

**STRATEGY OF ENVIRONMENTAL LEGAL ARRANGEMENT AS
AN EFFORT TO PREVENT NATURAL DISASTERS, FLOODS,
AND LANDSLIDES IN NORTH SULAWESI**

Flora Pricilla Kalalo^{1*}, Nelly Pinangkaan², Reymen M. Rewah³

¹⁻³ Faculty of Law, Universitas Sam Ratulangi, Manado, North Sulawesi

E-mail: ¹⁾ florakalalo@yahoo.com

Abstract

The prevention of violations of Environmental Law is based on Law Number 32 of 2009, which requires all members of society to comply with the law. National guidelines for preventing natural disasters have been established by BNPB, Provincial and Regional Governments as policies for society to follow. Compliance with environmental laws is crucial to ensure that people do not live in prohibited areas designated by the government. Failure to comply with environmental permits has resulted in losses and casualties during floods and landslides in Manado and North Sulawesi. Environmental standards are regulated by laws and institutions such as BNPB, as well as local government regulations. However, despite these regulations, environmental problems still persist. This research aims to address the legal strategies for structuring environmental law that must be followed by the community, as well as the enforcement strategies and sanctions for those who violate environmental laws. The research uses normative research methods focusing on two indicators: the basic strategies for structuring environmental laws and the enforcement strategies and sanctions for violators.

Keywords: Environmental Law, Prevention, Natural Disaster, Strategy

1. INTRODUCTION

The legal basis for preventing people from violating Environmental Law is Law Number 32 of 2009, where every element of society must obey and comply with all instructions in the Law. In particular, national regulations on the prevention of natural disasters have been established by BNPB, which is a government policy as a guideline for all members of society to comply with. There are also regulations issued by local governments, such as Governor's Regulations and Mayor's Regulations. These rules must be obeyed to avoid natural disasters, floods, and landslides (Kalalo, 2016).

Environmental sustainability is crucial in life, given the nature and character of the environment (Hardjosoemantri, 2005). The environment is an integral part of everyone's life. Humans breathe and receive light because there is air and sun, and human needs, such as obtaining food, drink, farming, making houses, bathing, and shelter, are fulfilled from the environment. The presence of the environment is crucial and decisive for the presence and continuity of humans, for their culture and civilization. Environmental factors are a part that cannot be absolutely separated from humans during their entire life, from birth to even when in the womb. Therefore, no matter how we perceive environmental objects, they are essential for our survival (Muhjad, 2015).

Every time floods and landslides occur in the city of Manado and throughout North Sulawesi, many people suffer losses and even casualties due to non-observance of environmental regulations by community members who violate environmental laws. The purpose and effort to maintain and protect the environment can take place in an organized manner so that it is followed and obeyed by all parties. These goals and efforts are

outlined in legal regulations. Thus, a type of law was born, specifically created with the main purpose and objective of maintaining and protecting the environment, called environmental law or, briefly, environmental law (Amiq, 2013).

The results of previous research show that North Sulawesi Governor Regulation Number 14 of 2018 concerning the Determination of Types of Business Plans and/or Activities that Have Environmental Management Efforts and Environmental Monitoring Efforts, and Manado City Regional Regulation Number 1 of 2020 concerning Environmental Protection and Management sanctions, have not been carefully implemented. This weakens law enforcement because unclear sanctions cause people not to comply with existing laws and regulations, especially those governing environmental permits. The lack of compliance with environmental permits is a complicated problem because, for example, most people who build houses in areas prone to floods and landslides do not have building permits, leading to natural disasters resulting in material losses and even fatalities. The absence of clear sanctions in the form of demolition of houses in the area is a weakness in environmental law enforcement, especially for governments that are always affected by disasters.

Responsibility for the recovery and prevention of environmental pollution needs to be confirmed against the consequences of pollution that occurs. Local governments can formulate the concept of sustainable development in relation to environmental restoration by providing clear boundaries on environmental responsibility in investment activities, the responsibility of business entities, and individuals, so as to prevent natural disasters (Al Afghani, 2003).

The government needs to intervene in environmental management by organizing the correct legal strategy based on applicable regulations for violators to comply with applicable laws (Hutabarat et al., 2022). This ensures that people clearly realize that if the laws and regulations on the environment are not implemented properly, there will be sanctions obtained from the government and especially from nature itself.

