

Environment as a Legal Subject in the Reconstruction of Indonesia's Environmental Law

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Abstract

This study aims to analyze the new paradigm of recognizing the environment as a legal subject within Indonesia's legal system and its implications for environmental law enforcement. Driven by the increasingly complex environmental crisis caused by natural resource exploitation, environmental degradation, and climate change, this paradigm introduces an eco-centric approach and the theory of biocentric justice. The concept acknowledges the environment as a legal entity with intrinsic rights to exist, develop, and be restored when damaged. The research employs a normative approach with qualitative analysis methods and comparative studies of countries such as Ecuador, Bolivia, New Zealand and India which have implemented the recognition of the environment as a legal subject. The findings indicate that recognizing the environment as a legal subject in Indonesia requires comprehensive legal reforms, including constitutional amendments, the enactment of specific laws on environmental rights, strengthening law enforcement institutions, and empowering communities. This recognition is expected to enhance environmental law enforcement, establish ecological justice, and promote

sustainable development. Therefore, this paradigm not only serves as a solution to the environmental crisis but also reflects Indonesia's commitment to Pancasila values and the sustainability of future generations.

KEYWORDS *Environment as a Legal Subject, Eco-Centrism, Biocentric Justice, Legal Reform, Environmental Law Enforcement.*

Introduction

The development of environmental law, both globally and nationally, has undergone significant transformation in recent decades.¹ This evolution has been driven by the increasing complexity of environmental issues arising from human activities, such as excessive exploitation of natural resources, environmental degradation, pollution, climate change, and biodiversity loss.² According to the latest report from the Forest Declaration Assessment, Indonesia experienced deforestation covering an area of 1.18 million hectares in 2023, making it the country with the second-largest deforestation in the world after Brazil. This deforestation is driven by mining activities, the expansion of plantations, and the pulp and paper industry.³ In addition, environmental degradation and biodiversity loss pose serious threats. WWF reports that approximately 20 percent of the Amazon rainforest has been lost in the past 50 years, while half of the world's shallow coral reefs have been damaged over the past 30 years. This habitat loss has a significant impact on the sustainability of global biodiversity.⁴

Environmental pollution is also a significant concern, particularly due to mining activities in Indonesia. Acid mine drainage containing heavy

¹ Tseming Yang and Robert V. Percival, "The Emergence of Global Environmental Law," *Ecology Law Quarterly* 36, no. 3 (2009): 615–64, <https://doi.org/10.15779/Z38P25R>.

² Natalia Grigorievna Zhavoronkova et al., "Transformation of Environmental Law in the Face of Great Challenges," *SHS Web of Conferences* 118 (2021): 1–5, <https://doi.org/10.1051/SHSCONF/202111803016>.

³ Danur Lambang Pristiandaru, "Deforestasi RI Terburuk Kedua Di Dunia, 1,18 Juta Hektare Hutan Rusak," *Kompas.com*, 2024, https://lestari.kompas.com/read/2024/10/14/150000086/deforestasi-ri-terburuk-kedua-di-dunia-1-18-juta-hektare-hutan-rusak?utm_source=chatgpt.com.

⁴ World Wide Fund for Nature, "Laporan Terbaru WWF Mengungkap Luasnya Dampak Aktivitas Manusia Di Planet Bumi," *wwf.id*, 2023, https://www.wwf.id/id/blog/laporan-terbaru-wwf-mengungkap-luasnya-dampak-aktivitas-manusia-di-planet-bumi?utm_source=chatgpt.com.

metals and hazardous chemicals contaminates water sources, kills aquatic life, and damages aquatic ecosystems.⁵ On the other hand, climate change poses a global challenge that requires serious commitment to adaptation and mitigation efforts.⁶ A World Bank report states that Indonesia faces considerable challenges in balancing greenhouse gas emission reductions with economic growth. The transition to a low-carbon and climate-resilient economy has become a priority to achieve sustainable development goals.⁷

Global environmental degradation continues to be a serious concern, with recent data highlighting its significant impacts. According to the Forest Pulse report by the World Resources Institute, the world lost approximately 3.7 million hectares of tropical primary forest in 2023. While Brazil successfully reduced its primary forest loss by 36% compared to the previous year, countries such as Bolivia, Laos, and Nicaragua experienced significant increases in deforestation.⁸ Additionally, global carbon emissions reached a record high in the same year. Data from the Global Carbon Project recorded global carbon dioxide emissions at 40.6 billion tons, a 1.1% increase from 2022, primarily driven by the continued use of fossil fuels.⁹ Forest damage caused by wildfires also poses a major threat, with global wildfire damage covering 11.91 million hectares in 2023. These fires not only destroy ecosystems but also release large amounts of carbon into the atmosphere, exacerbating climate change.¹⁰

⁵ Khairunnash Ahmad et al., "Heavy Metal Contamination in Aquatic and Terrestrial Animals Resulted from Anthropogenic Activities in Indonesia: A Review," *Asian Journal of Water, Environment and Pollution* 19, no. 4 (July 26, 2022): 1–8, <https://doi.org/10.3233/AJW220049>.

⁶ Kashif Abbass et al., "A Review of the Global Climate Change Impacts, Adaptation, and Sustainable Mitigation Measures," *Environmental Science and Pollution Research* 29, no. 28 (2022): 42539–59, <https://doi.org/10.1007/s11356-022-19718-6>.

⁷ World Bank Group, "Laporan Iklim Dan Pembangunan Negara Indonesia," [worldbank.org](https://www.worldbank.org), 2023, https://www.worldbank.org/in/country/indonesia/publication/indonesia-country-climate-and-development-report?utm_source=chatgpt.com.

⁸ Mikaela Weisse, Elizabeth Goldman, and Sarah Carter, "Forest Pulse: Informasi Terkini Tentang Hutan Dunia," World Resources Institute, 2024, <https://research.wri.org/id/gfr/latest-analysis-deforestation-trends>.

