



PRIMARY RESEARCH

# Environmental Crimes and Enforcement: A Critical Analysis of Indonesian Legislation

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## Keywords

Environmental crimes  
Indonesian legislation  
Enforcement mechanisms  
Penalties and sanctions  
Capacity building

**Received:** 08 September 2022**Accepted:** 12 December 2023**Published:** 03 March 2023

## Abstract

Environmental crimes pose significant threats to ecosystems, biodiversity, and sustainable development. This study critically analyzes the current Indonesian legislation pertaining to environmental crimes and evaluates its strengths, weaknesses, and gaps in implementation. By focusing on secondary data sources, including legal materials, the study examines the scope and definitions of environmental crimes, penalties and sanctions, enforcement mechanisms, and the socio-economic and political factors influencing the effectiveness of environmental law enforcement in Indonesia. The findings indicate that Indonesian legislation covers a broad range of environmental offenses; however, there is a need for clearer definitions and consistent penalties to address emerging environmental challenges adequately. Enforcement mechanisms face challenges such as fragmented coordination among agencies, resource constraints, and corruption. Recommendations for strengthening legislation and enforcement include legislative revisions and enhancements, capacity building, and addressing corruption and political interference. These recommendations aim to improve the effectiveness of environmental law enforcement in Indonesia.

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## INTRODUCTION

Environmental crimes pose a significant threat to our planet's delicate ecosystems and the well-being of human societies (van Uhm & Nijman, 2022). These crimes encompass a wide range of illegal activities, such as pollution, illegal logging, wildlife trafficking, and illegal waste disposal, which cause irreversible damage to the environment and compromise the sustainability of natural resources (Faroque & South, 2022). Addressing and combating environmental crimes requires effective legislation and robust enforcement mechanisms. The fragile state of our environment demands urgent attention. Over the past few decades, we have witnessed the alarming degradation of ecosystems, depletion of natural resources, and the extinction of countless species (Setyawati, 2022). One of the significant contributors to this catastrophic situation is environmental crime.

In Indonesia, a country known for its rich biodiversity and abundant natural resources, environmental crimes severely threaten its environmental heritage (Rum, Tukker, de Kon-

ing, & Yusuf, 2022). In order to safeguard the environment for future generations, it is imperative to critically evaluate the existing legislation and enforcement mechanisms, identify their shortcomings, and devise effective strategies for combatting environmental crimes. Indonesia is blessed with verdant rainforest, teeming with life and exuding a sense of serenity. However, the same forest is facing a swear threat of being pillaged and reduced to a barren wasteland, its inhabitants displaced, and its ecosystems irreversibly damaged (Ismail, 2020; Purwendah, Djatmiko, Erowati, Triana, & Pudyastiwi, 2022). Despite having a legal framework in place to address these issues, the country continues to struggle with rampant illegal logging, destructive mining practices, and pollution of its rivers and coastal areas. This critical analysis delves into the depths of Indonesian legislation governing environmental crimes, aiming to shed light on its strengths, weaknesses, and potential avenues for improvement.

Moreover, the current literature on environmental crimes in Indonesia has primarily focused on case studies, legal

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frameworks, and specific incidents. However, there is a notable gap in comprehensive analyses that critically assess the effectiveness of the existing legislation and enforcement mechanisms in addressing environmental crimes at a systemic level (Setyawati, 2022). Additionally, Indonesia, as one of the most biodiverse countries in the world, faces unique challenges in preserving its natural heritage. Its expansive rainforests, coastal areas, and marine ecosystems are home to countless species found nowhere else on the planet (Munfarida, Nilandita, & Auvaria, 2022). However, industrial activities, unregulated exploitation of natural resources, and weak enforcement of environmental regulations have led to widespread environmental degradation (Ahmad-Ur-Rehman, Haq, Jam, Ali, & Hijazi, 2010; Purwendah et al., 2022). The existing literature has discussed these challenges but has not adequately explored the specific gaps in Indonesian legislation and the associated enforcement issues. This research aims to bridge these academic and contextual gaps by thoroughly analyzing Indonesian legislation pertaining to environmental crimes, evaluating its strengths and weaknesses, and identifying areas for improvement.

