

Research Article

Rights of Nature and Environmental Management in the Developing Countries

Chris Ogolo Ikporukpo^{1,*}  Ninane Nina Ikporukpo² 

¹Department of Geography, University of Ibadan, Ibadan, Nigeria

²Department of Commercial and Industrial Law, University of Lagos, Lagos, Nigeria

Abstract

In spite of the fact that Rights of Nature (RoN), the perspective that natural objects, such as trees and rivers, should have legal rights like humans, has its beginnings in the United States of America (USA), it is in developing countries that it blossomed. Its emergence was catalysed by the realization that the human-based philosophy of development, anthropocentrism, has complicated the environmental crisis, and therefore one with nature as its centre, ecocentrism, is needed for effective environmental management. This paper analyses the theoretical and philosophical basis of RoN, its evolutionary trajectory and the challenges to its effectiveness in the developing countries. Documents/publications of those countries that have or attempted to adopt RoN, environmental civil society organisations, and those of researchers, are the main sources of data/information. Legal personhood provides the theoretical basis of RoN while its philosophical stance is influenced by the indigenous people's perspective on nature as a living system that is sacred and requiring harmonious relationship with humans. Ecuador which amended its constitution to include RoN provisions in 2008, is the first country in the developing world and the second globally after Tamaqua Borough, USA, to adopt RoN. Currently all the countries having country-wide RoN are in the developing world. Apart from Ecuador, others are Bolivia, Uganda and Panama. The introduction of RoN in these other countries was through legislation. Mexico and Brazil are countries where municipalities are the spatial units endowed with rights. Rivers, such as in Bangladesh, Colombia, India and Peru, are the most common natural entities endowed with rights. Ecuador and Bolivia are the earliest adopters of RoN while Panama and Peru are the most recent. Several challenges hinder an effective operation of RoN. These include ambiguity of the phraseology of RoN, inappropriate RoN guardianship systems, limited scope and coverage, conflict between the economic structure of the countries and RoN, and the high level of corruption in many of the countries. In order for RoN to succeed, the emergent challenges must be addressed.

Keywords

Rights of Nature (RoN), Indigenous Environmental Philosophy, Legal Personhood, Trend of Adoption of RoN, Channels of Adoption of RoN, Challenges of RoN

*Corresponding author: coikporukpo@yahoo.com (Chris Ogolo Ikporukpo)

Received: 19 May 2025; **Accepted:** 3 June 2025; **Published:** 23 June 2025



Copyright: © The Author(s), 2025. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

1. Introduction

The emergence of the philosophy and practice of Rights of Nature (RoN) is a major landmark in environmental management. RoN, which is based on a philosophy of ecocentrism challenges the orthodoxy of anthropocentrism. Anthropocentrism, a human-centred philosophical basis of development, emphasizes the supremacy of humans over nature and the freedom of humans to exploit nature [20, 22]. The result has been an overexploitation of nature and a consequent environmental crisis.

The realisation that humans have overexploited nature and that attempts at addressing the resultant environmental deterioration have not been successful necessitated a change in the development strategy. There is thus an increasing interest in ecocentrism which deemphasizes the supremacy of humans and places the protection of nature at the centre of the development process [21, 19, 50].

The RoN approach is one result of the interest in alternative strategies of the exploitation of nature and development. This paper analyses the theoretical/philosophical basis of RoN and its evolutionary pattern in the developing countries. The emergent challenges in the enthronement of this approach are also examined. The next section discusses the sources of data/information while the one that follows provides the theoretical/philosophical basis. This is followed by sections on the trend and the challenges in the enthronement of RoN. The last section provides a summary and the conclusion.

2. Sources of Data/Information

The publications/documents of the governments of those countries that have adopted RoN are the main sources of data/information. Such publications come from national, regional and local governments, including municipalities. These documents include mainly constitutions, laws and court judgements indicating the nature of the rights conferred on various entities. These constitutions, laws and court documents indicate not only the rights given but also such other information as the operational scope and individuals and organisations that will be responsible for the operationalisation of the RoN. These documents/publications were obtained mainly from the websites of the various governments and their agencies.