The first objective of this research is to elucidate the fundamental strategy for organizing environmental laws that necessitate compliance from every segment of society. This involves a comprehensive exploration of the essential components and principles that form the basis of these laws. Meanwhile, the second objective aims to investigate the strategies employed for the enforcement of environmental laws and the corresponding sanctions applied to individuals who breach these regulations, deviating from established environmental law standards and procedures. By delving into this aspect, the research intends to shed light on the mechanisms in place for ensuring compliance, examining the effectiveness of enforcement strategies, and assessing the appropriateness and consistency of sanctions imposed on violators.

2. RESEARCH METHODS

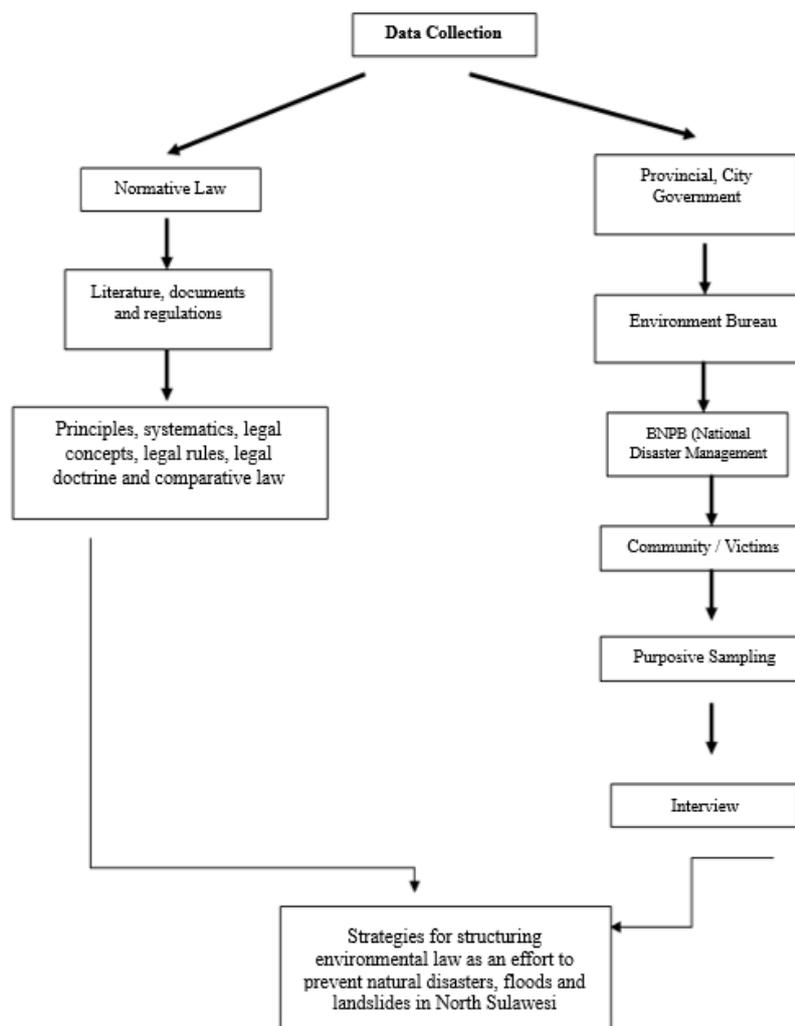


Figure 1. Research model

2.1. Type of Research

The research activities related to data collection encompass normative legal research supported by field surveys. This study employs juridical research methods, specifically normative law, which involves an examination of legal norms, rules, and doctrines present in legislation and jurisprudence (Soekanto & Mamudji, 2003). Additionally, the research involves an analysis of library materials addressing strategies for implementing effective environmental law. This includes a comprehensive review of books, laws and regulations, and theoretical documents. The theoretical research phase delves into discussions on principles, systematics, legal concepts, rules, doctrines, and comparative law concerning strategies for establishing environmental legal frameworks as a preventive measure against natural disasters, floods, and landslides in North Sulawesi. Field research or surveys are conducted to gather factual information by interviewing relevant stakeholders, focusing on predetermined research locations.

2.2. Determination of Data Collection Location

The research location was specifically identified within the North Sulawesi Province, Jakarta. This decision was based on the assumption that the environmental licensing arrangements fall under the jurisdiction of the North Sulawesi Provincial Government.

