

The Rights of Victims of Environmental Crimes in Indonesia: Challenges for Legal Reform

Francisco Tarigan ^{a,*} Hartiwiningsih ^a, Muhammad Rustamaji ^a, Intan Baretta Nur Annisa ^b
Matthew Marcellinno Gunawan ^c

^a Faculty of Law, Universitas Sebelas Maret, Surakarta, Indonesia

^b Faculty of Law, University of Leeds, Leeds, United Kingdom

^c Consociatio Ius et Ambientis, Surakarta, Indonesia

* corresponding author: franciscotarigan@student.uns.ac.id

ABSTRACT

Environmental crimes in Indonesia pose significant risks to both the ecosystem and human welfare. Notwithstanding established legal frameworks, the rights of victims of these offences frequently remain insufficiently addressed. This essay analyzes the current state of victim rights regarding environmental crimes in Indonesia, emphasizing the challenges in their enforcement and suggesting pathways for legal reform. Utilising a green victimology framework, it examines the legislative stipulations for victim compensation, restitution, and rehabilitation, juxtaposing them with international benchmarks. This study employs a normative juridical methodology, complemented by case study analysis and an examination of current regulatory instruments, to identify various structural deficiencies, including normative gaps, ineffective law enforcement mechanisms, and the absence of formal procedures for compensation and substantial victim involvement in legal proceedings. The research identifies key obstacles, including insufficient law enforcement, challenges in establishing causation and quantifying damages, restricted access to justice for marginalized groups, corporate influence, and inadequate support systems for victims. The essay ultimately presents policy proposals aimed at strengthening the legislative framework, enhancing enforcement capabilities, advocating for restorative justice, increasing access to justice, and fostering community empowerment to achieve more sustainable environmental justice in Indonesia.

KEYWORDS: *Environmental Crimes; Legal Reform; Restorative Justice; Victims*

1. INTRODUCTION

Environmental crime represents a deeply entrenched form of unlawful behaviour, yielding extensive ecological repercussions and profoundly impacting the rights and welfare of the communities that are affected. Within the Indonesian framework,

environmental deterioration frequently manifests in tangible consequences for individuals, such as diminished access to clean water, the degradation of arable land, and the onset of significant health challenges.¹ Nonetheless, the safeguards afforded to victims of environmental crime are still insufficient, whether in terms of substantive, procedural, or implementation aspects of the law. Indonesia, an archipelagic nation celebrated for its abundant biodiversity and extensive natural resources, grapples with ongoing issues stemming from environmental offences. The aforementioned unlawful practices, encompassing unauthorised logging, the trafficking of wildlife, industrial pollution, and the degradation of land, impose significant harm on ecosystems and disproportionately impact marginalised communities.²

The ramifications extend far beyond environmental degradation, affecting public health, economic stability, and the overall well-being of numerous individuals across Indonesia. Although national laws exist to address environmental protection and management, achieving justice for victims of these offences continues to be a multifaceted and frequently challenging pursuit. The actions of deforestation, illegal mining, water and air pollution, and land transformation for mining and agricultural plantations have a profound impact on ecosystems and the communities that inhabit them.³ For instance, the oil pollution in Balikpapan has decimated mangrove forests and devastated the livelihoods of local fishermen, both human and non-human victims whose rights remain unaddressed. In another instance, the exploitation of nickel mining in Raja Ampat has destroyed 500 hectares of forest and has had an adverse impact on coral reefs, posing a significant threat to indigenous communities and the rich tapestry of biodiversity.⁴

The notion of rights for victims within the realm of environmental offences is receiving heightened acknowledgement on a global scale. In Indonesia, individuals affected by

¹ Femke and Wijdekop, 'Restorative Justice Responses to Environmental Harm (IUCN Report)', n.d.

² Benjamin Scott, 'Environmental Crime and Money Laundering in Australia', in *Financial Crime, Law and Governance: Navigating Challenges in Different Contexts*, ed. by Louis Goldbarsht Doron and de Koker (Springer Nature Switzerland, 2024), pp. 99–121, doi:10.1007/978-3-031-59547-9_5.

³ Nancy M P Bocken and Samuel W Short, 'Unsustainable Business Models – Recognising and Resolving Institutionalised Social and Environmental Harm', *Journal of Cleaner Production*, 312 (2021), p. 127828, doi:https://doi.org/10.1016/j.jclepro.2021.127828.

⁴ Haitao Wu and others, 'Does Environmental Pollution Promote China's Crime Rate? A New Perspective through Government Official Corruption', *Structural Change and Economic Dynamics*, 57 (2021), pp. 292–307, doi:https://doi.org/10.1016/j.strueco.2021.04.006.

environmental degradation frequently experience marginalisation, with their plight insufficiently recognised by both the legal framework and the broader societal context. This article examines the pressing matter of the rights of victims of environmental crimes in Indonesia, analysing the current legal framework, highlighting the substantial challenges that hinder the effective enforcement of these rights, and offering specific recommendations for legal and policy reform.⁵

This study embraces a perspective that expands the conventional notion of victimhood, incorporating not only human victims but also recognising the environment as a victim of crime. This article endeavours to explore the intricate relationship between environmental degradation and human rights, offering a thorough examination of the prevailing circumstances. This examination will delve into the legal frameworks governing diverse avenues of redress, including compensation, restitution, and rehabilitation, while critically evaluating their practical implementation. Moreover, it will engage in a comparative analysis with global best practices and standards to identify areas where Indonesia can enhance its legal and institutional frameworks.⁶

On a global scale, the concept of green victimology has emerged as a theoretical framework that acknowledges the environment—encompassing soil, species, and ecosystems—can indeed be subjected to victimisation, thereby necessitating legal safeguards that integrate the principles of ecocentrism and restorative justice. While Pancasila and the Indonesian constitution suggest a commitment to ecological inclusivity, the actual application of these principles within legislative and law enforcement frameworks remains notably insufficient. This article aims to enhance the current discussion on environmental justice in Indonesia by highlighting the challenges faced by victims of environmental crime and promoting a more comprehensive and victim-centred approach to the enforcement of environmental laws.⁷ This article aims to achieve three

⁵ Paul Ekblom and others, 'Crime Prevention through Environmental Design in the United Arab Emirates: A Suitable Case for Reorientation?', *Built Environment*, 39.1 (2013), pp. 92 – 113, doi:10.2148/benv.39.1.92.

⁶ Rika Fajrini, 'Environmental Harm and Decriminalization of Traditional Slash-and-Burn Practices in Indonesia', *International Journal for Crime, Justice and Social Democracy*, 11.1 (2022), pp. 28–43, doi:10.5204/ijcsd.2034.

