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REFORMULATION OF GREEN VICTIMOLOGY ARRANGEMENTS IN THE LAW OF ENVIRONMENTAL PROTECTION AND MANAGEMENT THAT BETTER GUARANTEES LEGAL PROTECTION FOR THE ENVIRONMENT

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Abstract

This research is motivated by Law Number 32 of 2009 on Environmental Protection and Management, which, in fact, remains limited accommodating the concept of green victimology in the regulation and handling of environmental crimes. Given the prevalence of environmental crimes whose perpetrators are not punished proportionately to the human and non-human losses caused, it is important to question the legal implications of applying the concept of green victimology to the legal protection of environmental victims in the Environmental Protection and Management Law and the regulation of green victimology in the Environmental Protection and Management Law that Better Ensures Legal Protection for the Environment. The type of research used by the author is normative legal research with an explanatory nature. Legal materials for analysis were obtained from primary legal sources in the form of criminal and environmental laws, as well as secondary legal materials from literature on environmental crime and green victimology. The research was conducted through literature review, using a legal and comparative approach, and analyzed qualitatively. The legal implications of applying green victimology in the Environmental Protection and Management Law (UUPPLH) encourage reforms in the definition of victims, the right to sue, recovery mechanisms, as well as sanctions and law enforcement that are more comprehensive and ecological justice. the regulation of Green victimology in the UUPPLH to ensure legal protection for the environment can begin with the reconstruction/reformulation of the UUPPLH by expanding the definition of victims to include the environment as a victim with the right to protection and selected as a subject of environmental law enforcement, up to expanding the definition of victims by including the environment as a victim with the right to protection and selected as a subject of environmental law enforcement.

Keywords: ***Green Victimology; UUPPLH; Legal Protection; Victims.***

INTRODUCTION

Environmental crimes are becoming increasingly complex and varied, and should be a major focus of law enforcement efforts in Indonesia. Although Law No. 32 of 2009 concerning the Protection and Management of the Environment (UUPPLH) does not explicitly define environmental crimes, this law includes various forms of acts that damage and pollute the environment committed by individuals and corporations (Ashabul Kahfi, 2014). This indicates that the environmental crimes referred to in the Environmental Protection and Management Law constitute legal violations that directly impact the environment. Since the establishment of the Directorate General of Law Enforcement at the Ministry of Environment and Forestry (KLHK) in 2015, up to 2023, there have been 7,870 reports handled (Kompas.id, 2023). However, this data does not clearly indicate the number of cases that have resulted in criminal prosecution. There is still widespread disregard for legal obligations, such as the completeness of environmental impact analysis (EIA) documents and efforts to manage and monitor the environment (UKL-UPL). The Environmental Protection and Management Law (UU PPLH) actually grants environmental organizations the right to sue, as stated in Article 92(1). Environmental

organizations are authorized to sue in the name of preserving environmental functions, though in practice this has not yet been fully effective. Based on data from the Supreme Court for 2020–2023, around 76.9% of defendants in environmental cases were found guilty, with Riau recorded as the region with the highest number of cases (hukumonline.com, 2025). This indicates that environmental crimes are indeed occurring on a massive scale and require more serious attention, especially given their far-reaching impacts, ranging from public health issues to economic losses and the loss of biodiversity. These impacts are not only felt by humans. Environmental damage is also felt by non-human beings such as plants, animals, and the entire natural ecosystem (Handar Subhandi Bakhtiar, 2024). Unfortunately, Indonesia's legal system does not yet recognize non-human beings as legitimate victims. However, within the framework of green victimology, both humans and nature have equal rights as legal subjects under natural law. This emphasizes that all forms of life have equal value, both ethically and legally (Agus Salim et al., 2022).

