values and stewardship systems to guide its protection [15,18]. Similar arguments have been advanced regarding the CBD and human rights law as vehicles for ambitious biodiversity protection [32,54].

In Tanzania, however, the legal recognition of RoN remains absent from both constitutional and statutory law. Although the Environmental Management Act [40] articulates duties to protect and conserve the environment, it does so from a predominantly anthropocentric perspective, focusing on the utility of nature for human development and health [40] (Section 7). The Constitution (Article 27) obliges citizens to safeguard natural resources; however, no provision allows nature to hold legal rights or be represented in legal forums independently. This lack of legal foundation creates a vacuum where ecosystems, despite their intrinsic and relational values, lack standing and formal legal protection against exploitative or unsustainable practices [44,55,56].

The gap mirrors challenges identified across Africa, where conservation often marginalizes communities. For example, the Ogiek judgment of the African Court of Human and Peoples' Rights underscores the importance of aligning protected areas with Indigenous rights [33,57]. In Tanzania, similar tensions are visible in conservation legislation, which prioritizes extractive models over Indigenous ecological knowledge [14,58]. Indigenous worldviews, such as those highlighted by [59] in the management of sacred forests, resonate strongly with relational and stewardship ethics [10,11]. These perspectives align with global ecological philosophies that emphasize respect for nature as a moral community [1–5].

Institutional mechanisms in Tanzania have also been slow to adopt or advocate for RoN-based governance. Environmental institutions remain structured around an extractive development logic, focusing on mitigating environmental impacts rather than implementing proactive, rights-based protection. Ministries and agencies, including the Vice President's Office (Environment), operate within policy frameworks that do not consider ecosystems as rights holders but as commodities to be regulated or preserved for future human benefit [10,41,60]. This stands in contrast to transformative practices globally, where environmental ministries have begun to incorporate ethical and Indigenous perspectives into governance, as seen in countries like Colombia, where the Atrato River has been granted legal rights following court rulings [46,61].

Nonetheless, community-based environmental protection efforts in Tanzania show latent potential for RoN-aligned practices. Customary land tenure systems among the Maasai, Chagga, and Zaramo communities historically manage forests and water bodies based on spiritual, relational, and reciprocal principles [43,62]. Although these practices are not codified in formal legal systems, they reflect key tenets of the RoN paradigm, which views nature as kin or ancestor deserving of respect and protection. However, these systems are vulnerable to state appropriation, commercial exploitation, and land-use conversion without legal recognition. A RoN framework could formalize and scale such Indigenous stewardship models, reinforcing ecological integrity and community autonomy [47,63].

3.1.2. Environmental Governance

The legal and institutional architecture for environmental governance in Tanzania is anchored in the *Environmental Management Act of 2004* [40], which provides a comprehensive framework for environmental protection, impact assessment, and pollution control. The Act outlines the roles of various authorities, from the Minister responsible for the Environment to Local Government Environmental Management Committees [40] (Sections 13–18). These structures are designed to facilitate decentralized, participatory governance. Additionally, strategic environmental planning tools, such as Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs), are required to guide development planning. Despite these legal structures, implementation is weakened by gaps in enforcement and accountability [55,64]. For instance, while EIAs and SEAs are mandated, in practice they often function as procedural formalities rather than substantive safeguards. The SEA Regulations (GN 153 of 2008) grant sectoral ministers' discretionary authority to decide whether public consultations occur (Regulation 9(2)), undermining transparency and excluding communities from decisions that directly affect their livelihoods. This discretionary power weakens procedural justice and leads to inconsistent application across sectors, with extractive projects frequently prioritized over ecological or community concerns.

A critical shortcoming in Tanzania's environmental governance is the discretionary nature of public participation. SEA Regulations (GN 153 of 2008) give sectoral ministers the authority to determine whether or not to consult the public (Regulation 9(2)), which conflicts with the spirit of participatory governance promoted in the EMA and other policies [65]. This restricts procedural justice and creates barriers for local communities to influence decisions that impact their environment and livelihoods. As such, the existing governance structure risks reproducing the exclusion it intended to overcome. This is particularly problematic in rural areas where land-use changes and resource extraction projects often proceed without proper local engagement or consent [44,66]. Despite institutional challenges, community-based environmental protection efforts have emerged as important sites of local governance innovation. Participatory

Forest Management (PFM), Joint Forest Management (JFM), and Community-Based Forest Management (CBFM) are notable examples that have empowered communities to protect and manage forest resources [43,67]. These initiatives have shown promise in areas such as Kilimanjaro and Morogoro, where deforestation has been reduced and local stewardship has been revived. However, the legal powers granted to communities under these schemes are often limited, and benefits are not equitably distributed, leading to disillusionment and declining participation over time [63,68]. Regional variations demonstrate both potential and limitations. For example, PFM in Kilimanjaro has helped curb deforestation through revived community stewardship, while in Morogoro, limited benefit-sharing has generated disillusionment. Similarly, Wildlife Management Areas (WMAs) have offered some communities opportunities for ecotourism revenue, but weak legal powers and donor-driven agendas have limited their long-term effectiveness. These examples underline the need for legally mandated participation rights and equitable benefit-sharing mechanisms to ensure sustainability and to expand impact across diverse regions.