Furthermore, this study distinguishes itself by offering a comprehensive and critical analysis of Indonesian legislation on environmental crimes, focusing on both the legal framework and its implementation. By examining the effectiveness of existing laws and enforcement mechanisms, it aims to identify the root causes of the enforcement gap and propose innovative strategies for improvement (Mustofa, Solihin, Desyana, & Hardianto, 2022). Additionally, this research endeavors to provide an updated assessment of the legislation, considering recent developments, amendments, and international best practices. By synthesizing existing knowledge with new insights, this study contributes to the growing field of environmental law and policy, serving as a valuable resource for policymakers, researchers, and activists striving for effective environmental protection. The primary objectives of this research are as follows:

- To conduct a thorough examination and critical analysis of the existing legislative framework in Indonesia concerning environmental crimes, with a focus on assessing its strengths, weaknesses, and gaps in its implementation.
- To identify and analyze the primary challenges and obstacles encountered by law enforcement agencies in their efforts to effectively address and combat environmental crimes within the Indonesian context.
- To explore and evaluate the factors contributing to the inadequate enforcement of environmental laws and

regulations in Indonesia, considering their impact on the effectiveness of environmental crime prevention and deterrence.

- To develop a set of actionable recommendations and strategies to strengthen the legislative framework, improve enforcement mechanisms, and foster a culture of environmental protection in Indonesia to mitigate environmental crimes and safeguard the country's natural resources for future generations.

## LITERATURE REVIEW

### Environmental Crimes

Environmental crimes refer to illegal activities that harm the environment, ecosystems, and natural resources (van Uhm & Nijman, 2022). These crimes have far-reaching consequences, affecting the environment and human health, biodiversity, and sustainable development. Environmental crimes can take various forms, including illegal wildlife trafficking, illegal logging, illegal fishing, pollution, and the illegal disposal of hazardous waste (Faroque & South, 2022). One of the major challenges in addressing environmental crimes is their transnational nature. Many of these crimes cross national borders, making them difficult to regulate and enforce. Transnational criminal networks take advantage of weak governance, corruption, and inadequate law enforcement capacities to carry out their illegal activities (Wang, Ulibarri, Scott, & Davis, 2023). This poses a significant threat to global environmental conservation and sustainable development efforts.

The impacts of environmental crimes are extensive and severe. Illegal logging, for example, leads to deforestation, habitat destruction, and loss of biodiversity. It also contributes to climate change by reducing carbon sinks. Illegal wildlife trafficking threatens endangered species, disrupts ecosystems, and contributes to the spread of zoonotic diseases (Paglia, 2021). Pollution from illegal dumping of hazardous waste contaminates water sources, soils, and air, posing serious health risks to humans and ecosystems. Efforts to combat environmental crimes require a multifaceted approach (Rathi, 2023). This includes developing and implementing robust legislation and regulations that clearly define and penalize environmental offenses. Effective enforcement mechanisms, including specialized units, interagency cooperation, and international collaboration, are crucial in detecting, investigating, and prosecuting perpetrators (Oliveira, 2023). Furthermore, addressing the underlying factors that drive environmental crimes is essential. This includes addressing socio-economic issues such as poverty, inequality, and lack of alternative livelihoods,

as well as tackling corruption and improving governance. Raising public awareness and fostering a culture of environmental responsibility and stewardship are also important in preventing and deterring environmental crimes.

### **Laws and Regulations in Indonesia Concerning Environmental Crimes**

One of Indonesia's most significant laws addressing environmental crimes is Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction. This law targets the rampant issue of illegal logging and forest destruction, which has severely threatened Indonesia's rich forest ecosystems. The law prohibits unauthorized logging, land conversion, and encroachment into protected forest areas. It imposes strict penalties on individuals and entities engaged in these illegal practices, including substantial fines and imprisonment (Nugraheni & Aime, 2022). By prioritizing the preservation of forests and the conservation of biodiversity, this law plays a crucial role in curbing environmental crimes related to forest destruction.

Another critical legislation concerning environmental crimes in Indonesia is Law No. 32 of 2009 on Environmental Protection and Management. This comprehensive law provides a legal framework for various environmental issues, including pollution control, waste management, and the conservation of natural resources. It encompasses a wide range of activities that can be classified as environmental crimes, such as illegal waste disposal, air and water pollution, and the destruction of habitats. The law establishes guidelines for environmental impact assessments, pollution control measures, and the responsibilities of businesses and individuals in safeguarding the environment (Purwendah et al., 2022). Through this legislation, Indonesia aims to enhance environmental protection and deter environmental crimes by providing clear regulations and enforcement mechanisms.