In spite of the fact that RoN is a relatively recent phenomenon, there are several published works on it. These works provided useful information on the adoption of RoN, particularly by early adopters, such as Ecuador, Bolivia and India. Such information is typically on the circumstances of the adoption of RoN, the character of the rights and challenges. The relevant publications were obtained from academic journals and websites of research organisations.

Various environmental and civil society organisations are also significant sources of data. These include mainly Eco Jurisprudence Monitor, Earth Law Center, Lawyers for Na-

ture and Global Alliance for the Rights of Nature. Information on recent aspects of RoN was obtained from the websites of these organisations. Such data include recent adaptation of RoN, proposals on RoN, failed attempts at adopting RoN and emergent challenges.

The next section provides a theoretical basis. The central concepts of the RoN idea, and the philosophical basis are discussed.

3. Theoretical and Philosophical Contexts

Rights of Nature implies endowing non-human entities, such as rivers and animals, rights as if they were human beings. The idea was originated by Christopher D. Stone, a Professor of Law at the University of Southern California, U.S.A. in an article, *Should Trees Have Standing?*, published in 1972 [43]. Stone advocated rights for non-human entities, positing that some non-human entities such as corporations already have the status of legal persons. Such a strategy will check damage to the environment/nature, he argued. Although, he believed that the idea was “unthinkable”, “strange”, and “bound to sound odd or frightening or laughable” (455), he submitted thus:

I am quite seriously proposing that we give legal rights to forests, oceans, rivers and other so-called “natural objects” in the environment - indeed, to the natural environment as a whole (456).

The theoretical foundations of RoN are defined by the related concepts of a legal person/personhood and of legal rights. The traditional perspective of the legal person, grounded in anthropocentrism, is an entity capable of claiming rights and able to perform duties. It is posited that since only humans have these abilities, they are the only legal persons [1, 7, 24, 25]. This exclusive perspective has been criticized as being too restrictive and therefore not able to effectively address the environmental crisis. It is also argued that this exclusive anthropocentric perspective cannot stand given the fact that non-human entities, such as corporations have long been recognised as legal persons. Thus, an inclusive perspective where humans and non-humans, particularly nature, are recognised as having intrinsic nature is advocated as ideal for addressing the environmental challenge [23-25, 34].

Given the inclusive perspective that nature also has rights, as in the case of human rights, nature rights have also been defined. The *Universal Declaration of the Rights of Mother Earth* [16] provides such a definition. The Declaration in its preamble lamented the challenge posed by the environmental crisis and asserted that humans and nature have a common destiny on Mother Earth. The Preamble therefore declared that:

... in an interdependent living community (that the earth is),

it is not possible to recognize the rights of only human beings without causing an imbalance within Mother Earth; to guarantee human rights, it is necessary to recognize and defend the rights of the Mother Earth and all beings in her and ... there are existing cultures, practices and laws that do so.

The Declaration subsequently asserted that nature has ten inherent rights. These are life and existence, respect, regeneration free from human disruption, identity and integrity, and the right to water as a source of life. Others include right to clean air, integral health, freedom from contamination, pollution and toxic or radioactive waste, freedom from genetic structure modification or disruption, and right to full and prompt restoration if there is human interference.

The preceding analysis has shown that Law provides the theoretical basis of RoN. However, the philosophical basis is embedded in the worldview, belief system and environmental behaviour of indigenous people in several parts of the world [26, 10, 36]. The world view of indigenous people of living in harmony with nature influenced the focus of RoN. Gilbert (2022: 2) expressed this clearly thus:

The idea of recognizing nature as a person resonates with many indigenous peoples' cultures which are based on interconnectedness of all forms of life under which humans and nature are seen as part of a same system. It also resonates strongly with many indigenous communities who are acting as custodians and Stewards of Nature [10].

There are several examples of this indigenous perspective on the relationship between humans and nature [18]. For instance, in many African societies, particularly before colonialism, the belief in natural entities as being representatives of ancestors or deities provided a bond between humans and nature; such that natural objects were sacred, revered and were to be protected [39, 32]. For instance, among the Ewe people of Ghana, some natural entities such as mountains and rivers are so revered that destructive activities in them, such as in the Afajato Mountain, are not allowed. Violators are usually punished [3]. In the belief system of the Shona and Ndebele people of Zimbabwe, some tree species provided the link between the people and their ancestors. Such trees are protected; for, destroying them severs the link with the ancestors [49]. In some cases, it is not only some trees that are sacred but whole forests. There are many of such sacred forests in Africa which are believed to be the abode of ancestors, spirits and deities. For instance, in the coastal area of Nigeria, between the Forcados and Ramos estuaries near the village of Odimodi, there is a sacred forest called *Amadounou Bou-Okun* where several types of strange animals and birds are found. A lake there also has strange fishes. The exploitation of nature there is forbidden.