For environmental governance in Tanzania to become truly transformative, it must evolve beyond technical compliance toward models that integrate justice, local agency, and ecological resilience. This includes revising laws to mandate participatory processes, recognizing customary systems, and aligning governance with global trends such as the Rights of Nature [46,48,69]. Moreover, a shift in institutional culture from enforcement to empowerment is necessary. This would enable local actors to become central players in environmental governance rather than peripheral implementers. Such a transformation would improve ecological outcomes and advance Tanzania's commitments under SDGs 13, 15, and 16.

3.2. Inclusivity and Governance Challenges in Environmental Management

The literature consistently highlights that inclusivity in environmental governance is both an ethical imperative and a practical necessity for achieving sustainability. However, a major challenge identified is the exclusion or marginalization of local communities, Indigenous peoples, and vulnerable groups in environmental decision-making processes [9,18,41]. In the Tanzanian context, while the Environmental Management Act [40] and Article 27 of the Constitution grant citizens a duty to protect the environment, actual mechanisms for meaningful participation remain weak or inconsistently applied. Strategic Environmental Assessments (SEA), for instance, legally allow discretionary public consultations (Regulation 9(2), GN 153 of 2008), which undermines transparency and participatory rights. This form of procedural exclusion contradicts the principles of environmental justice and limits the transformative power of governance frameworks [14,43,65].

Moreover, legal analysis reveals that Tanzanian environmental law does not yet recognize the Rights of Nature, a concept gaining traction in global environmental jurisprudence as a potential solution to ecological degradation and governance deficits [20,51]. Countries like Ecuador and Bolivia have already integrated nature's rights into their constitutions, reshaping environmental accountability and stewardship [15,49,50,70]. In contrast, Tanzanian frameworks still centre on human utility and anthropocentric values, often favouring extractive development models that conflict with conservation goals [12,36,44]. However, as [6,32] caution, collectivist governance approaches, while offering alternatives to hyper-individualistic models, can reproduce exclusionary dynamics and suppress individual autonomy, replacing one problematic extreme with another.

Even in cases where community-based initiatives exist, such as Wildlife Management Areas (WMAs), local voices are often overshadowed by bureaucratic and donor-driven priorities [68,71]. These dynamics reflect broader struggles in Africa, where land dispossession and conservation conflicts, as observed in Kenya and Nigeria, underscore the contested balance between human rights and ecological integrity [12,13,57,67]. As [7,8] illustrate, such tensions are also embedded in broader political-ecological contexts, where state-centric models of development marginalize local epistemologies and undermine ecological resilience.

Thematic literature also exposes governance challenges related to structural inequalities and state-centric control over environmental resources. For example, the discretionary powers of ecological authorities in Tanzania to approve development projects or determine consultation processes without binding public input highlight an uneven power dynamic [55,64]. These dynamics hinder collaborative conservation and discourage community engagement. Scholars argue that addressing these governance failures requires embedding diverse values of nature, including spiritual, cultural, and ecological dimensions, into legal and policy frameworks [1,2,4,35,48,55,64,72]. These frameworks need to reflect the plurality of ecosystem values, including relational and cultural ones [72]. However, such reforms remain limited due to the dominance of economic and instrumental logic in decision-making [37,46]. This exclusion contributes to weak environmental outcomes and missed local empowerment and innovation opportunities.

Despite these challenges, some local initiatives in Tanzania demonstrate alternative governance models that hint at transformative potential. Community Forest Management (CFM) and Participatory Forest Management (PFM) schemes, for example, have shown partial success in fostering grassroots stewardship [43,73]. However, these efforts often lack adequate legal backing and consistent support from state agencies. Furthermore, most national policies have yet to recognize the intrinsic rights of ecosystems, limiting the ability of such local models to scale or influence broader reforms [47,63]. The literature thus highlights a significant gap: the lack of a coherent legal and institutional framework that recognizes human and ecological rights as mutually reinforcing. Bridging this gap requires a shift toward a more inclusive, legally grounded, and ecocentric model of environmental governance in Tanzania, one that aligns with global sustainable development goals and local aspirations [6,9].