⁷ Alexandra Aragão, 'Chapter 9 - Geoethics in the Anthropocene: Law as a Game Changer', in *Geoethics for the Future*, ed. by Silvia Peppoloni and Giuseppe Di Capua (Elsevier, 2024), pp. 109–25, doi:https://doi.org/10.1016/B978-0-443-15654-0.00025-6.

primary objectives: Initially, the aim is to present a comprehensive overview of environmental offences in Indonesia and their repercussions; subsequently, to scrutinise the current legal framework about the rights of victims of such crimes; and finally, to pinpoint the obstacles in enforcing these rights while suggesting pragmatic legal and policy reforms to foster enhanced justice for victims and promote a more sustainable environment for everyone.⁸

Environmental crime presents a significant challenge to contemporary criminal justice systems, given its pervasive and lasting effects. In Indonesia, the degradation of the environment due to illicit activities like deforestation, water pollution, and the unlawful exploitation of natural resources has resulted in significant distress for the communities in proximity, entities that deserve acknowledgement and consideration as victims. Regrettably, the environmental legal framework in Indonesia continues to adopt a punitive, last-resort methodology that emphasises the punishment of offenders, while failing to sufficiently consider the aspect of safeguarding victims.⁹ The rights of victims—including the right to information, involvement in legal proceedings, protection, and compensation—remain inadequately addressed within Indonesia's environmental criminal justice framework. Within the realm of environmental crime, the notion of victims extends beyond mere individuals, encompassing entire communities and even future generations, often referred to as intergenerational victims. This scenario prompts significant contemplation regarding the necessity for legal reform to ensure both redress and justice for the affected populations.¹⁰

The phenomenon of environmental crime in Indonesia has escalated in both magnitude and intricacy. Unlawful practices, including unauthorised logging, unlicensed extraction of minerals, pollution from industrial waste, and the occurrence of forest fires, have led to

⁸ Nasir Sultan and others, 'The Nexus of Environmental Crimes and Money Laundering/Terrorist Financing: Effectiveness of the FATF Recommendations against Green Criminology in Developing Jurisdictions', *Journal of Money Laundering Control*, 28.3 (2025), pp. 485 – 503, doi:10.1108/JMLC-08-2024-0142.

⁹ Ponco Hartanto, Subagio Gigih, and Riami Chancy, 'Discourse of Ecological Damage as a State Financial Loss: Evidence from Indonesia', *Journal of Law, Environmental and Justice*, 2.3 (2024), pp. 307–31, doi:10.62264/jlej.v2i3.110.

¹⁰ Muhammad Reza Syariffudin Zaki, 'Ecocide Dalam Pandangan Kriminalisasi Internasional Dengan Menguatnya Impunitas Korporasi Berdasarkan Hukum Pidana Internasional', *Mimbar Hukum*, 35.Special Issue (2023), doi:doi.org/10.22146/mh.v35i0.11457.

extensive ecological degradation and present significant risks to the sustainability of communities.¹¹ At the core of this devastation are various affected entities—individuals and indigenous communities alike—who have experienced the loss of their means of subsistence, endured health complications, and find themselves existing in degraded and inequitable circumstances as a result of environmental degradation.¹² Nonetheless, in the realm of law enforcement, the emphasis predominantly lies on penalising offenders and the tangible rehabilitation of the environment. The entitlements of victims, being those who are directly impacted, are frequently neglected. The current legal frameworks, exemplified by Law No. 32 of 2009 on Environmental Protection and Management (UUPPLH), offer a degree of opportunity for environmental restoration; however, they inadequately tackle the distinct entitlements of victims regarding compensation, rehabilitation, involvement in legal proceedings, and assurances against recurrence.¹³

Worldwide, there has been a significant transformation in the protection of environmental victims, moving towards a more victim-centred and restorative justice framework, as evidenced by the 2022 UNEP report and numerous international efforts that integrate victims' rights into environmental legal systems. Conversely, Indonesia remains devoid of an explicit normative acknowledgement of victims of environmental crimes, leading to affected communities being deprived of meaningful justice.¹⁴

Furthermore, the criminal justice system in Indonesia has yet to completely embody the tenets of environmental justice. A study indicates that legal actions taken against environmental offenders frequently overlook the societal repercussions for victims, as well

¹¹ Itok Dwi Kurniawan and others, 'Formal Requirements for Class Action Lawsuits in Environmental Cases in Indonesia: Problems and Solutions', *Journal of Law, Environmental and Justice*, 3.1 (2025), pp. 79–103, doi:10.62264/jlej.v3i1.114; Nilam Firmandayu and Ayman Alameen Mohammed Abdalrhman, 'Spatial Policy Regarding Carbon Trading for Climate Change Mitigation in Indonesia: Environmental Justice Perspective', *Journal of Law, Environmental and Justice*, 3.1 (2025), pp. 1–29, doi:10.62264/jlej.v3i1.113.

¹² M. Zaid, Rikcy Ricky, and Rakotoarisoa M H Sedera, 'Blue Carbon Regulations and Implementation in Several Countries: Lessons for Indonesia', *Journal of Law, Environmental and Justice*, 3.1 (2025), pp. 30–78, doi:10.62264/jlej.v3i1.117.

¹³ Rian Saputra, Willy Naresta, and Vincent Ariesto, 'Post-Mining Land Use Regulations and Practices in the United States of America: Lesson for Indonesia', *Journal of Law, Environmental and Justice*, 3.1 (2025), pp. 104–33, doi:10.62264/jlej.v3i1.118.

¹⁴ Rian Saputra and others, 'Ecological Justice in Indonesia and China Post-Mining Land Use?', *Journal of Law, Environmental and Justice*, 2.3 (2024), pp. 254–84, doi:10.62264/jlej.v2i3.108.

as the assurance of restoring their rights. The situation is further complicated by the constrained capabilities of law enforcement agencies and the existence of conflicts of interest in the management of natural resources, particularly about major corporations.¹⁵ The principal legal framework is established by Law No. 32 of 2009 concerning Environmental Protection and Management. This legislation introduces the concept of green victimology, recognising the inherent value of the environment. Yet, it only modestly requires the restitution of damages as a punitive measure, particularly about corporate entities. The regulation of corporate liability is primarily governed by criminal law; however, its implementation frequently intersects with civil and administrative law.¹⁶

Furthermore, the revised Criminal Code appears to lack an explicit incorporation of the principles of ecological restoration or restorative justice for those affected by environmental harm. The justice system remains predominantly focused on punitive measures rather than embracing a comprehensive approach to recovery, applicable to both individuals and ecosystems. Consequently, victims are frequently regarded merely as interested parties, rather than as individuals whose rights necessitate restoration. The lack of a systematic and victim-focused protection framework has emerged as a pressing issue. In numerous prominent instances—such as the contamination of the Citarum River and the forest fires in Riau and Kalimantan—local communities have emerged as the primary victims. Yet, they have been afforded neither compensation nor formal acknowledgement as victims within the legal framework. Research indicates that indigenous communities frequently experience significant impacts, yet they often lack adequate protection.¹⁷

In this context, legal reform must be undertaken to enhance the legal standing and safeguard the rights of victims of environmental crimes. Reforms should encompass the formal recognition of victim status, the establishment of robust compensation mechanisms, legal protections, and participatory rights for victims within judicial

¹⁵ FX. Hastowo Broto Laksito, Aji Bawono, and Afridah Ikrimah, 'Reducing Community Participation in the Preparation of Environmental Impact Assessments (EIA): Evidence from Indonesia', *Journal of Law, Environmental and Justice*, 2.2 (2024), pp. 137–61, doi:10.62264/jlej.v2i2.101.

¹⁶ Willy Naresta Hanum, Tran Thi Dieu Ha, and Nilam Firmandayu, 'Eliminating Ecological Damage in Geothermal Energy Extraction : Fulfillment of Ecological Rights by Proposing Permits Standardization', *Journal of Law, Environmental and Justice*, 2.2 (2024), pp. 205–28, doi:10.62264/jlej.v2i2.105.

