

## Law Enforcement And The Important Role Of Communities In Preserving Mangrove Forests In Protecting The Environment

Muhammad Irfan Faisal Barus<sup>1</sup>, Selfi Helfianto Simarmata<sup>2</sup>, Aulia Perbina Br Tarigan<sup>3</sup>, Suci Ramadani<sup>4</sup>

*Universitas Pembangunan Panca Budi*

[mhd77904@gmail.com](mailto:mhd77904@gmail.com), [denok2021@gmail.com](mailto:denok2021@gmail.com), [auliaaferbinaa@gmail.com](mailto:auliaaferbinaa@gmail.com),  
[suciramadani@dosen.pancabudi.ac.id](mailto:suciramadani@dosen.pancabudi.ac.id)

### Abstract

Mangrove forest conservation requires integrated efforts between law enforcement and community participation. This study analyzes the extent to which law enforcement and community roles contribute to maintaining the sustainability of mangrove forests. The results of the study indicate that strict law enforcement can provide a deterrent effect for perpetrators of violations and create a conducive climate for conservation efforts. On the other hand, community participation in conservation activities can increase the success of conservation efforts and strengthen a sense of ownership of mangrove forests. This study concludes that synergy between law enforcement and community participation is the key to success in maintaining the sustainability of mangrove forests and protecting the environment.

### Keywords:

Law Enforcement, Mangrove Forest Conservation, Community Participation

## 1. INTRODUCTION

Mangrove forests are one of the main components of coastal ecosystems that have very significant ecological, economic, and social functions. Ecologically, mangroves are a habitat for various types of flora and fauna, a breeding ground and food source for marine biota, and a carbon sink that can reduce the effects of global warming. In addition, mangroves function as natural protection against abrasion and tsunamis, and maintain seawater quality by filtering pollutants. However, currently the damage to mangrove forests is getting worse, especially due to the conversion of land into ponds, settlements, and uncontrolled industrial activities. Data from the Ministry of Environment and Forestry shows that more than 50% of mangrove forests in Indonesia are in damaged or critical condition (Ministry of Environment and Forestry, 2023).

Law enforcement is one of the important instruments to ensure sustainable mangrove forest management. Strong regulations are needed to protect mangroves from illegal exploitation and provide strict sanctions for violations. However, the effectiveness of law enforcement is often hampered by the lack of coordination between agencies, low capacity of law enforcement, and weak community participation in monitoring and reporting violations. Therefore, this study aims to evaluate the role of law and explore the extent to which communities can be actively involved in mangrove conservation. This study aims to provide strategic recommendations that include

strengthening regulations, increasing public awareness, and developing effective collaboration models.

The urgency of this research lies not only in the need to preserve mangroves as environmental assets, but also in the economic and social impacts they generate. Coastal communities are highly dependent on the existence of mangroves, both for fisheries, protection from natural disasters, and as a source of additional income through ecotourism. If mangrove damage is not immediately addressed, coastal communities will face the risk of losing their livelihoods, declining environmental quality, and increasing the threat of disasters.

The scope of this study includes an analysis of applicable regulations, such as Law No. 32 of 2009 concerning Environmental Protection and Management, as well as regional regulations related to mangrove forest management. In addition, this study will also evaluate the role of law enforcement officers, local governments, and communities in mangrove conservation efforts. A collaborative approach between various parties will be the focus to find applicable and sustainable solutions. It is hoped that the results of this study can provide a real contribution to improving mangrove forest governance in Indonesia. By actively involving the community in conservation, not only will awareness of the importance of mangroves increase, but also a strong sense of ownership of the sustainability of this natural resource will be created. In addition, the results of this study are also expected to be a reference for policy development and encourage further research that can explore innovations in mangrove conservation.

