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Original Article

Biodiversity Loss vs the Rights of Nature (RoN): The Legal Challenges to Biodiversity Protection

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Abstract - The convention on biodiversity recognised "biodiversity as a global and common heritage" of humankind. In recent times, biodiversity is under threat, leading to unprecedented loss. The UN estimates that one million plant and animal species are at risk of extinction. The "Rights of Nature" (RoN) movement is fundamentally rethinking humanity's relationship with nature, striving for a paradigm shift in which nature is placed at the center and humans are connected to it in an interdependent way to prevent or reduce loss of biodiversity. The essence of conferring rights to nature is to secure the highest level of environmental protection under which an ecosystem can thrive, and whose rights are not violated. Biodiversity conservation and management are inextricably linked to the legal systems enacting the laws and regulations. Such regulations are key elements in implementing many conservation strategies and thus foist on law the insignia of an instrument for transformation towards an ecocentric and biocentric society. The paper finds that RoN is not incorporated into most legislation, either at the national or global levels. The omission results in an increasing decline in the variety of living beings on the planet due to an anthropocentric attitude to biodiversity and difficulty in establishing compensation/restoration mechanisms for biodiversity loss. Adopting a doctrinal methodology, the paper therefore examines the legal challenges to establishing a regulatory body that incorporates ecocentric and biocentric values for biodiversity conservation. The paper also explores how to establish appropriate compensation mechanisms for biodiversity loss. In conclusion, drawing from best practices, the vignette proffers some salient recommendations.

Keywords: Biocentrism, Biodiversity, Conservation, Ecocentrism, Rights of Nature.

1. Introduction

Biodiversity refers to the number of species in a given area. Biodiversity loss is the decrease or extinction of species from an ecosystem or from the biosphere as a whole. According to the World Wildlife Fund,

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms works together in ecosystems, like an intricate web, to maintain balance and support life. Biodiversity supports everything in nature that we need to survive: food, clean water, medicine, and shelter. (WWF 2023)

Biodiversity protection is an old subject in international environmental law (Lynton Caldwell 1990). In 1964, the International Union for Conservation of Nature (IUCN) established its Red List of Threatened Species. (IUCN 2018) The focus of international law only recently expanded from mere protection of specific species or classes of species to the conservation or protection of biological diversity in its entirety. (Bodansky 1995) An important step in this direction is the codification of the Convention on Biological Diversity - an international legal framework for conserving biological diversity, including the sustainable use of its resources, as well as the fair and equitable distribution of the gains emanating from the utilisation of genetic resources. (Convention on Biological Diversity, section 15).



Sustainable environmental practices, including protected species, conservation, renewable energies, reforestation, green technologies, eco-friendly, as well as fair treatments of non-human species, etc., have become predominant debates and research issues as far as environmental ethics is concerned. These efforts are aimed at addressing an avalanche of environmental problems ranging from climate change, deforestation, drought, global warming, famine, mining, overfishing, poaching, overpopulation, pollution, oil drilling, green gases ozone depletion, nuclear waste, and carbon emission, among others. (Elisha & Felix 2020) Moreover, discussions around environmental ethics often revolve around human needs and the care of nature and other living organisms. However, responses to questions on human obligation and responsibilities toward non-human species as well as the environment have remained controversial and divergent. (WWF 2023).

From a historical standpoint, capitalism or its expansion around the world is an easy target to blame for many environmental problems now facing nature and human societies, yet the impact of capitalism in certain areas is not sufficient. It is also necessary to blame all parts of the world. As a matter of fact, it should be noted that there is consensus among scholars, economists and philosophers, in particular environmental ethicists, that the Industrial Revolution created changes in people's societies, changed their lifestyles and structures forever. (Tsui 2022) Overall, new technologies, machineries and sources of energy have characterised this era, with pollution as one of its most significant impacts. At the time when factories were being constructed in big cities, huge steam engines running off coal continued to pollute the air. People have begun moving to cities in search of work, which creates congestion and pollution on the streets. As its wildlife had been hunted for commercial purposes before, a number of the country's natural resources were already at risk. All major concerns were the decreasing stock of forest, grassland, water and mineral resources. In fact, environmental problems have frequently arisen at the margins of private enterprises as well as government interests. To put it simply, the organisation and functioning of a society are underpinned by economic forces that cause, contribute to or aggravate ecological problems, resulting in grave ethical dilemmas for humans together with their survival and developmental agendas. (Tsui 2022).