⁹ Noor Faaizah, "Emisi Karbon Capai Rekor Tertinggi Pada 2023, Ahli Peringatkan Hal Ini," *Detik.com*, 2023, https://www.detik.com/edu/detikpedia/d-7090512/emisi-karbon-capai-rekor-tertinggi-pada-2023-ahli-peringatkan-hal-ini?utm_source=chatgpt.com.

¹⁰ Cindy Mutia Annur, "Data Luas Kerusakan Hutan Global Terkait Kebakaran 10 Tahun Terakhir Hingga 2023," dataindonesia.id, 2023,

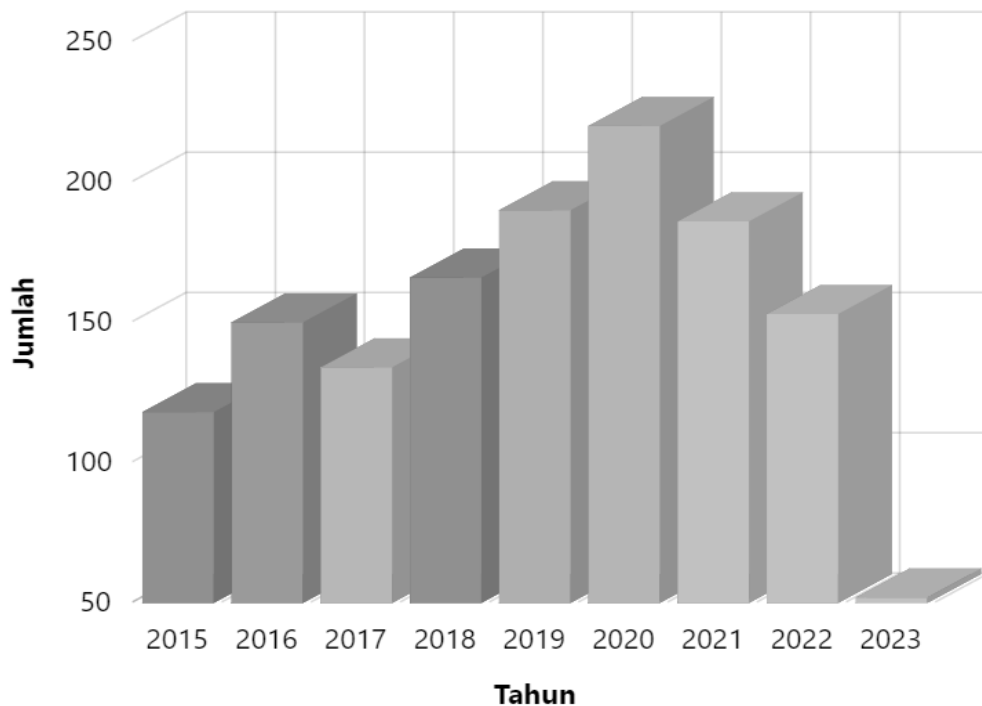
The frequency of natural disasters linked to climate change, such as floods, droughts, and storms, has also risen significantly. According to data from the World Bank, since 2000, climate-related disasters have often exceeded 300 events per year, causing extensive economic losses and significant human casualties.¹¹ Furthermore, the Global Risks Report 2024 by the World Economic Forum identifies extreme weather events, climate change, and environmental damage as the greatest risks facing the world in the coming decade.¹² This data underscores the urgent need for immediate action to address mounting environmental challenges to ensure ecosystem sustainability and the future of life on Earth. It also highlights the necessity for the development of more comprehensive and effective environmental laws to protect ecosystems and secure the sustainability of life for future generations.

In terms of law enforcement, during the period from 2015 to 2023, a total of 1,369 criminal law enforcement cases related to environmental issues were recorded in Indonesia, with 52 cases reported in 2023 alone.

https://dataindonesia.id/varia/detail/data-luas-kerusakan-hutan-global-terkait-kebakaran-10-tahun-terakhir-hingga-2023?utm_source=chatgpt.com.

¹¹ Adi Ahdiat, "Pelestarian Lingkungan Indonesia Tergolong Buruk Di Asia Pasifik," Databoks.katadata.co.id, 2022, <https://databoks.katadata.co.id/demografi/statistik/aa180d923e742d6/pelestarian-lingkungan-indonesia-tergolong-buruk-di-asia-pasifik>.

¹² Hari Widowati, "WEF: Perubahan Iklim, Kerusakan Alam Jadi Risiko Terbesar Bagi Dunia - Ekonomi Sirkular Katadata.Co.Id," katadata.co.id, 2024, https://katadata.co.id/ekonomi-hijau/ekonomi-sirkular/65a0a92cd5cbe/wef-perubahan-iklim-kerusakan-alam-jadi-risiko-terbesar-bagi-dunia?utm_source=chatgpt.com.



Source: Ministry of Environment and Forestry of the Republic of Indonesia

Over the past nine years, it is essential for the public to examine whether there has been an increase or decrease in the number of cases year by year. This analysis provides insight into the effectiveness of existing laws and regulations, as well as the government's commitment to enforcement. Among the 1,369 cases recorded, it is crucial to identify the most common types of violations whether related to illegal logging, pollution, habitat destruction, or other environmental issues. Each case undoubtedly has specific impacts on the environment, ranging from immediate damage such as deforestation to long-term effects like microclimate changes. An analysis of criminal law enforcement data related to environmental issues in Indonesia during the 2015–2023 period reveals fluctuations in the number of cases over the years, totaling 1,369 cases, including 52 in 2023. Law enforcement in these environmental cases reflects the government's response to violations and serves as a key indicator of the seriousness and effectiveness of current policies and regulations.

The phenomena mentioned above not only lead to an ecological crisis but also threaten the balance of life for humans and other living beings. In this context, there arises an urgent need to reconstruct the paradigm of environmental law, one of which is by recognizing the

environment as a legal subject.¹³ Historically, the law has tended to view the environment merely as a legal object something that can be owned, utilized, or exploited by humans to meet economic and developmental needs.¹⁴ This paradigm is anthropocentric, placing humans at the center of all policies and laws, while the environment is regarded as a passive resource. This approach has proven incapable of addressing increasingly complex environmental issues, often leading to irreversible damage.

