

Ecocide as the Fifth International Crime and the Urgency of Recognition in Indonesian Environmental Criminal Law

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Abstract

This study examines the urgency of recognizing ecocide as the fifth core international crime and its implications for Indonesian environmental criminal law. While the Rome Statute currently recognizes four core crimes genocide, crimes against humanity, war crimes, and the crime of aggression scholars and international movements increasingly advocate for the inclusion of ecocide, considering the scale and severity of environmental destruction. In Indonesia, the enactment of the 2023 Criminal Code has introduced a new configuration of environmental crimes, yet it has not fully addressed the concept of ecocide as a crime of international concern. This research employs a normative legal method, adopting statutory, conceptual, and comparative approaches. The nature of the study is descriptive-prescriptive, aiming both to describe the existing legal framework and to provide recommendations for legal reform. The data collected were analyzed using content analysis to evaluate statutory provisions, doctrinal debates, and comparative legal practices in several jurisdictions. The findings highlight that recognition of ecocide within Indonesian law would not only strengthen environmental protection domestically but also align Indonesia with global efforts to achieve Sustainable Development Goals, particularly in relation to climate action, peace, justice, and the protection of ecosystems.

Keywords: *Ecocide; International Crime; Environmental Criminal Law; Indonesia; Sustainable Development Goals.*

INTRODUCTION

Environmental damage today has reached a point where the law seems to lag behind the ecological reality it faces. Every year, the world witnesses the destruction of tropical forests, marine pollution, peat fires, and increasingly extreme climate change, all of which are no longer mere natural events, but rather the result of political decisions, economic policies, and deliberate or negligent human actions.¹ In this situation,

a fundamental question arises: can such massive, systematic, and widespread damage to life still be considered merely an “administrative violation,” or should it be treated as a crime against the earth itself?

This question brought the legal world to the increasingly discussed concept of ecocide. This term first appeared in the international public sphere in the early 1970s, when Olof Palme, Prime Minister of Sweden, in his speech at the UN Conference on the Human

¹ Haydn Washington et al., “Harmony in Conservation,” *Conservation* 2, no. 4 (November 1,

2022): 682–93, <https://doi.org/10.3390/CONSERVATION2040044>.

Environment (Stockholm, 1972) referred to the destruction of ecosystems in Vietnam as a result of war as “a crime against nature.”² From there, the idea of ecocide grew as a criticism of the international legal perspective that only protects humans, but ignores the suffering of the environment. International law has long had the tools to prosecute mass killings of humans, such as genocide and crimes against humanity, but it does not yet have the mechanisms to prosecute “mass killings” of ecosystems.³

The world has given names to crimes that destroy humans, but has not yet given names to crimes that destroy the earth. That is the moral and legal vacuum that modern civilization now faces. Industrial development, global capitalism, and development politics often give rise to “destructive progress,” where the exploitation of natural resources is carried out without considering the limits of nature's ability to recover. A striking example of this paradox can be seen in the tragedy in the Niger Delta, Nigeria, where more than five decades of oil exploitation

by multinational companies has caused severe pollution of the land, water, and air.⁴ The Niger Delta case is often cited as a textbook example of ecocide, as it shows how global industrial greed can cause ecological and human suffering simultaneously.

Another example can be found in the Aral Sea disaster in Central Asia, now known as one of the greatest environmental tragedies of the 20th century. During the Soviet era, two major rivers, the Amu Darya and Syr Darya, were diverted to support large-scale cotton farming projects. This policy caused Lake Aral, once the fourth largest lake in the world, to almost completely dry up. As a result, the aquatic ecosystem disappeared, fish populations vanished, and fishing communities lost their livelihoods. In addition, the dry lake bed turned into a toxic salt desert that was carried by the wind for hundreds of kilometers, causing a health crisis and a cross-border ecological disaster.⁵

The destruction of the Kakhovka Dam in Ukraine in 2023 also revealed a new

² Sailesh Mehta and Prisca Merz, “Ecocide – A New Crime Against Peace?,” *Environmental Law Review* 17, no. 1 (March 2015): 3–7, <https://doi.org/10.1177/1461452914564730>.

³ Ewa Nowak, “From Genocide to Ecocide. Essentials of a New Category of International Crime Against Humanity,” *Undecidabilities and Law*, no. 2 (December 15, 2022): 75–98, https://doi.org/10.14195/2184-9781_2_4.

⁴ Z. A. Elum, K. Mopipi, and A. Henri-Ukoha, “Oil Exploitation and Its Socioeconomic Effects on the

Niger Delta Region of Nigeria,” *Environmental Science and Pollution Research* 23, no. 13 (May 18, 2016): 12880–89, <https://doi.org/10.1007/S11356-016-6864-1>.

⁵ D. P. Bedford, “International Water Management in the Aral Sea Basin,” *Water International* 21, no. 2 (1996): 63–69, <https://doi.org/10.1080/02508069608686491;JOURNAL:JOURNAL:RWIN20;PAGE:STRING:ARTICLE/CHAPTER>.

dimension of ecocide in the context of modern warfare. The explosion that destroyed the dam on the Dnipro River caused massive flooding that submerged settlements, destroyed natural habitats, and contaminated soil and water sources in southern Ukraine. The Ukrainian government called this incident a form of ecocide, as it caused long-term ecological damage that affected millions of residents and permanently altered the ecological landscape of the region. This case shows that ecocide does not only occur for economic reasons, but also as a result of political and military conflicts.⁶

In Indonesia, there were 629 cases of forest and land fires (karhutla) in 2024, according to BNPB data, and they were handled comprehensively throughout the year.⁷ This phenomenon dominated national disasters from July to October, when the dry season exacerbated the intensity of fires in various regions. South Sumatra Province was the area with the most significant

damage, with a burned area of 9,697 hectares, covering mineral and peatlands.⁸ These fires not only caused ecological losses in the form of biodiversity loss and large carbon emissions, but also reflected the direct impact of the expansion of extractive industries and agribusiness driven by global capitalism. International market demand for commodities such as palm oil, timber, and pulp has triggered large-scale land clearing, often through cheap but destructive burning.