The concept of green victimology places the environment as a victim of crime on par with humans. This concept has been progressively adopted by New Zealand through the Te Urewera Act 2014, which grants the Te Urewera Forest area legal subject status. This law recognizes that the area—along with all forms of life within it has rights that must be protected by law, on par with humans and other legal entities (Rob White, 2018). New Zealand has even established various sanctions and criminal penalties for actions that damage the environment for economic gain, demonstrating a comprehensive form of protection. Indonesia can learn from this approach, especially in harmonizing a legal system that treats the environment not only as an object of protection but as a victim that must receive equal justice. Although Article 90 Paragraph (1) of the UUPPLH regulates the government's authority to file lawsuits for environmental damage, it still does not accommodate the principle of ecocentrism justice that recognizes the environment as a legitimate victim. Therefore, there needs to be a reformulation of more progressive legal regulations, including explicit recognition of environmental rights in national law. The urgency of adopting green victimology in the Environmental Protection and Management Law can be understood from several aspects:

1. Expanding the definition of victims: This concept does not only consider humans as victims of environmental crimes, but also other living beings such as animals, plants, rivers, and ecosystems as a whole. This approach reflects ecological justice that places the environment as a subject of law (Anisa Mutiara, 2022).
2. Promoting more inclusive and holistic policies: Currently, legal protection for non-human victims in Indonesia is still very limited. Green victimology can encourage policy reform towards a fair and sustainable legal system, oriented towards harmony between humans and nature (Agus Salim, 2022).
3. Learning from other countries: Germany, for example, has incorporated the principle of environmental protection into its constitution (German Grundgesetz, 2022 amendment). This provides an example that the environment can and should be the highest legal priority (Iis Isnaeni Nurwanty and Wahyu Yun Santoso, 2022).
4. Raising collective awareness: This victim-based approach will strengthen community participation in protecting the environment and increase government attention to ecological protection.

However, there are still various gaps in Indonesian legal regulations regarding the recognition of non-human victims, such as the non-recognition of the rights of forests, rivers, and certain species as adopted in the ecocentrism law approach. This results in uneven legal protection, especially for indigenous peoples who are often the main victims of environmental damage. In addition, there are no mechanisms in place to protect witnesses and environmental defenders, and there is a lack of an ecology-based restorative justice approach. From all these issues, it can be concluded that the current legal approach in Indonesia is not yet fully oriented towards ecological justice and holistic protection of the environment. Therefore, the author proposes the need to reformulate the Environmental Protection and Management Law (UU PPLH) to explicitly accommodate the concept of green victimology, thereby protecting the environment with equal status as a victim, while ensuring intergenerational justice and protection for other living beings.

LITERATURE REVIEW

The importance of prior research lies in its ability to identify similarities and differences between the study to be conducted and previous research, ensuring that the issues raised have not been discussed identically at other times and places. This is crucial to avoid duplication and demonstrate the novelty and urgency of the research. As part of their commitment to academic integrity at Brawijaya University, authors are required to conduct this review to prevent plagiarism and highlight the added value of their contributions. The research to

be conducted is titled "Reformulation of Green Victimology Regulations in the Environmental Protection and Management Law to Better Ensure Legal Protection for the Environment." Based on a comprehensive search, no other research has the exact same focus. Therefore, comparisons were made with studies that have similar themes, particularly those related to green victimology. There are three relevant theses for comparison. The first thesis by Zaenal Abdi (2022) discusses the qualification of environmental crimes (ecocide) as international crimes and their enforcement. The similarity lies in the focus on environmental protection within the context of environmental crimes, but the difference is that Zaenal's thesis emphasizes ecocide as an international crime, while this study focuses more on the adoption of the concept of green victimology for the Environmental Protection and Management Law (UU PPLH). The second thesis by Leonardo Siregar (2019) examines the application of the polluter pays principle in environmental civil cases. Although both discuss the environment in the Environmental Protection and Management Law, this thesis still focuses on human victims, unlike this research, which also includes non-human victims in accordance with the concept of green victimology. Finally, the thesis by Frengky Ever Wambrauw (2021) analyzes the effectiveness of environmental law enforcement against PT. Medcopapua Hijau Selaras. Similar to the previous thesis, although it discusses the environment in the Environmental Protection and Management Law (UUPPLH), this study also only considers human victims, emphasizing the novelty of this research in integrating non-human victims into the framework of green victimology.

METHOD

The type of research used in this study is normative legal research with a focus on Law Number 32 of 2009 concerning Environmental Protection and Management, as well as other legal materials. The approaches used in this study consist of a legislative approach, a conceptual approach, and a comparative approach. The collection of legal materials was carried out through document or library studies, which were then analyzed qualitatively using deductive, inductive, systematic, hermeneutic, and case analysis methods.