3.3. Transformative Practices, Local Initiatives, and Innovative Governance

The literature reveals that transformative environmental governance is increasingly linked to the recognition and integration of Indigenous and local knowledge systems. These systems embody holistic worldviews that see nature not merely as a resource but as a living entity with spiritual, ecological, and cultural significance [15,16,30]. In contrast to dominant technocratic models, Indigenous approaches emphasize relationality, reciprocity, and stewardship [10,11]. Countries like Ecuador have formalized this worldview by incorporating the Rights of Nature into their constitutions, thereby recognizing rivers, forests, and ecosystems as legal entities with enforceable rights [20,49,50]. This legal innovation has sparked global debates and underscored how Indigenous cosmologies can transform state-centric governance into more ecocentric and inclusive models [35,51].

In Tanzania, although Indigenous and local communities contribute significantly to environmental stewardship, primarily through practices such as sacred forest protection, traditional agroecology, and water-sharing customs, these practices are rarely recognized within formal governance frameworks [41,44,59]. For instance, customary norms governing forest use among the Chagga, Pare, and Haya peoples have historically ensured conservation and sustainable use, yet they lack legal codification and state support [74]. Efforts such as Participatory Forest Management (PFM) and Joint Forest Management (JFM) aim to involve communities, but their transformative potential is often curtailed by centralized control, tokenistic participation, and donor-driven agendas [43,68,71] This aligns with global findings that Indigenous stewardship is essential to biodiversity protection [75] and that biocultural diversity perspectives highlight the intertwined roles of culture and ecology [7,8,76].

Local innovations in governance have demonstrated that communities can design and implement effective environmental strategies when they are legally empowered and institutionally supported. For example, Community-Based Forest Management (CBFM) in regions like Morogoro and Kilimanjaro has demonstrated success in reducing deforestation and enhancing biodiversity, particularly where bylaws and benefit-sharing mechanisms are respected [63,77]. Similarly, Water User Associations (WUAs) and Village Environmental Committees (VECs) have contributed to sustainable water and land use practices when adequately linked to broader governance structures [78]. These efforts align with broader insights on commons governance, as articulated by [79], who emphasized the capacity of communities to self-organize for sustainable resource use.

However, these examples remain fragmented, and most operate without the legal recognition or financial autonomy required to influence national policy. The literature emphasizes that scaling such innovations necessitates a supportive legal and institutional ecosystem founded on inclusive, rights-based governance [46–48]. Transformative governance thus hinges on creating legal spaces where Indigenous and local epistemologies can co-produce knowledge, influence decision-making, and assert environmental rights [2–5]. Without institutional reform, the dominance of technocratic, state-driven models will continue to sideline alternative paradigms that are potentially more sustainable and equitable. Bridging this gap requires both normative shifts recognizing the intrinsic value of nature and practical legal reforms that embed local and Indigenous governance mechanisms within the national environmental architecture.

The Tanzania's environmental laws remain silent on the *Rights of Nature*, and its governance institutions often undervalue non-Western knowledge systems [48,80]. Without institutional reform, the dominance of technocratic, state-driven models will continue to sideline alternative paradigms that are potentially more sustainable and equitable. Bridging this gap requires both normative shifts recognizing the intrinsic value of nature and practical legal reforms that embed local and Indigenous governance mechanisms within the national environmental architecture. Such changes would contribute not only to improved ecological outcomes but also to broader goals of justice, equity, and the realization of multiple Sustainable Development Goals (SDGs), particularly SDG 15 (Life on Land), SDG 13 (Climate Action), and SDG 16 (Peace, Justice, and Strong Institutions). These findings have direct implications for the

Sustainable Development Goals (SDGs). Recognizing the Rights of Nature strengthens climate adaptation and mitigation efforts by enhancing ecosystem resilience, thereby advancing SDG 13 (Climate Action). Formalizing Indigenous and community-based stewardship secures biodiversity and ecosystem services, aligning with SDG 15 (Life on Land). Moreover, embedding procedural justice and rights-based governance mechanisms into law strengthens transparency, accountability, and community empowerment, which are central to SDG 16.

3.4. Rights-Based and Transformative Lens in Environmental Governance

A rights-based approach to environmental governance offers more than descriptive alignment with international standards. It provides a normative and enforceable foundation for justice, accountability, and ecological resilience [9,81,82]. Rather than treating citizens as passive recipients of environmental protection, this approach repositions them and ecosystems themselves as rights-holders with legitimate claims enforceable against the state and private actors [20,51]. This analytical shift highlights how Tanzania's current frameworks fall short and clarifies reform pathways for embedding human and ecological rights into law. In Tanzania, legal provisions such as Article 27 of the Constitution and the Environmental Management Act (2004) underscore the duties to protect natural resources. However, operational gaps persist in holding duty-bearers accountable and ensuring meaningful citizen participation. Although the Environmental Management Act promotes access to information and consultation, discretionary authority, particularly under SEA regulations (Regulation 9(2) of GN 153/2008), dilutes these protections, reflecting a disconnect between legal ideals and administrative practice [14,55,65].