The philosophical basis expressed in the emergence of rights of nature provisions in Ecuador, Bolivia, and India clearly manifested the influence of indigenous environmental beliefs and practice. In both Ecuador and Bolivia, the cultural belief in living in harmony with nature and the respect, ado-

ration and protection of *Pacha Mama* (Mother Earth) formed the basis of the introduction of RoN. This fact is explicitly stated in the preamble of the 2008 Constitution of Ecuador which for the first time in the country included RoN provisions [37] and the RoN Law of Bolivia dated December 7, 2010 [12].

For instance, Article 3 of the Law of Bolivia put it clearly thus:

Mother Earth is a dynamic living system comprising an indivisible community of all living systems and living organisms, interrelated, interdependent and complementary, which share a common destiny. Mother Earth is considered sacred, from the worldviews of nations and peasant indigenous peoples.

Similarly, in both indigenous New Zealand and India, the rivers that were endowed with rights are all regarded by the indigenous people as living entities and as deities of great significance [33, 5, 41].

The preceding analysis has indicated the significance of legal principles and the belief systems of indigenous people in the emergence and sustenance of RoN. In the next section, the trend in the emergence of RoN is examined while the one following that analyzes emergent and potential challenges in the enthronement of RoN.

4. Character and Evolutionary Trend of RoN

The developing countries, generally, have adopted RoN more than the developed ones. This may be due to their having provided the philosophical foundations for RoN and their having more environmental challenges and their lack of effective environmental management compared to the developed ones. Table 1, which shows the trend in the adoption of RoN indicates that Ecuador is the first country to adopt RoN. Ecuador is particularly significant because it is the first to have a country-wide RoN system globally and it is also the second to adopt RoN after Tamaqua Borough in the U.S.A. which introduced RoN through a local law in 2006 [29, 48, 5].

Ecuador, through a constitutional review of 2008 [37], Bolivia, through a Law in 2010 [4, 14], Uganda, through a law in 2019 [13] and Panama [38] through a law in 2022 are the only countries in the world, that have adopted RoN applicable to all parts of the country. An attempt by Chile in 2022 to introduce RoN in its constitution through an amendment failed. A draft constitution produced by a Constitutional Assembly, which included RoN that was country-wide, was rejected by the citizenry in a country-wide vote [44]. If successful, Chile would have been the fifth country in the world to have country-wide RoN and the second through the channel of constitution review.

As is evident in Table 1, it is either parts of a country or specific natural entities that are covered by the RoN provisions in the other countries. It is only in a relatively few

countries that units within a country are the subject of RoN. In New Caledonia, the unit is a province while in Brazil and Mexico, the units are municipalities.

Rivers predominate among the natural entities. In Colombia, Brazil, India, Bangladesh and Peru, the attention is on the rivers (Table 1). Common reasons why the rivers have received so much attention are pollution, encroachment and the feeling that sacred rivers were being violated. The factor of the pollution of several rivers explains why in several cases it was the initiative of concerned citizen that resulted in RoN provisions. This is why the channel of the court is very significant in the emergence of RoN (Table 1). For instance, the endowment of rights on rivers Ganga (Granges) and Yamuna in India resulted from the action of an individual who sued the government to check the pollution of, and encroachment on, the rivers [52, 33]. Similarly, all rivers in Bangladesh won rights through a court action by a Civil Society Organisation

(Human Rights and Peaceful Bangladesh). The organisation sued the government to prevent the pollution of, and the encroachment on, the river. The Court went beyond what the plaintiff asked for. It endowed River Turag and all the other rivers rights [11].

A Court in Colombia has also declared the Amazon forest of Colombia, a subject of rights. The setting of declaring only a single unit of a species of nature as having rights, instead of the whole, as in the cases of Argentina and Pakistan, is remarkable (Table 1). A court in Argentina declared a chimpanzee, nicknamed Sandra, a legal person in 2014 and in 2022, a six-month old Cougar/Puma, nicknamed Lola Limon, was also so declared by a Court in the same country. The one in Pakistan involved an elephant, nicknamed Kaavan, in 2020. In all these cases, the decisions of the Courts were based on human cruelty to these animals [35].