RESULTS AND DISCUSSION

Legal Implications of Applying the Concept of Green Victimology to Legal Protection for Environmental Victims in the Law on Environmental Protection and Management

The development and advancement of industry have had a significant impact on the environment. This includes environmental damage that needs to be examined in the context of the victim's position in victimology, as it is relevant to protecting the environment. Unfortunately, traditional victimology studies still tend to focus on human victims, even though reality shows that environmental damage also causes suffering to non-human entities such as animals, plants, rivers, and ecosystems as a whole. The limitations of the anthropocentric paradigm in victimology have led to the emergence of a new concept known as green victimology. Green victimology has emerged as a branch of victimology that expands the definition of victims beyond humans to include other living beings and ecosystems that suffer damage as a result of environmental crimes. Christopher Williams (1996) is considered one of the pioneers who introduced the concept of environmental victimology, which later evolved into green victimology (Daffa Prangsi Rakisa Wijaya Kusuma, 2024). Green victimology itself is a new branch of modern criminology research that expands its field of study and focuses on environmental crimes (Angkasa, 2020).

Garry Potter conceptualizes the scope of green criminology in two ways: first, a series of acts directly related to environmental issues; and second, the damage or loss caused as the basis for defining an act as a crime (Garry Potter, 2010). Garry Potter's scope of green victimology highlights the causes and consequences of environmental crimes themselves. In other words, the first scope provides a theoretical framework explaining why environmental damage occurs, while the second scope focuses on how such damage is recognized and addressed legally. In the context of criminal law, green victimology also emphasizes the importance of applying sanctions that are not only repressive but also restorative, such as environmental restoration (reparation) involving various stakeholders, including affected communities and environmental institutions. The urgency of green victimology is increasingly felt amid the rise of environmental crimes that are often ignored or receive insufficient serious attention from the legal system and public policy. In its development, experts such as Rob White and Matthew Hall have expanded this study by emphasizing the importance of considering non-human victims in victimology studies (Angkasa, 2020). Green victimology emerges as an interdisciplinary approach that places environmental victims, both human and non-human, at the center of attention within the legal protection system. With the increasing complexity of environmental crimes and growing awareness of the

importance of ecological justice, the need for comprehensive and responsive regulations has become increasingly urgent. The legal implications of applying green victimology to the legal protection of environmental victims under the Environmental Protection and Management Law include:

a. The Development of Environmental Law in Indonesia from a Classical Approach to a Modern Approach in the Context of Green Victimology.

Based on its orientation, environmental law is divided into modern environmental law and classical environmental law. Modern environmental law formulates rules and norms aimed at controlling human behavior in order to protect the environment from damage and deterioration, thereby ensuring that the environment is preserved and can be used sustainably by current and future generations. Conversely, classical environmental law places greater emphasis on regulating norms and provisions aimed at ensuring the maximum utilization and exploitation of natural resources through various means and human ingenuity, even if only for a short period of time (Koesnadi Hardjasoemantri and Harry Supriyono (2014). The Environmental Protection and Management Law (UUPPLH) in Indonesia is one of the early examples of environmental law in Indonesia that still has limitations in comprehensively addressing environmental issues. This can be seen in several notes from the Environmental Law (UULH), one of which is that the UULH only regulates environmental management in general terms and is not yet operational, so its implementation requires additional implementing regulations to be effective (Ketut Meta, 2015). Although the UUPPLH has provided a more comprehensive legal framework, legal protection for victims of environmental damage, both human and non-human, still requires more tangible strengthening. In this context, the application of the concept of green victimology is highly relevant as a new approach that places environmental victims at the center of legal protection, not merely as objects of damage. Thus, the integration of green victimology into Indonesia's environmental legal system can strengthen legal protection for victims of environmental damage and encourage fairer and more effective law enforcement.

b. Legal Implications of the Application of Green Victimology in the Legal Protection of Victims of Environmental Damage in the UUPPLH

Several indicators of the application of green victimology in the UUPPLH that have legal implications for environmental law enforcement in Indonesia include the expansion of the definition of victims, the expansion of the right to sue, the strengthening of recovery and compensation mechanisms, and the reform of sanctions and law enforcement. The limited definition of victims in the UUPPLH means that the environment cannot yet be categorized as a victim of environmental crimes. Therefore, the expansion of the definition of victims in the context of green victimology has very important legal implications for the legal protection of environmental victims in the Environmental Protection and Management Law. The concept of green victimology requires recognition that victims are not only humans who suffer direct losses, but also other living beings and ecosystems that are an integral part of the environment. This necessitates a shift in the legal paradigm of environmental law, which has traditionally been anthropocentric, toward an ecosentric approach that acknowledges the intrinsic value of every component of the environment.