Beyond procedural reforms, the transformative lens demands a more profound shift, challenging structural inequalities and the historical exclusion of local voices in environmental policy. In Tanzania, environmental governance has been shaped by colonial and postcolonial conservation models that have separated people from nature, particularly through restrictive policies in protected areas such as Ruaha National Park [36,68]. A transformative framework, inspired by works such as [6,18], aims to challenge these exclusions by incorporating local and Indigenous worldviews that prioritize relational and reciprocal engagements with the environment [10,11]. However, as [83] illustrates in institutional economics, effective governance requires balancing coercive rules, market dynamics, and cooperative norms to avoid false dichotomies between collectivist and hyper-individualistic legal traditions [79].

Local ecological knowledge, including customary land and water management systems, has historically supported sustainability but remains marginalized in national legal systems [43,74]. Transforming governance means dismantling centralized, militarized conservation models and empowering communities to co-design and co-manage natural resources. The Rights of Nature (RoN) framework offers a compelling legal and philosophical tool for this transformation, disrupting dominant anthropocentric logic and enabling the reimagining of human–environment relationships [1–5,52,53,84,85]. In Tanzania, where ecological degradation continues under extractive and top-down governance models, RoN could empower community-based governance rooted in relational worldviews, shifting community members from "users" to guardians or "eco-citizens". This change repositions self- and social relations to centre care, responsibility, and mutual flourishing with the more-than-human world [29,80]. At the same time, the sustainability debate underscores the need for workable institutional designs that reconcile philosophical ideals with practical governance challenges [32]. Embedding RoN in national frameworks would not only strengthen environmental protection but also deepen democratic participation, particularly in marginalized rural communities that manage forests, rivers, and grasslands according to customary norms [47,63].

Importantly, this approach encourages innovation in governance structures, such as the creation of guardianship councils, legal standing for ecosystems, and transformative education that reinforces ecological ethics [30,46]. Local examples, such as CBFM, PFM, and WMAs, offer partial prototypes; however, they remain constrained by weak statutory support and exclusion from national policymaking. Integrating RoN could help scale these efforts by granting nature formal legal status and recognizing communities as stewards with rights and responsibilities. This transformative blend of legal innovation and socio-cultural change aligns with SDGs 13, 15, and 16, promoting climate action, ecosystem protection, and institutional accountability [48,86]. Ultimately, the literature suggests that rights-based and transformative lenses are not merely legal strategies but rather paradigmatic shifts necessary to unlock sustainable, just, and inclusive environmental governance in Tanzania. The reforms also resonate with global debates on climate governance and net-zero transitions, which emphasize the need for both ecological integrity and just institutional arrangements [86].

3.5. Discussion Summary

This study explored the transformative potential of integrating the *Rights of Nature* (RoN) within Tanzania's environmental governance framework. The discussion revealed that while global precedents such as Ecuador's and New Zealand's legal recognition of ecosystems demonstrate progressive pathways, Tanzanian legal and institutional frameworks remain largely anthropocentric, focusing on the utility of nature rather than its intrinsic value. Despite constitutional provisions (Article 27) and the Environmental Management Act (2004), Tanzania lacks a legal foundation to recognize ecosystems as rights-bearing entities. The discretionary nature of public participation under SEA regulations and limited legal mandates for communities further weakens environmental democracy and accountability.

The findings also highlighted that local and Indigenous communities in Tanzania possess deeply rooted ecological knowledge and governance practices aligned with RoN principles. Customary systems of forest and water management, particularly among the Chagga, Maasai, and Zaramo reflect relational worldviews where nature is respected as kin. However, without legal codification or institutional support, these systems remain vulnerable to neglect by the state and exploitation by external forces. Initiatives like PFM and CBFM show partial success but are constrained by weak legal backing and centralized control. This indicates a significant gap between formal governance systems and locally grounded transformative practices.

To close this gap, the study argues for a paradigm shift that combines a rights-based approach with transformative governance lenses. This includes recognizing the legal personhood of ecosystems, empowering local communities through legally mandated participatory structures, and integrating Indigenous knowledge into policy and practice. Such reforms would not only address environmental degradation but also strengthen social equity, procedural justice, and cultural resilience, thereby contributing meaningfully to Tanzania's sustainable development agenda and its global commitments under the SDGs.