2.3. Population and Sample

The study's population encompasses entities involved in the flood and landslide natural disaster management strategy, specifically those affiliated with the Bureau responsible for permits. The population includes:

1. North Sulawesi Provincial and Municipal Government
2. National Disaster Management Agency, BNPB
3. Environment Agency
4. Communities residing in areas susceptible to natural disasters, particularly in the city of Manado

The sample selection followed a purposive sampling method, involving the selection of individuals as data sources based on specific considerations. For instance, individuals were chosen based on their presumed knowledge about the researcher's expectations or their role as heads of agencies, facilitating a more insightful exploration of the studied object or social situation (Sugiyono, 2017). The determined sample for this study includes:

- a. Provincial and Municipal Heads/Leaders and Staff
- b. Head/Leader and Staff of BPBN
- c. Head/Leader of the Environment Agency
- d. Members of the community residing in the vicinity of disaster-prone areas

2.4. Data Collection Technique

For the acquisition of necessary data, the study employed the following data collection techniques:

1. Interviews:

Utilizing interviews as a method to directly gather data from individuals with expertise, using interview guidelines as a structured approach.

2. Documentation:

Employing documentation as a method to collect data by examining relevant documents, including laws and regulations, essential data from agencies pertinent to the research problems, textbooks, and legal journals. These documents serve as study materials integral to the research.

2.5. Data Analysis

The collected data underwent qualitative analysis, involving a descriptive approach to elucidate the obtained data, encompassing both primary and secondary data. This analysis includes providing interpretations and drawing conclusions. The qualitative nature of this data analysis is selected due to its relevance to understanding the government's attitudes and roles in supporting disaster management and prevention

strategies, particularly in the context of the section responsible for environmental licensing.

3. RESULTS AND DISCUSSION

This research is focused on the Strategy for Structuring Environmental Law as an Effort to Prevent Natural Disasters, Floods, and Landslides in North Sulawesi. The implementation of the right strategy is crucial for establishing effective environmental legal frameworks to preempt future natural disasters. In environmental law, structuring refers to the comprehensive implementation of environmental requirements. It is considered achieved when all environmental prerequisites are fulfilled or executed by the subjects of environmental law (Husin, 2009). Structuring is a process aimed at motivating individuals to voluntarily adhere to the law. This process involves considering the knowledge, understanding, and behavior of the community towards the law, facilitating the fulfillment of law enforcement.

The government adopts various strategic measures to engage the community in disaster risk reduction efforts, specifically in disaster prevention and preparedness. The disaster management stage is executed to diminish and address the risks associated with disasters. Activities in this stage encompass not only the restoration and modification of the physical environment but also the enhancement of awareness and capabilities to respond to disaster risks. According to (Hardi & R Ahmad, 2019), the disaster response stage is conducted through structural and cultural means. Structurally, efforts include the development of diverse physical infrastructures and the application of technological approaches, such as the construction of specialized flood control channels and early warning systems. Structural mitigation also involves engineering designs for disaster-resistant buildings to reduce vulnerability. Conversely, cultural mitigation focuses on reducing vulnerability through policy instruments like the implementation of disaster management laws and regulations. Cultural mitigation endeavors include changing paradigms and expanding knowledge and attitudes to foster a resilient society, including communities committed to environmental care to minimize disaster occurrences. In general, this phase involves:

1. Creating maps and plans for areas particularly at risk of disasters.
2. Issuing disaster warnings.
3. Enhancing building resilience to specific disasters.
4. Providing comprehensive advice and education to residents in disaster-prone areas.

The environmental agency, in its strategy, outlines two programs: First, the Environmental Pollution and Damage Control Program aims to enhance environmental quality, preventing damage, pollution, and restoring the environment affected by excessive natural resource utilization. Notably, the North Sulawesi government, particularly in Manado, has intensified cooperation with the Ministry of Environment and Forestry to address marine debris resulting from floods. The floods in North Sulawesi contribute to sea garbage accumulation due to inadequate waste management by individuals and industries, particularly concerning hard-to-decompose plastic waste.

Second, the Natural Resources Protection and Conservation Program aims to elevate the role and commitment of stakeholders in natural resource management and environmental preservation.

A strategy is a comprehensive approach involving the implementation of ideas, planning, and activity execution within a defined timeframe. The strategy for structuring environmental law is heavily influenced by three dimensions affecting its quality:

1. Involving Lawbreakers:

Lawbreakers directly or indirectly contributing to environmental degradation leading to natural disasters, floods, and landslides are integral to this dimension. Common law violations, such as improper waste disposal, particularly during the rainy season, can cause flooding. Inadequate urban planning is often linked to landslides.

2. Victims (Community):

Victims are those directly impacted by natural disasters, encompassing property damage, loss, suffering, and loss of life. Victims may include those who are deceased, missing, injured, suffering, or displaced.