¹⁷ Ade Sathya Sanathana Ishwara, 'Reformasi Hukum Pidana: Suatu Kajian Yuridis Terhadap Pembuktian Tindak Pidana Santet Dalam KUHP Baru', *IBLAM Law Review*, 3.3 (2023), pp. 100–11.

processes, as well as the incorporation of restorative justice principles into environmental legislation. In light of this context, this study seeks to elucidate the legal obstacles that impede the realisation of rights for victims of environmental crimes and to develop a reform agenda that prioritises the needs of victims and is oriented towards justice. Furthermore, the Indonesian criminal justice system has yet to comprehensively adopt the tenets of environmental justice.¹⁸ A recent study suggests that legal actions taken against environmental offenders often overlook the societal repercussions for victims, as well as the assurance of restoring their rights. The situation is further complicated by the constrained capabilities of law enforcement agencies and the existence of conflicts of interest in the management of natural resources, particularly about major corporations. The principal legal framework is established by Law No. 32 of 2009, which pertains to Environmental Protection and Management. This legislation introduces the concept of green victimology, recognising the inherent value of the environment. Yet, it only modestly requires the restitution of damages as a penal measure, particularly about corporate entities. The regulation of corporate liability is primarily governed by criminal law; however, its implementation frequently intersects with civil and administrative law.¹⁹

Furthermore, the newly established Criminal Code appears to lack explicit provisions addressing the notion of ecological restoration or restorative justice for those affected by environmental harm. The justice system remains predominantly focused on punitive measures rather than fostering comprehensive recovery, applicable to both individuals and ecosystems. Consequently, victims are frequently regarded merely as interested parties, rather than as individuals whose rights necessitate restoration. The lack of a well-organised and victim-focused protection system has emerged as a notable issue. In numerous prominent instances—such as the contamination of the Citarum River and the forest fires in Riau and Kalimantan—local communities have emerged as the primary victims. Yet, they have been met with neither compensation nor formal acknowledgement

¹⁸ M Zaid, M Musa, and Bianglala Asmarasari, “‘Novum’ in Indonesian Criminal Justice: Problems and Legal Reform”, *Indonesian Journal of Crime and Criminal Justice*, 1 (2025), pp. 54–88, doi:10.62264/ijccj.v1i1.121.

¹⁹ Januar Rahadian Mahendra, Supanto, and Devi Triasari, ‘The Role of Victim Trust Funds in Addressing Unpaid Restitution Human Trafficking: Lessons US and Europe’, *Indonesian Journal of Crime and Criminal Justice*, 1 (2025), pp. 89–107, doi:10.62264/ijccj.v1i1.123.

of their victimhood within the legal framework.²⁰ Research indicates that indigenous communities frequently experience the most significant impact, yet they are often afforded the least protection.²¹

In this context, there is a pressing necessity for legal reform to enhance the legal status and safeguarding of victims of environmental crimes. Reforms of this nature should encompass the formal recognition of victim status, the establishment of robust compensation mechanisms, the implementation of legal protections and participatory rights for victims within judicial processes, as well as the integration of restorative justice principles into the framework of environmental law.²² In light of this context, this study seeks to elucidate the legal obstacles that impede the realisation of rights for victims of environmental crimes and to develop a reform agenda that prioritises the needs of victims and emphasises justice.²³

In order to illustrate the originality of this research, the author draws comparisons with various earlier works, notably a paper titled "Victims of environmental harm: Rights, recognition and redress under national and international law". This leads to the conclusion that "In recent years, the heightened emphasis on climate change and environmental degradation has resulted in an unparalleled scrutiny of the criminal responsibility of individuals, organisations, and even states regarding polluting activities." These advancements have led to the emergence of a novel domain within criminological research, frequently referred to as 'green criminology'. Despite the extensive theorising that has occurred in this domain, there remains a notable lack of concentrated attention on the individuals who are genuinely experiencing harm due to environmental degradation.

²⁰ Pujiyono Suwadi and Rian Saputra, 'Non-Fungible Tokens and the Metaverse Using Cryptocurrency in Indonesia: Money Laundering Potential and Challenges', *Indonesian Journal of Crime and Criminal Justice*, 1.1 (2025), pp. 109–31, doi:10.62264/ijccj.v1i1.120.

²¹ Muhammad Bagus Adi Wicaksono and Devi Triasari, 'Coal Post-Mining Reclamation Policies in Several Countries: Lessons for Indonesia', *Journal of Law, Environmental and Justice*, 2.3 (2024), pp. 229–53, doi:10.62264/jlej.v2i3.106.

²² Subagio Gigih Wijaya and Matthew Marcellinno Gunawan, 'Police Discretion on Terminating Corruption Investigations After Return State Financial Losses in Indonesia: Validity and Challenges', *Indonesian Journal of Crime and Criminal Justice*, 15.1 (201925), p. 1, doi:10.62264/ijccj.v1i1.124.

²³ Ponco Hartanto, Ricky Ricky, and Vincent Ariesto Gunawan, 'Using Indonesian Corruption Law for Eradicating the Yogyakarta Sultanate Land Mafia: A Legal Formulation Study', *Indonesian Journal of Crime and Criminal Justice*, 1.1 (2025), pp. 23–53, doi:10.62264/ijccj.v1i1.122.

This book embodies a distinctive endeavour to rigorously conceptualise and scrutinise the role of 'environmental victims' within criminal justice frameworks, both on a national and international scale. This volume, grounded in a comparative methodology and informed by critical criminological discourse, examines various domains typically addressed by victimologists about victims of environmental crime and, more broadly, environmental harm. These encompass the rights of victims, avenues for compensation, interactions with criminal justice systems, and engagement in that process. The book examines the concept of 'environmental victimisation' through the lens of 'social harms' rather than 'criminal harms,' thereby challenging the conventional definitions of environmental crime prevalent in many legal systems. *Victims of Environmental Harm* culminates in delineating the parameters for future inquiry into an evolving green victimology, exploring how this framework could influence reform within the criminal justice system and policy development on both national and international scales. This volume is poised to captivate scholars from diverse fields, including criminology, international law, victimology, socio-legal studies, and the physical sciences, as well as practitioners engaged in the intricacies of policy formulation.²⁴

The second is a research article titled "Victims of Environmental Harm During Conflict: The Potential for 'Justice'". This study examines the interplay of various relevant norms related to accountability and reparations for environmental harm in a post-conflict context. It delves into human rights norms and humanitarian law, including relevant precedents, and analyses their interrelations, particularly regarding the implications for victims. Examining displacement as a particular case study, the exploration of possible outcomes is bolstered by insights gained from previous reparation initiatives, including those implemented within the context of 'transitional justice' aimed at delivering 'justice' for violations of human rights and humanitarian law, encompassing both environmental and other concerns. This chapter examines various potential challenges associated with these interactions, particularly about justice initiatives and reparations schemes in post-conflict contexts. It addresses the construction of a coherent post-conflict narrative, the concept of restitution or 'truth,' the provision of reparations, including 'restitution,' and the role of

²⁴ Matthew Hall, *Victims of Environmental Harm: Rights, Recognition and Redress under National and International Law*, in *Victims of Environmental Harm: Rights, Recognition and Redress under National and International Law* (2013), doi:10.4324/9780203083444.