In recent years, progressive thinking has emerged that positions the environment as a legal subject. This idea is rooted in eco-centric and biocentric justice approaches, which recognize that the environment and other ecological entities possess inherent rights that must be protected. The environment is no longer seen merely as a human asset but as a legal entity with standing, interests, and rights that must be respected and safeguarded by law. This paradigm has been adopted in various countries, such as Ecuador, Bolivia, and New Zealand, where environmental rights are recognized in their constitutions or legal frameworks.

In Indonesia, environmental law enforcement faces significant challenges. Although legal instruments such as Law No. 32 of 2009 on Environmental Protection and Management (PPLH) exist, their implementation remains reactive, weak in sanction enforcement, and insufficient in providing protection for the environment as an entity with intrinsic value.¹⁵ Environmental damage from deforestation, industrial waste pollution, mining exploitation, and changes in land use continues to prevail. The weakness of legal sanctions and the dominance of anthropocentric approaches in environmental policies result in ecological injustices that impact local communities, indigenous peoples, and ecosystems as a whole.¹⁶

¹³ Abdurrahman Supardi Usman, "Lingkungan Hidup Sebagai Subjek Hukum: Redefinisi Relasi Hak Asasi Manusia Dan Hak Asasi Lingkungan Hidup Dalam Perspektif Negara Hukum," *Jurnal Ilmiah Hukum Legality* 26, no. 1 (2018): 1–16, <https://doi.org/10.22219/jihl.v26i1.6610>.

¹⁴ Susana Borràs, "New Transitions from Human Rights to the Environment to the Rights of Nature," *Transnational Environmental Law* 5, no. 1 (2016): 113–43, <https://doi.org/DOI: 10.1017/S204710251500028X>.

¹⁵ Ummi A'zizah Zahroh and Fatma Ulfatun Najicha, "Problems and Challenges on Environmental Law Enforcement in Indonesia: AMDAL in the Context of Administrative Law," *Indonesian State Law Review (ISLRev)* 5, no. 2 (2022): 53–66, <https://doi.org/10.15294/islrev.v5i2.46511>.

¹⁶ Fernández-Llamazares et al, "A State-of-the-Art Review of Indigenous Peoples and Environmental Pollution," *Environmental Epidemiology* 3, no. 1 (October 2019): 330–31, <https://doi.org/10.1097/01.EE9.0000609632.34852.DB>.

Recognizing the environment as a legal subject in Indonesia could serve as a transformative solution to address the environmental crisis. By acknowledging the environment as a legal subject, it would gain equal standing with humans within the legal system. The environment could be represented in litigation processes to safeguard its interests, as has been practiced in international cases. For instance, the Whanganui River in New Zealand has been recognized as a legal subject with inherent rights, and the local community has been assigned the responsibility of preserving and protecting it.¹⁷

Implementing this paradigm in Indonesia would require comprehensive legal reforms, including changes in legislation, the judicial system, and public policies that favor ecological justice. Recognizing the environment as a legal subject should be integrated into the national legal framework, including in the formulation of environmental criminal law, environmental administrative law, and sustainable development policies. Furthermore, this approach aligns with the values of Pancasila, particularly the principles of social justice and humanity, as well as the mandate of the 1945 Constitution, which obligates the state to preserve the environment for the well-being of current and future generations.

Adopting the paradigm of the environment as a legal subject would also strengthen environmental law enforcement in Indonesia. By granting legal standing to the environment, any violations of environmental rights could be legally addressed, including the application of criminal, administrative, and civil sanctions. This would create a deterrent effect for environmental offenders and encourage greater corporate and stakeholder accountability through stricter implementation of corporate social responsibility (CSR) principles.

This study aims to analyze the new paradigm of recognizing the environment as a legal subject within Indonesia's legal system and its implications for environmental law enforcement. This approach is expected to offer progressive solutions to address the current environmental crisis and promote the development of sustainable, equitable, and ecologically aware environmental law.

This study employs a normative legal research method as it aims to analyze the concept of recognizing the environment as a legal subject and

¹⁷ Catherine J. Iorns Magallanes, "From Rights to Responsibilities Using Legal Personhood and Guardianship for Rivers," *SSRN Electronic Journal*, August 21, 2019, 216–39, <https://doi.org/10.2139/SSRN.3270391>.

its implications for environmental law enforcement in Indonesia.¹⁸ The normative legal research method is conducted through several approaches, namely the statute approach, the conceptual approach, the comparative approach, and the philosophical approach. The statute approach is used to examine various environmental regulations in Indonesia, such as Law No. 32 of 2009 on Environmental Protection and Management, as well as the 1945 Constitution as the constitutional foundation. Meanwhile, the conceptual approach seeks to understand the fundamental idea of the environment as a legal subject through the theories of eco-centrism, ecological justice, and biocentric justice. In line with this, the approach also incorporates the concept of deep ecology, which emphasizes the intrinsic value of all living and non-living components of nature beyond human-centered interests. This addition strengthens the philosophical basis for granting legal personhood to the environment.. The comparative approach is applied by comparing the recognition of the environment as a legal subject in countries such as Ecuador, Bolivia, and New Zealand, which have implemented this concept within their legal systems. The philosophical approach is used to explore the values of ecological justice and sustainability in the context of Indonesian law. The data collected in this study includes primary legal materials, such as legislation and the constitution, as well as secondary legal materials, such as legal literature, scientific journals, and previous research. Tertiary legal materials, such as legal dictionaries and encyclopedias, are also used to support the understanding of the analyzed concepts. The data analysis technique employed is qualitative analysis, which aims to systematically describe, interpret, and evaluate the data. The results of this analysis are presented in the form of logical, comprehensive, and systematic legal arguments to provide solutions to the researched issues.¹⁹ Through this method, the study is expected to make both theoretical and practical contributions to advancing the recognition of the environment as a legal subject and strengthening environmental law enforcement in Indonesia.

¹⁸ Zico Junius Fernando, Kiki Kristanto, and Ariesta Wibisono Anditya, “Knitting Democracy, Separating Restraints: Legal Reform and a Critical Analysis of Article 256 of the New Criminal Code and Its Impact on Freedom of Speech,” *Journal of Law and Legal Reform* 5, no. 2 (April 30, 2024): 555–86, <https://doi.org/10.15294/JLLR.VOL5I2.1670>.

