

Analysis of the Role of Law in Environmental Dispute Resolution: A Case Study in Urban Areas

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Abstract

The objective of this research project is to conduct an in-depth examination of the role of law in environmental dispute resolution within the context of urban Yogyakarta. By employing a qualitative methodology, this study examines the factors affecting the implementation of environmental legislation and the efficacy of legal instruments in addressing disputes. This study seeks to elucidate the role of law in environmental dispute resolution in Yogyakarta, examine the obstacles and impediments encountered in the implementation of environmental law, and analyse the efficaciousness of the existing dispute resolution mechanisms. To this end, it employs qualitative methods, with a particular focus on primary data obtained through observation, interviews, and documentation. The findings demonstrate that, despite an adequate legal framework, the efficacy of environmental dispute resolution is constrained by challenges inherent in law enforcement, public awareness, and economic considerations.

Keywords: *environmental, urban, dispute, resolution*

INTRODUCTION

The number of environmental disputes in urban areas has increased markedly over recent decades, a phenomenon closely associated with the processes of rapid urbanisation and extensive industrialisation. In cities of significant scale, such as Yogyakarta, the pressure on natural resources has intensified, largely as a result of the elevated demand for space, infrastructure and resources that support the livelihoods of a growing population.

The expansion of urban populations gives rise to a multitude of environmental consequences, the most significant of which is the increased demand for housing, public services, and transportation. These developments often entail changes in the utilization of land, including the conversion of agricultural or forest areas into residential or industrial zones. The growth of the population in Yogyakarta has given rise to new challenges, including the diminution of green space, augmented water consumption, and an increase in the volume of garbage and waste (Mohaqiq, 2024).

A particularly conspicuous consequence of this demographic shift is the pollution of water sources. The lack of effective wastewater management, often concomitant with high rates of population growth, results in contamination of riverine and groundwater systems. In Yogyakarta, this issue is further exacerbated by the inadequate treatment of domestic and

industrial waste, with many discharges occurring directly into waterways without adhering to environmental quality standards.

Furthermore, population growth has resulted in increased emissions of carbon and other pollutants into the atmosphere. The prevalence of heavy traffic, continuous infrastructure development, and uncontrolled industrial activities has contributed to the deterioration of air quality. Air pollution represents a significant challenge in urban areas, including Yogyakarta, where concentrations of particulates and harmful gases such as carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen oxides (NO_x) have increased.

In addition to population growth, industrialisation is a significant contributing factor to environmental disputes in urban areas. The establishment of industrial facilities in suburban or even central locations can have a considerable impact on the quality of the local environment. In Yogyakarta, various industrial sectors, including textiles, food, and manufacturing, are experiencing rapid growth. However, this expansion is often not accompanied by the development of effective waste management systems for both solid and liquid waste (Fransisca et al., 2024).

The issue of waste management in Yogyakarta is of critical importance and requires immediate attention. The increasing volume of domestic waste resulting from population growth, when coupled with the lack of effective management of industrial waste, has led to significant soil, water and air pollution. The city's limited waste management system is often unable to accommodate the ever-increasing waste, leading to the emergence of illegal dumping or improper management practices. This has a detrimental impact on the quality of life of communities, particularly those residing in proximity to landfills or industrial sites.

As a consequence of water and air pollution, and inadequate waste management, there has been an increase in the number of environmental disputes in Yogyakarta. These disputes can involve a variety of parties, including communities, industries and the government. For instance, communities that have been affected by air pollution from factories or liquid waste leaks from industrial estates have initiated legal action against the companies responsible or even the local government, claiming that they have failed to enforce environmental laws.

Such environmental disputes frequently arise from environmental injustice, whereby the individuals and communities most adversely affected by environmental degradation are often socio-economically disadvantaged groups. These groups frequently lack adequate access to legal services, environmental information and fair decision-making processes, which in turn gives rise to social tensions and legal conflicts (Azizah, 2024).

It is evident that the role of law in this context is to facilitate the reconciliation of competing interests between development and environmental conservation. Indonesia has already established a framework of laws and regulations that govern environmental protection, including Law No. 32/2009 on Environmental Protection and Management. However, there are various impediments to the effective implementation of environmental laws on the ground.

In Yogyakarta, despite the existence of clearly defined regulations, the implementation of environmental laws is often constrained by a number of factors, including low law enforcement, a lack of public awareness, and the influence of strong economic interests. Many cases of environmental disputes are settled out of court through mediation or negotiation; however, the effectiveness of these methods remains questionable. Some parties believe that litigation, which involves the courts, provides a more certain outcome, although the process is often time-consuming and costly.