Table 1. Pattern of Adoption of RoN in the Developing Countries.

S/No.	Year Adopted	Country	Territory/Entity Covered	Source of Right
1	2008	Ecuador	Country-wide	Constitution
2	2010	Bolivia	Country-wide	Law
3	2014	Argentina	Sandra The Chimpanzee	Court
4	2016	Colombia	Rio Atrato (River Atrato)	Court
5	2016	Argentina	Cecilian The Chimpanzee	Court
6	2016	New Caledonia	The Royalty Islands Province	Law Environmental Code)
7	2017	India	Rivers Ganga & Yamuna & Glaciers	Court
8	2017	Mexico	Mexico City	Law
9	2017	Brazil	Municipality of Bonito	Law
10	2018	Colombia	Colombian Amazon Forest	Court
11	2018	Brazil	Municipality of Paudalho	Law
12	2018	India	Entire Animal Kingdom of Uttarakhand State	Court
13	2019	Uganda	Country-wide	Law
14	2019	Bangladesh	All Rivers	Court
15	2020	Pakistan	Kaavan The Elephant	Court
16	2022	Panama	Country-wide	Law
17	2022	Argentina	A six-month-old cougar/puma (a type of animal) in captivity in a private home in Buenos Aires, subsequently named <i>Lola Limon</i>	Court
18	2024	Peru	River Maranon (Rio Maranon), a Tributary of the Amazon River	Court

Source: Compiled by Authors (from several sources).

All the cases shown in Table 1 involved the declaration of an entity as a legal person with rights. The declaration of personhood is rather implicit in some cases but explicit in

others. Furthermore, the rights indicated in some cases are comprehensive involving most or all of those specified in the *Universal Declaration of the Rights of Mother Earth*. Ecuador,

Bolivia, India and Bangladesh are examples of explicit personhood declaration while Uganda, Brazil and Panama are examples of the other type. In both Ecuador and Bolivia, *Pacha Mama* (Mother Earth) is regarded as a living being that provides life for humans. In the case of India and Bangladesh, the rivers given rights are perceived as deities. The situation in India is expressed in the Court judgement that granted Rivers Ganges and Yamuna thus:

... While exercising the *parens patrie* jurisdiction, the Rivers Ganga and Yamuna, all their tributaries, streams, every natural water flowing with flow continuously or intermittently of these rivers, are declared as juristic/legal persons/living entities having the status of a legal person... (Uttarakhand 2017: 11).

The rights granted the various entities in the various countries do not vary markedly from one country to another. However, some countries provide details, spelling out all or most rights, in others only few are provided and in some cases, generalizations are made to cover all the rights. Ecuador, Bolivia and Panama are examples of the first type while Uganda is a good example of the second type. India where the rights document which simply declared that the rivers are legal persons “with all corresponding rights” is a typical example of that of generalization.

The operation of the rights of nature in various countries has thrown up some challenges and pointed to potential ones. It is the challenges that are examined in the next section.

5. Challenges of the RoN Strategy

Many developing countries, given their grave environmental crisis, have embraced RoN as an environmental management strategy. The extent to which RoN becomes a more effective environment approach, compared to others, will depend on how successfully the bottlenecks in its effectiveness are addressed. Some of the challenges are related to the conceptualisation of RoN while others pertain to the operationalisation. These challenges are related and in some cases intertwined. They include:

- 1) Ambiguity of phraseology;
- 2) Character of guardianship system;
- 3) Limited scope and coverage;
- 4) Conflict of ideal with economic structure;
- 5) Corruption.