¹⁹ Akhmad Akhmad, Zico Junius Fernando, and Papontee Teeraphan, “Unmasking Illicit Enrichment: A Comparative Analysis of Wealth Acquisition Under Indonesian, Thailand and Islamic Law,” *Journal of Indonesian Legal Studies* 8, no. 2 (2023): 899–934, <https://doi.org/10.15294/jils.v8i2.69332>.

A. The Concept of the Environment as A Legal Subject in the Perspective of Environmental Law

The concept of the environment as a legal subject represents a progressive idea in environmental law, aiming to grant legal recognition to environmental entities such as ecosystems, rivers, forests, and wildlife.²⁰ Within this framework, the environment is no longer viewed merely as an object that can be owned or exploited but as an entity with intrinsic rights to protection. This concept encompasses environmental rights, including the right to sustainability, ecosystem restoration, and protection from harmful exploitation. In practice, these rights are often represented by state institutions, indigenous communities, or non-governmental organizations (NGOs), ensuring that these rights are effectively implemented within the legal system.

The dominant legal paradigm has historically been anthropocentric, placing humans at the center of policies and laws and reducing the environment to a mere tool for fulfilling human needs.²¹ This approach treats the environment as an economic resource, which frequently leads to overexploitation, ecosystem degradation, and biodiversity loss. The consequences of this anthropocentric perspective are evident in various global environmental crises, such as the escalating impacts of climate change, increasing deforestation, and water pollution that devastates ecosystems and threatens the survival of numerous species.²²

The ecocentric approach and the theory of biocentric justice offer a transformative paradigm in environmental law that challenges the dominance of anthropocentric perspectives. The ecocentric approach is founded on the belief that nature possesses intrinsic value, independent of its utility or economic benefits to humans. This perspective views the environment as an entity with inherent rights to exist, thrive, and perform

²⁰ Rodrigo Henrique Branquinho Barboza Tozzi, "Yo Soy El Río, El Río Soy Yo: La Atribución de Personalidad Jurídica a Los Bienes Ambientales Naturales," *Revista de La Facultad de Derecho y Ciencias Políticas* 49, no. 131 (December 15, 2019): 255–77, <https://doi.org/10.18566/RFDPC.V49N131.A02>.

²¹ Lařna Droz, "Anthropocentrism as the Scapegoat of the Environmental Crisis: A Review," *Ethics in Science and Environmental Politics* 22 (May 5, 2022): 25–49, <https://doi.org/10.3354/ESEP00200>.

²² Anthony Le Duc, "The Multiple Contexts of the Environmental Crisis," *SSRN Electronic Journal*, December 30, 2020, 1–30, <https://doi.org/10.2139/SSRN.3812050>.

its natural functions without destructive human interference.²³ These rights encompass, for instance, a forest's right to remain intact, a river's right to flow naturally, and wildlife's right to live freely in their natural habitats. This intrinsic value underscores the importance of preserving ecosystems as entities deserving respect and protection under the law, rather than merely as resources for human exploitation.²⁴

Meanwhile, the theory of biocentric justice extends the concept of justice to all living entities, including animals, plants, and entire ecosystems.²⁵ This theory argues that justice is not exclusively a human concern but should encompass all forms of life.²⁶ Under this framework, human interactions with the environment must adhere to principles of ecological justice, recognizing the rights of all beings to live and thrive according to their natural needs. For example, in legal practices, biocentric justice can be applied to safeguard endangered species or to restore ecosystems damaged by human activities. These approaches provide the philosophical foundation for recognizing the environment as a legal subject, fostering a more inclusive legal framework that embodies true ecological justice.

Within the framework of environmental law, the recognition of the environment as a legal subject allows it to be represented in litigation processes by interested parties, such as individuals, non-governmental organizations (NGOs), or the government. For instance, in the case of the Whanganui River in New Zealand, the river was recognized as a legal subject with rights protected by law.²⁷ This recognition enables the river

²³ Poonam Kanwal, "Ecocentric Governance: Recognising the Rights of Nature," *Indian Journal of Public Administration* 69, no. 2 (February 1, 2023): 440–52, <https://doi.org/10.1177/00195561221141457>.

²⁴ Cameron La Follette et al., "When God Put Daylight on Earth We Had One Voice'Kwakwaka'wakw Perspectives on Sustainability and the Rights of Nature," *Sustainability and the Rights of Nature in Practice*, September 30, 2019, 89–111, <https://doi.org/10.1201/9780429505959-6>.

²⁵ Angie Pepper, "Delimiting Justice: Animal, Vegetable, Ecosystem?," *Les Ateliers de l'éthique* 13, no. 1 (January 18, 2019): 210–30, <https://doi.org/10.7202/1055125AR>.

²⁶ Anna Wienhues, "Sharing the Earth: A Biocentric Account of Ecological Justice," *Journal of Agricultural and Environmental Ethics* 30, no. 3 (2017): 367–85, <https://doi.org/10.1007/s10806-017-9672-9>.

²⁷ Christopher Finlayson, "A River Is Born: New Zealand Confers Legal Personhood on the Whanganui River to Protect It and Its Native People," *Sustainability and the Rights of Nature in Practice*, April 3, 2021, 259–78, <https://doi.org/10.1201/9780429505959-13/RIVER-BORN-NEW-ZEALAND-CONFERS-LEGAL-PERSONHOOD-WHANGANUI-RIVER-PROTECT-NATIVE-PEOPLE-CHRISTOPHER-FINLAYSON>.

to be represented by the local community in court, allowing for damages or pollution to be litigated and remedied. This concept creates a more effective mechanism to hold parties responsible for environmental harm accountable and to restore the damage caused.

Furthermore, recognizing the environment as a legal subject also opens opportunities for more progressive and sustainable legal reforms. The environment can be treated as an entity with rights to exist in a healthy condition, free from pollution, and protected from exploitation that damages ecosystems. This concept is highly relevant for Indonesia's legal system, which is still dominated by an anthropocentric approach. Adopting this paradigm would strengthen environmental law enforcement efforts and ensure better protection of the environment for current and future generations.