On the other hand, national development policies oriented towards economic growth and foreign investment tend to neglect aspects of ecological sustainability and the protection of local communities.⁹ The forest fires of 2024 show how economic “progress” within the global system can actually lead to systemic environmental degradation, where short-term profits sacrifice ecosystem balance and sustainability.¹⁰ As a result, nature becomes a victim without adequate legal protection.

⁶ Nataliia Malysheva and Anna Hurova, “Environmental Consequences of the Kakhovka H.P.P. Destruction in Ukraine: Challenge and Opportunity for International Justice,” *Journal of Environmental Law and Policy* 4, no. 1 (June 1, 2024): 84–104, <https://doi.org/10.33002/JELP040104>.

⁷ Hari Widowati, “BNPB: Ada 629 Kasus Kebakaran Hutan Dan Lahan Pada 2024,” *Katadata.co.id*, 2025, <https://katadata.co.id/ekonomi-hijau/ekonomi-sirkular/6780fada4b2c5/bnpb-ada-629-kasus-kebakaran-hutan-dan-lahan-pada-2024>.

⁸ Widowati.

⁹ William E. Rees, “Economic Development and Environmental Protection: An Ecological Economics Perspective,” *Environmental Monitoring and Assessment* 86, no. 1–2 (July 2003): 29–45, <https://doi.org/10.1023/A:1024098417023/METRIC.S>.

¹⁰ 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>.

When rivers are polluted with heavy metals, forests are burned for plantation expansion, and the sea is polluted with oil spills, it is not only humans who suffer, but also the land, air, species, and future generations.

In a global context, the debate on ecocide reflects the crisis of values faced by contemporary international law. The 1998 Rome Statute does include four core crimes: genocide, crimes against humanity, war crimes, and crimes of aggression, but all of them focus on humans.¹¹ Nature is only implied, and even then only in times of war. In fact, most environmental damage occurs during peacetime, perpetrated by corporations, states, and individuals acting in the name of development and progress. In this situation, many argue that the absence of ecocide from the list of international crimes is the greatest omission of modern law, failing to protect the entity that sustains all life.

The recurring environmental tragedies from decade to decade show that national criminal law is not strong enough to prevent and punish perpetrators of large-scale ecological damage. In various parts of the world, the destruction of the Amazon rainforest and the nuclear disaster in

Fukushima have become symbols of the failure of the global legal system to protect the earth. Environmental damage of this kind can no longer be considered an administrative violation, because its impact transcends national borders, time, and generations. It creates victims that are not only human, but also the entire web of life.

Indonesia stands at the center of this ecological paradox. On the one hand, the country is known as one of the most biodiverse regions in the world; on the other hand, it is also listed as one of the main contributors to global tropical forest loss. The forests of Kalimantan, Sumatra, and Papua, once known as the lungs of the world, are shrinking every year due to the expansion of palm oil plantations, mining, and infrastructure development. In 2024, the Ministry of Forestry noted that Indonesia's forest area reached 95.5 million hectares, or about 51.1% of the total land area, with most of it located within forest areas. The net deforestation rate in 2024 reached 175,400 hectares, which came from gross deforestation of 216,200 hectares minus reforestation of 40,800 hectares. Most of the deforestation occurred in secondary forests, mainly within forest areas. To address this, the government implemented Forest and Land

¹¹ Pocar* Fausto, "The Rome Statute of the International Criminal Court and Human Rights," *The Rome Statute of the International Criminal*

Court, July 5, 2017, 67–74, <https://doi.org/10.4324/9781315085326-11>.

Rehabilitation (RHL) covering an area of 217,900 hectares in the same year, both inside and outside forest areas, as part of efforts to restore forest cover and control the rate of deforestation in Indonesia.¹² These figures may seem technical, but behind them lies an ecological and social tragedy, the loss of animal habitats, the destruction of water cycles, and the extinction of indigenous peoples' local knowledge.

Several major incidents show that environmental damage in Indonesia is often on the scale of “crimes against the earth.” However, how many perpetrators are actually prosecuted? Most perpetrators only receive administrative sanctions. In terms of ecological justice, such punishments seem disproportionate to the suffering caused.

A similar case occurred in Aceh, when PT Kallista Alam burned peatlands in the Rawa Tripa area, which is part of the Leuser Ecosystem. The court imposed fines and compensation amounting to hundreds of billions of rupiah, but the restoration of the ecosystem has never been fully completed.¹³ This case reflects that the national legal framework is still oriented

towards financial compensation, rather than ecological responsibility. In many cases, the perpetrators of environmental crimes are large corporations with the economic capacity to pay fines, so the sanctions do not have a deterrent effect. Meanwhile, forests, air, and water, which have no voice in court, continue to suffer without any real restoration.

This phenomenon has sparked an increasingly heated debate about the position of nature in the legal system. Until now, positive law, both at the national and international levels, has been anthropocentric, centered on humans. Nature has been viewed solely as a resource, not as an entity with intrinsic value. The law protects the environment because humans need it, not because nature itself has the right to be protected. This view is now being challenged by a new school of thought known as ecocentric jurisprudence, which views nature as part of a moral community on par with humans. In this view, destroying forests is tantamount to attacking the collective life of the earth, and is therefore a form of universal crime.

¹² kehutanan.go.id, “Hutan Dan Deforestasi Indonesia Tahun 2024,” kehutanan.go.id, 2025, <https://www.kehutanan.go.id/news/article-10>.