3. Law Enforcement Officials:

Entities responsible for applying and enforcing the law, such as the police, prosecutors, courts, and Civil Service units, are central to this dimension, particularly in the context of criminal law enforcement.

In addressing issues related to the prevention of environmental damage, Article 71 of the PPLH Law outlines the following:

- (1) The minister, governor, or regent/mayor, in line with their respective authorities, are mandated to oversee the compliance of individuals responsible for businesses and/or activities with the provisions specified in laws and regulations pertaining to environmental protection and management.
- (2) The Minister, governor, or regent/mayor may delegate their oversight authority to officials or technical agencies responsible for environmental protection and management.
- (3) During the oversight process, the Minister, governor, or regent/mayor is required to appoint functional officials as environmental supervisory officers.

Environmental supervisory officials, as specified in Article 71, paragraph (3), are granted the authority to:

- a. Conduct monitoring.
- b. Request information.
- c. Make copies of documents and/or create necessary records.
- d. Enter specific locations.
- e. Take photographs.
- f. Produce audio-visual recordings.
- g. Collect samples.
- h. Inspect equipment.
- i. Examine installations and/or modes of transportation.
- j. Halt specific violations.

In the development of environmental law structuring strategies, Environmental Civil Servant Investigators have been established to carry out the responsibilities intended by Article 94 of the PPLH Law. The establishment of Environmental Civil Servant Investigators is one of the government's strategies to protect environmental fighters in

launching legal processes where the burdens and responsibilities carried out are reported directly to the Environmental Service itself where the Civil Servant Investigators are given legal protection for all the consequences of their work.

The responsibilities that must be carried out by PPNS LH, namely:

- a. Conducting examinations on the veracity of reports or information concerning criminal offenses in the realm of environmental protection and management.
- b. Examining individuals suspected of committing criminal offenses in the field of environmental protection and management.
- c. Requesting information and evidence from individuals related to criminal offenses in the environmental protection and management domain.
- d. Examining books, records, and other documents relevant to criminal offenses in environmental protection and management.
- e. Conducting examinations at specific locations suspected of containing evidence, books, records, and other pertinent documents.
- f. Confiscating materials and goods resulting from violations that can serve as evidence in cases of criminal acts in environmental protection and management.
- g. Seeking expert assistance in the investigation of criminal offenses related to environmental protection and management.
- h. Halting investigations.
- i. Entering specific places, capturing photographs, and/or creating audio-visual recordings.
- j. Searching the body, clothes, room, and/or other locations suspected of being the site of a committed criminal offense.
- k. Arresting and detaining perpetrators of criminal offenses.

PPNS LH exclusively investigates specific criminal cases related to environmental protection and management, as outlined in Law No. 32 of 2009. The cases addressed involve environmental pollution, environmental destruction, and activities related to hazardous and/or toxic waste (B3) conducted by both individuals and business entities, whether incorporated or unincorporated.

Environmental damage, a leading cause of contemporary natural disasters, necessitates strategic legal measures and efforts for proactive anticipation and resolution. This approach is vital to ensuring the perpetual preservation and protection of the environment, considering that the ongoing environmental degradation is intricately linked to human actions and habits. Consequently, fostering a sense of responsibility for environmental preservation within every community is imperative.

Up until 2009, Indonesia had three environmental laws. Initially, Law No. 4 of 1982 concerning Principles of Environmental Management was enacted, later revoked, and replaced by Law No. 23 of 1997 concerning Environmental Management. Eventually, Law No. 32 of 2009 on Environmental Protection and Management (UUPPLH) superseded previous legislation. Siti Sundari Rangkuti emphasized that environmental laws and regulations were crafted to support the UUPPLH.

The UUPPLH serves as a platform for formulating environmental policy, offering a potential solution to environmental challenges. Law, functioning as a tool for development and social engineering, assumes the role of an agent of change and becomes the cornerstone for aspiring to achieve sustainable development (Shidarta, 2004). The amalgamation of all the aforementioned laws and regulations contributes to the

Indonesian environmental legal system. The legal norms embedded in the 2009 Environmental Law constitute the primary provisions necessitating the integration of Indonesian environmental law in conservation endeavors.

The UUPPLH grants considerable autonomy to regions to formulate environmental laws tailored to their specific circumstances, as articulated in Article 63, paragraph 2. Each province is authorized to determine Strategic Environmental Assessments, Environmental Protection and Management Plans, and Environmental Impact Assessments in accordance with their unique situations and conditions.