Concurrently, local and national governments bear the responsibility of formulating policies that facilitate the effective enforcement of environmental laws. The implementation of robust regulations and transparent monitoring systems is essential to guarantee that

industries adhere to environmental standards. Conversely, it is imperative that communities be included in the environmental decision-making process, thereby instilling a sense of ownership and responsibility for the sustainability of their environment (Budijati & Setiyawan, 2023).

METHOD

This research employs a qualitative methodology with a case-study approach, which enables investigators to examine in depth the social, legal and environmental contexts associated with environmental dispute resolution in Yogyakarta. The case-study method was selected because it offers researchers flexibility in analysing the multifaceted dimensions of a complex phenomenon, such as environmental disputes, which involve numerous actors, including local communities, government agencies and the private sector.

The qualitative method is appropriate for this research due to its interpretative nature, which allows researchers to explore the perspectives and subjective experiences of informants involved in environmental disputes. In addition to describing the legal facts, this approach enables researchers to understand how different parties interpret the role of the law in resolving conflicts. Qualitative research also permits researchers to be more flexible in developing theoretical frameworks that emerge from field data, rather than relying solely on existing literature (Werkmeister et al., 2024).



Figure 1. Qualitative Research

The case study employed in this research is focused on particular instances of environmental disputes in Yogyakarta, which exhibits distinctive characteristics in an urban context. In urban regions, environmental concerns are frequently more complex due to the influence of demographic growth, urbanization and industrialization, which not only impact the natural environment but also have a bearing on the socio-economic aspects of the population residing in the area. Case studies permit researchers to investigate such interrelationships in depth, thereby creating an integrated picture of how environmental disputes emerge and are resolved in Yogyakarta.

The case study is located in the Indonesian city of Yogyakarta, focusing on urban areas experiencing heightened levels of environmental pressure. Yogyakarta was selected as the research site due to the city's accelerated development over recent decades, which has

resulted in a multitude of environmental concerns, including water and air pollution, inadequate waste management and the transformation of green space into industrial and residential zones. Environmental disputes in Yogyakarta frequently involve competing interests between the government, communities and the industrial sector, highlighting the complexities of environmental governance in urban areas (Masjhoer & Vitrianto, 2024).

RESULT & DISCUSSION

The Role of Law in Environmental Dispute Resolution

This research demonstrates that environmental law plays a pivotal role in resolving disputes pertaining to environmental damage in Yogyakarta, particularly in urban areas. The law serves as a means of maintaining equilibrium between sustainable development and environmental conservation. However, the efficacy of law in this context is not always assured, as there are numerous impediments to its implementation that restrict its effectiveness.

In general, environmental law in Indonesia is governed by a number of regulations, the most important of which is Law No. 32/2009 on Environmental Protection and Management. This legislation provides a robust legal framework for addressing a range of environmental concerns, including pollution, ecosystem degradation and inter-party disputes over the utilisation of natural resources. Furthermore, regional regulations (Perda), applicable at the provincial and district/city levels, also regulate specific aspects of environmental management in accordance with the distinctive characteristics of each region (Jamal et al., 2021).

Mediation as an Alternative Dispute Resolution Mechanism. The results demonstrate that mediation is a prevalent environmental dispute resolution mechanism in Yogyakarta. Mediation enables disputing parties to reach an agreement without undergoing a protracted and costly court process. In mediation, the involved parties, including affected communities, government, and industry, collaborate with the assistance of an impartial mediator to identify a solution that is equitable and acceptable to all parties.

Mediation offers several advantages in the context of environmental dispute resolution. Firstly, it is a more expedient process than litigation in court. In situations where environmental damage must be halted immediately, such as river pollution or air pollution that endangers public health, mediation allows for more rapid and pragmatic solutions. Secondly, mediation provides a forum for direct dialogue, enabling the parties to discuss issues without the constraints of a courtroom and to consider solutions that may not arise in litigation (Gayo, 2022).

Nevertheless, the efficacy of mediation is contingent upon the willingness and sincerity of the involved parties to engage in constructive dialogue. In some instances, industry parties may be uncooperative or reluctant to adhere to the outcome of mediation. In such cases, mediation may prove ineffective in reaching a satisfactory settlement, necessitating the pursuit of legal action through the courts by the aggrieved party. Furthermore, while mediation is frequently successful in resolving conflicts at the local level, the outcome of mediation is not always legally binding, potentially leading to non-compliance by the losing party with the agreed upon resolution.