¹³ Lisa Ikhsana and Nabilla Alya Rahmah, “Civil Lawsuit Cases of Forest and Land Fires PT Kalista

Alam (Study of Meulaboh District Court Decision Number 12/PDT.G/2012/PN.MBO),” *Jurnal Scientia Indonesia* 7, no. 2 (October 30, 2021): 185–200, <https://doi.org/10.15294/JSI.V7I2.36152>.

The idea of ecocide arises in this context as a reflection of the need to redefine the relationship between humans, law, and nature. It is not only a new legal category, but also a symbol of a paradigm shift. Recognizing ecocide means recognizing that the earth has the right not to be destroyed, that perpetrators of environmental damage are not only guilty to the state, but also to all living beings who are victims. In a philosophical sense, the recognition of ecocide is a step towards environmental personhood, namely the recognition that nature is a legal subject with its own dignity.¹⁴

Indonesia, with its social, economic, and ecological complexities, is an important space for testing this idea. Its vast natural wealth makes Indonesia one of the most strategic points in the global conversation on ecological justice. However, this wealth is also a source of vulnerability. In the last two decades, the exploitation of natural resources has taken place on an unprecedented scale. From the forests of Kalimantan to the coasts of Sulawesi, from nickel mines to palm oil plantations, the land and water have been silent witnesses to destruction that is often legalized in the name of national development. In such a situation, ecocide is not only a global issue,

but also a mirror for national law to look at itself, to see whether it is still capable of protecting life, or whether it has become a tool that justifies destruction.

Amidst these challenges, there is a new awareness that environmental damage can no longer be viewed as an administrative violation. It is a form of structural violence that causes suffering for communities, future generations, and other living beings. In many cases, ecological disasters are not accidents, but the result of conscious decisions by governments, corporations, or individuals who choose short-term profits over sustainable coexistence. When such decisions are made with full awareness of the risk of major damage, that is where ecocide takes shape.

The global context also shows a similar wave of awareness. Countries such as France, Belgium, and Spain have begun to adopt ecocide into their national laws. In the Pacific region, island nations such as Vanuatu and Samoa are pushing for amendments to the Rome Statute to recognize ecocide as the fifth international crime. They understand that for communities living on the front lines of the climate crisis, the destruction of ecosystems is not just an environmental problem, but an

¹⁴ M Müller-Perron, Maya Müller-Perron, and Paulina Habsburg, "Granting Nature Legal Rights: A Shift Towards an Ecocentric Conception of Nature

in Germany?," *The Maastricht Journal of Liberal Arts* 14 (September 19, 2023): 41–54, <https://doi.org/10.26481/MJLA.2023.V14.917>.

existential threat to their nations. This movement shows that the recognition of ecocide is not only a legal demand, but also a moral call for global civilization to take responsibility for the damage it has caused.

On a broader scale, the discussion of ecocide marks a transition from “law for humans” to “law for life.” It demands a change in thinking, from a paradigm of domination to a paradigm of sustainability. It rejects the old logic that separates humans from nature, and affirms that the two are ontologically interrelated. Thus, the recognition of ecocide is not only a matter of criminal law, but also an ethical statement about the direction of civilization. It questions whether humans are still capable of regulating themselves in a just relationship with the earth, or whether they will become the main perpetrators of their own extinction.

Indonesia, as the country with the third largest tropical forest in the world and one of the largest emitters of deforestation, plays an important role in this new chapter of global environmental law. The recognition of ecocide in the national legal system would be a strategic step not only to strengthen environmental protection, but also to affirm Indonesia's position as a country that is responsible for the future of the earth. However, this step requires political courage, legal reform, and ethical

awareness that environmental protection is not merely an economic issue, but a matter of intergenerational justice.

Amidst the increasingly apparent climate crisis, the idea of ecocide has emerged not as green romanticism, but as a response to the failure of laws that have long treated nature as an object of exploitation. It forces the law to transform from an instrument of power into an instrument of life preservation. In this context, the discussion of ecocide is not merely academic discourse, but also a moral and legal call for humanity to correct the course of its own history before it is too late.

RESEARCH QUESTIONS

1. How has the concept and legal basis of ecocide as an international crime developed in international criminal law?
2. To what extent is environmental criminal law in Indonesia effective in combating major ecological damage and related to the concept of ecocide?
3. How can Indonesian environmental criminal law be reformed through the integration of the principle of ecocide to be in line with ecological justice and international norms?

RESEARCH METHOD

This study uses a normative legal method that places law as a system of norms,

principles, and principles that regulate social life and form the basis for environmental protection. This approach was chosen because the issue under review, namely the urgency of recognizing ecocide as the fifth international crime and its relevance to Indonesian environmental criminal law, is conceptual and normative in nature, rather than empirical. Within this framework, this study combines three main approaches, namely conceptual, comparative, and futuristic.¹⁵ The conceptual approach is used to explore and understand the meaning, elements, and basic principles of ecocide in international legal literature and doctrine. The comparative approach is used to compare regulations and practices in several jurisdictions, such as France, Belgium, and Pacific countries that have regulated or proposed the recognition of ecocide in their legal systems. while the futuristic approach aims to formulate the direction of environmental criminal law reform in Indonesia so that it is more responsive to global developments and future ecological challenges. This type of research is descriptive-prescriptive in nature¹⁶,

meaning that it systematically describes the existing legal conditions while providing normative recommendations for the formation of ideal laws.