4. Conclusions and Recommendations

This study has shown that the Rights of Nature (RoN) framework holds significant potential to transform environmental governance in Tanzania by shifting from an anthropocentric to an ecocentric paradigm. While existing legal and institutional arrangements recognize duties to protect the environment, they remain limited by their human-centred focus and by the exclusion of Indigenous and local knowledge systems. Bridging this gap requires a transformative approach, acknowledging ecosystems as rights-bearing entities and empowering communities as stewards and guardians of nature. The institutionalization of RoN will demand not only legal reforms but also cultural and ethical shifts that validate relational worldviews and Indigenous governance practices. It is crucial to support and strengthen grassroots initiatives such as Participatory Forest Management (PFM), Community-Based Forest Management (CBFM), and Wildlife Management Areas (WMAs), as they can provide the foundation for this transformation. With clear legal mandates and adequate resources, these initiatives can play a significant role in the successful implementation of RoN. Ultimately, embedding RoN into national governance frameworks presents an opportunity to align environmental protection with social justice, enhance ecological resilience, and foster more inclusive forms of citizenship. Reframing human—nature relations around dignity, reciprocity, and responsibility presses toward a governance model that is legally innovative, socially grounded, and ecologically sustainable.

Statement of the Use of Generative AI and AI-Assisted Technologies in the Writing Process

The authors declare that generative artificial intelligence (AI) tools, including OpenAI's ChatGPT (GPT-5), were used to assist in reformatting and the organising the reference list. The intellectual content, analysis, interpretations, and conclusions are entirely the authors' original work. All AI-assisted contributions were reviewed, verified, and edited by the authors before their use to ensure accuracy and academic integrity.

Acknowledgments

We appreciate the University of Iringa for providing academic and time resources that facilitated this study.

Author Contributions

All authors contributed equally to the conception, design, analysis, writing, and revision of this manuscript. All authors have read and approved the final version of the paper.

Ethics Statement

Not applicable.

Informed Consent Statement

Not applicable.

Data Availability Statement

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Funding

The authors did not receive support from any organization for the submitted work.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- 1. Leopold A. A Sand County Almanac; Oxford University Press: Oxford, UK, 1949.
- 2. Naess A. The shallow and the deep, long-range ecology movement. *Inquiry* **1973**, *16*, 95–100.
- 3. Plumwood V. Environmental Culture: The Ecological Crisis of Reason; Routledge: Oxford, UK, 2002.
- 4. Rolston H. *Environmental Ethics: Duties to and Values in the Natural World*; Temple University Press: Philadelphia, PA, USA, 1988.
- 5. Taylor PW. Respect for Nature: A Theory of Environmental Ethics; Princeton University Press: Princeton, NJ, USA, 1986.
- 6. Dryzek J. The Politics of the Earth: Environmental Discourses, 3rd ed.; Oxford University Press: Oxford, UK, 2013.
- 7. Escobar A. Constructing nature: Elements for a poststructural political ecology. In *Liberation Ecologies*; Peet, Watts, Eds.; Routledge: Oxford, UK, 1996.
- 8. Fairhead J, Leach M. *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic*; Cambridge University Press: Cambridge, UK, 1996.
- 9. Schlosberg D. Defining Environmental Justice: Theories, Movements, and Nature; Oxford University Press: Oxford, UK, 2007.
- 10. Behrens KG. An African relational environmentalism and moral considerability. Environ. Ethics 2014, 36, 63-82.
- 11. Murithi T. An African perspective on peace education: Ubuntu lessons in reconciliation. Int. Rev. Educ. 2009, 55, 221–233.
- 12. Akpan W. Oil, human rights, and the environment: The Ogoni struggle in Nigeria. Soc. Justice 2012, 38, 90–106.
- 13. Kameri-Mbote P. Land Tenure, Land Use and Sustainability in Kenya: Towards Innovative Use of Property Rights in Wildlife Management; IELRC Working Paper; International Environmental Law Research Centre: Geneva, Switzerland, 2009.
- 14. Makulilo A. Environmental justice struggles in Tanzania. J. Afr. Law 2016, 60, 421–443.
- 15. Adolfsson JS, Normann S, Nakkerud E, Palacios Haugestad CA. Indigenizing psychology: A way forward for Indigenous knowledges in the psy-disciplines? *Int. Perspect. Psychol. Res. Pract. Consult.* **2025**, *14*, 59–69. doi:10.1027/2157-3891/a000121.
- 16. Bell E, Tremblay C, Carodenuto S, Downie B, Dearden P, Ole Kileli E, et al. Indigenous knowledge-bridging to support ecological stewardship in Canada and Tanzania. *People Nat.* **2025**, *7*, 1139–1150.
- 17. Cariño J, Ferrari MF. Negotiating the futures of nature and cultures: Perspectives from Indigenous peoples and local communities about the post-2020 global biodiversity framework. *J. Ethnobiol.* **2021**, *41*, 192–208.
- 18. Cornwall A, Rivas AM. From 'gender equality' and 'women's empowerment' to global justice: Reclaiming a transformative agenda for gender and development. *Third World Q.* **2015**, *36*, 396–415. doi:10.1080/01436597.2015.1013341.
- 19. Marah TS. Legal Protection of Indigenous Peoples under International Environmental Law. *Indones. J. Law Justice* **2025**, *2*, 18.
- 20. Rajamani L, Peel J. (Eds.) *The Oxford Handbook of International Environmental Law*; Oxford University Press: Oxford, UK, 2021.
- 21. Liu L, Lei Y, Zhuang M, Ding S. The impact of climate change on urban resilience in the Beijing-Tianjin-Hebei region. *Sci. Total Environ.* **2022**, *827*, 154157.