In response to this, the "Rights of Nature" movement is fundamentally rethinking humanity's relationship with nature, and it is gaining momentum. It is led by activists advocating for ecosystems, such as rivers, lakes, and mountains, to have legal rights in the same manner, or at least a similar manner, as human beings. (Tsui 2022) This movement is trying to change the paradigm in which nature takes center stage and people are connected by interdependence instead of a dominant one. This movement is striving for a paradigm shift in which nature becomes the focus and humans connect to it by interdependence, instead of dominance. (Tsui 2022) How such a legal system would function, and could granting rights to nature aid in the legal battle against climate change?

With regards to research methodology, the paper employs the doctrinal (or "black letter") research methodology. The doctrinal methodology is simply a way of conducting research that is usually thought of as "typical legal research". A doctrinal approach to research focuses on case-law, statutes and other legal sources. Using this approach, therefore, this paper seeks to examine the legal challenges to achieving a regulatory body that embraces ecocentric and biocentric values for biodiversity conservation. The paper also explores how to establish appropriate compensation mechanisms for biodiversity loss.

2. The Reality of Biodiversity Loss

Human activities have continued to put significant pressure on the planet astronomically, through increased usage and consumption of more using and consuming more resources than ever before, we risk upsetting the balance of ecosystems and losing biodiversity. According to the World Wide Fund for Nature's 2022 Living Planet Report, since 1970, the global population of mammals, fish, birds, reptiles and amphibians has declined by an average of 69%. One million species of animals and plants are now at risk of extinction, the highest number in human history, according to the 2019 landmark Global Assessment Report by the Intergovernmental Platform on Biodiversity and Ecosystem Services. Three-quarters of the land-based environment and roughly 66% of the ocean environment have been significantly altered. (Tsui 2022) Today, crop and livestock production cover over a third of the world's land area and nearly 75% of its freshwater

resources. The effects of other stress factors on nature and our mental health are worsened by climate change. (WHO 2025) Humans are overfishing the oceans, cutting down forests and polluting our water sources, which has led to a climate crisis. These actions affect biodiversity in all parts of the globe, from remote places to our immediate environments. (Joseph Desjardins 2013; Environmental Ethics).

Human pressures are even more challenging to overcome for the world's most important biodiversity centres. More than 1,400 different animal species, as well as at least 15,000 plant species, are found on Borneo, an enormous island in Southeast Asia. (Annabel 2024; Biodiversity Presentation 2024) .Iconic wildlife, including orangutans, pygmy elephants, clouded leopards, rhinos, and proboscis monkeys, share the landscape with the world's tallest tropical trees. A total of over 50 species of predatory pitcher plants, which are capable of trapping and eating insects and crustaceans, will also be found. More than 3,000 species of orchids; flying, colour-changing frogs; and slugs that shoot darts at their prey. More than nature lovers, however, were attracted to the vast wealth of natural resources on the island of Borneo. Over the years, large international interests have tried to extract as many resources out of this island as possible, from timber trees, coal, rubber, gold and diamonds, as well as other minerals and metals. All of these pressures are contributing to a landscape that is changing very quickly, and nature has difficulty keeping up with it. The UN estimates that as many as one million plant and animal species are at risk of extinction. In only 40 years, there has been a deforestation of about 30% of Borneo's forests. In the last 20 years, we have lost half of all critically endangered Bornean orangutans; there's even a risk of extinction to the most famous carnivorous pitcher plant, Nepenthes rajah. (Wildlife of Borneo 2025; Orangutan Foundation).

However, it is its resilience that is one of the most wonderful things about biodiversity. The Environmentalists believe that the natural world and biodiversity are going to be restored. Some of the threats have been identified and addressed by environmentalists, namely:

- Working with local communities and international governments to protect protected areas and to stop illegal deforestation;
- Working with timber companies to ensure the paper, wood, timber and food products being used daily are sourced responsibly; and
- Leading global efforts to stop wildlife crime.