Additionally, Law No. 5 of 1990 on Conservation of Living Resources and Their Ecosystems is of utmost importance in addressing environmental crimes related to wildlife trafficking and the destruction of protected species and their habitats. This law emphasizes biodiversity conservation and establishes measures to prevent the illegal trade of wildlife and the destruction of ecosystems. It prohibits activities that harm protected species, destroys habitats, or engage in the illegal wildlife trade. The law imposes significant penalties on individuals involved in such offenses, including fines and imprisonment (Wijayanto, Wiraraja, & Idris, 2022; ?, ?). By focusing on protecting and preserving Indonesia's unique and diverse ecosystems, this legisla-

tion plays a crucial role in combatting environmental crimes associated with biodiversity loss and wildlife trafficking. These laws represent crucial pillars in the legal framework addressing environmental crimes in Indonesia. They serve to deter and penalize individuals and entities engaged in illegal logging, forest destruction, pollution, and wildlife trafficking. While the effectiveness of these laws depends on robust enforcement and collaborative efforts among relevant stakeholders, their existence and provisions provide a basis for the protection and conservation of Indonesia's environment and natural resources.

### **RESEARCH METHOD**

In this research, a qualitative research method was employed, specifically focusing on the analysis of legal materials as secondary data. The study relied on existing legal documents, such as laws, regulations, court cases, and governmental reports, to gather comprehensive information related to Indonesian legislation concerning environmental crimes (Sehnálek, 2022). The utilization of legal material as secondary data allowed for an in-depth examination of the current legal framework and its implementation (Sehnálek, 2022). Initially, a systematic review of the relevant laws and regulations was conducted to identify and analyze the specific provisions addressing environmental crimes in Indonesia. The legal texts were carefully examined to understand the scope, definitions, and penalties associated with various environmental offenses. Court cases and judicial decisions were reviewed to gain insights into the enforcement and adjudication processes. Additionally, governmental reports and publications were examined to assess the effectiveness of the existing legislation in addressing environmental crimes and to identify any gaps or challenges in its implementation. These secondary data sources provided valuable information regarding the enforcement efforts, monitoring mechanisms, and policy initiatives related to environmental crimes in Indonesia. The data collected from legal materials were analyzed through thematic analysis, focusing on identifying common patterns, strengths, weaknesses, and gaps in the legislation. Key themes and findings were synthesized to form a comprehensive understanding of the current state of Indonesian legislation concerning environmental crimes.

### **RESULTS AND DISCUSSION**

#### **Analysis of Current Indonesian Legislation on Environmental Crimes**

The analysis of current Indonesian legislation revealed a comprehensive framework for addressing environmental

crimes. Laws such as Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction and Law No. 5 of 1990 on Conservation of Living Resources and Their Ecosystems clearly define and outline the scope of environmental crimes. These laws encompass various offenses, including illegal logging, wildlife trafficking, pollution, and destruction of protected species and habitats. However, a key observation is the need for further clarity and specificity in defining certain offenses. For example, the definition of pollution-related crimes could be expanded to encompass emerging environmental challenges such as electronic waste and air pollution. The legislation would better address evolving environmental crimes by providing more detailed definitions. The analysis of penalties and sanctions outlined in the current legislation demonstrated a range of punitive measures to deter environmental crimes. Fines and imprisonment are the primary forms of punishment, with penalties varying based on the severity of the offense. For instance, Law No. 18 of 2013 establishes significant fines and imprisonment for individuals involved in illegal logging activities, aiming to deter such crimes that lead to widespread deforestation and habitat destruction. However, there are concerns regarding the consistency and adequacy of these penalties. In some cases, fines imposed may not sufficiently reflect the economic gains from environmental crimes, allowing perpetrators to evade accountability. Moreover, sentencing disparities among different courts and judges raise questions about the effectiveness and fairness of the judicial process. Addressing these issues would require a more standardized approach to penalties and enhanced coordination among judicial authorities.

### **Evaluation of Enforcement Mechanisms and Challenges**

The evaluation of enforcement mechanisms revealed a fragmented landscape of law enforcement agencies involved in addressing environmental crimes in Indonesia. Agencies such as the National Police, the Ministry of Environment and Forestry, and local governments play crucial roles. However, coordination and collaboration among these agencies remain a challenge, often leading to overlapping jurisdictions, information gaps, and limited resource sharing. Strengthening interagency coordination is vital to ensure effective enforcement and streamline efforts in combating environmental crimes. A significant challenge identified in the enforcement of environmental laws is the limited resources and capacity of law enforcement agencies. Insufficient funding, manpower, and technical expertise hamper effective enforcement efforts (Du & Yan, 2022). This is particularly evident in remote areas, where illegal activi-