Furthermore, the right to sue is also essential in environmental protection in Indonesia because it provides a clear legal space for the government, environmental organizations, and the public to actively file lawsuits against perpetrators of environmental pollution or destruction. The Environmental Protection and Management Law (UUPPLH) is still selective suit and injunctive suit, meaning that lawsuits are limited to certain actions without broad compensation claims, so that victim protection is more normative and administrative than substantive. Therefore, after expanding the definition, it is necessary to accommodate the right to sue for the government, environmental organizations, and the public (broader legal standing). Not only does the Environmental Protection and Management Law (UUPPLH) regulate the right to sue in greater detail, but it also provides more detailed explanations regarding the mechanisms for civil and criminal lawsuits (claims).

Regarding the mechanisms for restoration and compensation in the UUPPLH, one of them is regulated through Article 119 of the UUPPLH, which stipulates environmental restoration or remediation as an additional sanction for polluters or those responsible for environmental damage. The UUPPLH still designates criminal fines as the sole primary criminal sanction for corporations. From the perspective of green victimology, environmental victims are those from the current or future generations who are harmed by activities that degrade ecological functions due to individual or collective negligence or failure (Willson and Ross, 2015). Therefore, the application of green victimology through the UUPPLH is essential for environmental restoration. Finally, reforming sanctions and law enforcement is a crucial aspect in promoting

substantive changes to the UUPPLH through the application of green victimology. The sanctions stipulated in the UUPPLH are already quite diverse, particularly Article 25 of the UUPPLH regarding administrative sanctions in the form of government coercion, fines, and revocation of business licenses. However, strengthening recovery and compensation mechanisms is also a key focus, where environmental recovery is prioritized as the primary sanction in law enforcement, replacing a purely repressive approach. Therefore, the application of green victimology in the UUPPLH is essential to strengthen legal protection for environmental victims in a more holistic and sustainable manner.

Green Victimology Provisions in Environmental Protection and Management Laws that Better Guarantee Legal Protection for the Environment

The designation of the environment as a victim in the provisions of the UUPPLH has its own reasons, which can be explained philosophically, legally, and sociologically. First, philosophically, the environment must be perceived as a unified space encompassing living beings (including humans), the objects surrounding them, and all forms of behavior that influence the sustainability and well-being of these living beings. Environmental protection is an integral part of the nation's sustainability that must be carefully considered in the formulation of regulations and policies, particularly in the implementation of UUPPLH in Indonesia (Central Java Provincial Legislative Council, 2022). Legally, the environment as a victim has actually been recognized in the context of environmental law in Indonesia (particularly in the Environmental Protection and Management Law), but not explicitly because its substance is more about placing the right to the environment as part of human rights that need to be guaranteed and protected. Therefore, legal protection for the environment, especially in classifying the environment as a victim of damage caused to it, requires clear regulations on green victimology that will be used by law enforcement agencies to more efficiently handle perpetrators who damage the environment (Rena Yulia, 2010). Finally, sociologically, the environment as a victim needs to be considered due to the imbalance between the position of humans and the environment in social interactions, which are more often dominated by humans who exploit and damage the environment for the sake of modernization and economic interests, but do not see the ecological impact that such actions can cause. Therefore, the state must provide ample opportunities for relevant institutions to represent the environment in its own protection efforts (Hasbi, 2019).