reconciliation within the broader framework of 'peacebuilding.'²⁵

The third is a scholarly article titled "Victims of Environmental Harms and Their Role in National and International Justice." The conclusion drawn is that "In the past twenty years, criminologists have devoted increasing attention to the natural environment and the criminal activities that contribute to environmental degradation (White, 2008). Scholars engaged in the domain often referred to as 'conservation criminology' (Gibbs et al., 2010), 'eco-critical criminology' (Lynch & Stretesky, 2007), and, more recently, 'green criminology' (Ruggiero & South, 2010) have consistently advanced the integration of criminological theories about offending and crime prevention into these pursuits. From a discerning viewpoint, criminology has illuminated the power disparities inherent in categorising specific polluting activities as 'criminal', which is, naturally, intertwined with the economic ambitions of corporate entities and, indeed, of states in their entirety (Pepper, 1993). Throughout this development, green criminology has consistently overlooked a significant issue that is now gaining recognition within mainstream criminology: the exclusion of crime victims from academic discussions. In the past four decades, the sub-discipline of victimology has gained momentum and, to a certain degree, has filled the gaps associated with more conventional understandings of victimisation, such as property crime, violent offences, domestic abuse, and similar issues. Currently, there is a notable lack of victimological research that addresses individuals impacted by environmental crime, as well as the broader concept of environmental harm."²⁶

The research articulated by the author leads to the conclusion that this paper is groundbreaking, as it delves into the rights of victims of environmental crimes specifically within the context of Indonesia. This phenomenon can be attributed to the widespread environmental degradation in Indonesia resulting from environmental offences, a topic that has received scant attention in scholarly discourse.

²⁵ Merryl Lawry-White, *Victims of Environmental Harm during Conflict: The Potential for 'Justice'*, in *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles, and Practices* (2017), doi:10.1093/oso/9780198784630.003.0016.

²⁶ Matthew Hall, 'Victims of Environmental Harms and Their Role in National and International Justice', *Critical Criminological Perspectives*, 2013, pp. 218 – 241, doi:10.1057/9781137273994_12.

2. RESEARCH METHODS

This study employs a normative legal research method, which focuses on written legal norms as the primary source for addressing the identified legal issues.²⁷ This approach is utilised to examine the adequacy, gaps, and weaknesses of Indonesia's positive legal system in ensuring the fulfilment of the rights of environmental crime victims. In addition to the normative approach, this research incorporates a conceptual approach to analyse theoretical frameworks on victimology, human rights, and restorative justice, which form the theoretical basis for the proposed legal reforms.²⁸ A case approach is also employed to evaluate the practical application of environmental law in actual cases in Indonesia, such as forest fire incidents in Sumatra and Kalimantan, as well as the pollution of the Citarum River. The analysis is conducted qualitatively using legal interpretation techniques to identify the living legal principles and norms that operate within society. This interpretive process serves to construct legal arguments and formulate recommendations for necessary legal reforms.²⁹

3. RESULTS AND DISCUSSION

Environmental Crime and Victims in Indonesia: Issues and Regulatory Framework

The swift economic advancement of Indonesia, coupled with its rich natural resources, has regrettably positioned the nation as a focal point for numerous types of environmental offences. Such unlawful endeavours are frequently driven by financial incentives, facilitated by inadequate governance, and exacerbated by a lack of public awareness and regulatory enforcement. The breadth of environmental offences in Indonesia is extensive, involving various detrimental activities that compromise the country's ecological integrity and its objectives for sustainable development.³⁰ Illegal logging stands as one of the most

²⁷ Arsyad Aldyan and others, 'Local Wisdom-Based Environmental Management Policy in Indonesia: Challenges and Implementation', *Journal of Law, Environmental and Justice*, 2.3 (2024), pp. 332–54, doi:10.62264/jlej.v2i3.100.

²⁸ Henner Busch and others, 'Mining Coal While Digging for Justice: Investigating Justice Claims against a Coal-Phase out in Five Countries', *The Extractive Industries and Society*, 15 (2023), p. 101275, doi:https://doi.org/10.1016/j.exis.2023.101275.

²⁹ Graham Lawton, 'Crimes against Nature', *New Scientist*, 250.3333 (2021), p. 24, doi:https://doi.org/10.1016/S0262-4079(21)00787-9.

³⁰ Chukwumerije Okereke and Mark Charlesworth, *Environmental and Ecological Justice*, in *Advances in International Environmental Politics* (2014), doi:10.1057/9781137338976.

widespread environmental offences in Indonesia. Extensive areas of rainforest, particularly in Sumatra and Kalimantan, have suffered severe degradation due to illicit timber harvesting, resulting in deforestation, the loss of habitats for endangered species such as orangutans and tigers, and an increase in greenhouse gas emissions. This phenomenon is frequently linked to unlawful land conversion for palm oil plantations and mining activities, which intensify environmental degradation and social discord. The issue of pollution, particularly stemming from industrial waste and mining operations, poses a significant challenge, as it contaminates water sources, soil, and air, thereby presenting substantial health hazards to nearby populations. The illicit wildlife trade, particularly that involving endangered species, significantly undermines biodiversity and disrupts the balance of ecosystems.³¹

The ramifications of these environmental transgressions extend profoundly. From an ecological perspective, these actions result in irreversible losses in biodiversity, contribute to the impacts of climate change through deforestation, and lead to the degradation of essential ecosystems, including peatlands and coral reefs. Environmental crimes, in a social context, frequently result in the displacement of indigenous communities, undermine traditional livelihoods, and exacerbate poverty and health challenges within the impacted populations. The financial implications are considerable, encompassing diminished income from natural resources, heightened healthcare costs, and the investment required for environmental restoration. Indonesia has a comprehensive legal framework in place to address the intricacies of environmental protection and management, primarily outlined in Law No. 32 of 2009 regarding Environmental Protection and Management (UUPPLH). This legislation serves as the primary legal framework for governing environmental matters, outlining foundational principles for managing environmental resources, regulating pollution, and preventing ecological harm. It additionally establishes criminal penalties for those who commit environmental offences. Additional pertinent legislation encompasses regulations related to forestry, mining, and conservation, which together establish the legal framework for addressing environmental violations. Nevertheless, despite the presence of these regulations, the practical application and enforcement of them pose considerable difficulties, which will

³¹ Dimitris Stevis, 'Whose Ecological Justice?', *Strategies: Journal of Theory, Culture & Politics*, 13.1 (2000), pp. 63–76, doi:10.1080/10402130050007520.

be elaborated upon in the following sections.³²

Within the Indonesian legal framework, individuals who have suffered from criminal offences are acknowledged through various legal provisions, notably Law No. 31 of 2014 concerning the Protection of Witnesses and Victims, which serves as an amendment to Law No. 13 of 2006. Nevertheless, within the realm of environmental offences, the legal status of victims has not been sufficiently acknowledged, neither in theory nor in practice. Individuals affected by environmental crimes are typically regarded not as active legal entities entitled to protection and restitution, but rather as passive recipients of damage. Law No. 32 of 2009 concerning Environmental Protection and Management (UUPPLH) indeed establishes a legal framework that permits communities to initiate civil proceedings in instances of environmental harm or pollution, as outlined in Articles 91–93. Nonetheless, these provisions fail to provide a clear definition of victims as legal entities within the context of criminal proceedings. In the realm of environmental law enforcement in Indonesia, there exists a pronounced emphasis on ecological restoration. However, the plight of human victims, who frequently endure both immediate and enduring consequences, tends to be inadequately acknowledged.³³

Nonetheless, environmental offences can profoundly impact essential human rights, encompassing the right to health, the right to a clean and healthy environment, and the right to a sustainable livelihood. In significant instances, such as the contamination of the Citarum River or the forest fires in Riau and Kalimantan, local communities have endured considerable detriments to their health, economy, and social fabric. Nonetheless, Indonesia's environmental criminal Law lacks a formal mechanism that offers compensation, restitution, or specific legal protection for these victims. "Indonesian environmental law persists in prioritising ecological recovery at the expense of safeguarding victims' human rights, consequently overlooking the dimensions of social justice." In terms of procedure, the Indonesian criminal justice system offers inadequate opportunities for victims of environmental crimes to engage in a meaningful manner. In practical terms, individuals who have suffered harm are seldom engaged in the processes

³² Ela Tokay, *Climate Change, Environmental Philosophy, and Anthropocentrism* (2023), pp. 361–76, doi:10.1007/978-3-031-07002-0_107.