- 22. Peng L, Wu H, Li Z. Spatial–temporal evolutions of ecological environment quality and ecological resilience pattern in the middle and lower reaches of the Yangtze River Economic Belt. *Remote Sens.* **2023**, *15*, 430.
- 23. Shi C, Guo N, Gao X, Wu F. How carbon emission reduction is going to affect urban resilience. *J. Clean. Prod.* **2022**, *372*, 133737
- 24. Wang K, Ma H, Fang C. The relationship evolution between urbanization and urban ecological resilience in the Northern Slope Economic Belt of Tianshan Mountains, China. *Sustain. Cities Soc.* **2023**, *97*, 104783.
- 25. Gbadegesin OA. Indigenous Ecological Knowledge: A Transformative Approach to Biodiversity Legislation in Nigeria. *Environ. Manag.* **2024**, *74*, 317–331.
- 26. Ouyang X, Chen J, Wei X, Li J. Ecological resilience in China's ten urban agglomerations: Evolution and influence under the background of carbon neutrality. *Ecol. Model.* **2025**, *508*, 111226.
- 27. Tong Y, Lei J, Zhang S, Zhang X, Rong T, Fan L, et al. Analysis of the spatial and temporal variability and factors influencing the ecological resilience in the urban agglomeration on the Northern Slope of Tianshan Mountain. *Sustainability* **2023**, *15*, 4828.
- 28. Zhao Q, Liu J, Hu X. Renewable energy transitions and green innovation in Asia. *Energy Policy* **2025**, 190, 113468.
- 29. World Bank Group. Africa SS. 2025. Available online: https://data. worldbank. org/country/sub-saharan-africa (accessed on 29 March 2025).
- 30. Najjar D, Shadrack N, Ahmed S. Transforming land rights, improving rural livelihoods, and carving just responses to the climate crisis. *Gend. Dev.* **2025**, *33*, 1–15.
- 31. Baard P. Are rights of nature manifesto rights (and is that a problem)? Res Publica 2023, 29, 425-443.
- 32. Ekardt F. Sustainability—Transformation, Governance, Ethics, Law; Environmental Humanities: Transformation, Governance; Springer: Cham, Switzerland, 2024; pp. 1–296. doi:10.1007/978-3-031-62711-8.
- 33. Ekardt F, Günther P, Hagemann K, Garske B, Heyl K, Weyland R. Legally binding and ambitious biodiversity protection under the CBD, the global biodiversity framework, and human rights law. *Environ. Sci. Eur.* **2023**, *35*, 80. doi:10.1186/s12302-023-00786-5.
- 34. United Nations Development Programme (UNDP). Why Nature-Based Solutions Are Critical for Climate Change Adaptation. Climate Promise News & Stories, 15 August 2025. Available online: https://climatepromise.undp.org/news-and-stories/why-nature-based-solutions-are-critical-climate-change-adaptation (accessed on 20 August 2025).
- 35. Termansen M, Jacobs S, Pandit R, Mwampamba TH, Dendoncker N, Schaafsma M, et al. Five steps towards transformative valuation of nature. *Curr. Opin. Environ. Sustain.* **2023**, *64*, 101344. doi:10.1016/j.cosust.2023.101344.
- 36. Death C. Environmental mainstreaming and post-sovereign governance in Tanzania. J. East. Afr. Stud. 2013, 7, 1–20.
- 37. Kojola E, Pellow DN. New directions in environmental justice studies: examining the state and violence. *Environ. Politics* **2021**, *30*, 100–118. doi:10.1080/09644016.2020.1836898
- 38. Lalander R, Singh N, Galindo JF, Maganga F, Sjöling S, Lehtilä K. Comparative reflections on contested hydro-territorial rights in Indigenous communities of Bolivia, India and Tanzania. *Soc. Sci. Humanit. Open* **2025**, *11*, 101508.
- 39. Jänicke M, Jörgens H. New approaches to environmental governance. In *The Ecological Modernisation Reader*; Routledge: Oxford, UK, 2020; pp. 156–189.
- 40. United Republic of Tanzania. *Environmental Management Act (EMA), No. 20 of 2004*; Government Printer: Dar es Salaam, Tanzania, 2004.
- 41. Mukono D. Rethinking power and forestry governance in colonial and post-colonial Tanzania: Towards a poststructural political ecology. *Afr. Rev.* **2022**, *I*, 1–32.
- 42. Richards P. *Indigenous Agricultural Revolution: Ecology and Food Production in West Africa*; Routledge: Oxford, UK, 2023. doi:10.4324/9781003383734
- 43. Ngowi NJ. Inclusivity in decentralized forest management and its effects on economic resilience and nature sustainability in East Central Tanzania. *Asian J. For.* **2024**, *8*, 165–173. doi:10.13057/asianjfor/r080207.
- 44. Laltaika E. An appraisal of procedural environmental rights in Tanzania's extractive sector. *Afr. Nazarene Univ. Law J.* **2019**, 7, 46–63.
- 45. Yanda PZ, Moshy VH, Gwambene B, Mwajombe AR, Kamoyo S. How do institutional frameworks influence socio-ecological systems? The case of natural gas development in Mtwara region, Tanzania. *Extr. Ind. Soc.* **2024**, *19*, 101473. doi:10.1016/j.exis.2024.101473.
- 46. Mehta L, Leach M, Scoones I. Environmental governance in an uncertain world. IDS Bulletin 2025, 56, 68-76.
- 47. Mukono D. Revealing REDD+ through intersectionality from below: An exploration of everyday subjectivities in rural southern Tanzania. *Local Environ.* **2025**, *30*, 653–668.
- 48. Vatn A, Pascual U, Chaplin-Kramer R, Termansen M, Arias-Arévalo P, Balvanera P, et al. Incorporating diverse values of nature in decision-making—theory and practice. *Philos. Trans. R. Soc. B* **2024**, *379*, 20220315.
- 49. Kauffman CM, Martin PL. Can rights of nature make development more sustainable? Why some Ecuadorian lawsuits succeed and others fail. *World Dev.* **2018**, *92*, 130–142.