ties such as illegal logging and wildlife trafficking often occur. Investing in capacity-building initiatives, training programs, and technological resources can enhance the effectiveness of law enforcement agencies in combating environmental crimes. Additionally, corruption and political interference emerged as critical challenges in the enforcement of environmental laws in Indonesia. Instances of bribery, collusion, and nepotism undermine the efficacy of enforcement efforts and impede justice. The influence of powerful interest groups and political pressures on law enforcement agencies hampers their ability to address environmental crimes effectively (Wang et al., 2023). Tackling corruption and ensuring an impartial and transparent enforcement system is crucial for the success of environmental law enforcement.

### **Socio-Economic and Political Factors Affecting Enforcement**

Socio-economic factors, particularly economic pressures and the pursuit of development projects, contribute to Indonesia's inadequate enforcement of environmental laws. The demand for natural resources, economic growth, and job creation often take precedence over environmental considerations (Abubakar, Ishak, Bakar, & Uddin, 2022). This imbalance results in weak environmental impact assessments, insufficient monitoring, and lenient penalties for corporations involved in environmental crimes. Addressing this issue requires a more balanced approach that prioritizes sustainable development and integrates environmental considerations into decision-making processes. The socio-economic conditions of local communities can also affect the enforcement of environmental laws (Asmah & Salam, 2022). In some cases, marginalized communities may engage in environmentally damaging activities due to limited livelihood options. Strict enforcement without considering alternative livelihood opportunities can exacerbate poverty and further strain law enforcement resources (Panda et al., 2020). A holistic approach that addresses the socio-economic needs of local communities while promoting sustainable practices is crucial for effective environmental law enforcement.

### **Recommendations for Strengthening Legislation and Enforcement**

Based on the findings of this study, several recommendations can be made to strengthen Indonesian legislation pertaining to environmental crimes. For instance, legislative revisions and enhancements are crucial to address emerging environmental challenges and clarify offenses' defini-

tions. Firstly, there is a need to expand the scope of environmental crimes covered by existing laws. This should include addressing issues such as electronic waste disposal, air pollution, and the destruction of sensitive ecosystems like coral reefs. By incorporating these modern environmental challenges into the legislation, the legal framework can effectively address the evolving nature of environmental crimes. Furthermore, the legislation should establish more consistent and proportionate penalties that reflect the economic gains from environmental crimes. Currently, penalties vary widely, leading to inconsistencies in sentencing. Harmonizing penalties and ensuring they are commensurate with the severity of the offense will deter potential perpetrators and promote a sense of fairness in the judicial process. In addition, efforts should be made to harmonize overlapping regulations and enhance coordination among relevant agencies involved in enforcing environmental laws. This can be achieved by establishing interagency task forces and developing comprehensive databases to facilitate information sharing. Enhancing cooperation and coordination will ensure a more streamlined and effective enforcement process. Additionally, significant investment is needed in training programs, technology, and infrastructure to address the challenges of resource constraints and capacity building. Law enforcement agencies responsible for combating environmental crimes should receive specialized training on identifying, investigating, and prosecuting such offenses. This includes training in evidence collection, forensic techniques, and the application of environmental laws. Regular and updated training programs will enhance the knowledge and skills of law enforcement personnel, enabling them to effectively tackle environmental crimes. In terms of technology, law enforcement agencies should have access to advanced monitoring tools and databases. This includes satellite imagery, remote sensing technologies, and data analytics platforms to detect and monitor illegal activities such as deforestation, illegal mining, and wildlife trafficking. Moreover, using such technology will strengthen surveillance capabilities and aid in identifying environmental crimes. Simultaneously, improving infrastructure in remote areas is crucial for effective enforcement. This includes establishing well-equipped checkpoints, field stations, and communication networks to support law enforcement agencies monitoring and response efforts. Adequate infrastructure will facilitate on-the-ground operations and enhance the presence of law enforcement in areas vulnerable to environmental crimes. Furthermore, strengthening cooperation with international organizations and sharing best practices can contribute to capacity-building ef-

forts. Collaborative initiatives with organizations like Interpol and United Nations Office on Drugs and Crime (UNODC) can provide training opportunities, technical assistance, and knowledge exchange on combating transnational environmental crimes. Learning from successful enforcement strategies employed by other countries will enhance the capacity of Indonesian law enforcement agencies.