At the operational level, Law No. 24 of 2007 mandated the establishment of the National Disaster Management Agency (BNPB), subsequently affirmed by Presidential Regulation No. 8 of 2008. BNPB is entrusted with various duties, including providing guidance and direction for disaster management efforts, setting standards and requirements for disaster management, disseminating information on disaster management activities, reporting to the President, utilizing national and international assistance, being accountable for budget utilization, and facilitating the establishment of Regional Disaster Management Bodies. Besides the Central Government, Local Government, and the National Agency for Regional Disaster Management (BPBD), Law No. 24 of 2007 recognizes the involvement of other entities, namely business institutions and international organizations.

The North Sulawesi government, as the delegated authority from the central government to formulate legal policies for environmental permits at the provincial level, consistently offers guidance and supervision to districts and cities in the authorization of environmental permits to mitigate the risk of natural disasters. The provincial government allows regional flexibility in regulating environmental laws within their respective territories. Some of these regulations include:

1. Manado City Regional Regulation Number 1 of 2020 concerning Environmental Protection and Management,
2. Bitung City Regional Regulation Number 2 of 2021 amending Regional Regulation Number 16 of 2013 regarding Control of Wastewater Discharge to Water or Water Sources,
3. Tomohon City Regional Regulation (PERDA) Number 1 of 2022 concerning Environmental Protection and Management Plan 2021-2025,
4. Regent Regulation (PERBUP) of Minahasa Regency Number 16A of 2018 concerning Types of Business Plans and/or Activities Must be Equipped with Environmental Management Efforts and Environmental Monitoring Efforts,
5. Regulation of the Regent of North Minahasa Regency Number 15 of 2014 on the Description of Duties and Functions of the Environmental Management Agency of North Minahasa Regency,
6. Regent Regulation (PERBUP) of Southeast Minahasa Regency Number 49 of 2016 on the Position, Organizational Structure, Duties and Functions, and Work Procedures of the Type C Environmental Agency of Southeast Minahasa Regency,
7. Regent Regulation (PERBUP) of Sangihe Islands Regency Number 12 of 2013 amending Regent Regulation Number 51 of 2008 concerning Job Description of the Environmental Agency of Sangihe Islands Regency.

As part of the strategies for structuring environmental law at the regional level, it is evident in Manado City Regional Regulation Number 1 of 2020 concerning Environmental Protection and Management. Article 10 elucidates that every policy must engage and coordinate with stakeholders, both at the central and regional levels, based on the Strategic Environmental Assessment (KLHS). The execution of every policy should be transparent to the public, ensuring everyone's right to a good and healthy environment and providing information on environmental protection and management.

Manado City, situated within North Sulawesi Province and serving as the provincial capital, has experienced rapid regional development, leading to an increased occurrence of natural disasters like floods and landslides compared to other areas in the province. Almost every rainy season witnesses floods and landslides in various parts of Manado city. The primary concern revolves around the urban center of Manado being a focal point for flooding. In response, the government has implemented stringent rules, including direct enforcement against individuals littering, especially along riverbanks. The Manado City Government has instituted an on-the-spot Misdemeanor Court to take decisive action against violations committed by citizens. Penalties include imprisonment for three days or fines of up to Rp. 300,000. The enforcement of these regulations is complemented by improvements in government facilities, particularly waste disposal facilities, which have been increased in each sub-district and neighborhood, overseen directly by the neighborhood head.

Various governmental initiatives have been undertaken to prevent the occurrence of natural disasters. Legal frameworks have been established by both the central and local governments. The PPLH law empowers the government to clearly define sanctions for violations of environmental laws, encompassing both severe and administrative penalties.

Administrative sanctions given are:

- a. written warning;
- b. government coercion;
- c. freezing of environmental permits; or
- d. revocation of environmental license.

Severe sanctions that the government can impose for serious violations of environmental permit laws include criminal penalties, where violators may face imprisonment for 1-3 years or fines ranging from 1 billion rupiah to 3 billion rupiah (Rahmadi, 2011).

Each sanction issued will naturally undergo a legal process established on the basis of valid evidence, such as witness testimony, expert opinions, letters, instructions, the defendant's testimony, and other evidence supporting the investigation process in accordance with applicable regulations.

The existence of clear regulations and sanctions for the legal structuring strategy of environmental permits as an effort to prevent natural disasters, floods and landslides must of course be known by the wider community so that it can be understood and obeyed (Ninik, 1992). Some of the ways the government implements the strategy of legal structuring of environmental permits, namely:

1. Socialization to the local community conducted by environmental stakeholders such as the Head of the Environment or the head of RT/RW,
2. Guidance on the socialization that has been carried out so that it can be understood and obeyed,

3. Providing technical assistance to the community directly,
4. Supervision with continuous guidance on the rules that have been enacted.

