

The Role of Environmental Law in Controlling the Exploitation of Natural Resources

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Article Info

Article History:

Received: Jan 20, 2026

Revised: Mar 28, 2026

Accepted: Jun 15, 2026

Keywords

Environmental
Law, Natural
Resource
Exploitation,
Sustainability, Law
Enforcement

Abstract

Uncontrolled exploitation of natural resources (NR) has become one of the major challenges to environmental sustainability, resulting in ecosystem degradation, environmental pollution, biodiversity loss, and increasing social conflicts over resource utilization. These issues have highlighted the urgent need for an effective legal framework capable of balancing economic development with environmental protection. Environmental law plays a strategic role in regulating the utilization and management of natural resources by establishing legal standards, preventive measures, and enforcement mechanisms that promote sustainable development. This study aims to analyze the role of environmental law in controlling natural resource exploitation in Indonesia and to evaluate the effectiveness of its implementation in achieving environmental sustainability. The research employs a normative juridical method using statutory and conceptual approaches through the analysis of relevant legislation, legal doctrines, and scholarly literature. The findings reveal that Indonesia's environmental legal framework provides several important control instruments, including environmental licensing, Environmental Impact Assessment (EIA/AMDAL), environmental monitoring, and administrative, civil, and criminal sanctions for legal violations. Nevertheless, the implementation of these legal instruments continues to face significant challenges, such as weak law enforcement, overlapping regulations, limited institutional coordination, and low public awareness and participation in environmental protection. Therefore, strengthening regulatory frameworks, enhancing law enforcement capacity, and encouraging greater public participation are essential to achieving sustainable natural resource management and long-term environmental conservation in Indonesia.

1. Introduction

Indonesia is a country endowed with abundant natural resources (NR), including both renewable and non-renewable resources, which constitute a fundamental asset for national development and the improvement of public welfare. However, excessive and uncontrolled exploitation of natural resources has resulted in various adverse consequences, including deforestation, environmental pollution, and ecosystem degradation. This condition demonstrates that development oriented solely toward short-term economic gains without considering environmental carrying capacity inevitably gives rise to serious ecological, social, and legal problems. Therefore, environmental law

plays a strategic role as an instrument for regulating the utilization of natural resources to ensure their sustainability, as stipulated in Law Number 32 of 2009 concerning Environmental Protection and Management, which emphasizes the principles of responsibility, sustainability, precaution, and justice.

The high rate of environmental degradation in Indonesia indicates that the control of natural resource exploitation has not yet been implemented effectively. Industrial, mining, and plantation activities frequently neglect environmental considerations, thereby triggering social conflicts and ecological losses. According to Emil Salim (1986), development that

disregards environmental protection generates social costs that ultimately exceed its economic benefits. This underscores the importance of implementing the principles of sustainable development as articulated in the Brundtland Report (1987), which defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

From a theoretical perspective, environmental law constitutes a body of legal norms governing the relationship between human beings and the environment to ensure the preservation of environmental functions (Danusaputro, 1980). Environmental law performs both preventive and repressive functions. Its preventive function is reflected in regulatory instruments such as environmental licensing, Environmental Impact Assessment (EIA/AMDAL), and environmental supervision, whereas its repressive function is implemented through administrative, civil, and criminal sanctions (Hardjasoemantri, 2005). The effectiveness of environmental law is highly dependent on law enforcement, which, according to Soerjono Soekanto (1983), is influenced by legal substance, law enforcement institutions, supporting facilities, society, and legal culture.

In practice, environmental law plays a significant role in controlling natural resource exploitation through regulatory instruments such as environmental permits and Environmental Impact Assessments (EIA/AMDAL), which are intended to prevent environmental degradation at an early stage (Soemarwoto, 2001). Furthermore, the enforcement of legal sanctions serves as a repressive mechanism for addressing environmental violations. According to Satjipto Rahardjo (2000), law

should function as an instrument of social engineering capable of shaping environmentally responsible behavior.

Based on the foregoing discussion, it can be concluded that environmental law plays a crucial role in controlling the exploitation of natural resources; however, its effectiveness continues to encounter various challenges. Accordingly, this study addresses the following research questions: (1) What is the role of environmental law in controlling the exploitation of natural resources? and (2) How effective is the implementation of environmental law in Indonesia? The objective of this study is to analyze the role and effectiveness of environmental law in the practice of sustainable natural resource management.