Sources of legal materials consist of primary legal materials in the form of national legislation such as Law No. 32 of 2009 concerning Environmental Protection and Management, Law No. 1 of 2023 concerning the Criminal Code, as well as international legal instruments such as the Rome Statute of the International Criminal Court (1998), secondary legal materials such as books, journals, reports from international institutions, and tertiary legal materials such as legal dictionaries and encyclopedias. Data analysis was conducted using content analysis to interpret legal provisions, identify normative gaps, and evaluate the adequacy of positive law in relation to the phenomenon of ecocide.¹⁷ Through this approach, the study seeks to combine normative analysis and theoretical reflection in order to find a legal basis that is capable of protecting the environment in an ecologically just manner and oriented towards intergenerational responsibility,

¹⁵ Zico Junius Fernando et al., "Advancing Ecological Justice through the Integration of Eco-Religion in Criminal Law Reform," *Journal of Law, Environmental and Justice* 3, no. 2 (July 27, 2025): 160–200, <https://doi.org/10.62264/JLEJ.V3I2.133>.

¹⁶ Zico Junius Fernando and Muhammad Imanuddin, "Green Financial Crime in The Perspective of Islamic Law," *Khazanah Hukum* 7,

no. 2 (June 28, 2025): 206–22, <https://doi.org/10.15575/KH.V7I2.39211>.

¹⁷ Ria Anggraeni Utami & Zico Junius Fernando Agusalim, "Green Victimology: Sebuah Konsep Perlindungan Korban Dan Penegakan Hukum Lingkungan Di Indonesia," *Bina Hukum Lingkungan* 7, no. 1 (October 2022): 60–79, <https://doi.org/10.24970/BHL.V7I1.302>.

thereby producing a criminal law construct that is not only repressive but also restorative to ecological life.

RESULT AND DISCUSSION

1. Conceptual and Legal Development of the Recognition of Ecocide as an International Crime under International Criminal Law

The idea of ecocide arose from global awareness of the inability of international law to respond to widespread, severe, and long-term environmental damage to life on earth. The term ecocide was first used politically by Swedish Prime Minister Olof Palme at the United Nations Conference on the Human Environment in Stockholm in 1972.¹⁸ He condemned the ecological destruction that occurred in Vietnam due to the use of napalm bombs and herbicides, calling it “a crime sometimes described as ecocide.” From this point on, ecocide began to be understood as a crime against the earth parallel to genocide against humanity, even though it has not yet gained legal legitimacy within the framework of international law. In the 1970s–1990s, the discourse on ecocide developed through the writings of environmental legal thinkers such as Richard Falk and Arthur Galston,

who emphasized the need for international mechanisms to punish massive environmental destruction, especially that carried out by states or corporations on a large scale.¹⁹ However, the dynamics of international politics during the Cold War and the dominance of the anthropocentric paradigm in international criminal law meant that this idea was not immediately accommodated in formal international agreements.

The conceptual transformation of ecocide began to gain new momentum in the 21st century, along with increasing global awareness of the climate crisis and ecological justice. In this context, there has been a strong push from civil society and academics to expand the jurisdiction of the International Criminal Court (ICC) to include ecocide as a fifth core crime, alongside genocide, crimes against humanity, war crimes, and crimes of aggression. One important milestone in this development was the establishment of the Independent Expert Panel for the Legal Definition of Ecocide by the Stop Ecocide Foundation in 2020, led by Philippe Sands (University College London) and Dior Fall Sow (former prosecutor in Senegal).²⁰ In

¹⁸ Müller-Perron, Müller-Perron, and Habsburg, “Granting Nature Legal Rights: A Shift Towards an Ecocentric Conception of Nature in Germany?”

¹⁹ Somabha Bandopadhyay, “Peace and Sustainability from The Lens of Rights of Nature: Arguing the

Case for Ecocide,” *E3S Web of Conferences* 585 (November 7, 2024): 1–5, <https://doi.org/10.1051/E3SCONF/202458503006>.

²⁰ Sailesh Mehta and Prisca Merz, “Ecocide – A New Crime Against Peace?,” *Environmental Law Review*

2021, this panel proposed an official definition of ecocide as: “unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.” This definition contains four main elements: unlawful or wanton acts, committed with knowledge, causing severe damage that is either widespread or long-term. This formulation reflects a balance between objective and subjective aspects, and affirms that the environment has its own legal value, not merely a derivative interest of human rights.

Within the existing framework of international law, ecocide has normative roots that can be found in a number of legal instruments, although it has not yet been recognized as a core crime in its own right. For example, Additional Protocol I of 1977 to the Geneva Conventions stipulates that acts causing widespread, long-term, and severe environmental damage during armed conflict are prohibited (Articles 35(3) and 55). Similarly, the 1998 Rome Statute in Article 8(2)(b)(iv) lists acts that “cause extensive and long-term damage to the natural environment” as war crimes, but only in the context of war and with a very high threshold. Thus, environmental

damage that occurs in times of peace, such as that caused by industrial exploitation, large-scale mining, or massive deforestation, cannot be covered by the jurisdiction of the ICC. This is where ecocide is proposed to close this legal loophole, namely by recognizing large-scale ecological destruction as an international crime in both times of peace and war.

The push to recognize ecocide as an international crime gained momentum when several Pacific nations, including Vanuatu, Fiji, and Samoa, formally proposed amendments to the Rome Statute to the Assembly of States Parties (ASP) of the ICC in 2023. These small nations are leading the charge because they are directly experiencing the impacts of climate change and environmental degradation that threaten their very existence as island nations. This movement reflects the dimension of global justice, whereby countries that contribute the least to environmental damage bear the heaviest burden of the ecological crisis. The recognition of ecocide is not only a legal step, but also a moral and political act to uphold international responsibility for systemic ecological crimes.

17, no. 1 (March 2015): 3–7, <https://doi.org/10.1177/1461452914564730>.