The recognition of the environment as a legal subject also has significant implications for development policies and natural resource management. By granting legal status to the environment, both the government and the private sector are required to consider environmental rights in every policy and decision made. This would encourage the application of sustainable development principles and ecological justice, balancing economic interests with environmental protection. In the Indonesian context, implementing this concept would support the Sustainable Development Goals (SDGs) and align with the values of Pancasila and the mandate of the 1945 Constitution, which emphasize environmental preservation for the welfare of all Indonesians.

The recognition of the environment as a legal subject is rooted in both international and national legal frameworks. At the international level, this idea began to emerge in the Stockholm Declaration of 1972, which emphasized the need for global cooperation in addressing environmental issues and acknowledged the intrinsic value of the environment. The concept was further reinforced by the Rio Declaration of 1992, which introduced principles of sustainable development and the responsibility of states to protect and preserve the environment for future generations. Additionally, significant conventions such as the Convention on Biological Diversity (CBD) highlighted the importance of conserving biodiversity and ensuring the sustainable use of biological resources, acknowledging the environment's essential role in supporting life. The Paris Agreement of 2015, aimed at combating climate change, underscored the urgency of maintaining environmental integrity as a global priority. In specific national contexts, some countries have taken significant steps toward formally recognizing environmental rights within

their legal systems. For instance, Ecuador became a pioneer by explicitly including the rights of nature in its 2008 Constitution, granting ecosystems the right to exist, regenerate, and be restored.²⁸ Similarly, Bolivia adopted the Law of the Rights of Mother Earth in 2010, which recognizes Earth as a collective subject of public interest with inherent rights.²⁹ These legal advancements mark an important shift toward incorporating environmental considerations as fundamental legal principles, reflecting growing global recognition of the need to treat the environment as more than just a resource for human exploitation. In Indonesia, the legal foundation can be identified in Articles 28H and 33(4) of the 1945 Constitution, which mandate the state to protect the environment for the welfare of the people and the sustainability of natural resources. Additionally, Law No. 32 of 2009 on Environmental Protection and Management (PPLH) can serve as an initial framework for acknowledging the environment as an entity with rights that must be safeguarded.

The sociological basis for recognizing the environment as a legal subject stems from the worsening environmental degradation caused by human activities. Ecological injustice has inflicted significant harm on local communities, particularly indigenous groups, who rely on environmental preservation for their livelihoods. By recognizing the environment as a legal subject, society gains a stronger legal mechanism to advocate for their rights to a healthy and sustainable environment. Furthermore, this recognition reflects social demands for ecological justice and sustainable development that balances human interests with environmental well-being.

B. Practice of Recognizing The Environment as A Legal Subject in Other Countries

The practice of recognizing the environment as a legal subject in other countries provides a concrete example of how this paradigm can be implemented within a positive legal system. Several countries have become pioneers in acknowledging the environment as a legal entity with rights that are recognized and protected by the state. These countries include

²⁸ Mihnea Tanasescu, "The Rights of Nature in Ecuador: The Making of an Idea," *International Journal of Environmental Studies* 70, no. 6 (December 1, 2013): 846–61, <https://doi.org/10.1080/00207233.2013.845715>.

²⁹ Miriam Tola, "Between Pachamama and Mother Earth: Gender, Political Ontology and the Rights of Nature in Contemporary Bolivia," *Feminist Review* 118, no. 1 (April 1, 2018): 25–26, <https://doi.org/10.1057/S41305-018-0100-4>.

Ecuador, Bolivia, and New Zealand, each of which has developed unique approaches and experiences that can serve as a model for other nations, including Indonesia.

1. Ecuador

In 2008, Ecuador made history as the first country in the world to explicitly recognize the rights of nature through its constitution. This marked a paradigm shift from anthropocentrism, which places humans at the center of existence, to ecocentrism, which acknowledges that nature has intrinsic value and possesses rights equal to those of humans.³⁰ Articles 71-74 of Ecuador's Constitution state that nature, referred to as Pachamama (Mother Earth in the cosmology of the indigenous Andean people), has the right to have its existence respected, to be maintained, and to regenerate its natural life cycles.³¹ These rights include protection from harm caused by human activities. The constitution further grants individuals, communities, and organizations the right to file lawsuits on behalf of nature if its rights are violated. This recognition is not merely symbolic but has been implemented in practice through the country's judicial system.³²

The most significant example of the implementation of nature's rights is the Vilcabamba River case, which set a global precedent for recognizing the environment as a legal subject. The case began when a road construction project in the Loja province caused construction materials, such as soil and rocks, to be dumped into the Vilcabamba River. This activity led to the river's sedimentation, an increased risk of flooding, and significant damage to the river's ecosystem.³³ Two Ecuadorian citizens, Richard Wheeler and Eleanor Bravo, filed a

³⁰ Eco Jurisprudence Monitor, "Ecuador's Organic Code of the Environment," ecojurisprudence.org/, 2023, <https://ecojurisprudence.org/initiatives/ecuadors-organic-code-of-the-environment/>.

³¹ Hugo Echeverria and Francisco José Bustamante Romo Leroux, "The Rights of Nature in Ecuador: An Overview of the New Environmental Paradigm," *Sustainability and the Rights of Nature in Practice*, April 3, 2021, 279–93, <https://doi.org/10.1201/9780429505959-14/RIGHTS-NATURE-ECUADOR-OVERVIEW-NEW-ENVIRONMENTAL-PARADIGM-HUGO-ECHEVERRIA-FRANCISCO-JOS>.

³² Synneva Geithus Laastad, "Nature as a Subject of Rights? National Discourses on Ecuador's Constitutional Rights of Nature," *Forum for Development Studies* 47, no. 3 (September 1, 2020): 401–25, <https://doi.org/10.1080/08039410.2019.1654544>.