There are a number of provisions in the RoN system that are ambiguous or lack precision. For instance, the right to life, to exist and to persist is a common provision in the various countries. Persisting implies that the entity will exist beyond the normal life span, if not forever. Whereas a river can persist, an animal or a tree cannot. The use of the word, “persist” is thus not clear. Similarly, what does it imply to respect a natural entity? This is also a common RoN provision. There is also apparent conflict in some provisions. For instance, there is incongruence between Article 8 and Article 9 of Panama’s RoN Law. Article 8 specified that nature is of “superior in-

terest” and that in any controversy or conflict between humans and nature, any settlement must be in favour of the latter (that is nature). However, Article 9 stated that the State must allocate natural resources for the benefit of the health and well-being of the population [38]. Given the emphasis on the “superior interest” of nature, it will be difficult to achieve the objective of people’s well-being. Furthermore, it is not clear how the State can “ensure ... the sustainable use of the environmental benefits of nature ...” enunciated in Article 1 of the Law. Such conflicts and ambiguities also exist in Ecuador’s RoN provisions. For instance, Article 74 of the Constitution places emphasis on the strict control of the use of natural resources. In the same Article 74, there is the provision that:

Persons, communities, peoples and nations shall have the right to benefit from the environment and the natural wealth enabling them to enjoy the good way of living (Republic of Ecuador 2008).

Is it possible for people to enjoy the good way of life without infringing on the rights of nature? This question is particularly relevant in situations where there is so much dependence on the exploitation of natural resources to eke out a living. It is noteworthy that it is such vagueness and conflicts that resulted in many of the RoN attempts in the USA losing in the Courts [28]. The character of the guardianship system is also a challenge. The success of RoN depends largely on the effectiveness of the guardianship system. Since Nature, though endowed with personhood, does not have the characteristics of a human. Thus, a human has to act on its behalf to enforce the rights. Three types of guardianship may be identified from the various RoN schemes of the various countries. These include all citizens acting as guardians as in the cases of Ecuador, Uganda, and Panama, and a second type is the use of specific government officials. India and Bangladesh are examples of the second type. The Director of Namami Gange (the central government agency for the conservation of River Ganges), Chief Secretary of Uttarakhand State and Advocate General of the State were appointed as the guardians of the Ganges and Yamuna in India [52]. In the case of Bangladesh, the responsibility was given to the National River Conservation Commission.

The third scheme, typified by guardianship for the Atrato River in Colombia, is one of a Committee made up of community representatives and government officials. The communities involved are those around the river. The sheer number, with the consequent widespread availability of guardians, is the advantage of involving everyone. However, given the widespread mistrust of government and common lack of confidence in corporations, individuals are not likely to act where there are violations by other individuals except where corporations are involved. In the case of only government officials acting as guardians, the failure of governments that has encouraged the emergence of RoN is the shortcoming. A guardianship system involving both individuals and government officials is ideal. This is particularly the case, officials as in the Atrato River scheme, where concerned

individuals were chosen.

A limited scope and coverage is a major challenge in the effectiveness of RoN schemes. There are cases where a RoN scheme covers only a subsystem instead of the entire system. In such cases, the impact is very limited; for, the subsystem has limited impact on the whole system. The Ganges and Yamuna Rivers (India) RoN provisions which are only applicable to the State of Uttarhand is a good example. Given the fact that each of the rivers flow through five States, a law that is applicable in one State cannot address the need of the entire river. The same scenario applies to the RoN of the Colombian Amazon forest given the fact that this part of the Amazon forest accounts for only about 10% of the whole. The section in Brazil accounts for 60% and that in Peru for 13% while Bolivia and other countries each accounts for insignificant percentages [9]. The fact that the Amazon forest in each country is not a closed system but an open one, with birds and animals migrating freely, is a flaw in endowing only part of the forest with rights. The cases of endowing one chimpanzee and a cougar/puma in Argentina and one elephant in Pakistan (see Table 1) are extreme cases.

A major issue that limits the operational effectiveness of RoN is the fact that its ideals conflict with the economic structure and activities of most countries. This is a two-dimensional challenge emanating from citizens and from the government. A large proportion of the population of these countries depends on primary production activities involving the exploitation of nature for economic survival. These exploitation activities often involve damaging nature without any restorative action. Such exploitation is what RoN is meant to address. For instance, fishing in the rivers, employing mainly unsustainable methods, is a major activity of rural dwellers in Bangladesh [40, 27] where all rivers are subject of rights. In India, the major rivers, Ganges and Yamuna, whose region has the largest concentration of fishing population in the world [42, 31] are endowed with rights. Similarly, in Uganda where RoN exists, the exploitation of forests, and wildlife resources is the economic mainstay of many individuals [51, 47, 2].