The recognition of ecocide as an international crime is not only a legal step, but also a moral and political act that reflects a paradigm shift in how humans understand their responsibility towards nature. Theoretically, this idea is rooted in a number of schools of legal and environmental philosophy that place nature as a moral and legal entity worthy of protection, not merely because of its instrumental value to humans, but because its existence itself has intrinsic value. Theories such as Earth Jurisprudence, Deep Ecology, and Green Criminology form the intellectual foundation for efforts to criminalize systemic environmental destruction at the global level, emphasizing that crimes against nature are crimes against life itself.

From the perspective of Earth Jurisprudence, as proposed by Thomas Berry and Cormac Cullinan, the modern legal system has failed because it places humans above nature, creating an anthropocentric system that treats the earth merely as an economic resource. The recognition of ecocide seeks to reverse this hierarchy by acknowledging that the earth has the right to exist, thrive, and regenerate.

In this paradigm, the law no longer functions solely to protect human interests, but also to maintain the balance of ecosystems that sustain life. Thus, ecocide becomes a form of legal affirmation of the rights of nature and the embodiment of the principle of intergenerational equity, namely the moral responsibility to preserve the earth for future generations.²¹

In the perspective of Green Criminology, as developed by Michael Lynch, Nigel South, and Rob White, environmental crime cannot be understood solely from the perspective of violations of positive law, but must be seen as widespread social harm.²² Ecological crimes are often committed by large corporations and even facilitated by the state through exploitative development policies. Therefore, the concept of ecocide was introduced to transcend the positivistic boundaries of criminal law and highlight the structural dimensions of environmental crimes involving global economic and political power. Here, the recognition of ecocide is a form of resistance against corporate and state impunity, as well as a call to expand the concept of justice to the ecological realm. In this framework, ecocide is not

²¹ Maria Akchurin, "Constructing the Rights of Nature: Constitutional Reform, Mobilization, and Environmental Protection in Ecuador," *Law & Social Inquiry* 40, no. 4 (September 1, 2015): 937, <https://doi.org/10.1111/LSI.12141>.

²² Vincenzo Ruggiero and Nigel South, "Green Criminology and Dirty Collar Crime," *Critical Criminology* 18, no. 4 (December 21, 2010): 251–62, <https://doi.org/10.1007/S10612-010-9122-8/METRICS>.

merely a criminal act, but a manifestation of structural violence against nature that must be held accountable legally and morally.

The theory of ecological justice is also relevant in explaining the urgency of recognizing ecocide. This theory, rooted in the thinking of Robyn Eckersley and Andrew Dobson, rejects the idea that justice only applies between humans (interspecies justice). Ecological justice demands that laws and public policies take into account interspecies balance and the integrity of ecological systems. Thus, ecocide is seen as a serious violation of ecological justice because it destroys the ability of natural systems to support life in its various forms on earth. Through this perspective, the recognition of ecocide at the international level serves as a mechanism to correct the structural imbalance between an exploitative global economy and a fragile global ecology.

From the perspective of moral philosophy and environmental ethics, this idea is also intertwined with Hans Jonas' theory of moral responsibility in his work *The Imperative of Responsibility* (1979). Jonas argues that technological progress has given humans such great power that it has created a new moral obligation: to be responsible for the long-term impact of their actions on the sustainability of life on

earth. This principle of responsibility then becomes the ethical basis for the criminalization of ecocide. The recognition of ecocide means expanding the classic moral principle of “do no harm to others” to “do no harm to the earth,” because ecological damage will ultimately threaten the survival of humanity itself. In this context, ecocide is not only a violation of positive law, but also a violation of universal moral obligations.

In addition, contemporary international legal theory places the recognition of ecocide as a continuation of the evolution of *jus cogens* norms, which are fundamental norms that bind all countries without exception. Just as genocide and crimes against humanity are recognized as violations of universal human values, ecocide has emerged to emphasize that widespread and prolonged ecological damage is also a violation of the common concern of humankind. In this context, the recognition of ecocide under the Rome Statute will not only strengthen the legitimacy of international law, but also expand the scope of legal protection to non-human entities. This effort is in line with the views of Philippe Sands and Dior Fall Sow in the Independent Expert Panel for the Legal Definition of Ecocide (2020–2021), who stated that this recognition is a normative step to expand the boundaries of

international justice from anthropocentric justice to ecocentric-justice.

Politically, the recognition of ecocide reflects a shift in global moral authority from economic interests to planetary responsibility. Pacific island nations such as Vanuatu, Fiji, and Samoa have pioneered the push for the recognition of ecocide at the International Criminal Court (ICC) as a form of protection for their existence, which is threatened by climate change and the exploitation of marine resources. This step is an expression of global ecological solidarity and an effort to uphold climate justice through international criminal law instruments. This means that ecocide is not only a technical legal issue, but also a political representation of the struggle of vulnerable countries against the structural injustices produced by global capitalism.

In addition to state encouragement, various international organizations, academics, and legal figures have also strengthened the normative basis for the recognition of ecocide. Philippe Sands, for example, argues that international law needs to move away from an anthropocentric framework and recognize the environment as a subject of international law with intrinsic value. Polly Higgins, an environmental lawyer from the UK, even champions ecocide as “the missing crime against peace.” Her thinking has been a major inspiration for

the Stop Ecocide Foundation movement, which now collaborates with international institutions, academics, and parliamentarians in various countries. Public support for the recognition of ecocide is also growing. A 2021 YouGov survey in the European Union showed that more than 60% of respondents supported the criminalization of ecocide at the international level. In addition, the European Parliament, through resolutions in 2021 and 2023, officially recognized ecocide as a crime that should be included in the EU Directive on Environmental Crimes.