In Indonesia's environmental legal culture, economic development is often considered more urgent than environmental conservation efforts. This motivates individuals and legal entities to commit crimes against the environment, which can become one of the criminogenic factors for environmental damage (Armidan Salsiah and Alisjahbana an Endah Murningtyas, 2018). As a concept that expands the boundaries of crime victims, green victimology clearly emphasizes that the context of victims in criminal acts is not limited to humans alone, but also includes non-human victims, particularly the environment and all its ecosystems, such as rivers and forests (Intan Wahyuningtyas Andin et al., 2024). Thus, any form of action that leads to anthropocentric egoism is highly unwise if it is consistently maintained, given that environmental conditions are crucial to the sustainability of all organisms and living beings within them if there are actions that cause damage to the environment. Given the limitations of UUPPLH including its provisions on green victimology, a comparative study with best-practice countries, particularly Germany and New Zealand, is necessary to adopt substantive elements and concepts that can be incorporated into the UUPPLH regarding green victimology regulations. First, Germany is recognized as one of the cleanest countries in the world, driven by a strong commitment to sustainability and environmental protection. The Energiewende policy serves as the backbone of these efforts, transitioning to renewable energy. By 2020, over 40% of Germany's energy consumption came from renewable sources, with a target of 65% by 2030, demonstrating their dedication to reducing fossil fuel use and greenhouse gas emissions.

Air quality has also improved, with PM2.5 pollution below WHO thresholds thanks to strict vehicle emissions policies and investments in public transportation (Hamdani S Rukiah, 2024). Environmental protection in Germany is enshrined in the German Constitution (German Grundgesetz, 2025) Article 20a, which states that the state is obligated to protect the natural foundations of life and animals for future generations. Although it does not explicitly recognize non-human elements as legal subjects, Germany values their intrinsic worth. Green victimology is applied implicitly, recognizing the environment as a victim of crime in some cases (Deutscher Bundestag). For example, the case of INEOS Koln GmbH v Bundesrepublik Deutschland required preventive measures for the environment, and Bundes fuer Umwelt und Naturschutz Deutschland, Landesverband Westfalen v Bezirksregierung Arnsberg granted NGOs the right to represent environmental interests in court. German environmental criminal law also focuses on prevention and risk assessment, criminalizing negligent acts and often relying on administrative law. The implementation of green victimology in Germany demonstrates the recognition

of equal value between humans and non-humans as victims of environmental issues, although not yet in the status of legal subjects (European Union Action to Fight Environmental Crime, 2014). Second, New Zealand is a country that stands out in its efforts toward sustainability and environmental protection. Known for its abundant biodiversity, strict environmental policies, and strong commitment to reducing greenhouse gas emissions, New Zealand has set ambitious targets to achieve Net Zero Emissions and Zero Carbon by 2050 (The OECD, 2025). Additionally, its participation in the Antarctic Treaty and various efforts to maintain the cleanliness of its ecosystems demonstrate a high level of dedication to environmental conservation. New Zealand recognizes two ecological entities, the Whanganui River and the Te Urewera Forest, as legal subjects. This recognition is regulated by the "Te Awa Tupua Act" and the "Te Urewera Act," which form the basis for analyzing the concept of green victimology. The Te Urewera Forest, located on New Zealand's North Island, holds significant cultural and spiritual value for the Tuhoe Maori tribe. Section 11 of the Te Urewera Act 2014 explicitly states that Te Urewera is a legal entity with rights, obligations, and responsibilities akin to those of a legal person. Its technical implementation is delegated to the Te Urewera Council as a trustee. This law also has comprehensive criminal provisions covering 15 types of offenses against Te Urewera, which in this context is viewed as the victim. Examples of offenses include illegally transporting animals, damaging plants or natural objects, polluting, and obstructing officials. Criminal penalties under the Te Urewera Act 2014 vary. For the 15 main types of criminal offenses (Section 78 (3)), individuals can be sentenced to up to 2 years in prison or fined up to $100,000, while legal entities can be fined up to $200,000. If the violation continues, an additional fine of $10,000 per day may be imposed. For offenses not yet regulated (Section 79), similar penalties apply. Interestingly, for criminal offenses that generate economic gain (Section 80), stricter penalties apply, with imprisonment of up to 5 years or a fine of up to $300,000 for individuals, and a fine of up to $300,000 for legal entities, plus a daily fine of $20,000 if the violation continues (Craig M, Kauffman, and Pamela Martin, 2018).