- 50. Kotzé LJ, Calzadilla PV. Somewhere between rhetoric and reality: Environmental constitutionalism and the rights of nature in Ecuador. *Transnatl. Environ. Law* **2017**, *6*, 401–433.
- 51. Boyd DR. The Rights of Nature: A Legal Revolution That Could Save the World; ECW Press: Toronto, ON, Canada, 2017.
- 52. Nash R. The Rights of Nature: A History of Environmental Ethics; University of Wisconsin Press: Madison, WI, USA, 1989.
- 53. Stone CD. Should Trees Have Standing? Toward Legal Rights for Natural Objects. South. Calif. Law Rev. 1972, 45, 450–501.
- 54. Hill TE. Ideals of human excellence and preserving natural environments. In *The Ethics of the Environment*; Routledge: Oxford, UK, 2017; pp. 319–332.
- 55. Mapunda BT. Environmental law and policy in Tanzania: Reflections on the enforcement of the Environmental Management Act. *East. Afr. Law Rev.* **2019**, *46*, 157–184.
- 56. Masud MM. The Examination of the Legal and Practical Challenges Relating to Environmental Protection in Tanzania. Bachelor's Thesis, Muslim University of Morogoro, Morogoro, Tanzania, 2024.doi:10.2139/ssrn.5406962.
- 57. Claridge L, Kobei D. Protected areas, Indigenous rights and land restitution: the Ogiek judgment of the African Court of Human and Peoples' Rights and community land protection in Kenya. *Oryx* **2023**, *57*, 313–324.
- 58. Kegamba JJ, Sangha KK, Wurm PA, Kideghesho JR, Garnett ST. The influence of conservation policies and legislations on communities in Tanzania. *Biodivers. Conserv.* **2024**, *33*, 3147–3170.
- 59. Mgaya E. Traditional Institutions' Management of Sacred Forests in Tanzania: History, Narratives, and Evidence from Njombe Region, 1880s–2019. Ph.D. Thesis, Te Herenga Waka-Victoria University of Wellington, Wellington, New Zealand, 2020.
- 60. Olawuyi DS. Legal strategies and tools for mitigating legal risks associated with oil and gas investments in A frica. *OPEC Energy Rev.* **2015**, *39*, 247–265.
- 61. Bullock RM, Chen JG, Gagliardi L, Chirik PJ, Farha OK, Hendon CH, et al. Using nature's blueprint to expand catalysis with Earth-abundant metals. *Science* **2020**, *369*, eabc3183.
- 62. Escobedo FJ, Giannico V, Jim CY, Sanesi G, Lafortezza R. Urban forests, ecosystem services, green infrastructure and nature-based solutions: Nexus or evolving metaphors? *Urban For. Urban Green.* **2019**, *37*, 3–12.
- 63. Sama SM, Ashukem JCN. Introduction: Beyond the lens of constitutional environmental rights in Africa. In *Domestic and Regional Environmental Laws and Policies in Africa*; Routledge: Oxford, UK, 2023; pp. 1–11.
- 64. Pallagyo DM. Environmental law in Tanzania; How far have we gone. Law Env't & Dev. J. 2007, 3:26.
- 65. Mukono D. Beyond the REDD+ neoliberal environmentality and its discontents in Southern Tanzania. *J. Political Ecol.* **2024**, 31, 200–216.
- 66. Muchunguzi S. Participatory management of natural resources in Africa: an imperative policy direction for sustainable development. *Manag. Environ.Qual. Int. J.* **2023**, *34*, 704–720.
- 67. Naanyu V, Kisembe E, Lagat D, Wathuta J. Environmental Ethics: A Kenyan Perspective. In *Bioethics from the Global South*; Springer: Cham, Switzerland, 2025; pp. 65–81.
- 68. Kiwango WA, Komakech HC, Tarimo TM, Martz L. Decentralized environmental governance: A reflection on its role in shaping wildlife management areas in Tanzania. *Trop. Conserv. Sci.* **2015**, *8*, 1080–1097.
- 69. Ugwu IP. Environmental Protection, Rights of Nature, and Religious Beliefs in Europe. Int. J. Semiot. Law 2025, 38, 993-
- 70. Apple M. The hidden curriculum and the nature of conflict. In *The Critical Pedagogy Reader*; Routledge: Oxford, UK, 2023; pp. 434–452.
- 71. Riboldi E. The Conflict between Conservation, Tourism and Indigenous Land Rights: The Case of the Maasai in Kenya and Tanzania. Università Degli Studi Di Padova. Available online: https://hdl.handle.net/20.500.12608/75039 (accessed on 29 March 2025).
- 72. Pascual U, Balvanera P, Anderson CB, Chaplin-Kramer R, Christie M, González-Jiménez D, et al. Diverse values of nature for sustainability. *Nature* **2023**, *620*, 813–823.
- 73. Wily LA. Community-Based land Tenure Management: Questions and Answers about Tanzania's New Village Land Act, 1999. International Institute for Environment and Development 2003. Available online: https://repository.out.ac.tz/1641/1/9295I_community_based_land_tenure.pdf (accessed on 29 March 2025).
- 74. Wily LA. The democratization of forest management in eastern and southern Africa. Int. For. Rev. 2000, 287–294.
- 75. Garnett ST, Burgess ND, Fa JE, Fernández-Llamazares Á, Molnár Z, Robinson CJ, et al. A spatial overview of the global importance of Indigenous lands for conservation. *Nat. Sustain.* **2018**, *1*, 369–374.
- 76. Bridgewater P, Rotherham ID. A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation. *People Nat.* **2019**, *1*, 291–304.
- 77. Muchunguzi S. Perception of Quality Service Provision in Local Government Authorities in Tanzania: A Citizen Participation Perspective. *JPAS (J. Public Adm.Stud.)* **2023**, *8*, 30–40.
- 78. Mosha NF, Ngulube P. Adoption of climate change mitigation and adaptation strategies among smallholder farmers in African countries: A systematic review. *Discov. Sustain.* **2025**, *6*, 1–24.