Legally, the recognition of ecocide also brings about a paradigm shift in the subject and object of international crimes. While crimes such as genocide or crimes against humanity focus on violations against humans, ecocide expands the scope of protection to include non-human entities of nature, species, and ecosystems. This marks a shift from the concept of anthropocentric justice to ecocentric justice. Within this framework, perpetrators of ecocide are not only considered to have violated human interests, but also to have violated the global ecological balance. In addition, criminal liability mechanisms in ecocide have the potential to cover both individuals and corporations, given that much of the major ecological damage is actually the

result of decisions made by transnational corporations. This means that ecocide challenges the classic paradigm of international law, which has so far only focused on individual criminal responsibility.

However, despite growing moral and academic support for ecocide, political and legal obstacles remain significant. The process of amending the Rome Statute requires the support of two-thirds of the 123 member states, with a lengthy ratification process and the possibility of rejection by large industrialized countries that have a high economic interest in the exploitation of natural resources. On the other hand, the issue of definition is also a matter of debate, particularly regarding the threshold of damage that can be classified as ecocide, as well as the criteria for proving intent or wantonness. Nevertheless, this discourse remains important because it opens up space for the evolution of international criminal law that is more adaptive to global ecological challenges.

The conceptual and juridical development of ecocide in international criminal law points to a new direction for global legal civilization. It was born out of an awareness of the limitations of existing laws, reinforced by moral imperatives, and is now moving towards formal legal legitimacy. This idea marks a fundamental

change in the relationship between humans and the environment in the legal system, from a paradigm of protecting humans to protecting life itself. Although the journey towards official recognition is still long, ecocide has become a symbol of the transition towards a more ecologically and universally just international legal order in protecting the earth from destruction.

2. Regulation and Effectiveness of Environmental Criminal Law in Indonesia in Addressing Major Ecological Damage and Its Relationship to the Concept of Ecocide

The environmental criminal law system in Indonesia was essentially born out of an awareness of the need to balance economic development and the protection of nature conservation. However, even though normative instruments are available, the existing legal framework has not been able to address the complexity of systemic and intergenerational ecological damage. Since the enactment of Law No. 32 of 2009 on Environmental Protection and Management (PPLH), the state has formally established that acts that cause pollution or environmental destruction are criminal offenses. The criminal provisions stipulated in Articles 97 to 120 of the PPLH Law provide a legal basis for the enforcement of sanctions against individuals and

corporations. However, the formulation of these articles is still administratively oriented, emphasizing violations of environmental permits or technical obligations, and has not touched on the substantive dimension of ecological crimes as contained in the concept of ecocide, namely damage that exceeds the natural environment's ability to recover.

Conceptually, Indonesian environmental criminal law is still based on an anthropocentric paradigm. The environment is positioned as an object of protection for the benefit of humans, not as an entity with intrinsic value. As a result, criminal elements in the Environmental Protection and Management Law tend to link actions to their impact on humans, such as health, the economy, or quality of life, rather than on the ecosystem itself. However, ecocide stems from the view that nature has moral and legal rights not to be destroyed. This overly human-centric view has an impact on the weak effectiveness of law enforcement, because proving the causality between an act and human harm is often difficult, while the actual ecological impact, which is much broader, is not used as the basis for criminal liability.

The vagueness of this paradigm is also reflected in the legal reform through Law No. 1 of 2023 on the new Criminal Code (KUHP). Although the Criminal Code

includes a special chapter on environmental crimes, namely in Articles 280 to 283, the substance of the regulations has not brought about any significant breakthroughs. The formulation of these norms is still identical to those stipulated in the Environmental Protection and Management Law (UU PPLH) and does not recognize large-scale ecological destruction as an extraordinary crime with global impacts. The Criminal Code also does not comprehensively regulate the mechanism of corporate criminal liability, even though empirically, most perpetrators of environmental destruction in Indonesia are legal entities or large companies in the mining, plantation, and energy sectors. The absence of norms that explicitly place corporations as subjects of ecological crimes means that the law enforcement system tends to stop at administrative sanctions or fines, without reaching the corporate decision-making structures that are at the root of the problem.

In terms of implementation, the effectiveness of environmental criminal law in Indonesia is still far from ideal. Various major cases show that even though environmental damage has reached extraordinary levels, the criminal sanctions imposed are still light or even not enforced. The 2015 forest and land fires are a concrete example, where fires that ravaged millions of hectares in Sumatra and

Kalimantan caused losses of more than a trillion rupiah and caused a transnational haze disaster, but the majority of the perpetrators were only subject to civil or administrative sanctions. Similarly, the 2018 oil spill in Balikpapan Bay, which caused deaths and large-scale marine pollution, was resolved through compensation mechanisms rather than criminal prosecution. These facts show that the national legal system does not yet consider large-scale environmental destruction to be a crime equivalent to other serious crimes such as corruption or crimes against humanity, even though in terms of impact, ecological damage causes long-term suffering that is no less serious.

Another obstacle that reduces the effectiveness of environmental criminal law is the difficulty of proving criminal intent (*mens rea*). In practice, many perpetrators hide behind the excuse of technical complexity and industrial risks, claiming that the damage caused was unforeseeable. On the other hand, the capacity of law enforcement agencies, such as environmental investigators, prosecutors, and courts, is still limited both scientifically and technically in handling environmental cases that require complex scientific evidence. Inter-agency coordination between the Ministry of Environment and Forestry (KLHK), the

police, and the prosecutor's office is also not yet effective, resulting in many cases ending at the investigation stage or not proceeding to prosecution. This situation highlights structural and institutional problems that weaken the implementation of environmental criminal law and create a space for impunity for perpetrators, especially large corporations.

In terms of substance, Indonesia's criminal justice system does not yet recognize the environment as a victim in its own right. In various provisions of legislation, environmental damage is still treated as an economic loss that can be remedied through financial compensation, rather than as a violation of ecological rights. This differs from the ecocentric justice approach, which places nature as an entity that has moral and legal rights to be restored. The absence of the concept of ecological victimhood in the national criminal justice system demonstrates the limitations of the legal perspective on the relationship between humans and nature. In many cases, communities affected by environmental damage are treated as secondary victims, while the destruction of the ecosystems that are their source of livelihood does not receive direct protection from the law.