In the event of mediation failing or being unable to fairly resolve a dispute, the next legal avenue is through the courts. This research has identified that a number of cases pertaining to environmental disputes in Yogyakarta ultimately proceed to court, particularly when the infringements of environmental legislation are significant or involve extensive environmental damage that affects a considerable number of individuals (Sasmiar et al., 2024).

The court serves as a legal forum that provides certainty and legitimacy to the enforcement of environmental regulations. Through the court, aggrieved parties may file a lawsuit and demand compensation for their losses. In this process, the court has the authority to strictly enforce the law, for example by ordering the guilty company to pay compensation or restore the damaged environment.

However, research also indicates that court intervention frequently encounters a number of obstacles. Firstly, litigation in court can be lengthy and costly. Many communities affected by environmental damage lack the financial resources to pursue their case in court, resulting in a lack of legal action. Secondly, the judicial system in Indonesia, including in Yogyakarta, faces challenges in terms of capacity and integrity. Weak law enforcement, corruption, and a shortage of environmental experts can impede the litigation process and reduce the effectiveness of dispute resolution in court.

Furthermore, it is not always the case that court judgments guarantee sufficient environmental restoration. While courts may order legal sanctions or compensation, environmental restoration frequently requires a lengthy process and close monitoring. In the absence of robust oversight mechanisms, those responsible for environmental damage may fail to fulfil their obligations to repair the damage, or may do so only minimally.

The implementation of environmental law in Yogyakarta also presents a significant challenge. Despite the existence of a comprehensive legal framework, its practical application in the field frequently fails to meet expectations (Ratnaningrum et al., 2024).

One of the most significant challenges in the enforcement of environmental legislation is the lack of effective supervision. Government agencies responsible for monitoring industry compliance with environmental regulations frequently lack the requisite human resources and budgets. This results in inadequate oversight of factories and companies operating in Yogyakarta, particularly with regard to waste management and exhaust emissions. In the absence of rigorous supervision, many companies contravene environmental regulations without facing significant consequences.

In some cases, communities, particularly in urban areas, may lack sufficient awareness of their environmental rights or the means by which they can utilise the law to safeguard the environment. Low levels of education and restricted access to information contribute to a lack of awareness among many individuals that they can seek legal protection for environmental damage. Consequently, numerous instances of environmental pollution or destruction remain unaddressed by the legal system (Krismantoro & Hari Supriyanto, 2021).

As in many other Indonesian cities, there is a dichotomy between financial and environmental interests in Yogyakarta. Local governments often prioritise rapid economic development, particularly in the industrial sector, over environmental protection. Consequently, violations of environmental legislation are frequently disregarded or tolerated in order to maintain economic stability and generate employment. Additionally, there are instances where those with significant political or economic influence can influence legal processes, resulting in less stringent enforcement of environmental regulations.

Barriers to Law Enforcement

Environmental law enforcement plays a pivotal role in safeguarding natural resources and maintaining ecological balance in urban areas such as Yogyakarta. However, in practice, there are a number of significant barriers that impede the effective and equitable implementation of environmental law. These barriers are not merely technical in nature, but also encompass social, economic, and political factors that influence the entire process of environmental dispute resolution.

One of the most significant challenges to environmental law enforcement in Yogyakarta is the scarcity of resources in law enforcement agencies. Agencies entrusted with environmental protection, such as environmental agencies or environmental management bodies at the local level, frequently lack the personnel, equipment, and financial resources essential for monitoring and prosecuting environmental offenses (Widjaja, 2024).

The scarcity of personnel with expertise in environmental matters represents a significant challenge. The volume of cases requiring attention often exceeds the number of available experts. In Yogyakarta, for instance, environmental inspectors responsible for monitoring industrial activities are frequently overwhelmed, leading to inadequate supervision of industrial practices that contribute to environmental degradation.

Furthermore, the lack of sophisticated technical equipment also contributes to the challenges faced by law enforcement agencies. The inability to accurately measure the level of air, water or soil pollution hinders the identification and follow-up of environmental pollution cases.