In order to fight the global loss of biodiversity, they are employing similar tactics with a view to identifying specific threats and coming up with new solutions. To protect the iconic wildlife we all love, we must rebuild the web of biodiversity that supports it. We will do so by reassessing our use of resources, reducing pressure on the environment and allowing ecosystems to grow again. All life (plants, insects, fish, birds, mammals and humans) benefits from this process. (Baxter 2002).

Finally, it would appear that industrialised countries have advantages of their own, and they are unequalled by the underdeveloped or poor world. Therefore, while environmentally sustainable practices unequivocally represent a moral imperative that all stakeholders of the world are required to fulfil their responsibilities, for the industrialised and advanced world, it's not just easier, it is more convenient to develop and implement such practices.

3. Support for the Right of Nature

The rights of nature or the Earth is a jurisdictional and legal theory which describes intrinsic rights relating to ecosystems and species, as opposed to a concept of basic Human Rights. The concept of the rights of nature, which is based on a distorted understanding of natural resources as items to be possessed, exploited or lost, conflicts with the law of nature. The Proponents claim that laws based on the right to nature direct humanity to act properly and in a manner consistent with modern, systematised scientific research, which proves there is fundamental interdependence between human beings and the natural world. (Alex, Putzer et al, 2022)

Two fundamental pillars of logic underpin that school of thought. First, since the recognition of human rights is based in part on the philosophical belief that those rights arise from the existence of the human being, the inherent rights of the natural world also arise from the existence of the natural world. Another more

pragmatic argument argues that in order to survive, humans depend on healthy ecosystems and thus the protection of nature's rights is reciprocally benefiting humanity. Extending this point, the common ethical and moral grounding of human rights and the rights of nature gives rise to the concept of "co-violations" of rights, defined as a situation in which governments, industries, or others violate both the rights of nature and human rights, including indigenous rights, with the same action. (Sheehan and Wilson, 2015; Wilson, Michelle and Sheehan, 2016).

The ecosystem is entitled to legal personhood and has the right to defend itself against harm, including environmental degradation caused by a specific development project or climate change, according to the doctrine of the Rights of Nature. The Rights of Nature law recognizes that an ecosystem has the right to exist, flourish, regenerate its vital cycles, and naturally evolve without human-caused disruption. Furthermore, when an ecosystem is declared a "subject of rights," it has the right to legal representation by a guardian — much like a charitable trust designates a trustee — who will act on its behalf and in its best interest. The guardian generally consists of an individual or group of individuals who are very familiar with how to care for and manage this ecosystem. For the purpose of granting natural rights, it is to secure a high standard of environmental protection in which ecosystems can survive and their rights are not infringed. These rights of nature are often also associated with human rights, in particular the right to a clean and healthy environment. (Tiffany Challe, 2021).

As far as the rights of nature are concerned, most environmental legislation of the twentieth century is based on an outdated framework that considers nature to be composed of separate and independent parts, rather than components of a larger system. The most important criticism, however, is that these laws are subordinate to economic interests; rather than addressing nature's right to thrive as the main objective of such legislation, they seek only a partial alleviation of economic degradation and will merely partially mitigate it. An important element of tactics such as litigation against climate change, aimed at pressing governments and society into action to reduce greenhouse gas emissions, is his criticism of existing environmental legislation. At least 39 countries, including dozens of cities and counties in the United States, have rights of nature legislation at the local and national levels as of June 2021. Constitutional provisions, treaty agreements, statutes, local ordinances and judicial decisions are incorporated into them.

4. The Criminalisation of Ecocide

It was difficult to win legal action against those responsible for pollution or destruction of the natural world, even if one could just file a complaint. This is largely because of the imbalance of power (financial and political) between the state or private entities whose activities cause the pollution or destruction of nature (often extractive industries, such as mining, or conglomerates who destroy forests to create larger agriculture areas), and those who most directly suffer the consequences: these are often rural, indigenous or poor populations of which a majority are women. The direct damage to those marginalised populations from the exploitation activities or destruction of their woods and nature habitat often cannot be demonstrated convincingly. But the growing movement for nature's rights, which seeks to protect nature's own rights, regardless of human harm, may offer hope. (Ann Baker; Orie, Ugbejeh and Orubebe 2023).