In the case of the government, the dilemma is that in order to grow the economy and develop the country, the exploitation of natural resources cannot be avoided. This is because natural resources are the economic mainstay of most of the countries. A good example is Bolivia where the economy depends so much on nature extractive activities. Since the 2010 RoN Law, applicable country-wide, the government has approved or embarked on major projects, such as in agriculture and road infrastructure; in some cases in environmentally sensitive and biodiversity – rich areas in the drive for development [17, 30, 45, 53]. Munoz, (2023) [30] expressed the situation thus:

... The Mother Earth Laws (of Bolivia) have done very little, if anything, to effectively protect nature, specially when we take into account that one of the government's priorities is development in a country where poverty is widespread and natural resources extraction activities are

usually the easiest and most lucrative way to ensure the government enough resources to advance their political agenda ... The greatest violations to environmental laws and regulations are perpetuated by the government itself.

The high level of corruption in many of these countries is also a major challenge. Many of the developing countries perform poorly in the corruption Perception Index of Transparency International and are some of the most corrupt countries of the world. There is considerable evidence that corruption in many of these countries impede the realisation of human rights. Given this setting, corruption will also be an hinderance to an effective operation of the rights of nature ideal. For instance, the guardianship system may be affected; for, violations may not be reported or even where reported may not be effectively sanctioned.

6. Conclusion

It is remarkable that although the RoN Movement started in the U.S.A. [29, 6, 15, 48], it is in the developing countries that it blossomed. All the countries where RoN applies nation-wide (Ecuador, Bolivia, Uganda and Panama) are developing ones. The epicentre is South America which has many more countries that have adopted RoN than any other Continent.

There are several developing countries that have attempted to introduce or working towards introducing RoN. For instance, in early 2024, Aruba, a small Caribbean island country commenced the process of introducing RoN in its constitution [46]. Similarly, the River Ethiope Trust Foundation which was established in 1992 has been advocating for rights for the River Ethiope in Nigeria. In 2019, the River Ethiope Trust Foundation and the Earth Law Center produced a draft document, the River Ethiope Rights Act, indicating the rights, the River is expected to enjoy. Six rights were specified which were similar to those of other rivers in other parts of the world endowed with rights. There were also provisions to protect the interest of those living around the river [8]. There has, however, been little progress in ensuring that there is an appropriate law.

There is no doubt that as attractive as RoN may be as a strategy for environmental management, there are several limitations to its effectiveness. The experience in Bolivia has indicated that until the dependence on nature for their development is addressed, RoN may not be an effective strategy. The challenge of corruption complicates the issue. Beyond these challenges, a mobilization and education of the citizenry, as was the case in Ecuador is necessary.