With regard to financial resources, the budgetary allocation for environmental protection at the local government level is frequently inadequate. This budgetary constraint has ramifications across a range of areas, from the absence of training for officers to the lack of support for advocacy and socialisation programmes. This ultimately gives rise to a lack of robust law enforcement in the field, where environmental offences are often not met with sufficient sanctions (Purnawati et al., 2021).

A second obstacle is the low public awareness of environmental rights. While there are clear regulations on people's rights to live in a clean and healthy environment, many people, especially in densely populated urban areas such as Yogyakarta, lack an understanding of these rights. This is often due to a lack of environmental education and information on the laws that protect environmental rights.

A lack of awareness of environmental rights among the general public often results in a lack of understanding that they have the right to file a complaint or take legal action when pollution occurs in their neighbourhood. For instance, in the event of water or air pollution in their vicinity, affected communities frequently adopt a passive and reluctant stance with regard to reporting the incident, on the grounds that they lack the capacity to effectively challenge the actions of large corporations or even the government, which is perceived as inaction. This ignorance results in numerous instances of environmental pollution going undetected, and perpetrators frequently evade punishment (Soleh et al., 2024).

Furthermore, the absence of community involvement in environmental decision-making processes represents a significant obstacle to the enforcement of environmental legislation. In numerous instances, crucial decisions that have a profound impact on the environment, such as the issuance of industrial development permits or land use changes, are taken without sufficient consultation with affected communities. This frequently gives rise to discontent and environmental disputes, yet, due to the lack of accessible information, communities are seldom actively engaged in the resolution process.

The lack of sustainable education and advocacy programmes represents a significant obstacle to efforts to raise public awareness of environmental rights. It is therefore essential that the government and non-governmental organisations (NGOs) in Yogyakarta reinforce their socialisation efforts to provide communities with a more comprehensive understanding of their rights and the measures that can be taken to address environmental issues.

Economic factors represent a significant challenge to the enforcement of environmental legislation, particularly in developing cities such as Yogyakarta, where the pursuit of economic growth frequently supersedes environmental concerns. In numerous instances, policies designed to advance economic growth take precedence over environmental

protection, creating a quandary between the necessity to enhance economic well-being and the imperative of sustainable environmental stewardship (Suprpto, 2023).

In Yogyakarta, industry, tourism and infrastructure development are the main drivers of economic growth. However, the drive to maximise economic benefits often leads to compromises on environmental regulations. For example, industries operating in urban areas are often granted lax operating licences without consideration of serious environmental impacts, or without strict oversight of their compliance with environmental standards.

Large companies with substantial economic influence frequently exert pressure on governments to relax environmental regulations or accelerate the licensing process, even when projects are likely to result in significant environmental contamination. In some instances, conflicts of interest between government officials and the private sector contribute to this problem. Officials tasked with enforcing environmental laws often find themselves in a predicament, where they must choose between protecting the environment or facilitating investment and economic development.

The aforementioned economic pressures also affect the communities that are directly affected by environmental pollution. Many communities in Yogyakarta depend on industry or development projects for their livelihoods. Despite being affected by environmental pollution, they often feel trapped in a situation where prioritising job survival is more important than fighting for their environmental rights. This situation is exacerbated by structural poverty, whereby the most economically vulnerable groups of people are the most affected by environmental pollution, yet also the most difficult to access justice.

In addition to economic pressures, deficiencies in law enforcement and ineffectual sanctions constitute significant impediments to the resolution of environmental disputes. Frequently, when environmental infractions are identified, the penalties imposed are insufficient to deter the perpetrators. For instance, the fines levied on corporations that pollute the environment are often insignificant in comparison to the profits they generate from non-compliant operations.

The weak application of administrative or criminal environmental sanctions results in companies considering the cost of violating environmental laws as part of their operational costs. This demonstrates that effective law enforcement requires not only the presence of robust regulations but also the capability to implement them effectively. In Yogyakarta, environmental violations are frequently addressed through negotiation or mediation approaches, which, while they may resolve conflicts, do not always provide justice for affected parties or impose sufficiently stringent sanctions on violators (Mustofa et al., 2024).

Effectiveness of Dispute Settlement Mechanisms

The efficacy of environmental dispute resolution mechanisms is contingent upon a number of factors, including the nature of the dispute, the parties involved, and the specific mechanism employed. In the context of Yogyakarta, a review of the literature and interviews with key informants, including government officials, environmental lawyers, and affected communities, suggests that litigation mechanisms may not be as effective as non-litigation mechanisms, particularly mediation and negotiation (Alawiya et al., 2023).