³³ Ismu Gunadi Widodo and others, 'Constraints on Enforcement of Environmental Law Against Corporate Defendants', *Environmental Policy and Law*, 49.1 (2019), pp. 76–83, doi:10.3233/EPL-190129.

of investigation, prosecution, or adjudication. This presents a notable divergence from the tenets of restorative justice, which prioritise the recovery of the victim.³⁴

While the Law on the Protection of Witnesses and Victims ostensibly ensures victims' rights to compensation and restitution, the practical enforcement of these provisions in cases of environmental crimes remains infrequent. This can be ascribed to two fundamental factors: (1) the lack of a definitive normative structure within environmental legislation, and (2) insufficient institutional collaboration in recognising victims and accurately assessing their losses. Communities or social groups are often the primary entities affected by environmental crimes. Nevertheless, Indonesia's legal framework continues to emphasise the identification of individual victims. Consequently, indigenous peoples, local communities, and even future generations are deprived of formal acknowledgement as rights-bearing victims within the legal framework. As noted by UNEP (2022), there is a growing trend among advanced legal frameworks globally to recognise the notion of victims of environmental damage, encompassing not only communities and ecosystems but also future generations. Indonesia has not yet integrated this framework. "A significant deficiency within Indonesia's environmental legal framework is the lack of a juridical definition and legal safeguards for collective victims of environmental offences."³⁵

In Indonesia, the social ramifications of environmental crimes disproportionately affect vulnerable populations, including indigenous peoples, farmers, fishers, and impoverished rural communities. The restricted access to legal aid, information, and complaint mechanisms for these groups significantly intensifies their experience of injustice. According to data from WALHI (2020), it is evident that the majority of impacted communities have not been allowed to receive information or engage in consultations concerning their rights in the aftermath of environmental pollution incidents. The acknowledgement and safeguarding of the rights of victims in cases of environmental crime are crucial for achieving a comprehensive form of environmental justice. In

³⁴ Raynaldo Sembiring, Isna Fatimah, and Grita Anindarini Widyaningsih, 'Indonesia's Omnibus Bill on Job Creation: A Setback for Environmental Law?', *Chinese Journal of Environmental Law* (Leiden, The Netherlands), 4.1 (2020), pp. 97–109, doi:10.1163/24686042-12340051.

³⁵ Arie Afriansyah, Anbar Jayadi, and Angela Vania, 'Fighting the Giants: Efforts in Holding Corporation Responsible for Environmental Damages in Indonesia', *Hasanuddin Law Review*, 4.3 (2018), pp. 325 – 338, doi:10.20956/halrev.v4i3.1626.

Indonesia, the legal framework, specifically Law No. 32 of 2009 concerning Environmental Protection and Management (UUPPLH), establishes various provisions designed to protect the rights of individuals and communities impacted by environmental degradation. The rights in question typically include the entitlements to compensation, restitution, and rehabilitation; however, the actual realisation of these rights frequently encounters considerable obstacles.³⁶

Compensation denotes the financial remuneration provided to individuals who have incurred losses as a result of environmental offences. This encompasses economic detriments such as property damage, loss of income, and healthcare expenses, alongside non-economic detriments including pain and suffering. Article 90 of the UUPPLH, for example, outlines the entitlement to initiate legal action for damages resulting from environmental harm. Nonetheless, the endeavour of asserting and obtaining compensation can be convoluted and lengthy, frequently necessitating that victims navigate complex legal frameworks and overcome obstacles in establishing a direct link between the environmental transgression and their specific losses. Research suggests that the compensation frameworks in Indonesia are frequently poorly designed, resulting in victims facing constrained options for meaningful restitution.³⁷

Restitution seeks to restore victims to their prior condition before the occurrence of environmental degradation. In the realm of environmental offences, this frequently entails the rehabilitation of the impaired ecosystem, alongside the restitution for personal detriments. Although the UUPPLH underscores the importance of environmental restoration, the practical execution of these initiatives can prove to be quite complex, particularly in the context of extensive environmental degradation. The notion of restorative justice has surfaced as a compelling strategy in this context, emphasising the rectification of the damage inflicted by criminal acts and engaging victims, offenders, and the community in the process of resolution. In Indonesia, there is a growing exploration of restorative justice mechanisms, including mediation and dialogue, as a fitting response

³⁶ Marulak Pardede and others, 'Perspectives of Sustainable Development vs. Law Enforcement on Damage, Pollution and Environmental Conservation Management in Indonesia', *Journal of Water and Climate Change*, 14.10 (2023), pp. 3770–90, doi:10.2166/wcc.2023.417.

³⁷ Agung Andiojaya, 'Do Stronger Anti Money Laundering (AML) Measures Reduce Crime? An Empirical Study on Corruption, Bribery, and Environmental Crime', *Journal of Economic Criminology*, 8 (2025), p. 100157, doi:<https://doi.org/10.1016/j.jeconc.2025.100157>.

to environmental crimes. These approaches aim to provide legal protection for victims while promoting environmental recovery.³⁸

Rehabilitation emphasises the restoration of both physical and psychological well-being for individuals, especially those affected by health issues or trauma resulting from environmental pollution or degradation. This may encompass medical interventions, psychological guidance, and community-based support initiatives. Although the UUPPLH implicitly endorses rehabilitation through its overarching goals of environmental safeguarding and public health, the specific stipulations for victim rehabilitation in cases of environmental crime tend to be less clearly articulated in comparison to those concerning compensation and restitution.³⁹

The notion of Green Victimology holds significant importance within the Indonesian framework. This viewpoint acknowledges that environmental offences inflict harm not solely on humanity but also on the natural world, with repercussions that frequently affect subsequent generations. It contests conventional victimology by emphasising the collective and frequently unconventional aspects of environmental victimisation.⁴⁰ From a perspective focused on the intersection of environmental issues and victimology, the Indonesian government's insufficient acknowledgement of victims of environmental crimes presents a considerable issue, highlighting the necessity for a more comprehensive approach that takes into account both human and ecological victims. The implementation of green victimology in Indonesia underscores the need for collaboration between governmental bodies and the community to achieve environmental justice.⁴¹

³⁸ Yahman Yahman and Azis Setyagama, 'Government Policy in Regulating the Environment for Development of Sustainable Environment in Indonesia', *Environment, Development and Sustainability*, 25.11 (2023), pp. 12829–40, doi:10.1007/s10668-022-02591-1.

³⁹ Taufik Kurrahman and others, 'Data-Driven Natural Capital Accounting Model in Indonesia: Impacts of Environmentally Related Economic Activities on Ecological Processes and Services', *Journal of Cleaner Production*, 469 (2024), p. 143213, doi:https://doi.org/10.1016/j.jclepro.2024.143213.

⁴⁰ Gordon Bazemore, 'Crime Victims, Restorative Justice and the Juvenile Court: Exploring Victim Needs and Involvement in the Response to Youth Crime', *International Review of Victimology*, 6.4 (1999), pp. 295–320, doi:10.1177/026975809900600404.

