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Forging a legal culture: criminal law enforcement in environmental protection amidst the sustainable development era

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Abstract

The research explores the challenges of creating a responsive legal culture in the environmental sector, focusing on Indonesia's environmental legislation, specifically Law Number 32 of 2009. It highlights the disparities between legal ideals and practical implementation, particularly in addressing behavioural changes toward the environment. The study highlights the need to integrate environmental justice values into criminal law enforcement, considering their impact on human rights and environmental sustainability. The reactive enforcement pattern towards administrative violations or repetitions has yet to accommodate environmental justice values fully. Factors such as lack of awareness of environmental importance and dominance of economic interests in government policies also pose significant challenges. The research calls for a legal culture that is more responsive to environmental justice values, both within society and among law enforcement officials.

Keywords: legal culture, environmental law, criminal law, environmental justice, ecocide.

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Forjando una cultura legal: aplicación del derecho penal en la protección ambiental en la era del desarrollo sostenible

Resumen

La investigación explora los desafíos de crear una cultura legal receptiva en el sector ambiental, centrándose en la legislación ambiental de Indonesia, específicamente la Ley Número 32 de 2009. Destaca las disparidades entre los ideales legales y la implementación práctica, particularmente en la promoción de cambios de comportamiento hacia el medio ambiente. El estudio subraya la necesidad de integrar valores de justicia ambiental en la aplicación del derecho penal, considerando su impacto en los derechos humanos y la sostenibilidad ambiental. El patrón reactivo de aplicación frente a violaciones administrativas o reincidencias aún no logra incorporar plenamente los valores de justicia ambiental. Factores como la falta de conciencia sobre la importancia del medio ambiente y la prevalencia de intereses económicos en las políticas gubernamentales también representan desafíos significativos. La investigación aboga por una cultura legal más receptiva a los valores de justicia ambiental, tanto en la sociedad como entre los funcionarios encargados de hacer cumplir la ley.

Palabras clave: cultura legal, derecho ambiental, derecho penal, justicia ambiental, ecocidio.

Introduction

Before the implementation of the UN Sustainable Development Goals (SDGs), the obligations of countries to tackle environmental issues were clearly established in legally binding multilateral environmental agreements (MEAs) that were signed by almost every nation globally. Currently, over 250 MEAs, including the Convention on Biological Diversity, the Paris Agreement on Climate Change, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, tackle various environmental challenges. The legally binding nature of MEAs indicates a significant opportunity for countries to demonstrate measurable

progress toward achieving all SDG targets. Nonetheless, although there is a distinct overlap in the scope and objectives of MEAs and the SDGs, certain MEAs have not adequately demonstrated a clear connection to the SDGs in their reporting, verification, and compliance protocols. International environmental law plays a crucial role in advancing the SDGs by connecting and integrating existing reporting obligations under MEAs with relevant SDGs through a nexus governance approach. A nexus governance approach facilitates integration and interoperability by promoting information sharing, coordinated programming, and institutional cooperation concerning the AEC and SDGs. This integration allows stakeholders, both nationally and internationally, to develop and execute multi-scale actions and plans that provide collective advantages while minimizing redundancy (Olawuyi et al., 2022).

The current framework of environmental regulation is based on the idea that legal measures can instigate social change by intervening directly, addressing even the minutiae of societal interactions. This instrumentalist model, termed 'substantive' law by Teubner, delineates environmental law as a framework that establishes overarching objectives, such as the attainment of clean air and water, alongside specific standards for environmental quality. It meticulously outlines the necessary actions to achieve these defined goals (Richardson & Wood, 2006). The increasing complexity of environmental challenges has led to a recognition of the importance of environmental human rights, law, jurisprudence, and governance in tackling issues related to environmental justice. The essential elements outlined here are integral to the framework of the environmental rule of law. This framework encompasses the establishment of fair, clear, and enforceable environmental laws; the inclusion of public participation in decision-making

processes and the provision of access to justice and information regarding environmental issues, in accordance with Principle 10 of the Rio Declaration; the promotion of accountability and integrity within institutions and among decision-makers, supported by environmental auditing and enforcement mechanisms; the implementation of accessible, fair, impartial, timely, and effective dispute resolution processes, which involve the development of specialized expertise in environmental adjudication and innovative procedures and remedies; the acknowledgment of the interconnectedness of human rights and environmental considerations; and the establishment of specific criteria for the interpretation of environmental law (Kreilhuber & Kariuki, 2019).

The interplay of these elements highlights the significance of the environmental rule of law in enhancing awareness of the fundamental rights that are universally shared, as well as our shared obligation to protect them. The United Nations Environment Programme's Issue Brief on Environmental Rule of Law (May 2015), developed under the patronage of the UNEP International Advisory Council for Environmental Justice, highlights the integration of essential environmental priorities with the fundamental principles of the rule of law, establishing a basis for enhancing environmental governance. The rule of law underscores the importance of environmental sustainability while connecting it to essential rights and responsibilities, thereby embodying universal moral and ethical standards of conduct. The document asserts that the absence of an environmental rule of law and the enforcement of legal rights and duties may lead to environmental governance that is arbitrary and influenced by discretion, subjectivity, and unpredictability (Kreilhuber & Kariuki, 2019).