³³ Lidia Cano and Pecharroman Id, "Rights of Nature: Rivers That Can Stand in Court," *Resources* 2018, Vol. 7, Page 13 7, no. 1 (February 14, 2018): 1–14, <https://doi.org/10.3390/RESOURCES7010013>.

lawsuit not for personal gain but on behalf of the Vilcabamba River arguing that the construction project violated the river's constitutional rights. The Provincial Court of Loja ruled in favor of the Vilcabamba River, declaring that the construction activities infringed upon nature's right to remain free from harm. The court ordered the cessation of harmful activities and mandated the restoration of the river's ecosystem as a form of accountability.

The Vilcabamba River case demonstrates that the recognition of nature's rights in Ecuador's Constitution is not theoretical but can be effectively enforced through legal mechanisms. It affirms that nature possesses legal rights that must be respected and restored when violated. The case also highlights the crucial role of individuals and communities in representing nature and seeking justice on its behalf. The positive impact of this recognition is evident in the promotion of sustainable conservation efforts and the involvement of local communities as stewards of the environment. However, implementing this principle is not without challenges, as economic interests, infrastructure development, and resource exploitation often conflict with environmental protection.

Thus, Ecuador has provided a concrete example of how the environment can be recognized as a legal subject with enforceable rights. Through its 2008 Constitution and landmark cases such as the Vilcabamba River, Ecuador has inspired the world by showing that nature is not merely an object of exploitation but an entity with rights to be respected, protected, and restored. This paradigm shift can serve as an inspirational model for other countries, including Indonesia, in developing legal frameworks that are more ecocentric and sustainable, ensuring the harmonious coexistence of humans and nature.

2. Bolivia

In 2010, Bolivia followed Ecuador's pioneering steps by adopting the Law of the Rights of Mother Earth (*Ley de Derechos de la Madre Tierra*), granting legal recognition to nature as an entity with inherent rights.³⁴ This law marked a significant shift toward an ecocentric legal framework, where nature, referred to as "Pachamama" (Mother Earth), is acknowledged as a living entity

³⁴ Borràs, "New Transitions from Human Rights to the Environment to the Rights of Nature."

deserving protection, respect, and care.³⁵ The law explicitly outlines seven fundamental rights of nature, including the right to life, the right to maintain its ecological cycles, the right to clean water and air, the right to balance, and the right to restoration from damage caused by human activity. These provisions emphasize that nature's integrity must be preserved for the well-being of all living beings, highlighting that environmental degradation constitutes a form of ecological injustice that threatens the sustainability of life on Earth. The law also places a legal responsibility on the state, society, and individuals to act as guardians of nature, obligating them to prevent exploitation, restore damaged ecosystems, and promote sustainable practices.³⁶

The foundation of this law is deeply rooted in the indigenous values and philosophies of Bolivia's native communities, particularly the Andean concept of "Vivir Bien" (Living Well), which advocates for living in harmony with nature.³⁷ For these communities, nature is not seen as an object for human exploitation but as a sacred, living entity with intrinsic value that must be protected and respected. By adopting this perspective, Bolivia highlights the interconnectedness between human well-being and the health of the environment. However, while the law represents a groundbreaking step, its implementation has faced significant challenges, including balancing Bolivia's economic reliance on natural resource extraction with the principles of environmental protection. The enforcement of the law has also been limited in certain areas, particularly where industries such as mining and fossil fuels dominate. Despite these challenges, indigenous communities continue to play a crucial role in safeguarding the environment, emphasizing the need for stronger collaboration between local populations and government authorities.

The Law of the Rights of Mother Earth holds significant global relevance as it demonstrates Bolivia's commitment to advancing environmental justice through legal recognition of nature's rights. By

³⁵ David Humphreys, "Rights of Pachamama: The Emergence of An Earth Jurisprudence in the Americas," *Journal of International Relations and Development* 20, no. 3 (July 1, 2017): 459, <https://doi.org/10.1057/S41268-016-0001-0/METRICS>.

³⁶ Cletus Gregor Barié, "Doce Años de Soledad de Los Derechos de La Madre Tierra En Bolivia," *Naturaleza y Sociedad. Desafíos Medioambientales*, no. 4 (December 1, 2022): 142–82, <https://doi.org/10.53010/NYS4.05>.

³⁷ María Itatí Dolhare and Sol Rojas-Lizana, "The Indigenous Concept of Vivir Bien in the Bolivian Legal Field: A Decolonial Proposal," *The Australian Journal of Indigenous Education* 47, no. 1 (August 1, 2018): 19–29, <https://doi.org/10.1017/JIE.2017.31>.

integrating cultural values, ecological sustainability, and legal protections, the law serves as a model for addressing pressing issues such as climate change, biodiversity loss, and environmental degradation. Bolivia's approach reflects a broader understanding that achieving harmony between humans and nature requires systemic legal, cultural, and social transformation. This law not only positions Bolivia as a leader in the global environmental movement but also serves as an inspiration for other nations, including Indonesia, to adopt similar frameworks that prioritize ecological justice and sustainability.

3. New Zealand

New Zealand serves as a significant example in recognizing the environment as a legal subject through the Whanganui River case. In 2017, the New Zealand government officially recognized the Whanganui River as a legal entity with rights that must be protected. This groundbreaking recognition emerged from decades of efforts by the Māori iwi (tribes), particularly the Whanganui iwi, who hold deep spiritual and cultural connections to the river.³⁸ For the Māori people, the Whanganui River is not merely a waterway but a living ancestor and an inseparable part of their identity and existence, reflected in their saying: "Ko au te awa, ko te awa ko au" ("I am the river, and the river is me"). This recognition was formalized through the Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, which granted the river the status of a legal person with all corresponding rights, duties, and liabilities.³⁹

The law establishes that the river is now represented by two guardians (Te Pou Tupua): one appointed by the Whanganui iwi and the other by the government of New Zealand. These guardians act as the river's legal representatives and are responsible for ensuring its well-being, protection, and restoration.⁴⁰ By appointing joint

³⁸ Christopher Rodgers, "A New Approach to Protecting Ecosystems: The Te Awa Tupua (Whanganui River Claims Settlement) Act 2017," *Environmental Law Review* 19, no. 4 (December 1, 2017): 266–79, <https://doi.org/10.1177/1461452917744909>.