There is a contradiction in philosophy and ethics on the relationship between nature and humans. The first belief is that nature's purpose is to serve humans: this reflects a culture of control of and violence against nature. The extraction of natural resources, regardless of the impact on nature and the destruction of natural habitats, is justified by this perspective. It also serves to exacerbate the imbalance between:

- Underdeveloped countries and regions which are rich in natural resources and
- The natural-resources "poorer" countries possess that are exported after extraction.

The second (opposite) belief is that humans do not own or control the planet and the land, but are simply part of it, and that, therefore, nature should be preserved, protected and nurtured – the relationship between nature and humans is a deeply cooperative one. The way in which native populations regard nature and learn about it is a reflection of this belief. It is often indigenous women, who need food to feed their families, who depend on this relationship with nature and who therefore become the driving force in promoting measures to

counteract the consequences of climate change. In particular, it has come to light that several countries have recently moved towards the recognition of nature's own legal rights in a number of cases due to efforts led by indigenous women. (Baker, 2022) Ecuador's High Court rendered a decision on December 21, 2021, that interpreted and affirmed protection for the rights of nature itself (*Pachamama*, meaning "Mother Earth"). As a result, the Constitution of Ecuador states that Mother Earth should be free to exist and regenerate cycles, structure, functions and evolution processes. In his majority opinion, the Constitutional Court judge stated that the fundamental principle underlying the rights of nature is that nature has inherent value and that that value must be recognised in and of itself, regardless of its usefulness to humans. Consequently, the permits issued to a State mining company and its Canadian subsidiary was cancelled in accordance with this Decision. In his majority opinion, the Constitutional Court judge stated that the fundamental principle underlying the rights of nature is that nature has inherent value and that that value must be recognised in and of itself, regardless of its usefulness to humans. Consequently, the permits issued to a State mining company and its Canadian subsidiary were cancelled in accordance with this Decision. (Baker, 2022).

It seems more compelling for Nature to have the rights than corporations, even if humans can't survive without them. In the United States, even though corporations are not enshrined in the Constitution, corporations are now able to invoke rights and seek protection under the Commerce Clause and the Contracts Clause, as well as under the First, Fourth, Fifth, Sixth and Fourteenth Amendments of the Constitution. The corporations are using these rights to challenge national and local activists in their efforts to combat corporate extraction that has a detrimental impact on the environment. Consequently, corporations have a great deal of power in our communities to influence how we govern our environment.

The inclusion of a new crime against nature or ecocide into the applicable legislation and treaties is another aim of the rights for Nature movement and related political and legal efforts. (Orie, Ugbejeh and Orubebe 2023) The following proposed definition of ecocide: unlawful or wanton acts committed with knowledge that there is a significant likelihood of serious or widespread or long term damage to the environment caused by such acts has been drawn up by a legal panel composed of experts from different countries: Hopefully, this definition will be the basis for countries to take a step towards incorporating ecocide into their national law in some form.

Furthermore, this legal definition of ecocide should be used to push for amending the Rome Statute of the International Criminal Court (ICC) to add ecocide to those core crimes already provided by the Rome Statute (currently, genocide, war crimes, crimes against humanity and the crime of aggression). For example, in France, in August 2021, a new climate law was adopted. That law introduces a new crime of (*délit*) for those committing such infringements, which irreparably and permanently damage the health, environment or quality of air, water. In addition to this, Article 296 of the new Act requires the Government to submit a report within one year on its action in favour of recognizing ecocides as crimes that can be tried by international criminal courts. (Baker 2022).

The rights of Nature movement and the efforts to criminalise ecocide should continue to be urgently promoted through political activism and international collaboration. With a view to fighting denial of climate change and counter movement for women's rights, we must have all the necessary legal instruments in order to guarantee sanctions, enforcement, as well as resources aimed at protecting Biodiversity and Human Rights and advancing conservation based on science. (Baker 2022; Orie, Ugbejeh and Orubebe 2023)

5. Environmental Liability Litigation

Biodiversity loss, due to actions such as illegal wildlife trade, deforestation, pollution and mining, leads to cascading environmental, social and economic damage. The result is a growing need for legal systems to ensure that regulations are not merely strengthened and enforced, but also hold accountable those responsible for the damage they cause. (Bentata & Faure 2012; Bergkamp 2001; Phelps · 2021)