Another factor that weakens the effectiveness of environmental criminal law is the dominance of economic and

political interests in the law enforcement process. Perpetrators of environmental crimes who have financial power and political connections often receive protection or leniency. In the case of illegal mining in East Kalimantan and Papua, for example, reports from civil society organizations indicate the involvement of security forces and local officials in the chain of permits and distribution of mining products. This situation creates a serious conflict of interest, as law enforcement officials who are supposed to take action instead become part of the destructive system. As a result, criminal law loses its coercive power and becomes merely a symbol without the substantive power to uphold ecological justice.

In terms of criminal policy, the approach taken by the Indonesian government is still reactive. Law enforcement is only carried out after damage has occurred, rather than based on the principle of prevention. The Environmental Protection and Management Law (UU PPLH) and the Criminal Code (KUHP) do contain criminal penalties, but neither has strong preventive mechanisms to avoid major ecological damage. This contradicts the precautionary principle, which is a key principle in international environmental law, namely that countries must take preventive measures even when scientific evidence is incomplete, in order

to avoid serious or irreversible impacts. The absence of this principle demonstrates the weak synergy between national law and international standards, and shows that Indonesia's criminal justice system has not yet transformed towards the paradigm of caution that is central to ecological protection.

In judicial practice, efforts to expand the subject of criminal liability to corporations have actually begun, but their application has not been consistent. Several court decisions, such as in the cases of PT Kallista Alam in Aceh and PT Jatim Jaya Perkasa in Riau, have indeed affirmed corporate criminal liability. However, in many other cases, criminal liability stops at lower-level individuals within the company structure, while strategic decision-makers remain exempt from legal consequences. This inconsistency reflects the weak legal culture in treating environmental crimes as extraordinary crimes. In fact, when measured by their ecological and social impacts, environmental crimes should be treated as serious crimes that threaten the security of ecosystems and the lives of future generations.

The environmental criminal justice system in Indonesia is still in a transitional phase between an economic-oriented development paradigm and a more holistic ecological justice paradigm. Although legal

instruments are available, their effectiveness is still limited by structural weaknesses, legal culture, and normative orientations that have not shifted from anthropocentrism to ecocentrism. In these circumstances, the idea of ecocide is important to strengthen the moral and legal legitimacy of environmental protection in Indonesia. It can serve as a conceptual framework that demands the reformulation of norms, accountability mechanisms, and a more rigorous law enforcement system against major ecological crimes. Through the lens of ecocide, environmental criminal law becomes not only a tool to punish perpetrators, but also an instrument to maintain the sustainability of life and restore the balance of the national ecosystem, which is part of our global responsibility.

3. Environmental Criminal Law Reform in Indonesia through the Integration of Ecocide Principles to Build a Legal System that is Ecologically Just and in Line with International Norms

Updating environmental criminal law in Indonesia is an urgent necessity amid the increasing frequency and scale of ecological damage that can no longer be addressed through conventional legal approaches. The legal paradigm that has been anthropocentric must evolve towards

an approach that places the environment as a legal subject with rights that must be protected. The principle of ecocide can serve as the normative and philosophical basis for this transformation, as it contains the idea that large-scale environmental destruction is not merely an administrative violation or economic crime, but a crime against life itself. The integration of ecocide into the Indonesian criminal law system will force fundamental changes on three levels simultaneously: conceptual, structural, and functional, all of which aim to build a legal system that is ecologically just and oriented towards the sustainability of life.

At the conceptual level, the reform of environmental criminal law needs to begin with a reconstruction of the philosophical basis of national law. Pancasila and the 1945 Constitution actually contain strong ecological principles, particularly in Article 28H paragraph (1), which guarantees the right to a good and healthy environment, and Article 33 paragraph (3), which affirms that the earth, water, and natural resources are controlled by the state and used to the greatest extent possible for the prosperity of the people. However, in practice, these norms have not been translated into strict criminal policies against perpetrators of environmental destruction. Therefore, the integration of the principle of ecocide

requires a progressive interpretation of these constitutional values, namely that environmental protection is part of the protection of collective human rights and the state's obligation to maintain ecological balance. Within this framework, criminal law should not only serve to punish, but also to restore the relationship between humans and nature that has been damaged by excessive exploitation.

At the normative level, the most strategic direction for reform is to establish new criminal norms that explicitly recognize ecocide as an extraordinary crime within the national legal system. This norm can be adopted through amendments to Law No. 32 of 2009 on Environmental Protection and Management or included in the Criminal Code as a separate offense on par with other serious crimes. The formulation of the article must emphasize three key elements: first, the existence of acts that cause severe, widespread, or long-term environmental damage; second, the intent or gross negligence of the perpetrator with the knowledge that their actions have the potential to cause significant ecological impacts; and third, the obligation to restore the environment as part of criminal liability. Thus, the regulation of ecocide should not only emphasize the retributive aspect, but also integrate the principle of restorative ecological justice. The norm should also

include provisions on the criminal liability of corporations and authorized state officials, because in many cases ecological damage occurs as a result of structural decisions involving political and economic power.

Another important aspect of updating environmental criminal law is the expansion of the subjects of criminal liability. Current positive law still tends to focus on individual perpetrators in the field, while policy makers and corporations as legal entities often escape criminal prosecution. The principle of ecocide demands that this subject be expanded to include: (1) individuals who directly commit or order acts of ecological destruction, (2) corporations that profit from activities that cause environmental damage, and (3) public officials who abuse their authority by issuing permits or policies that result in large-scale ecological degradation. In this context, recognition of command responsibility or responsibility due to position is important, so that state officials cannot hide behind administrative procedures. Such arrangements have already been implemented in international criminal law, for example in the Rome Statute, which holds leaders or strategic decision-makers criminally responsible for crimes committed by their subordinates.