At the same time, addressing corruption and political interference is crucial for the effective enforcement of environmental laws in Indonesia. Comprehensive anti-corruption measures should be implemented to ensure the integrity of environmental law enforcement. One key recommendation is to establish independent oversight bodies responsible for monitoring and investigating corruption cases related to environmental crimes. These bodies should have the authority to initiate investigations, conduct audits, and hold individuals accountable for corrupt practices. By establishing independent oversight, transparency, and accountability can be ensured within the law enforcement agencies. Additionally, the enforcement of anti-corruption laws should be strengthened. This includes strict enforcement of existing anti-corruption legislation, such as the Anti-Corruption Law, with stringent penalties for those found guilty of corruption.

Whistle-blower protection programs should be established to encourage individuals to come forward with information on corrupt practices without fear of reprisals. A robust and impartial whistle-blower protection system will facilitate reporting corruption cases within law enforcement agencies. Public awareness campaigns and education programs are essential to foster a culture of environmental responsibility and accountability. These initiatives should target various stakeholders, including law enforcement personnel, local communities, and the general public. Promoting ethical behavior, integrity, and the importance of environmental protection will contribute to a positive change in attitudes and behaviors.

It is also crucial to involve civil society organizations, Non-Governmental Organizations (NGOs), and environmental activists in monitoring and reporting instances of corruption and political interference. These organizations play a vital role in holding the government accountable and can provide support in exposing corrupt practices. Collaborative efforts between law enforcement agencies and civil society organizations will strengthen the fight against corruption and political interference in environmental law enforcement.

Hence, to effectively combat environmental crimes in Indonesia, it is imperative to strengthen legislation and en-

hance enforcement mechanisms. Legislative revisions and enhancements should focus on expanding the scope of environmental crimes, establishing consistent and proportionate penalties, and improving interagency coordination. Capacity-building efforts should include specialized training, advanced technology, and enhanced infrastructure for law enforcement agencies. Addressing corruption and political interference requires the establishment of independent oversight bodies, strict enforcement of anti-corruption laws, and public awareness campaigns. By implementing these recommendations, Indonesia can significantly strengthen its legislation, enhance enforcement mechanisms, and promote environmental protection in the face of environmental crimes.

## CONCLUSION

The current study critically analyzed the current Indonesian legislation about environmental crimes and evaluated its strengths, weaknesses, and gaps in implementation (Wakhidah & Erman, 2022). The findings shed light on various aspects of the legal framework, enforcement mechanisms, and socio-economic factors influencing the effectiveness of environmental law enforcement in Indonesia. The analysis revealed that while Indonesian legislation encompasses a broad range of environmental offenses, there is a need for clearer definitions and consistent penalties. Harmonizing and enhancing the legislation, particularly in addressing emerging environmental challenges, will contribute to more effective deterrence and punishment of environmental crimes (Rowe & Finley, 2021). Enforcement mechanisms face significant challenges, including fragmented coordination among law enforcement agencies, resource constraints, and corruption. Strengthening interagency coordination, investing in capacity-building initiatives, and addressing corruption and political interference are crucial steps toward enhancing the enforcement of

environmental laws.

It is important to acknowledge the limitations of this study. Firstly, the analysis relied solely on secondary data in the form of legal materials, which may have certain limitations in capturing the real-world complexities of enforcement efforts. Additionally, the study focused primarily on the legal and enforcement aspects, with limited exploration of the social, economic, and cultural dimensions influencing environmental crimes in Indonesia. Future research should aim to address these limitations and provide a more comprehensive understanding of environmental crimes and their enforcement in Indonesia. Conducting fieldwork, interviews, and surveys with law enforcement personnel, local communities, and other stakeholders will offer valuable insights into the challenges faced on the ground. Exploring the socio-economic and political factors contributing to environmental crimes in greater depth will help develop a holistic understanding of the issue.

Furthermore, future research could also examine the role of technology and innovative approaches in improving environmental law enforcement. This includes exploring the potential of artificial intelligence, remote sensing, and big data analytics in detecting and monitoring environmental crimes. Investigating successful case studies and best practices from other countries can provide valuable lessons and inspire effective strategies for combating environmental crimes in Indonesia. In conclusion, this study serves as a foundation for further research and provides valuable insights into Indonesian legislation on environmental crimes. By implementing the recommended legislative revisions, enhancing enforcement mechanisms, and addressing underlying socio-economic and political factors, Indonesia can strengthen its environmental protection efforts, deter environmental crimes, and safeguard its valuable natural resources for future generations.

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