1. Litigation: Lengthy Process and High Cost. Litigation refers to the resolution of disputes through formal legal channels, whereby cases are submitted to courts, including general courts and specialised courts such as the State Administrative Court (PTUN) and District Courts with jurisdiction over environmental disputes. While litigation provides legal certainty and a legally binding judgement, it is often considered less effective by the majority of informants in this study for several reasons:

- The lengthy duration of the process is a significant drawback. One of the primary criticisms of litigation is that it is a protracted process. In environmental disputes, cases frequently take years to reach a final verdict. This is due to the intricate nature of environmental issues, which often involve numerous parties and a multitude of technical elements necessitating the presentation of evidence and expert testimony. The process can encompass various stages, including the examination of evidence, the articulation of legal arguments, and appeals, all of which demand a significant investment of time and effort.
 - The financial burden associated with litigation is a significant concern. In addition to the lengthy nature of the process, litigation is also known to be a costly endeavour. Plaintiffs, particularly those communities affected by environmental damage, frequently bear significant financial burdens, including the costs associated with hiring legal counsel, court fees, and the procurement of technical evidence, such as environmental expert reports. In many instances, these communities are from economically disadvantaged backgrounds, making the financial constraints a significant barrier to pursuing legal action.
 - The influence of interested parties: In numerous instances of environmental litigation, economically or politically dominant parties, such as major corporations or investors, can exert significant influence on communities or claimants. Informants in this study have indicated that the power and influence of interested parties frequently impede the litigation process or even influence the outcome of a trial.
 - A further obstacle is the lack of public understanding of the legal process. A significant number of communities engaged in environmental disputes lack a comprehensive understanding of the legal mechanisms and litigation process. This can result in feelings of alienation from the legal process, with the perception that the courts favour parties with superior access to resources and legal expertise (Jarnawansyah & Rizqi, 2022).
2. Non-litigation: Mediation and negotiation are more effective and accepted as mechanisms for resolving disputes. In contrast, non-litigation mechanisms such as mediation and negotiation are perceived as more effective and more accepted by local communities in resolving environmental disputes. These mechanisms are regarded as more expedient, cost-effective, and facilitate greater participation from all parties involved (Kusworo & Fauzi, 2023).
- Mediation represents a faster and more inclusive solution. Mediation is a process in which the disputing parties are assisted by a neutral mediator to reach a mutual agreement. In the context of environmental disputes in Yogyakarta, mediation is a more widely used option for several reasons.
 - The mediation process is typically more expeditious than litigation. Mediation enables the resolution of disputes in a shorter timeframe than litigation. In many instances, disputes can be settled within a matter of months, or even weeks, contingent on the intricacy of the issues and the willingness of the parties involved to engage in negotiations.
 - Lower costs are another advantage of mediation. One of the principal advantages of mediation is that the costs are significantly lower than those associated with litigation. The fees incurred for mediation

often only cover the remuneration of the mediator and the associated administrative costs, which are relatively more affordable for the public. Furthermore, the shorter duration of the process allows for the minimisation of additional expenses, such as those incurred for evidence gathering and the hiring of legal counsel.

- The direct participation of those affected by the dispute is a further advantage of mediation.

Mediation permits all parties involved, including communities directly affected by environmental damage, to engage in direct negotiation. This provides a forum for communities to articulate their interests and concerns in a manner that is not typically afforded in highly formalised litigation processes. In this study, informants indicated that mediation fostered a heightened sense of ownership over the dispute resolution process.

- The concept of legal certainty is of particular importance in this context. Despite the fact that mediation is not a litigation-based process, the outcome of mediation can be given the same legal force as a court judgement if it is set out in a written agreement that has been authorised by the court. Consequently, an agreement reached in mediation can provide legal certainty that is comparable to that of a court judgement.

- **Negotiation: Flexibility in Conflict Resolution.**

Negotiation represents a further form of non-litigation dispute resolution, entailing direct discussions between the disputing parties with a view to reaching an agreement. In negotiation, the parties enjoy greater flexibility in determining the terms of settlement that are in accordance with their respective interests. The informants of this study have indicated that negotiations are often more successful in resolving disputes involving large companies or industries, given that companies are more open to compromise in order to avoid costly litigation and the potential damage to their reputation that such litigation could entail. The advantages of negotiation can be summarised as follows:

- The flexibility afforded by negotiation allows the parties involved to reach an agreement that is more tailored to their needs. In the context of an environmental dispute, for instance, a company may agree to compensate or remediate environmental damage within a specified period of time, which is a preferable outcome to a litigation settlement that requires rigid legal action.
- A focus on pragmatic solutions is a key advantage of negotiation. Rather than seeking victory in the legal sense, disputants are able to explore solutions that are acceptable to both parties. In the context of Yogyakarta, for example, companies involved in pollution may agree to invest in environmentally friendly technologies as part of a negotiated deal.