2. Literature Review

2.1 Environmental Law Theory

According to Munadjat Danusaputro (1980), environmental law encompasses the entire body of legal regulations governing the relationship between human beings and their environment. Meanwhile, Koesnadi Hardjasoemantri (2005) argues that environmental law aims to preserve environmental sustainability.

Environmental law theory provides the conceptual foundation for understanding how law functions to regulate, protect, and manage the environment in order to ensure its sustainability. In general, environmental law is understood as a body of legal norms governing the relationship between human beings and the environment, with the objective of maintaining ecological balance while preventing environmental pollution and degradation.

Furthermore, Koesnadi Hardjasoemantri (2005) states that environmental law constitutes an essential instrument for achieving environmentally

sound development by controlling human activities so that they do not exceed the environmental carrying capacity. From this perspective, environmental law performs two principal functions, namely preventive and repressive functions. The preventive function is implemented through regulatory instruments such as environmental licensing, Environmental Impact Assessment (EIA/AMDAL), and the establishment of environmental quality standards aimed at preventing environmental degradation from the outset. In contrast, the repressive function is realized through law enforcement measures in the form of administrative, civil, and criminal sanctions imposed on individuals or entities responsible for environmental pollution and environmental destruction.

2.2 Sustainable Development Theory

Sustainable development theory is a concept that emphasizes the importance of balancing economic growth, social justice, and environmental protection within the development process. This concept was first popularized by the World Commission on Environment and Development (WCED) through its report *Our Common Future* (Brundtland Report) in 1987, which defines sustainable development as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. This definition emphasizes that the utilization of natural resources should not be conducted in an exploitative manner but should instead take into account sustainability and the environmental carrying capacity.

From the perspective of this theory, development is no longer oriented solely toward economic growth but must also give due consideration to ecological and social

dimensions. In other words, every development activity should take into account its long-term environmental impacts as well as the equitable distribution of benefits to society. Sustainable development also requires the integration of economic, environmental, and social policies into every decision-making process. This perspective is consistent with the view of Emil Salim (1986), who emphasizes that development must be environmentally oriented in order to prevent environmental degradation that could adversely affect future generations.

3. Research Methods

This study employs a normative juridical research method, which focuses on examining legal norms as embodied in statutory regulations and other relevant legal instruments. Normative juridical research is intended to analyze legal principles, concepts, and regulations governing environmental protection and the control of natural resource exploitation in Indonesia. Rather than relying on empirical field data, this method emphasizes legal analysis through the interpretation and evaluation of applicable legal norms to assess their role and effectiveness in addressing environmental issues.

The study applies three complementary research approaches. First, the statutory approach is used to examine and analyze relevant laws and regulations governing environmental protection and natural resource management, particularly those related to environmental conservation, environmental licensing, and sustainable natural resource utilization. Second, the conceptual approach is employed to explore legal doctrines, theories, and scholarly perspectives concerning environmental law and

sustainable development, thereby providing a theoretical framework for analyzing the implementation of environmental legal principles. Third, the case approach is utilized to examine selected legal cases and judicial decisions related to environmental disputes and natural resource exploitation in order to evaluate the practical application and enforcement of environmental law.

The legal materials used in this study consist of primary, secondary, and tertiary legal sources. Primary legal materials include statutory regulations and other legally binding instruments relevant to environmental protection and natural resource management. Secondary legal materials comprise books, scientific journal articles, research reports, and other scholarly publications that discuss environmental law and sustainable development. Meanwhile, tertiary legal materials include legal dictionaries, encyclopedias, and other reference sources that support the interpretation and analysis of legal concepts. The collected legal materials are analyzed qualitatively through legal interpretation and systematic analysis to draw conclusions regarding the role and effectiveness of environmental law in controlling the exploitation of natural resources in Indonesia.