This crisis results from factors that extend beyond environmental crime. The responsibility lies with our system. Nonetheless, it is propelled by environmental crime. Failure to address this issue will compromise our developing crisis response. Data presents a clear narrative. At COP26 in Glasgow, nations pledged to eradicate deforestation by 2030, a crucial step in the effort to restrict global warming to 1.5 degrees. Illegal logging constitutes a significant portion, ranging from 15% to 30%, of the timber trade. The Sustainable Development Goals are designed to eradicate hunger and poverty. The annual financial impact of international illegal fishing is estimated at $36.4 billion. A variety of conventions govern the management of hazardous substances, encompassing issues from electronic waste to prohibited refrigerants. Transnational criminal organizations and unethical corporations engage in the trafficking and disposal of illegal drugs and waste. Health issues are also prevalent among marginalized groups. Conventions are designed to safeguard species and ecosystems; however, there remains a significant issue with the harvesting, selling, and exporting of endangered species. The impacts of such crimes on economic, social, and peace dimensions are substantial. Ecocrime incurs annual costs ranging from $91 to $259 billion, resulting in a significant loss of tax revenue for governments. Environmental crime takes advantage of economically disadvantaged communities to appropriate their resources, leading to the degradation of their livelihoods. Environmental crime, which includes financing armed groups and targeting environmentalists, poses significant threats to peace, security, and stability (Andersen, 2021).

In Indonesia, the data regarding criminal law enforcement against environmental crimes by the Directorate General of Environmental and Forestry

Law Enforcement from 2015 to 2023 indicates a total of 1,369 cases. Specifically, in 2023, there were 52 cases categorized as follows: illegal logging at 26.9%, encroachment at 23.1%, illegal distribution of wild plants and animals at 36.5%, environmental pollution at 9.6%, and environmental damage at 3.8%. The data indicates a concerning trend that suggests pollution and environmental damage may escalate and proliferate over time (Baidi, 2024).

The interaction between humans and the environment is essential for human survival and quality of life (Ali & Kamraju, 2023). Environmental law, both criminal and civil, has been enforced to address actions that harm nature or disrupt the balance between nature and humans. However, the interaction between "nature" and humans is undeniable and can lead to the destruction of the natural balance, impacting humans directly or indirectly (Leiss, 2023).

Law enforcement against environmental crimes has traditionally been carried out from the perspective of civil law as the *primum remedium*, with criminal law as the *ultimum remedium* (Purwani, 2022). This differing approach suggests that criminal law may not restore the damage caused and the imbalance disrupted. However, instilling fear and providing education to the public are the primary motivations for applying criminal law as the *ultimum remedium* (Anggraeni & Amrullah, 2023).

Environmental degradation, particularly those with massive impacts, begins with the discourse of ecocide as the fifth crime against humanity, equivalent to genocide (Sarlième, 2020). This premise is based on the understanding that the fatal impact on the environment will ultimately affect human life, leading to human rights issues with potentially more extensive consequences than anticipated. Environmental problems are categorized into three groups:

environmental pollution, improper land use, excessive excavation, and depletion of natural resources (Rahmadi, 2020).

Environmental damage is almost certain to occur due to human involvement, dominated by economic interests (Natalis et al., 2023). Legal instruments often favour economic interests, such as granting flexibility to investors in establishing businesses, as advocated through the Omnibus Law on Job Creation. Law and all instruments within it are means of fulfilling interests, and the environmental aspect of the law includes civil law, criminal law, administrative law, and spatial planning. Criminal law, in the context of environmental law, is interpreted as a last resort in correcting human behaviour (Dias, 2012).

The portrayal of criminal law as the *ultimum remedium* in environmental law enforcement does not always become an alternative option for resolving environmental issue (Dewi et al., 2021)s. The losses suffered by the environment and surrounding communities are often not considered for the application of criminal law against environmental perpetrators. To bridge human and environmental interests, the term ecocide is introduced as a crime in the environmental field, integrating environmental justice values into criminal law enforcement efforts. The development of a legal culture based on environmental justice values is crucial in integrating these values into efforts to resolve criminal cases in the environmental field.

Research methods

This research applies a socio-legal approach to understanding the dynamics of legal culture in environmental law enforcement in Indonesia. The research method is designed to delineate the disparities between legal aspirations and their

implementation within the context of Law Number 32 of 2009 concerning Environmental Protection and Management. The socio-legal approach is employed to integrate social and legal dimensions in analyzing how legal norms influence societal behaviour and to what extent their implementation reflects environmental justice.

The first step involves document analysis to comprehend the goals and legal aspects of environmental law. Subsequently, interviews with stakeholders, including legal experts, environmental activists, and government officials, are conducted to capture their perspectives and experiences regarding the law's implementation.

Qualitative data from these interviews will be analyzed using a content analysis approach to identify common patterns, conflicts, and challenges in environmental law enforcement. Social analysis is also applied to understand how societal values and government policies mutually influence each other in shaping legal culture.