3. **Challenges in the Implementation of Non-Litigation Mechanisms.** Despite the perceived efficacy of non-litigation mechanisms such as mediation and negotiation, their implementation continues to present certain challenges.

- The potential for power imbalances to influence the outcome of negotiations represents a significant challenge.
- In some instances, the efficacy of negotiation or mediation may be constrained by the presence of power imbalances between more dominant parties (e.g., large corporations) and local communities. It is, therefore, incumbent upon the

mediator or negotiator to ensure that the process is conducted in a manner that is both fair and balanced.

- A further challenge is the lack of legal awareness among the parties involved.
- Although mediation and negotiation are often perceived as faster and cheaper alternatives to litigation, many communities lack the requisite legal awareness to fully comprehend their rights within these processes. Consequently, they may unwittingly accept unfavourable agreements due to a lack of understanding (Fauzy & Isnawan, 2024).

CONCLUSION

The findings of this research indicate that the role of law in environmental dispute resolution in Yogyakarta is confronted with considerable challenges. These challenges are not solely confined to the domain of law enforcement; they also extend to the public's awareness of environmental issues and the socio-economic dynamics that render the enforcement of environmental policies a challenging endeavour. Although the extant legal framework is adequate in principle, implementation in the field is often not in accordance with expectations. This discrepancy can be ascribed to a number of causes, both internal to the legal system itself and stemming from external factors, including economic, political and social pressures. The enforcement of environmental legislation in Yogyakarta remains a significant challenge. In numerous instances of environmental disputes, despite the existence of regulations and laws such as Law No. 32/2009 on Environmental Protection and Management, which provide a comprehensive framework for addressing cases of environmental pollution and damage, the actual implementation of these legal provisions has often proved to be ineffective. A further challenge is the low level of public awareness of the importance of environmental protection. The lack of effectiveness in the enforcement of environmental laws is contingent upon a fundamental understanding and concern for environmental protection among those who are the primary actors in environmental damage or conservation. In environmental dispute resolution, the central challenge is the inherent conflict between economic growth and environmental preservation. Local governments are confronted with the dilemma of balancing two competing interests: on the one hand, the necessity of encouraging investment to stimulate the local economy and fulfill the demands of infrastructure development; on the other hand, the imperative of safeguarding the environment and protecting communities from the adverse effects of development.

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REFERENCES

- Alawiya, N., Utami, N. A. T., & Afwa, U. (2023). Hospital Dispute Settlement Through the Provincial Hospital Supervisory Board in Indonesian Health Law (A Study in Yogyakarta Province). *Jurnal Dinamika Hukum*, 23(1), 1. <https://doi.org/10.20884/1.jdh.2023.23.1.2351>
- Azizah, R. N. (2024). Prediction of Waste Generation in Yogyakarta Special Region Province Using ARIMA Model. *IJIIS: International Journal of Informatics and Information Systems*, 7(2), 63–75. <https://doi.org/10.47738/ijiis.v7i2.200>
- Budijati, S. M., & Setiyawan, P. D. (2023). Initial Finding of Material Flow Analysis of Food Waste of Particular Restaurants in Yogyakarta, Indonesia. *Engineering Science Letter*, 2(03), 92–98. <https://doi.org/10.56741/esl.v2i03.415>