4. Results and Discussion

4.1 The Role of Environmental Law in Controlling Natural Resource Exploitation

The role of environmental law in controlling the exploitation of natural resources (NR) in Indonesia is highly strategic because law functions as an instrument to regulate, control, and simultaneously balance economic interests with environmental sustainability. Normatively, the legal basis for

environmental management in Indonesia is regulated under Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH), which emphasizes fundamental principles such as sustainability, the precautionary principle, the polluter pays principle, and participatory principles. In addition, state control over natural resources is also affirmed in Article 33 paragraph (3) of the 1945 Constitution, which states that the land, waters, and natural resources contained therein shall be controlled by the state and utilized to the greatest extent possible for the prosperity of the people. This demonstrates that the state has a constitutional obligation to regulate the utilization of natural resources so that they are not exploited excessively.

In practice, environmental law functions through preventive and repressive instruments. Preventively, the control of natural resource exploitation is carried out through environmental licensing mechanisms, Environmental Impact Assessment (AMDAL), and the establishment of environmental quality standards. Environmental Impact Assessment (AMDAL), as explained by Otto Soemarwoto (2001), is an important instrument in the decision-making process because it is capable of predicting the environmental impacts of an activity before the activity is implemented. Through the implementation of AMDAL, the potential for environmental damage resulting from natural resource exploitation can be minimized from the outset. Furthermore, the requirement for an environmental permit serves as a form of administrative control to ensure that every business activity remains within the limits of the environmental carrying capacity.

Repressively, environmental law functions through the enforcement of

sanctions against violations that cause environmental pollution and environmental degradation. The UUPPLH regulates three types of sanctions, namely administrative, civil, and criminal sanctions. Administrative sanctions include warnings, suspension, and revocation of permits; civil sanctions consist of compensation and environmental restoration; while criminal sanctions include imprisonment and fines. From a theoretical perspective, this is consistent with the view of Koesnadi Hardjosoemantri (2005), who states that environmental law functions as an instrument of control as well as an instrument for maintaining order in environmental utilization. Furthermore, Satjipto Rahardjo (2000) emphasizes that law must be capable of serving as law as a tool of social engineering, namely, shaping the behavior of business actors and society to become more responsible toward the environment. Nevertheless, the effectiveness of the role of environmental law in controlling natural resource exploitation continues to face various challenges. According to Soerjono Soekanto (1983), the success of law enforcement is influenced by five factors, namely legal substance, law enforcement officers, facilities and infrastructure, society, and legal culture. In the Indonesian context, the primary obstacles include weak supervision, the low level of compliance among business actors, and conflicts of economic interests that frequently disregard environmental considerations. In addition, overlapping regulations between the central and regional governments also constitute an obstacle to the effective implementation of environmental law.

From the perspective of the sustainable development theory introduced by the World Commission on Environment and Development (1987), natural resource

management should be carried out in a balanced manner among economic, social, and environmental interests. However, in practice, natural resource exploitation in Indonesia still tends to be oriented toward short-term economic gains. This indicates that the implementation of the principles of sustainable development has not yet been fully realized in either policy or practice.

Thus, it can be concluded that environmental law plays a highly significant role in controlling natural resource exploitation through preventive and repressive instruments supported by constitutional foundations and statutory regulations. However, in order to improve its effectiveness, it is necessary to strengthen law enforcement, enhance public awareness, and ensure government consistency in implementing the principles of sustainable development so that the utilization of natural resources can be carried out in a fair and sustainable manner.

4.2 Forms of Uncontrolled Natural Resource Exploitation

Uncontrolled exploitation of natural resources (NR) is one of the primary causes of environmental degradation in Indonesia. This form of exploitation generally occurs due to weak supervision, low compliance with regulations, and the dominance of short-term economic interests over the principle of sustainability. In general, uncontrolled exploitation can be observed across various sectors, including forestry, mining, industry, and marine resources, each of which has significant impacts on environmental sustainability.

One of the most evident forms of exploitation is deforestation resulting from illegal logging. This activity not only causes the loss of forest cover but also results in ecosystem degradation, loss of biodiversity, and an increased risk of natural disasters

such as floods and landslides. In addition, exploitation in the mining sector, particularly illegal mining conducted without permits, has also become a serious problem because it is often carried out without complying with environmental standards, thereby causing land degradation, water pollution, and permanent environmental degradation.