³⁹ Iorns Magallanes, "From Rights to Responsibilities Using Legal Personhood and Guardianship for Rivers."

⁴⁰ Aikaterini Argyrou and Harry Hummels, "Legal Personality and Economic Livelihood of the Whanganui River: A Call for Community Entrepreneurship," *Water International* 44, no. 6–7 (October 3, 2019): 752, <https://doi.org/10.1080/02508060.2019.1643525>.

guardianship, the Act reflects a collaborative approach that combines indigenous values and modern legal mechanisms, ensuring both cultural and ecological perspectives are honored. This legal status enables the Whanganui River to initiate legal action through its guardians if its rights are violated, such as in cases of pollution, exploitation, or ecological damage. Any harm to the river can be addressed in court, holding individuals, companies, or government bodies accountable for their actions.

The recognition of the Whanganui River as a legal person also holds profound cultural and environmental significance. For the Māori, this decision marks a long-overdue acknowledgment of their ancestral relationship with the river and their role as *kaitiaki* (guardians) of the environment. Beyond cultural considerations, this legal framework sets a precedent for innovative environmental governance, offering a model for balancing ecological protection and human activities.⁴¹ The Whanganui River's recognition has inspired similar efforts globally, including the legal personhood granted to natural entities like Mount Taranaki in New Zealand and the Ganges and Yamuna rivers in India, though implementation varies by jurisdiction.

However, while the Whanganui River's legal status is a landmark achievement, challenges remain in balancing economic interests, such as water usage and land development, with the need for environmental preservation. The success of this model depends on continued collaboration between the Māori community, the government, and local stakeholders to ensure the river's rights are upheld in practice. Nonetheless, New Zealand's recognition of the Whanganui River as a legal entity represents a progressive and holistic approach to environmental law, integrating indigenous wisdom, cultural values, and legal mechanisms to protect nature. This landmark decision serves as an inspirational model for other countries, including Indonesia, to adopt similar frameworks that honor cultural heritage while promoting sustainable environmental governance.

4. India

India has demonstrated significant progress in recognizing the environment as a legal subject through a judicial decision that granted

⁴¹ Finlayson, "A River Is Born: New Zealand Confers Legal Personhood on the Whanganui River to Protect It and Its Native People."

legal personhood to the Ganges and Yamuna Rivers. In 2017, the Uttarakhand High Court issued a landmark ruling recognizing these rivers as “living entities” or “legal persons” with rights that must be protected.⁴² This decision was motivated by the severe pollution afflicting both rivers due to industrial activities, domestic sewage, and religious practices, which have caused substantial ecological damage, degraded water quality, and threatened the survival of life dependent on these rivers. The court’s ruling declared that the Ganges and Yamuna Rivers possess rights equivalent to those of human beings, including the right to life, the right to remain free from pollution, and the right to preservation. This legal status creates a foundation for stricter environmental protection measures and allows for litigation to be brought on behalf of the rivers if their rights are violated.⁴³

The court further appointed three guardians, comprised of government officials from the state of Uttarakhand, to act as the legal representatives of the rivers. These guardians are tasked with the responsibility of ensuring the protection, restoration, and well-being of the rivers, serving as their legal custodians. This decision is not only a progressive legal innovation but also deeply rooted in the spiritual and cultural significance of the rivers. For the people of India, particularly Hindus, the Ganges and Yamuna are considered sacred deities and sources of life, welfare, and purification. They are revered as living goddesses that sustain communities, further underscoring the cultural dimension of the ruling.

However, while this judicial decision represents a critical step forward, implementation has faced numerous challenges. The primary obstacles include ineffective enforcement mechanisms, a lack of coordination between government agencies, and the economic pressures stemming from industrial activities that disregard sustainability principles. Additionally, the widespread reliance on these rivers for drinking water, irrigation, and religious practices complicates efforts to restore and protect their ecosystems. Addressing these challenges requires not only legal enforcement but also public education, government commitment, and sustainable policies that balance human needs with environmental preservation.

⁴² Yamuna River, “Rights of Nature Case Study Ganga River and Yamuna River,” no. December 2016 (2017): 1–4.

⁴³ Moe Nakazora, “Environmental Law With Non-Human Features in India: Giving Legal Personhood to the Ganges,” *South Asia Research* 43, no. 2 (May 11, 2023): 172–91, <https://doi.org/10.1177/02627280231163094>.

Although the practical implementation of this ruling remains limited, the recognition of the Ganges and Yamuna Rivers as legal persons reflects a growing legal consciousness in India about the urgent need for effective and sustainable environmental protection. This decision marks a pivotal attempt to address ecological crises through innovative legal approaches that treat nature as a subject of rights. Furthermore, it positions India within a global movement where countries are beginning to recognize the legal rights of nature as a solution to combat environmental degradation. Despite existing hurdles, this ruling provides a powerful foundation for restoring the rivers' ecosystems and stands as an inspirational example for other nations, including Indonesia, to adopt similar legal frameworks that promote ecological justice and sustainable environmental governance.

C. Legal Reform Steps Needed to Implement the Environmental Paradigm As A Legal Subject in Indonesia

The legal reforms needed to implement the paradigm of recognizing the environment as a legal subject in Indonesia must be carried out comprehensively, involving various elements within the legal and governmental system. These reforms encompass legislative aspects, law enforcement institutions, community engagement, and the integration of ecological justice values into public policy. Below are the systematic steps that need to be taken:

1. Constitutional or Legislative Amendments

The first and most fundamental step in recognizing the environment as a legal subject is amending the national legal framework to explicitly acknowledge the rights of nature. Examples from Ecuador and Bolivia serve as guiding models. Ecuador's 2008 Constitution formally recognizes the rights of nature, or *Pachamama*, to exist, thrive, and be restored. Similarly, Bolivia's *Ley de Derechos de la Madre Tierra* emphasizes the inherent rights of nature to life, freedom from pollution, and ecological continuity. New Zealand's groundbreaking legislation, the *Te Awa Tupua (Whanganui River Claims Settlement) Act 2017*, grants legal personhood to the Whanganui River, recognizing it as a living entity with protected rights. Indonesia can adopt similar measures by integrating the rights of nature into its 1945

Constitution or sectoral laws such as Law No. 32 of 2009 on Environmental Protection and Management (PPLH). This could involve drafting specific environmental laws or revising existing legislation to explicitly include the rights of ecosystems to restoration and protection, ensuring nature's legal recognition as a subject with enforceable rights.