⁴¹ Xiuqin Zhang and Meiqi You, 'Environmental Justice, Corporate Green Total Factor Productivity, and Pollution Control: A Quasi-Natural Experiment Based on the Establishment of Environmental Courts', *International Review of Economics & Finance*, 100 (2025), p. 104126, doi:https://doi.org/10.1016/j.iref.2025.104126.

Comparing Indonesia's approach with international standards reveals areas for improvement. A multitude of international instruments and national legislations in various jurisdictions establish more substantial frameworks for victim involvement, access to information, and extensive support services for victims in cases of environmental crime.⁴² Although Indonesia has progressed in acknowledging environmental rights, the actual implementation of these rights for victims frequently encounters numerous systemic and practical obstacles, which will be discussed in the following section.

Restoring the Rights of Victims of Environmental Crimes in Indonesia: Challenges for Legal Reform

In light of the existing legal frameworks and the growing awareness of environmental offences, the robust enforcement of victim rights in Indonesia faces a myriad of complexities. The challenges at hand are intricately intertwined with systemic issues, institutional frailties, and socioeconomic dynamics, frequently rendering victims vulnerable and lacking sufficient recourse. A significant challenge lies in the inadequacies of law enforcement and the judicial system's capacity. The implementation of environmental regulations in Indonesia often encounters obstacles due to inadequate resources, a lack of training for law enforcement personnel, and ineffective coordination among various agencies. The presence of corruption within the legal and administrative frameworks significantly intensifies this problem, enabling those who commit environmental offences to escape accountability. The intricacies and protracted nature of judicial processes often pose significant challenges for victims seeking to navigate their claims with efficacy. The lack of specialised environmental courts or dedicated judicial expertise in environmental law may impede the equitable and effective resolution of cases.⁴³

A notable challenge resides in the complexities associated with establishing causation and accurately quantifying damages. Environmental offences frequently yield widespread and enduring consequences, complicating the task of establishing a direct

⁴² Tom Daems, 'Compatible Victims? Prison Overcrowding and Penal Reform in Belgium', *International Journal of Law, Crime and Justice*, 36.3 (2008), pp. 153–67, doi:<https://doi.org/10.1016/j.ijlcj.2008.04.001>.

⁴³ *Victim-Offender Mediation with Youth Offenders in Europe*, ed. by Anna Mestitz and Simona Ghetti (Springer-Verlag, 2005), doi:10.1007/1-4020-3879-8.

causal relationship between a particular action and the subsequent damage inflicted upon individuals or communities. Assessing the economic and non-economic damages, particularly about environmental degradation impacting public health or ecosystem services, presents a multifaceted challenge that necessitates specialised knowledge and access to data that may not be easily obtainable. The responsibility of providing evidence frequently rests upon the victims, who generally do not possess the necessary resources or technical expertise to fulfil these demands.⁴⁴

The restricted availability of justice for marginalised communities represents a significant and widespread concern. A significant number of individuals affected by environmental offences originate from rural or indigenous communities, often facing challenges such as limited legal knowledge, insufficient financial resources, or inadequate geographical access to legal assistance. The formal legal system often presents a daunting and culturally unresponsive framework, which serves to further marginalise these communities. Although legal aid initiatives are in place, their scope and capacity frequently fall short of meeting the extensive demand. The pervasive impact of corporate influence and corruption significantly obstructs the pursuit of justice. Major corporations operating in sectors such as mining, palm oil, and forestry often emerge as the perpetrators of environmental transgressions. Their economic influence and political affiliations can significantly shape policy formulation and implementation, thereby complicating efforts to ensure accountability. Occurrences of bribery and unlawful financial transactions can significantly compromise investigations and judicial processes, resulting in reduced penalties or, in some cases, complete impunity for corporate wrongdoers.⁴⁵

Moreover, there is a deficiency in public consciousness and engagement regarding environmental rights and the available pathways for pursuing redress. Numerous communities impacted by environmental degradation may lack comprehensive awareness of their entitlements or the legal frameworks accessible to them. The absence of awareness may be exacerbated by apprehension regarding retaliation from influential

⁴⁴ Eran Itskovich and Roni Factor, 'Economic Inequality and Crime: The Role of Social Resistance', *Journal of Criminal Justice*, 86 (2023), p. 102065, doi:<https://doi.org/10.1016/j.jcrimjus.2023.102065>.

⁴⁵ Jonathan Gonçalves da Silva, Roselaine Bonfim de Almeida, and Leandro Vinícios Carvalho, 'An Economic Analysis of a Zero-Deforestation Policy in the Brazilian Amazon', *Ecological Economics*, 203 (2023), p. 107613, doi:<https://doi.org/10.1016/j.ecolecon.2022.107613>.

offenders or a pervasive scepticism towards the legal framework. Although community empowerment is acknowledged as essential for environmental protection, its complete capacity in championing the rights of victims remains to be fully actualised.⁴⁶ Ultimately, insufficient support systems for victims exacerbate the difficulties encountered by those affected by environmental crimes. In addition to seeking legal remedies, individuals affected by such circumstances frequently necessitate a multifaceted array of support services, encompassing medical care, psychological counselling, and initiatives aimed at restoring their livelihoods. These services often exhibit fragmentation, inadequate funding, or a complete absence, compelling victims to navigate the consequences of environmental degradation independently. The Indonesian criminal justice system has traditionally emphasised retribution over victim support and rehabilitation; however, there is an emerging interest in restorative justice approaches.⁴⁷

The intricate nature of these challenges highlights the necessity for a comprehensive strategy in legal reform and policy interventions to authentically safeguard the rights of victims of environmental crimes in Indonesia. The following section will explore possible solutions and recommendations to tackle these challenges. While the legal framework in Indonesia recognises the significance of environmental protection and the rights of crime victims, the practical realisation of these rights in cases of environmental crime continues to face numerous challenges. The challenges encountered can be classified into two principal dimensions: juridical (normative) barriers and practical (implementative and structural) obstacles.⁴⁸

Lack of Targeted Regulations Addressing Victims of Environmental Crimes. Currently, Law No. 32 of 2009 and its associated regulations lack explicit definitions, protections, or mechanisms for addressing the needs of victims of environmental crimes. The legislation predominantly focuses on environmental prevention, monitoring, and

⁴⁶ Frida and Eriksson, 'Victim-Offender Mediation in Sweden and South Africa' (unpublished, 2018).

⁴⁷ Heather Strang and others, 'Restorative Justice Conferencing (RJC) Using Face-to-Face Meetings of Offenders and Victims: Effects on Offender Recidivism and Victim Satisfaction. A Systematic Review', *Campbell Systematic Reviews*, 9.1 (2013), pp. 1–59, doi:10.4073/csr.2013.12.