## **2. LITERATURE REVIEW**

### **A. Definition of Law Enforcement**

Law enforcement is the process of making efforts to enforce or function legal norms in real terms as guidelines for behavior in traffic or legal relations in community and state life. Viewed from the perspective of the subject, law enforcement can be carried out by a broad subject and can also be interpreted as an effort to enforce the law by the subject in a limited or narrow sense. In a broad sense, the law enforcement process involves all legal subjects in every legal relationship. Anyone who carries out normative rules or does something or does not do something based on the applicable legal norms means that he is carrying out or enforcing the rule of law. In a narrow sense, from the perspective of the subject, law enforcement is only interpreted as an effort by certain law enforcement officers to guarantee and ensure that a rule of law runs as it should. In ensuring the enforcement of the law, if necessary, law enforcement officers are permitted to use coercive power.

The definition of law enforcement can also be viewed from the perspective of its object, namely from the legal aspect. In this case, the definition also includes broad and narrow meanings. In a broad sense, law enforcement also includes the values of justice contained in the formal rules and the values of justice that live in society. However, in a narrow sense, law enforcement only concerns the enforcement of formal and written regulations. Therefore, the translation of the words 'law enforcement' into Indonesian uses the words 'law enforcement' in a broad sense and the term 'regulation enforcement' can also be used in a narrow sense. The distinction between the formality of written legal rules and the scope of the values of justice contained in them even arises in English itself with the development of the terms 'the rule of law' versus 'the rule of just law' or in the term 'the rule of law and not of man' versus the term 'the rule by law' which means 'the rule of man by law'. In the term 'the rule of law' there is the meaning of government by law, but not in its formal meaning, but

also includes the values of justice contained therein. Therefore, the term 'the rule of just law' is used. In the term 'the rule of law and not of man' it is intended to emphasize that in essence the government of a modern legal state is carried out by law, not by people. The opposite term is 'the rule by law' which is intended as a government by people who use the law merely as a tool of power.

With the description above, it is clear that what is meant by law enforcement is more or less an effort made to make the law, both in the narrow formal sense and in the broad material sense, as a guideline for behavior in every legal act, both by the legal subjects concerned and by the law enforcement apparatus who are officially given the task and authority by law to ensure the functioning of legal norms that apply in community and state life. From this broad understanding, we can determine the boundaries of our discussion of law enforcement. Will we discuss all aspects and dimensions of law enforcement, both in terms of its subjects and objects or will we limit ourselves to discussing only certain things, for example, only examining subjective aspects. This paper was deliberately created to provide an overview of all aspects related to the theme of law enforcement.

## **B. Community Role in Mangrove Forest Conservation**

In the management of mangrove ecosystems, the most important part in the sustainability of the management of the area is the local community. This is because the local community is very dependent on the conditions and potential of natural resources and feels the impacts in the area more, or in other words, the good or bad management of the mangrove ecosystem depends on the participation of the local community (Erwianto, 2006).

The results of the analysis show that community participation in counseling on the importance of the existence of mangrove forests is relatively low, namely 65%. Participation in counseling is relatively low because the local government has held meetings with the community several times, but only certain people attended the meetings. Many people choose not to participate in these activities. This was stated by one of the mothers who lives around the mangrove area.

Participation in utilization is relatively low, namely 61%. This is because there are regulations by the local government that prohibit the community from taking resources in the mangrove area. Anyone who takes will be fined. This rule has only been implemented now. However, in ancient times before the area was managed as an ecotourism area, the community could freely take the existing resources to fulfill their daily needs without fear of regulations.

## **C. Definition of Mangrove**

Mangrove forests are a type of forest that is typically found along the coast or river estuaries that are affected by the ebb and flow of sea water. Mangroves grow on sheltered beaches or flat beaches, usually along the windward side of an island or behind a coral reef offshore that is sheltered (Nontji, 1987; Nybakken, 1992).