2. Strengthening Litigation Mechanisms

Recognizing the environment as a legal subject must be accompanied by robust litigation mechanisms that enable legal representation for nature. Countries like Ecuador and New Zealand provide valuable examples. Ecuador empowers individuals and organizations to file lawsuits on behalf of nature, as demonstrated in the *Vilcabamba River Case*, where courts ordered the cessation of harmful activities to protect the river. Similarly, in New Zealand, the Whanganui River is represented by appointed guardians who advocate for the river's health and rights. Indonesia can strengthen its legal system by granting clearer legal standing to civil society organizations (CSOs), indigenous communities, and government agencies to represent the environment in court. This can include establishing procedures for class action lawsuits and representation by environmental advocates to address ecological harm effectively and hold perpetrators accountable.

3. Collaboration with Indigenous Communities

Indigenous communities often possess deep cultural and spiritual connections to the environment, making them essential partners in environmental protection. In Ecuador and Bolivia, indigenous values such as *Pachamama* form the philosophical foundation for recognizing nature's rights. In New Zealand, the Māori concept of *kaitiakitanga* guardianship of nature played a central role in granting legal personhood to the Whanganui River, acknowledging it as a living ancestor. Indonesia, with its rich cultural diversity, can engage indigenous communities as key stakeholders in environmental governance. Traditional ecological knowledge passed down through generations can be integrated into legal frameworks and policy development. This collaboration would not only strengthen environmental protection efforts but also preserve Indonesia's cultural heritage and align with the principles of sustainable development.

4. Establishing Specific Legal Instruments

Indonesia needs specific legal instruments that clearly define the rights of nature and mechanisms for their protection. Laws similar to the *Te Awa Tupua Act* or Bolivia's *Ley de Derechos de la Madre Tierra* can be introduced to provide a dedicated framework for recognizing and safeguarding environmental rights. These laws should incorporate ecocentric principles and biocentric justice, establishing legal mechanisms to ensure the representation of ecosystems and imposing stringent sanctions for violations.

5. Strengthening Environmental Monitoring and Restoration

Legal recognition alone is insufficient without effective mechanisms for monitoring and restoring damaged ecosystems. Bolivia mandates the state to restore degraded environments under its *Law of the Rights of Mother Earth*. In New Zealand, the guardians of the Whanganui River actively monitor and promote the river's health. Indonesia can establish independent environmental monitoring bodies responsible for enforcing compliance with environmental laws, assessing ecosystem health, and implementing restoration programs. Such initiatives should be supported by allocating sufficient resources and enforcing strict penalties for violators to ensure long-term ecological sustainability.

6. Reforming Legal Institutions and Law Enforcement

Effective law enforcement is crucial to implementing environmental rights. Establishing specialized environmental courts with jurisdiction over cases related to the rights of nature can enhance the judiciary's capacity to handle environmental disputes. Furthermore, law enforcement officials, including judges, prosecutors, and police officers, should receive continuous training on the concept of the environment as a legal subject. This education will ensure a deeper understanding of ecological justice and improve the enforcement of environmental laws.

7. Integrating Ecological Justice into Public Policy

Recognizing the environment as a legal subject requires the integration of ecological justice principles into national and regional development policies. Governments must ensure that economic and spatial planning decisions respect environmental rights and prioritize sustainable development. By embedding these principles into public policy, Indonesia can balance

economic growth with environmental protection, aligning its governance with the Sustainable Development Goals (SDGs) and the values of Pancasila.

8. Promoting Education and Public Awareness

A key component of legal reform is fostering societal awareness of the environment's intrinsic value and legal rights. Public education campaigns and environmental education programs can cultivate a deeper understanding of ecological justice among citizens. Through widespread awareness, the recognition of the environment as a legal subject can gain broader societal acceptance and support.

The recognition of the environment as a legal subject is grounded in ecocentric thought and biocentric justice. Unlike the anthropocentric view, which treats nature as a tool for human exploitation, ecocentric principles emphasize the intrinsic value of all ecological entities. Theories such as deep ecology highlight the interconnectedness of humans and nature, promoting harmony and a profound sense of responsibility to protect the natural world.

Biocentric justice extends the concept of justice beyond humans to include animals, plants, and ecosystems, advocating for their right to exist and thrive. By adopting these philosophies, Indonesia can build a legal framework that respects and protects nature as an integral part of life, fostering a sustainable relationship between humans and the environment.

Conclusion

The recognition of the environment as a legal subject represents a progressive and transformative step in addressing the increasingly complex environmental crisis. This concept is grounded in an ecocentric approach and the theory of biocentric justice, which position the environment as an entity with intrinsic rights to live, thrive, and function naturally. The practice of recognizing the environment as a legal subject has been implemented in several countries, such as Ecuador, Bolivia, New Zealand and India, providing inspiration for Indonesia to formulate a more just and equitable environmental legal framework. In Indonesia, the implementation of this paradigm requires comprehensive legal reform. These steps include revisions to the constitution and environmental legislation, the establishment of specific legal instruments recognizing the rights of nature, strengthening the role of law enforcement agencies, empowering indigenous communities and non-governmental organizations (NGOs), and integrating ecological justice values into public

policy. Furthermore, mechanisms for environmental restoration and proportional sanctions must be enforced to create a deterrent effect against perpetrators of environmental crimes. By recognizing the environment as a legal subject, a more just, sustainable, and ecologically balanced legal system can be achieved. This paradigm not only ensures effective protection of the environment but also reflects Indonesia's commitment to the principles of sustainable development and social justice as mandated in Pancasila and the 1945 Constitution. This reform is expected to address the current environmental crisis and secure the well-being of future generations through the preservation and sustainability of the natural environment.

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