⁴⁸ Mucahit Aydin and others, 'Regulatory Pathways to Green Energy Transition for Sustainable Environment: The Fostering Role of Human Rights, Banking Sector Development, Economic Complexity, and Economic Freedom', *Journal of Environmental Management*, 366 (2024), p. 121739, doi:<https://doi.org/10.1016/j.jenvman.2024.121739>.

restoration; however, it falls short in adequately addressing the victimisation experienced by affected communities. “The Environmental Law lacks a definitive legal standing for victims of environmental crimes within both criminal and administrative legal frameworks.”⁴⁹

Insufficient alignment of regulatory frameworks across sectors. Provisions concerning the rights of victims are scattered throughout various legislative frameworks, including the Law on the Protection of Witnesses and Victims (Law No. 31 of 2014), the Human Rights Law, and the Environmental Law. Nonetheless, these regulations exhibit a deficiency in proper synchronisation and connectivity. This leads to ambiguity in execution, particularly regarding compensation frameworks, restitution processes, and the involvement of victims in judicial proceedings—a lack of Defined Legal Frameworks for Remuneration. The Witness and Victim Protection Law establishes a theoretical framework for compensation and restitution; however, its application in environmental cases remains markedly constrained. There are no formal guidelines for evaluating or allocating compensation to victims of environmental crimes. Court rulings in environmental cases often prioritise ecological restoration over the socio-economic rights of the affected individuals. “In practical terms, a standardised evaluation of the losses endured by environmental victims is conspicuously absent, as is a well-defined mechanism for compensation.”⁵⁰

Challenges in implementation, limited recognition of victims. In numerous instances of environmental offences, the identification of the victims remains ambiguous. This arises from a lack of collaboration among law enforcement agencies, local governments, and the communities affected. Frequently, the evaluation focuses solely on ecological harm, neglecting the socio-economic repercussions faced by the local populace. Constraints on the Abilities of Law Enforcement Officials, Law enforcement officials, especially those in investigative and prosecutorial roles, frequently exhibit a deficiency in understanding victimology or awareness of environmental justice issues. The emphasis is often placed on

⁴⁹ Qi Zhang, Xifeng Wu, and Yu Chen, ‘Is Economic Crisis an Opportunity for Realizing the Low-Carbon Transition? A Simulation Study on the Interaction between Economic Cycle and Energy Regulation Policy’, *Energy Policy*, 168 (2022), p. 113114, doi:<https://doi.org/10.1016/j.enpol.2022.113114>.

⁵⁰ Muneeb Sagheer and Alia Ashraf, ‘Insights on China’s Economic and Environmental Dynamics for Integrating Growth and Sustainability’, *Innovation and Green Development*, 3.4 (2024), p. 100171, doi:<https://doi.org/10.1016/j.igd.2024.100171>.

the formal aspects of the crime, overshadowing the rights of the victims, which are frequently neglected throughout the investigation and prosecution phases. “In the absence of sufficient training and a well-defined legal framework, law enforcement personnel find themselves ill-equipped to ensure the protection of victims in environmental cases.”⁵¹

Restricted Availability of Legal Assistance and Resources, Individuals affected by environmental offences frequently belong to marginalised communities, including Indigenous populations, agricultural workers, and fishermen, many of whom are deprived of legal knowledge or access to essential resources. They frequently lack the financial means for legal representation, legal aid, or even the ability to engage with formal complaint mechanisms. The insufficient availability of legal aid organisations in the impacted areas further complicates the circumstances. **Political and Economic Considerations:** A considerable number of environmental crime cases involve substantial corporations that wield considerable political and economic influence. In these circumstances, individuals often find themselves without the necessary resources to advocate for their entitlements. Moreover, individuals within the community who champion the rights of victims often face intimidation or even criminalisation. In instances where influential corporations engage in environmental transgressions, the legal processes frequently exhibit a bias that overlooks the perspectives of those adversely affected.⁵²

Confronting the complex issues associated with safeguarding the rights of victims of environmental crimes in Indonesia requires thorough legal reform and well-planned policy initiatives. The following recommendations aim to establish a more resilient, just, and efficient framework for pursuing environmental justice. **Enhancing the Legal Structure for Victim Compensation and Restitution:** The existing legal frameworks for compensation and restitution, although present, often exhibit a lack of coherence and pose significant challenges to practical implementation. Legal reforms should prioritise the

⁵¹ Md. Sanowar Hossain and others, ‘Investigating the Techno-Economic and Environmental Feasibility of Biogas-Based Power Generation Potential Using Food Waste in Bangladesh’, *Renewable Energy*, 232 (2024), p. 121017, doi:<https://doi.org/10.1016/j.renene.2024.121017>.

⁵² Romain Pirard, Pablo Pacheco, and Claudia Romero, ‘The Role of Hybrid Governance in Supporting Deforestation-Free Trade’, *Ecological Economics*, 210 (2023), p. 107867, doi:<https://doi.org/10.1016/j.ecolecon.2023.107867>.

clarification of procedures related to the assessment and recovery of damages, encompassing both economic and non-economic losses. This may necessitate the formulation of precise protocols for measuring environmental degradation and its repercussions on human well-being and economic stability. Moreover, the frameworks for enforcing compensation orders must be enhanced, possibly through the establishment of specialised funds or the imposition of more stringent penalties for non-compliance. The notion of environmental liability should be broadened to ensure that those who pollute are held accountable for the entirety of the harm they cause, encompassing the long-term restoration of ecosystems.⁵³

Strengthening the capabilities of law enforcement and the judiciary: The inadequate enforcement of laws presents a significant barrier to the realisation of justice. Reforms should encompass enhanced investment in the training and capacity development of law enforcement agencies, prosecutors, and judges who specialise in environmental law. This would entail cultivating a deep understanding of the intricacies involved in investigating complex environmental offences, gathering scientific evidence, and comprehending the nuances of assessing environmental harm. The establishment of specialised environmental courts or the creation of dedicated divisions within existing judicial systems has the potential to enhance the efficiency of legal proceedings, ensuring that cases are adjudicated by judges possessing the requisite expertise in the field. Strategies to address corruption within these institutions are crucial to ensuring fairness and accountability.⁵⁴

Advocating for Restorative Justice approaches: The conventional punitive framework for environmental offences frequently fails to adequately address the damage inflicted upon both victims and the ecosystem. Restorative justice presents a compelling alternative by emphasising the importance of mending harm, encouraging meaningful dialogue between victims and offenders, and enhancing community engagement in the resolution process. Legal frameworks ought to explicitly incorporate restorative justice mechanisms,

⁵³ Colas Chervier and others, 'Impact of Indonesia's Forest Management Units on the Reduction of Forest Loss and Forest Fires in Sulawesi', *Ecological Economics*, 227 (2025), doi:10.1016/j.ecolecon.2024.108418.

⁵⁴ Bijendra Basnyat and others, 'Conservation by Corruption: The Hidden yet Regulated Economy in Nepal's Community Forest Timber Sector', *Forest Policy and Economics*, 149 (2023), p. 102917, doi:https://doi.org/10.1016/j.forpol.2023.102917.

including mediation and environmental rehabilitation programs, as viable alternatives or complements to conventional criminal sanctions. This methodology has the potential to yield more significant results for those affected, aid in ecological restoration, and foster a collective sense of accountability.⁵⁵

Enhancing Accessibility to Justice and Legal Assistance: Communities that are marginalised face a disproportionate impact from environmental crimes and frequently lack the necessary resources to pursue legal remedies. Policies need to focus on enhancing the availability of legal aid services, especially in remote and marginalised regions. This encompasses the provision of complimentary legal aid, the streamlining of legal processes, and the delivery of culturally attuned support to indigenous populations. Public awareness campaigns play a crucial role in educating communities about their rights and the legal options available to them.⁵⁶

Encouraging the active involvement and empowerment of communities in safeguarding their environment and advocating their rights is crucial for the efficacy of environmental governance. This entails enhancing community-driven environmental monitoring efforts, bolstering local environmental organisations, and ensuring substantial public engagement in the environmental decision-making process. Legal reforms have the potential to empower communities with enhanced authority to pursue legal action against polluters, as well as establish frameworks for collective redress and accountability. The integration of local wisdom and traditional ecological knowledge into environmental protection strategies holds significant promise. **Global Collaboration and Exchange of Insights:** Environmental offences often have cross-border ramifications, necessitating collaborative efforts on a global scale. Indonesia stands to gain significantly from engaging in partnerships with international organisations and various nations to exchange exemplary practices in the realms of environmental law enforcement, victim protection, and legal reform. This encompasses engaging in global accords, enabling transnational enquiries, and utilising international knowledge to enhance domestic capabilities.⁵⁷

⁵⁵ T. Marshall, *Restorative Justice: An Overview* (Home Office, 1999).