Another form of exploitation is environmental pollution caused by industrial activities, such as the discharge of liquid waste into rivers without adequate treatment. This is contrary to the provisions of Law Number 32 of 2009 concerning Environmental Protection and Management, which requires every business actor to maintain environmental quality standards. Furthermore, the exploitation of marine resources, such as overfishing and the use of destructive fishing gear, has also caused damage to marine ecosystems and a significant decline in fish populations. From the perspective of the sustainable development theory (WCED, 1987), these forms of exploitation demonstrate an imbalance between the utilization of natural resources and environmental conservation efforts. This confirms that uncontrolled exploitation not only results in environmental degradation but also has the potential to threaten the sustainability of future generations. Therefore, a strong role of environmental law is required to control these various forms of exploitation through regulation, supervision, and strict law enforcement so that natural resource management can be carried out in a responsible and sustainable manner.

4.3 The Effectiveness of Environmental Law in Indonesia

The effectiveness of environmental law in Indonesia is determined by the

consistency of the implementation of legal regulations in controlling environmental pollution and the exploitation of natural resources (NR). Normatively, Indonesia has established a strong legal foundation through Law Number 32 of 2009 concerning Environmental Protection and Management and Article 33 paragraph (3) of the 1945 Constitution, which emphasize the sustainable management of natural resources for the prosperity of the people. However, in practice, such effectiveness continues to face challenges, including weak law enforcement, overlapping regulations, limited facilities, and low public awareness.

According to Soerjono Soekanto (1983), the success of law enforcement is influenced by five factors, namely legal substance, law enforcement officers, facilities, society, and legal culture. In this context, weaknesses in these factors have resulted in law not functioning optimally. Furthermore, law has not yet fully functioned as a tool of social engineering, as proposed by Satjipto Rahardjo (2000). Therefore, strengthening law enforcement, improving regulations, and enhancing public awareness are necessary to ensure that environmental law can effectively support sustainable development (WCED, 1987).

4.4 Efforts to Strengthen Environmental Law

Efforts to strengthen environmental law are necessary to improve the effectiveness of controlling the exploitation of natural resources (NR) in accordance with the principles of sustainable development. This can be achieved through the improvement of regulations, particularly the implementation of Law Number 32 of 2009, as well as the harmonization of policies between the central and regional governments to

prevent regulatory overlap.

In addition, law enforcement needs to be strengthened by enhancing the integrity of law enforcement officers, implementing strict supervision, and enforcing firm sanctions to create a deterrent effect, as stated by Soerjono Soekanto (1983). Public participation and legal awareness must also be enhanced, in line with the view of Satjipto Rahardjo (2000) that law functions as a tool of social engineering. With the support of monitoring technology and the synergy of all stakeholders, natural resource management can be implemented more effectively, equitably, and sustainably (WCED, 1987).

5. Conclusions

Environmental law plays a highly significant role in controlling the exploitation of natural resources (NR) through preventive instruments such as environmental licensing and Environmental Impact Assessment (AMDAL), as well as repressive instruments in the form of administrative, civil, and criminal sanctions. Normatively, the existence of Law Number 32 of 2009 concerning Environmental Protection and Management and Article 33 paragraph (3) of the 1945 Constitution has provided a strong legal foundation for the sustainable management of natural resources. However, in practice, the effectiveness of environmental law remains suboptimal due to various challenges, including weak law enforcement, overlapping regulations, limited facilities and infrastructure, and low public legal awareness. Therefore, although environmental law has functioned as an instrument for controlling natural resource exploitation, its implementation still needs to be strengthened in order to effectively balance economic interests and environmental sustainability.

The recommendations that can be proposed are that the government should strengthen existing regulations and harmonize policies to prevent regulatory overlap in the management of natural resources (NR). Law enforcement must also be carried out firmly, consistently, and free from particular interests in order to create a deterrent effect for violators. In addition, the capacity and integrity of law enforcement officers should continue to be enhanced, accompanied by the utilization of technology in environmental monitoring to improve the effectiveness of environmental control. On the other hand, the public should be actively involved in environmental monitoring and management through the enhancement of legal awareness and environmental education. Accordingly, strong synergy among the government, business actors, and society is required to achieve natural resource management that is equitable, responsible, and sustainable.

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