Abbreviations

RoN	Rights of Nature
USA	United States of America

Author Contribution

The research emerged from a discussion between the authors. Most of the search for literature was done by NNI. The writing was done collectively.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Adriano E. A. Q. (2015) The Natural Person, Legal Entity or Juridical Person and Juridical Personality, *Penn State Journal of Law & International Affairs*, 4: 363-39.
- [2] Alule J. R.; Nuwategeka E. & Oriangi G. (2023) Characterisation of Forest Resources and the Local Communities for the Choice of Sustainable Forest Management Strategies in Uganda, *East African Journal of Forestry and Agroforestry*, 6: 186-199.
- [3] Benson G. H. (2021) African Traditional Religion and Natural Resource Management: The Role of Totems and Deity Worship in Ghana, *American Journal of Environment Studies*, 4: 13-37.
- [4] Calzadilla P. V. & Kofze L. J. (2018) Living in Harmony With Nature? A Critical Appraisal of the Rights of Mother Earth in Bolivia, *Environmental Law*, 7: 397-424.
- [5] Centre for Law & the Environment (2023) *Rights for Nature: Who Holds Them?* ssm - 4929 ipad.
- [6] Doran P. & Killean R. (2021) *Rights of Nature Origins, Development and Possibilities for the Island of Ireland*, EJNI Briefing Paper.
- [7] Dyschkant A. (2015) Legal Personhood: How We Are Getting It Wrong, *University of Illinois Law Review*, 5: 2075-2110.
- [8] Eco Jurisprudence Monitor (2025) *Nigeria's River Ethiopia Rights Act*, ecojurisprudence.org
- [9] Flores B. M. et al (2024) Critical Transactions in the Amazon Forest System, *Nature*, 626: 555-564.
- [10] Gilbert J. (2022) The Rights of Nature, Earth Jurisprudence and Indigenous Peoples: A Human Rights Based Approach, *Journal of Human Rights & the Environment*, <https://www.elgaronline.com.ihre>
- [11] Government of Bangladesh (2019) *Supreme Court of Bangladesh. High Court Division, Writ Petition, No. 13989/2016, Human Rights and Peaceful Bangladesh Vs. Government of Bangladesh and Others.*
- [12] Government of Bolivia (2010) *Law of the Rights of Mother Earth*, Chamber of Senators.
- [13] Government of Uganda (2019) *The National Environmental Act, 2019*, Kampala.
- [14] Heinrich Boll-Stiftung-HBS (2025) *The Rights of Mother Earth in Bolivia: Progress and Challenges*, HBS.
- [15] Huneus A. (2022) The Legal Struggle for the Rights of Nature in the United States, *Wisconsin Law Review*, 133-162.
- [16] International Rights of Nature Tribunal (2010) *Universal Declaration of the Rights of Mother Earth*, World People's Conference on Climate Change and the Rights of Mother Earth, Cochabamba, Bolivia, 22 April (Earth Day) 2010.
- [17] Kauffman C. M. (2019) *Why Rights of Nature Laws Are Implemented in Some Cases And Not in Others: The Controlled Comparison of Bolivia and Ecuador*, Paper Presented at International Studies Association Annual Conference, March 29, 2019. Toronto: Canada.
- [18] Kemf E. (Editor) (1993) *Indigenous Peoples and Protected Areas; The Law of Mother Earth*. London: Earthscan.
- [19] Kopnina H. & Taylor B. R. (2017) *Statement of Commitment to Ecocentrism*, academia. edu retrieved, 18 January 2025.
- [20] Kopnina H. (2019) Anthropocentrism: Problem of Human-Centered Ethics in Sustainable Development Goals, *Life on Land*, 1-9. <https://doi.org/10.1007/978-3-319-71065-5.105-1>
- [21] Kopnina H. et al (2017) Why Ecocentrism is the Key Pathway to Sustainability, *The Ecological Citizen*, 1: 35.
- [22] Kopnina H. et al (2021) Anthropocentrism: Mere Than Just a Misunderstood Problem, *The International Journal of Ecopsychology*, 3: 4.
- [23] Kotzmann J., Stonebridge M. & Christiaenssen P. (2023) Evolving Conceptions of Legal Personhood: What Might Recent Legal Developments Herald for Non-Human Animals in Australia, University of South Wales, *Law Journal*, 46: 347-380.
- [24] Kurki, V. A. J. (2019) *A Theory of Legal Personhood*, Oxford University Press.
- [25] Kurki V. A. J. (2023) *Legal Personhood Elements in Philosophy of Law*, Cambridge University Press.
- [26] Lalander R. (2014) Rights of Nature and the Indigenous Peoples in Bolivia and Ecuador: A Straight-jacket for Progressive Development Politics? *Iberoamerican Journal of Development Studies*, 3: 148-173.
- [27] Manik M. H. (2023) Inland Fisheries Production and Production Growth Rate in Bangladesh, *Journal Multidiscipline Madani*, 3: 1790-1799. In Bangladesh 85% of the fish catch from inland fisheries.
- [28] Mannard, K. M. (2021) Lake Erie Bill of Rights Struck Down: Why the Rights of Nature Movement is a Nonviable Legislative Strategy for Municipalities Plagued by Pollution, *Buffalo Environmental Law Journal*, 28: 39-75.
- [29] Moutrie M. J. (2020) The Rights of Nature Movement in the United States: Community Organizing, Local Legislation, Court Challenges, Possible Lessons and Pathways, *Environmental and Earth Law Journal*, 10: 5-66.