⁵⁶ Ian D Marder, 'Mapping Restorative Justice and Restorative Practices in Criminal Justice in the Republic of Ireland', *International Journal of Law, Crime and Justice*, 70 (2022), p. 100544, doi:<https://doi.org/10.1016/j.ijlcj.2022.100544>.

⁵⁷ Gerry Johnstone, *Restorative Justice: Ideas, Values, Debates* (Willan, 2002).

Through the adoption of these legal reforms and policy recommendations, Indonesia has the potential to advance towards a more equitable and sustainable future, ensuring that the rights of victims of environmental crimes are adequately safeguarded and that environmental accountability is rigorously maintained. In light of the numerous normative and practical challenges faced in safeguarding the rights of victims of environmental crimes in Indonesia, the imperative for legal reform has reached a critical juncture. This reform should transcend mere formalities, such as modifications to current legislation. It must encompass a fundamental transformation in both criminal and environmental administrative law, advancing towards a more victim-centred approach to justice and a commitment to ecological integrity.⁵⁸

Framework for Meaningful Legal Transformation: Detailed Regulations Concerning Victims of Environmental Offences. The initial and most essential legal reform involves incorporating clear stipulations concerning the rights of victims of environmental crimes into the Environmental Protection and Management Act (UUPPLH). These provisions may encompass: Firstly, a legal definition of “environmental crime victims,” which includes both individual and collective victims. Secondly, acknowledgement of the entitlements to compensation, restitution, and rehabilitation. Third, the entitlement of victims to engage in the law enforcement process.⁵⁹

According to the proposal by UNEP (2022), nations with robust environmental regulations have started to incorporate the principle of environmental victim justice into their national legal frameworks. “Legal frameworks should acknowledge communities impacted by environmental crimes as legal entities deserving of reparation.” Restorative justice should be integrated into the framework of environmental criminal law enforcement, emphasising the importance of not merely penalising offenders but also addressing the harm and distress endured by victims. This is consistent with contemporary movements in criminal justice reform that prioritise the interests of victims alongside deterrence and punishment. The application of restorative justice can manifest as: Environmental mediation involving both perpetrators and victims, legally binding environmental compensation agreements, community-oriented socio-ecological recovery

⁵⁸ Arthur Hartmann and Sophie Settels, *Comparative Statistics in the Field of Restorative Justice*, in *Comparative Restorative Justice* (2021), doi:10.1007/978-3-030-74874-6_13.

⁵⁹ Annemieke and Wolthuis, ‘Restorative Justice Experiences from the Netherlands’, Jakarta, 2022.

initiatives and “Restorative justice ought to be perceived as a connection between ecological restoration and social justice for those affected by environmental crimes.”⁶⁰

Advancement of Collaboration Compensation Systems. The legal reform framework should incorporate collective compensation mechanisms for victims through an Environmental Compensation Fund, which should be accessible to the impacted communities. This mechanism could be bolstered by environmental guarantee funds required for business entities, by the polluter pays principle, as well as judicial rulings that assign damages to groups or communities instead of solely to individuals. This model has been adopted in nations such as Brazil and Colombia, enabling impacted communities to obtain compensation without the need to pursue individual legal actions.⁶¹

Model for Procedural and Institutional Reform: Creation of an agency dedicated to the protection of environmental victims. A specialised agency or operational unit within the Ministry of Environment and Forestry (KLHK) or the Witness and Victim Protection Agency (LPSK) is essential for managing victim identification, loss verification, and administrative recovery processes.⁶² This agency should function as an advocacy hub and collaborate with law enforcement entities to harmonise damage evaluation and involve affected individuals. The government should formulate comprehensive national guidelines for assessing losses incurred by victims of environmental crimes, encompassing health, economic, and social damages and secondly, facilitating the involvement of victims in the investigation and trial processes. Third, engaging environmental legal advisors to support communities is essential. “In the absence of standardised procedures, victims of environmental crimes find themselves lacking a solid legal foundation to assert their rights with efficacy.” Collaboration among various agencies, Effective synergy among the Ministry of Environment and Forestry (KLHK), the Witness and Victim Protection Agency (LPSK), the Ministry of Social Affairs, the Attorney General’s Office, the Police, and community-based legal aid organisations is essential for

⁶⁰ Howard Zehr, ‘Commentary: Restorative Justice: Beyond Victim-offender Mediation’, *Conflict Resolution Quarterly*, 22.1–2 (2004), pp. 305–15, doi:10.1002/crq.103.

⁶¹ Christoph Willms and Rehzi Malzahn, *The ‘Deadly Embrace’ of Restorative Justice in Germany*, in *Restorative Justice at a Crossroads: Dilemmas of Institutionalisation* (2024), doi:10.4324/9781003320647-10.

⁶² Annemieke Wolthuis and others, ‘Dutch Developments: Restorative Justice in Legislation and in Practice’, *The International Journal of Restorative Justice*, 2.1 (2019), pp. 118–34, doi:10.5553/IJRJ/258908912019002001007.

advancing legal reform.

The collaboration among various agencies is crucial to guarantee that the recovery of victims advances concurrently with the restoration of the environment. The implementation of international legal principles necessitates that Indonesia embrace and integrate globally acknowledged standards, including the UN Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (2005), as well as the Aarhus Convention, which pertains to access to information, public participation, and access to justice in environmental issues.

4. CONCLUSION

The legal standing of victims in environmental crime cases in Indonesia is inadequate and poorly safeguarded. Current regulations fail to explicitly address victim protection in environmental criminal law and lack effective compensation mechanisms. Thus, legal reform is necessary, both through the amendment of current legislation and the creation of supplementary legal mechanisms that empower victims as active legal subjects. The realisation of victims' rights in environmental crime cases in Indonesia encounters both legal and practical challenges. Juridical barriers encompass the lack of sufficient normative provisions, whereas practical barriers involve ineffective implementation, constrained capacity of law enforcement agencies, and the significant influence of political and economic stakeholders. In the absence of thorough legal reform and the fortification of enforcement institutions, victims will remain the most adversely affected yet least safeguarded individuals. The requisite model of legal reform to enhance victim protection within the context of environmental crime in Indonesia encompasses the following components: Initially, implement significant legal reform by explicitly integrating victims' rights into the Environmental Protection and Management Law (UUPPLH). Secondly, the incorporation of restorative justice, collective compensation mechanisms, and community-oriented strategies into the environmental justice framework. Third, procedural and institutional reform entails the creation of a specialised institution, the formulation of damage assessment guidelines, and the improvement of inter-agency coordination. Fourth, the adoption of international standards regarding victims' rights in environmental contexts is necessary to harmonise domestic legal frameworks with global human rights

and environmental protection norms.

5. CONFLICTING INTEREST STATEMENT

The authors state that there is no conflict of interest in the publication of this article.

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