In addition to expanding the subject matter, updates to environmental criminal law also need to adopt more adaptive and collaborative law enforcement instruments. Ecologically just law enforcement is not sufficient with a repressive approach through criminal courts, but must involve prevention, restoration, and community participation mechanisms. For example, strengthening the environmental court system, which has special competence to examine cases with complex ecological dimensions, including the use of multidisciplinary scientific evidence such as climate data, satellite imagery, and ecosystem impact analysis. In addition, it is also necessary to develop ecological reparation mechanisms, namely criminal sanctions that are not only in the form of fines or imprisonment, but also the obligation to directly restore the damaged environment. This model is in line with practices in several countries, such as France, which in the Law on the Fight Against Waste and the Circular Economy (2021) recognizes ecological restoration orders as sanctions for perpetrators of severe environmental damage.

The next update should focus on strengthening the precautionary principle and preventive justice in criminal law policy. This principle requires the state not to wait for perfect scientific evidence

before taking action against activities that have the potential to seriously damage the environment. In the Indonesian context, the application of this principle means that there is a need for legal mechanisms that enable law enforcement officials to stop high-risk activities before they cause permanent damage. The application of the precautionary principle can also be realized through the obligation of criminal risk assessment for large projects that have the potential to cause ecological impacts, such as mining, fossil fuels, and large-scale infrastructure development. Thus, criminal law does not only serve as a reactive tool after damage has occurred, but also as an early warning system that protects the sustainability of ecosystems.

In addition to strengthening prevention, the reform should also focus on integrating national laws and international norms. As a party to the Rome Statute, Indonesia has a strategic opportunity to support amendments that add ecocide as a core crime under the jurisdiction of the International Criminal Court. This step will not only strengthen Indonesia's position in global environmental diplomacy, but also provide moral legitimacy for adopting similar norms at the national level. This integration can be done through a mechanism of harmonization of law, namely the alignment of ecocide principles

with provisions in the Criminal Code and the Environmental Protection and Management Law, so that the two complement each other. In addition, Indonesia can also adopt international legal provisions that have been implemented in several jurisdictions, such as extended liability for transnational corporations or cross-border ecological crimes that allow prosecution for transnational damage, such as marine pollution or regionally impactful haze.

From an institutional perspective, the renewal of environmental criminal law must be accompanied by reform of law enforcement that is based on integrity and scientific knowledge. It is necessary to increase the capacity of investigators and prosecutors in understanding the technical and scientific aspects of ecological damage. The use of environmental forensic technology, satellite-based surveillance systems, and the integration of data from environmental research institutions are important steps to strengthen evidence in ecological cases. In addition, collaboration with civil society and local communities also needs to be expanded, as they are often the first to witness or be affected by environmental crimes. Public involvement not only strengthens oversight, but also ensures that law enforcement is transparent and in the interests of the ecosystem, rather

than short-term political or economic interests.

The direction of environmental criminal law reform through the integration of the principle of ecocide ultimately aims to establish a legal system that views the earth as a moral and legal subject. In an ecologically just system, the environment is no longer treated as a passive victim, but as an entity that has the right to be restored. This principle is in line with the spirit of the Indonesian constitution and global commitments to the Sustainable Development Goals (SDGs), particularly goal 13 (climate action), goal 14 (life below water), and goal 15 (life on land). Through this integration, Indonesian criminal law can evolve from merely a tool of punishment into a visionary instrument of ecological protection, a legal system that upholds justice not only for humans, but for all life on earth.

CONCLUSION

The development of the idea of ecocide as the fifth international crime marks a major paradigm shift in the way the law understands and protects life on earth. From a mere moral discourse, this concept has now developed into a global legal necessity amid increasing systemic, cross-border ecological damage that threatens the sustainability of life. Indonesia, as a

megabiodiversity country, has a strategic position and a major responsibility in this agenda. Although national legal instruments such as Law No. 32 of 2009 on Environmental Protection and Management and the 2023 Criminal Code have regulated environmental crimes, their substance is still confined to an anthropocentric and administrative paradigm, which has not been able to reach the dimensions of major ecological crimes as idealized by the concept of ecocide. The effectiveness of environmental criminal law in Indonesia is still limited by structural, political, and cultural weaknesses in the legal system. Law enforcement tends to be reactive and inconsistent, while corporations, as the main actors in many cases of environmental destruction, often escape commensurate criminal responsibility. This situation shows that the national legal system does not yet have the paradigmatic or institutional strength to deal with complex and transnational forms of modern ecological crime. In this context, the integration of the principle of ecocide is not only relevant but also urgent as a basis for building a more just, firm, and ecologically oriented environmental criminal law system. Future reforms to environmental criminal law must be comprehensive: from a philosophical reconstruction that affirms ecological values in Pancasila and the 1945 Constitution, to the establishment of new

criminal norms that recognize ecocide as an extraordinary crime, to the strengthening of law enforcement institutions based on science, transparency, and integrity. The principle of ecocide opens up opportunities for Indonesian law to transcend the limits of anthropocentrism and uphold ecocentric justice, a form of justice that recognizes the rights of nature to live and recover from damage. Through this step, Indonesian criminal law will not only become an instrument of punishment, but also a means of ecological healing, as well as a manifestation of constitutional and moral responsibility towards future generations. The recognition and integration of ecocide into the national legal system is not merely a legal agenda, but also an ethical and civilizational step: a commitment to position Indonesia as a pioneer of ecological justice on the global stage, which no longer merely punishes perpetrators, but also protects the sustainability of the earth as a shared home for all life.

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