Brazil, China, Democratic Republic of Congo, EU Member India, Indonesia, Mexico, Philippines and the United States are all countries that offer a right to compensation for environmental damage according to laws, procedures and practices that differ from country to country. Nevertheless, in a large part of the southern

hemisphere, where there are numerous biodiversity hotspots, environmental liability litigation has virtually ceased to exist. Moreover, such litigation is most familiar in the context of remedying pollution: landmark cases, such as the 1989 Exxon Valdez and 2010 Deepwater Horizon oil spills, held responsible parties liable for remedying harms to both the general public and private parties by undertaking clean-up, habitat restoration and financial compensation. (Brosi & Biber 2012; Cohen 1991)

In most countries, there is a shortage of precedent cases, expert advice or experience in the development of such conservation claims. In parallel with difficulties in the identification of defendants as well as issues concerning causation among actions and damage experienced, it is an ongoing challenge to identify ecological harm and determine appropriate legal remedies. In addition, scholarship related to the law is published widely in legal journals, and existing litigation tends to be instigated by a small number of actors. (EU Environmental Liability Directive (2004).

For the purpose of protecting biodiversity, three dimensions in environmental liability litigation may be carried out: Firstly, defining harm, secondly identifying adequate remedies and thirdly understanding what legal or judicial means are available for dealing with it. By providing remedies that return the harmed system to its baseline condition, as though the harm had not occurred, and by compensating for the loss in the meantime, litigation may help the injured parties to be whole. (Garcia, et al, 2012).

Depending on the jurisdiction concerned, litigations can be initiated by government agencies, Non-Governmental Organisations (NGOs), individuals, and corporate plaintiffs, seeking remedies for damage experienced by both private parties and public resources (such as waterways, protected areas, threatened species). Remedy-focused liability litigation is an important conservation strategy that creates new avenues for justice and financial support for conservation work. Actually, liability litigation for environmental damage complements traditional approaches to conservation laws. (Garcia, et al, 2012; GIZ 2017).

In a nutshell, the possibility of ground breaking advances in the protection of biodiversity, which can be achieved by using existing legislation across a number of countries, is offered by environmental liability litigation. As discussed above, in a number of highly biodiverse countries, the strategy remains an extremely promising opportunity and is particularly neglected as far as its potential to combat threats like illicit trade in endangered species are concerned.

6. Legal Challenges to Biodiversity Protection

A number of criminal, civil and administrative legal responses that vary temporally are contained in Conservation Law. Public law generally forms the basis of conservation, that is, administrative, criminal, constitutional and procedural law. However, there are a number of challenges bedevilling the legal protection of biodiversity.

One of these challenges has to do with the nature of the suit itself. Liability disputes are an area of particular interest as they differ from traditional conservation enforcement practices in terms of complexity of law, with most conservationists not very expert on these issues. In addition, a lawsuit may involve high transaction costs and technical barriers, lengthy legal proceedings or offer uncertain returns to the complainants all of which could discourage their action.

Violence against activists of the environment, including those active through court proceedings, has increased this burden on complainants. In addition, judicial action is faced with a wide range of governance challenges that frequently affect how the law is actually enforced, such as: lax enforcement. A strong institutional framework is essential for proper enforcement of law. This will entail having the correct mix of infrastructure and facilities necessary for such operations, proper funding, capacity development, data availability, collaboration with sister ministries or agencies, etc. It is equally necessary to ensure that other relevant/complementary laws and regulations, like the Environmental Impact Assessment Act, are co-opted as part of the enforcement mechanism. (Orie 2017) Other issues that affect enforcement of the law include corruption, lack of resources and capacity constraints. These obstacles may also have an impact on how the law

is applied in cases brought before courts, what decisions are made by judges and whether effective enforcement of injunctions or remedies occurs at ground level. (Mather 1998)

7. Conclusion and Recommendations

In conclusion, the paper has examined the inextricable relationship between Biodiversity conservation and management on one hand and the legal systems enacting the laws and regulations on the other hand. The vignette further examined the legal challenges to achieving a regulatory body that embraces ecocentric and biocentric values for biodiversity conservation as well as appropriate compensation mechanisms for biodiversity loss. It noted that there is a disconnect in the laws as it relates to the relationship between human beings and the RoN. It therefore recommends the establishment of effective legal framework for the preservation of biodiversity and RON. In addition also it recommends the provision of a strong institutional framework for proper enforcement of such laws and the criminalisation of ecocide.

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