A sound strategy for managing environmental regulations is the primary effort to prevent regulatory violations and/or environmental pollution. The implementation of the right strategy results in effective environmental legal frameworks to prevent future natural disasters. Real prevention is evident in the proactive actions of the government, enforcing applicable rules to create a deterrent effect for rule violators.

The decrease in the intensity of natural disasters, floods, and landslides serves as proof that the strategy of structuring environmental law has been appropriately implemented. However, as long as natural disasters persist due to the negligence of the community and the government, the strategy for environmental law structuring must continue to evolve and adapt to the ongoing situations and conditions. This ongoing development is essential because every individual has an equal right to a good and healthy environment.

4. CONCLUSION

The formulation and implementation of a strategic environmental law framework, aimed at preventing natural disasters, floods, and landslides, are enshrined in Law Number 32 of 2009. This legal foundation establishes the imperative for every societal element to adhere to and comply with the stipulations set forth. Oversight and regulations by institutions such as BNPB, in conjunction with local government directives like Governor Regulations and Mayor/Regent Regulations, further reinforce the necessity for strict compliance. The effective management of environmental regulations stands as the cornerstone in preventing violations and environmental pollution, thereby mitigating the occurrence of natural disasters.

The enforcement of a judicious legal strategy is pivotal in ensuring robust compliance with environmental laws to forestall natural disasters. However, shortcomings in government measures, particularly in supervision and guidance, create loopholes allowing for community infractions. The government's perceived leniency in applying sanctions diminishes their deterrent impact, perpetuating the recurrence of natural disasters, floods, and landslides.

In light of the aforementioned findings, certain recommendations emerge to strengthen environmental law management and foster greater community adherence: Firstly, the government should enhance environmental law management by implementing legal sanctions in alignment with existing regulations, compelling violators to conform to applicable laws. Hence, there is a need for comprehensive community guidance, emphasizing the direct correlation between improper adherence to environmental laws and the resultant sanctions imposed by both the government and nature itself. Furthermore, socialization, technical guidance, and supervision must be intensified to directly engage communities. A comprehensive understanding of environmental regulations is crucial, as lack of knowledge perpetuates violations. Therefore, an emphasis on community-focused education and awareness initiatives is paramount to curbing environmental transgressions effectively.

REFERENCES

- Al Afghani, M. M. (2003). Konsep Kealpaan dalam Hukum Pertanggung Jawaban Negara. *Skripsi Fakultas Hukum Uiniversitas Indonesia*.
- Amiq, B. (2013). *Penerapan sanksi administrasi dalam hukum lingkungan*. Laksbang Mediatama.
- Hardi, W., & R Ahmad, B. (2019). *Kolaborasi Penanganan Bencana*. Trim Komunika.
- Hardjasoemantri, K. (2005). *Hukum Tata Lingkungan (cetakan ke delapan belas)*. Gadjah Mada University Pers.
- Husin, S. (2009). *Penegakan hukum lingkungan Indonesia*. Sinar Grafika.
- Hutabarat, D. T. H., Fransisca, Z., Ritonga, F., Pardede, D. J., Almas, S., Sikumbang, N. A., Mutiara, Khoiriyah, A., Hamizah, S., Malahayati, & Suryadi. (2022). Understanding And Describing Relationship Of State Law And Human Right. *Journal of Humanities, Social Sciences and Business (JHSSB)*, 1(1), 65–72. <https://doi.org/https://doi.org/10.55047/jhssb.v1i1.63>
- Kalalo, F. P. (2016). *Hukum Lingkungan*. Unsrat Press.
- Muhjad, M. H. (2015). *Hukum Lingkungan Sebuah Pengantar Untuk Konteks Indonesia*.
- Ninik, S. (1992). *Pelestarian, Pengelolaan dan Penegakan Hukum Lingkungan Hidup*. Sinar Galia.
- Rahmadi, T. (2011). *Hukum Lingkungan di Indonesia*. PT Raja Grafindo Persada.
- Shidarta. (2004). *Hukum Perlindungan Konsumen Indonesia*. Gramedia Widiasarana Indonesia.
- Soekanto, S., & Mamudji, S. (2003). *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. Raja Grafindo Persada.
- Sugiyono. (2017). *Metode Penelitian Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).