The mangrove forest ecosystem is complex and dynamic, but unstable. It is said to be complex because its ecosystem is filled with mangrove vegetation, and is also a habitat for various animals and aquatic biota. The type of soil underneath it includes young development soil (saline young soil) which has a high clay content with a high base saturation value and cation exchange capacity. The content of organic matter, total nitrogen, and ammonium is categorized as moderate in the part near the sea and high in the landward part (Kusmana, 1994)

### 3. RESEARCH METHODS

This study adopts a doctrinal methodology (Indra Utama Tanjung 2024) with a normative legal approach to analyze and compare Article 284 of the 1946 Criminal Code and Article 411 of the Criminal Code No. 1 of 2023, which regulates the punishment for adultery in Indonesia. This method involves an in-depth study of relevant laws and regulations and related literature to identify changes in the law and their impact on social dynamics and moral values in Indonesia. Primary and secondary data sources such as regulations, journal articles, and law books are used in data collection through documentation studies and comparative analysis. The purpose of this study is to provide an understanding of the evolution of adultery criminal law in Indonesia and to assess the urgency and implications of these changes for society and the legal system as a whole.

### 4. DISCUSSION AND RESEARCH RESULTS

This study examines the role of law enforcement and community participation in mangrove forest conservation, with a particular focus on the activities of the Sumatran Elephant Foundation (Yagasu) in North Sumatra. Primary data were obtained through in-depth interviews, participant observation, and surveys of local communities, law enforcement officers, and Yagasu representatives. Secondary data were collected from various sources, including official reports and related publications.

#### 1. Condition of Mangrove Forests in North Sumatra

Mangrove forests in North Sumatra are under significant pressure due to land conversion, illegal logging, and other illegal activities. According to data from the Ministry of Environment and Forestry, almost 50% of the total mangroves in Indonesia have been lost in the last two to three decades. In the study area, mangrove destruction has had a negative impact on coastal ecosystems and the welfare of the communities that depend on them.

#### 2. Yagasu's Role in Mangrove Conservation

Yagasu has been actively involved in mangrove forest restoration and conservation efforts in North Sumatra. They work together with local communities and government agencies to conduct mangrove replanting, routine patrols, and environmental education. One significant activity is routine patrols in the mangrove area of Halaban Village, Langkat Regency, together with UPT KPH I Stabat and local residents, to protect 400 hectares of forest from the threat of illegal logging.

#### 3. Effectiveness of Law Enforcement

Law enforcement in mangrove forest protection still faces various challenges. Although regulations have been established, their implementation in the field is often less than optimal. Factors such as limited resources, lack of coordination between institutions, and low public legal awareness are the main obstacles. Studies show that mangrove forest damage in Indonesia has exceeded the standard criteria for environmental damage, indicating the need for more effective law enforcement. In an effort to support mangrove forest conservation, several important regulations have been established by the government, such as:

1. Law Number 41 of 1999 concerning Forestry
2. Law Number 32 of 2009 concerning Environmental Management and Management
3. Law Number 39 of 2014 concerning Plantations.

#### 4. Community Participation in Conservation

The active participation of local communities is a key component in the success of mangrove conservation programs. Through a participatory approach, Yagasu has formed Community Patrolling Units (CPU) from local communities to help protect 25,000 hectares of mangrove forests divided into seven zones in North Sumatra and Aceh Provinces. This involvement not only increases environmental awareness but also provides economic benefits through the development of ecotourism and mangrove derivative products.

#### 5. Synergy between Law Enforcement and Community Participation

The results of the study show that synergy between strict law enforcement and active community participation can increase the effectiveness of mangrove forest conservation. Collaboration between Yagasu, law enforcement officers, and the community in conducting patrols and other conservation activities has succeeded in reducing illegal activities and increasing awareness of the importance of mangroves. However, challenges such as limited resources and the need for increased capacity of law enforcement still need to be overcome to achieve more optimal results.

#### 6. Recommendations for Improving Mangrove Conservation

Based on the research above, some recommendations that we can propose include:

1. Strengthening Law Enforcement: Building public legal awareness regarding the importance of preserving mangrove areas is always carried out by all parties, in this case academics are obliged and have a moral responsibility for it. Repressive efforts are carried out through law enforcement involving law enforcement officers, from the central to regional and village levels.

2. Community Empowerment: Continuing and expanding mangrove-based education and economic empowerment programs to increase community participation and welfare.

By implementing these recommendations, it is hoped that mangrove forest conservation efforts in North Sumatra can be more effective and sustainable, providing ecological, economic and social benefits for local communities.