Similar to Te Urewera, the Whanganui River is also recognized as a legal entity through the Te Awa Tupua Act 2017. This river has had a strong spiritual connection with the indigenous Maori community for over 800 years. The main purpose of this law (Section 3) is to record the recognition and apology of the Crown to the Whanganui Iwi, as well as to provide effect to the terms of the historical claims settlement. Section 12 of the Te Awa Tupua Act 2017 explicitly states that Te Awa Tupua is "an indivisible and living entity, encompassing the Whanganui River from the mountains to the sea, including all its physical and metaphysical elements." This reflects a holistic recognition of the entire river ecosystem. Furthermore, Section 14 states that Te Awa Tupua is "a legal entity and has all the rights, powers, duties, and responsibilities of a legal entity," the implementation of which is represented by Te Pou Tupua (Jason P. Mika and Regina Scheyvens, 2022). Although the Te Awa Tupua Act 2017 recognizes the Whanganui River as a legal entity with rights and obligations, the law does not specifically address environmental crimes. The author argues that both laws, the Te Urewera Act 2014 and the Te Awa Tupua Act 2017, reflect the basic idea of green victimology, namely the recognition of the intrinsic value of humans and non-humans as equal victims of environmental crimes. However, only the Te Urewera Act 2014 provides criminal provisions that explicitly recognize Te Urewera as a victim of environmental crime within the framework of criminal law. In relation to the theory of eco-justice, the lessons learned from comparing green victimology in Germany and New Zealand can be summarized as follows:

Type of Justice	Recognized Victims
Environmental Justice	Human as victims
Ecological Justice	Animal and plants as victims
	Certain species as victims
These three principles also emphasize that environmental crimes must be viewed from a broader perspective of justice, both from an anthropocentric and an ecocentric perspective.	

Considering examples from Germany and New Zealand, Indonesia's Environmental Protection and Management Law (UUPPLH) needs to be reconstructed to recognize the environment as a victim. Currently, the UUPPLH only focuses on humans as victims of environmental damage. However, animals, plants, rivers, and ecosystems as a whole also suffer significant losses as a result of environmental crimes. It is important to expand the definition of victims in the UUPPLH so that damage to non-human entities is also considered a criminal offense deserving of appropriate punishment. Proposed additions to the substance of the UUPPLH, such as "the environment as a victim with the right to protection," would strengthen the position of the environment within the legal system. Additionally, the principle of ecosentrisme, which recognizes the intrinsic value and rights of non-

human entities, must be integrated so that environmental crimes are not only seen as losses for humans but also as violations of the rights of non-human entities. Efforts to incorporate the lessons learned from this comparison can be made by accommodating a definition of environmental victims that includes non-human entities. Then, establishing the state's obligation to protect the rights of the environment as victims of criminal acts. Finally, affirming that damaging the environment is automatically a legal violation that harms non-human victims. Legal representation for lawsuits or claims for legal protection and fulfillment of rights can be carried out by individuals, groups of people, or environmental organizations (Indah Sari, 2018) that have a legal interest and are directly affected by the damage. They may file civil lawsuits through various models, such as individual lawsuits, class-action lawsuits, and lawsuits by environmental organizations (legal standing), with these provisions also serving as one of the substantive regulations in the Environmental Protection and Management Law (UUPPLH) following previous regulatory recommendations.

CONCLUSION

First, environmental law in Indonesia has shifted from a classical approach to a modern paradigm that protects the environment comprehensively, in line with the concept of Green Victimology. This concept broadens the definition of victims of environmental crimes to include not only humans, but also other living creatures and ecosystems. UUPPLH serves as an important foundation by adopting the principles of ecocentrism and sustainable development, and strengthening the right to sue for various parties as "environmental guardians." Although it regulates restoration and compensation, its implementation still faces challenges, particularly in protecting non-human victims. Second, to ensure better legal protection, a substantive reconstruction of the Environmental Protection and Management Law is necessary. This can begin by expanding the definition of victims so that the environment is recognized as a victim with the right to protection. Learning from Germany and New Zealand, it is important to integrate the principle that environmental damage is a crime against non-human entities. In addition, the types of environmental crimes from these countries can be adopted and regulated specifically in the Environmental Protection and Management Law, supported by reaffirming the state's obligation to protect the environment and providing broad access for individuals or organizations to represent the environment in legal proceedings.

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