- 79. Ostrom E. Governing the Commons: The Evolution of Institutions for Collective Action; Cambridge University Press: Cambridge, UK, 1990.
- 80. Wiegleb V, Bruns A. Whose Knowledge Counts? Unpacking the uneven geographies and politics of knowledge co-production in IPBES. *Hum. Ecol.* **2025**, *53*, 73–86.
- 81. United Nations. *The Human Rights Based Approach to Development Cooperation: Towards a Common Understanding among UN Agencies*; United Nations: New York, NY, USA, 2003.
- 82. Mwimali J, Marang'a M, Ayongah E, Ndirangu I, Bowen M. A Rights-Based Approach to Greening the Justice System. *JL Pol'y Glob.* **2024**, *142*, 1.
- 83. Greif A. Commitment, coercion, and markets: The nature and dynamics of institutions supporting exchange. In *Handbook of New Institutional Economics*; Stanford University: Stanford, CA, USA, 2025; pp. 811–868. doi:10.1007/978-3-031-50810-3 32.
- 84. Guim M, Livermore MA. Where nature's rights go wrong. Va. Law Rev. 2021, 107, 1347–1419.
- 85. Hart HL. Are There any Natural Rights? In *Theories of Rights*; Routledge: Oxford, UK, 2017; pp. 61–77.
- 86. Fankhauser S, Smith SM, Allen M, Axelsson K, Hale T, Hepburn C, et al. The meaning of net zero and how to get it right. *Nat. Clim. Change* **2022**, *12*, 15–21.