- [30] Munoz L. S. (2023) *Bolivia's Mother Earth Laws: Is the Eco-centric Legislation Misleading?* Revista, Harvard Review of Latin America, 6 February, 2023.
- [31] Nautiyal P. & Dwivedi A. C. (2019) Fishery in the Tributaries of Yamuna and Ganga River, *Journal of Mountain Research*, 14: 19-36.
- [32] Nche G. C. & Michael B. O. (2024) *Perspectives on African Indigenous Religion and the Natural Environment: Beings, Interconnectedness, Communities and Knowledge Systems*, Unisa Press.
- [33] O'Donnell E. L. (2018) At the Interaction of the Sacred and the Legal: Rights of Nature in Uttarakhand, India, *Journal of Environmental Law*, 30: 135-144.
- [34] Pain N. & Pepper R. (2021) Can Personhood Protect the Environment? Affording Legal Rights to Nature, *Fordham International Law Journal*, 45: 315-378.
- [35] Pallotta N. (2022) *Argentine Court Declares Cougar: a Subject of Rights*, Animal Legal Defence (Organisation), Fund aldf.org
- [36] Radziunas C. (2022) Missing the Mark: A Critical Analysis of the Rights of Nature as a Legal Framework for Protecting Indigenous Interests, *Tulane Environmental Law Journal*, 35: 115-141.
- [37] Republic of Ecuador (2008) *Constitution of the Republic of Ecuador 2008*, English Versions Edmand A. Walsh School of Foreign Service, Center for Latin American Studies.
- [38] Republic of Panama (2022) *Law No. 287: Rights of Nature*, Panama City.
- [39] Sanga F. (2021) The Relevance of Indigenous Knowledge in Conserving Natural Forests in the Face of Modernisation: The Case of Makete District, Southern Highlands of Tanzania, *Ghana Journal of Geography*, 13: 113-139.
- [40] Shamsuzzaman M. M. et al (2022) Assessing Fisheries Policies of Bangladesh: Need for Consistency or Transformation, *Water*, 14: 3414. Fishery a major activity in Bangladesh, 2nd largest employer of labour in the rural areas. Fishery sector accounts for about 3.6% of GDP and about 1.4% by value of exports.
- [41] Sidiki U. F. & Tuli T. A. (2024) Legal Personality of Rivers in Bangladesh and India, *Law and Policy Review*, 3(2): 1-20.
- [42] South Asia Network on Dams, Rivers and People-SANDRP (2014) *Dams, Fish and Fishing Communities of the Ganga*.
- [43] Stone C. D. (1972) Should Trees Have Standing? - Toward Legal Rights for Natural Objects, *Southern California Law Review*, 45: 450-501.
- [44] Surma K. (2022) *Chilean Voters Reject a New Constitution That Would Have Provided Groundbreaking Protections for the Rights of Nature*, Inside Climate News, insideclimate news.org Accessed 20 February 2025.
- [45] Surma K. (2024a) *Bolivia Has National Rights of Nature Laws, Why Haven't They Been Enforced?* Inside Climate News, October 13, 2024, insideclimatenews.org
- [46] Surma K. (2024b) *Aruba Embraces the Rights of Nature and a Human Rights to a Clean Environment* Inside Climate News, March 25, 2024, insideclimatenews.org
- [47] Synman S.; McKey A. & Ndizihwe D. (2021) *The State of the Wildlife Economy in Uganda: Policy Brief*, African Leadership University.
- [48] Tanasescu M. (2022) *Understanding the Rights of Nature: A Critical Introduction*, Verlag, Bielefeld.
- [49] Tanyanyiwa V. I. & Chikwanha M. (2011) The Role of Indigenous Knowledge Systems in the Management of Forest Resources in Mugabe Area, Masvingo, Zimbabwe, *Journal of Sustainable Development in Africa*, 13: 132-149.
- [50] Tete F. (2022) Ecocentricism as Theoretical Framework for Environmental Ethics, *Journal Sosialisasi*, 9: 102-112.
- [51] Uganda Wildlife Authority (2018) *State of Wildlife Resources in Uganda, Kampala*, Significant Challenges in the Reserves, Poaching, Habitat Loss, and Degradation.
- [52] Uttarakhand (2017) *In the High Court of Uttarakhand at Nainital, Writ Petition (PIL) No. 126 of 2014 Mohd Salim V. State of Uttarakhand & Others, Dated March 20, 2017*.
- [53] Villavicencio-Calzadilla P. (2025) *The Rights of Mother Earth in Bolivia: Progress and Challenges*, Heinrich Boll Stiftung.