- Fauzy, R. R., & Isnawan, F. (2024). The Implementation of Legal Protection Against Economic Exploitation of Street Children in Yogyakarta City. *Ius Poenale*, 5(1), 15–30. <https://doi.org/10.25041/ip.v5i1.3381>
- Fransisca, S., Robiani, B., Meutia, I., & Yusnaini, Y. (2024). Development of Carbon Emission Disclosure Indicators in Indonesia and Analysis of Determining Factors. *Qubahan Academic Journal*, 4(3), 242–262. <https://doi.org/10.48161/qaj.v4n3a617>
- Gayo, S. (2022). Alternative Dispute Resolution in Mining Disputes with the Mechanism of Mediation. *International Journal of Research and Review*, 9(3), 401–416. <https://doi.org/10.52403/ijrr.20220345>
- Jamal, M., Mahfudz, A. A., Syamsuri, S., & Handayani, R. (2021). Analysis of Alternative Dispute Resolution in non-litigation dispute resolution on Islamic Mortgage: at the Ombudsman Institution Yogyakarta. *TSAQAFAH*, 17(1). <https://doi.org/10.21111/tsaqafah.v17i1.6760>
- Jarnawansyah, M., & Rizqi, R. M. (2022). Consumer Legal Protection Reviewed from Consumer Protection Law in Consumer Dispute Settlement through Litigation. *International Journal of Research and Review*, 9(1), 161–166. <https://doi.org/10.52403/ijrr.20220121>
- Krismantoro, D., & Hari Supriyanto, V. (2021). Implementation of Land Procurement for Public Green Open Space Development in Yogyakarta City, Indonesia. *International Journal of Social Science Research and Review*, 4(4), 24–30. <https://doi.org/10.47814/ijssr.v4i4.120>
- Kusworo, D. L., & Fauzi, M. N. K. (2023). Implementation of Litigation Mediation in Resolving Medical Negligence Disputes Between Patients and Health Workers. *Administrative and Environmental Law Review*, 4(1), 21–36. <https://doi.org/10.25041/aclr.v4i1.2858>
- Masjhoer, J. M., & Vitrianto, P. N. (2024). Community engagement in waste reduction: A critical component for Gunung Sewu Geopark conservation, Yogyakarta, Indonesia. *Environmental & Socio-Economic Studies*, 12(2), 1–12. <https://doi.org/10.2478/environ-2024-0008>
- Mohaqiq, M. S. (2024). Rank Size Rule Analysis on the Urban Population Distribution of Indonesia for the Year 2020. *International Journal of Scientific Research and Management (IJSRM)*, 12(09), 7495–7503. <https://doi.org/10.18535/ijssrm/v12i09.em15>
- Mustofa, M. S., Wijaya, A., & Mulyono, K. B. (2024). Tourism Development: Economic Interests and Environmental Problems (Yogyakarta Tourism Destinations Study, Indonesia). *International Journal of Religion*, 5(6), 816–822. <https://doi.org/10.61707/wpmwf309>
- Purnawati, A., Irmawaty, I., Haling, S., & Ikbali, M. (2021). Urgency of Law Enforcement in the Field of Conservation of Living Natural Resources and Ecosystems. *Jurnal Dinamika Hukum*, 21(3), 520. <https://doi.org/10.20884/1.jdh.2021.21.3.3510>
- Ratnaningrum, A. Y., Maharani, O., & Yudiarto, D. A. (2024). Legal Protection for Health Workers against Occupational Safety and Health Standards in Hospital. *Green Medical Journal*, 6(2), 57–65. <https://doi.org/10.33096/gmj.v6i2.186>
- Sasmiar, S., Hasan, U., & Suhermi, S. (2024). LEGAL CERTAINTY OF ALTERNATIVE DISPUTE RESOLUTION MEDIATION. *Bengkoelen Justice : Jurnal Ilmu Hukum*, 14(1), 25–44. <https://doi.org/10.33369/jbengkoelenjust.v14i1.33432>
- Soleh, A., Muhamad, A. S., & Libriyanti, Y. (2024). Inclusive Education Awareness: Muslim Community Response to The Jurisprudence of Disability in Yogyakarta. *Analisa: Journal of Social Science and Religion*, 9(1), 128–144. <https://doi.org/10.18784/analisa.v9i1.2266>

- Suprpto. (2023). Environmental Crimes and Enforcement: A Critical Analysis of Indonesian Legislation. *Journal of Advances in Humanities and Social Sciences*, 9(1). <https://doi.org/10.20474/jahss-9.1.2>
- Werkmeister, B., Haase, A. M., Fleming, T., & Officer, T. N. (2024). Environmental Factors for Sustained Telehealth Use in Mental Health Services: A Mixed Methods Analysis. *International Journal of Telemedicine and Applications*, 2024(1). <https://doi.org/10.1155/2024/8835933>
- Widjaja, G. (2024). Law Enforcement Role in the Management of Sustainable Natural Resources. *Journal of Ecohumanism*, 3(3), 388–398. <https://doi.org/10.62754/joe.v3i3.3348>.