### 5. CONCLUSION

Mangrove forests play an important role in maintaining coastal ecosystems, but their destruction is increasingly worrying due to illegal activities and land conversion. This study shows that synergy between effective law enforcement and active community participation is essential for mangrove conservation. The Sumatran Elephant Foundation (Yagasu) is an example of successful collaboration through rehabilitation programs, environmental patrols, and community empowerment. However, challenges such as weak law enforcement and coordination between agencies still need to be addressed. Recommendations include strengthening regulations, community empowerment, and multi-stakeholder collaboration to increase the effectiveness of sustainable mangrove conservation and provide ecological, social, and economic benefits.

### 6. REFERENCE

Anantama, A. T., Munawir, Z., & Rafiqi, R. (2020). Pertanggung Jawaban Pidana Karyawan Korporasi Dalam Tindak Pidana Lingkungan Hidup (Studi Putusan No. 133/Pid. B/2013/PN. MBO). *JUNCTO: Jurnal Ilmiah Hukum*, 2(2).

Blog Ayobantu. (2023). Perjuangan Yagasu Dukung Konservasi Alam dan Ekonomi Masyarakat. *Ayobantu Blog*. Retrieved from <https://blog.ayobantu.com/konservasi-alam-yagasu/>





- Chairil, N. S. (2007). Ketidakseimbangan Sistem Sosial Penyebab Bencana Alam. *Jurnal Sosioteknologi*, 10(6),
- Disemadi, H. S., & Prananingtyas, P. (2020). Kebijakan Corporate Social Responsibility (CSR) sebagai Strategi Hukum dalam Pemberdayaan Masyarakat di Indonesia. *Jurnal Wawasan Yuridika*, 4(1),
- Ginting, E. P., & Saragih, Y. M. (2024). LEGAL PROTECTION FOR HEALTH WORKERS AFTER THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS (RME). *International Journal of Synergy in Law, Criminal, and Justice*, 1(2), 118-125.
- Ismaidar, I., & Rahmayanti, R. (2023). Legal Protection for Children as Victims of Domestic Violence. *Randwick International of Social Science Journal*, 4(1), 106-110.
- Muhammad, A. H. (2016). Penegakan Hukum Pidana Lingkungan Hidup dalam Menanggulangi Kerugian Negara. *Jurnal Legal Pluralism*, 6(1)
- Subyakto, K. (2015). Azas Ultimum Remedium Ataukah Azas Primum Remedium Yang Dianut Dalam Penegakan Hukum Pidana Pada Tindak Pidana Lingkungan Hidup Pada Uu Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup. *Jurnal Pembaharuan Hukum*, 2(2),
- Saragih, Y. M., & Hadiyanto, A. (2021). *Pengantar Teori Kriminologi & Teori Dalam Hukum Pidana*. Cattleya Darmaya Fortuna.
- Nurhayati, S., Wakhyuni, E., & Hasibuan, S. A. (2021). Enforcement of Labor Wages Below the Minimum Standard Reviewed from Government Regulation (PP) Number 36 of 2021 Concerning Wages and Islamic Law. *paragraph*, 1, 36.
- Veronica, A. K. (2002). Lingkungan Hidup dan Sumberdaya Alam yang Semakin Rusak dan Mengancam Keberlanjutan Kehidupan Manusia Indonesia, *Jurnal Ekoton*, 2(1)
- Zarzani, T. R., Ismaidar, I., & Fahriza, W. (2024). Dimensions Of Corporate Crime. *International Journal of Law, Crime and Justice*, 1(2), 108-113.
- Yayasan Gajah Sumatera (Yagasu). (2023). Laporan Konservasi dan Edukasi Hutan Mangrove di Sumatera Utara. *Yagasu Publication*. Retrieved from <https://yagasu.or.id>
- Yuliana, D., & Pradana, I. (2018). Partisipasi Masyarakat dalam Melestarikan Hutan Mangrove di Cagar Alam Pulau Dua, Serang, Banten. *Jurnal Kehutanan Tropis*, 15(2), 134-150.