Results and discussion

1. Criminal law enforcement in the environmental sector: between ideals and reality

The law represents a depiction of a goal or aspiration to be concretely realized through legal enforcement efforts. In the context of perfect law, as articulated by Gustav Radbruch (1950), the law should achieve the goals of justice, utility, and certainty, which often interact and, at times, even contradict each other. Radbruch asserts that the ideals of the law fundamentally serve as indicators or benchmarks for assessing justice, utility, and certainty embedded in the legal

system. In another perspective, the ideals of the law are depicted as determining the direction of societal desires, as emphasized by Rudolf Stammler.

Many industrialized nations implement regulations on economic activities that could damage the environment. Businesses of this nature must obtain permits for the emission or discharge of pollutants into air or water, as well as for the disposal of hazardous waste. Regulatory bodies, such as the Environmental Protection Agency, consistently monitor companies to ensure adherence to the conditions specified in their permits. Should there be a failure to comply with general environmental law, authorities can impose fines or interim orders for the payment of such fines. Additionally, they may mandate the temporary or permanent closure of the installation and possess the authority to revoke the permit altogether. In certain nations, such interventions might be integrated with criminal inquiries. Administrative enforcement typically focuses on future implications. The primary objective is to halt environmental degradation and pursue remedies for the harm caused. When analyzed, the criminal justice approach appears to be regressive, focusing predominantly on penalizing individuals who violate the law. In the realm of environmental criminal law, certain jurisdictions incorporate criminal sanctions that are specifically designed to achieve redress (Spapens & Huisman, 2016).

Certain commentators contend that criminal law may not consistently serve as the most effective tool for preventing or managing breaches of environmental law, and there are suggestions that the enforcement of criminal law may fundamentally conflict with the principles of environmental law. Nonetheless, this does not imply the absence of a theoretical foundation supporting the application of criminal law in the realm of environmental protection. Political decisions to

criminalize environmental offenses are fundamentally grounded in utilitarian or retributive rationales. The two primary foundations that define the framework for any initiative aimed at criminalizing offenses are outlined here. Retributive theories of crime and punishment assert that criminal sanctions should be implemented when moral wrongfulness in the wrongful act can be discerned (or 'just retribution'). Utilitarians contend that the primary justification for implementing criminal punishment lies in its potential to optimize societal welfare through a systematic cost-benefit analysis aimed at enhancing deterrence rather than merely penalizing offenders for their previous actions. Retributivism focuses on punishing offenders for actions deemed morally wrong, emphasizing past behavior (Pereira, 2015).

In contrast, utilitarianism seeks to establish a punishment system that effectively deters future criminal activity, concentrating on future outcomes. The simultaneous pursuit of retributive and utilitarian goals can lead to notable consequences for criminal policy and sentencing practices, depending on the emphasis placed on each approach. In the realm of corporate crime, the application of punishment theory serves to rationalize the penalization of corporations. Celia Wells posits that the theory of corporate criminal liability effectively addresses both retributive and deterrent theories of punishment, indicating that its application to corporate criminals faces no significant challenges. Enforcing environmental laws and regulations presents significant challenges due to various factors. Initially, it is important to note that authorities often operate with constrained resources, and the intricacies of the regulations further complicate the process of demonstrating violations (Pereira, 2015).

Furthermore, issues related to coordination may emerge as a result of the multitude of agencies engaged in the enforcement of environmental legislation. Thirdly, the challenge of identifying a responsible party within the corporate entity often arises, influenced by the nature of the offense and the jurisdiction involved. Legal ambiguities and the variations in environmental regulations across different nations further compound this complexity (Spapens & Huisman, 2016).

Discussing environmental law in Indonesia, the foundation of its ideals can be traced back to critical regulations, particularly the 1945 Constitution of the Republic of Indonesia. Article 28 letter H of the constitution explicitly mandates the state's responsibility to create a good and healthy environment, deeming it a fundamental right for every citizen. This constitutional provision has laid the groundwork for subsequent regulations, specifically in the field of environmental law (Pinilih, 2018).

Even with the enactment of Law Number 6 of 2023, which followed Law Number 32 of 2009, the latter still encapsulates the aspirational ideals of environmental law in Indonesia. These ideals broadly encompass several overarching objectives that guide the country's environmental legal framework. Firstly, it aims to protect the Indonesian state’s territory from all forms of environmental pollution or damage, emphasizing the significance of safeguarding the nation's natural resources.

Another crucial objective is ensuring the safety, health, and lives of humans. This underscores the interconnectedness of the environment and human well-being, acknowledging that a healthy environment is vital for sustaining life. Moreover, the inclusivity of all living beings in the environment and the sustainability of ecosystems is a crucial principle. This recognizes the intricate

web of life and ecosystems, highlighting the need to preserve biodiversity and ecological balance.

Preserving the functions of the environment is integral to maintaining ecological integrity. The law emphasizes the importance of safeguarding the various functions performed by the environment, ranging from providing clean air and water to supporting diverse flora and fauna. Achieving harmony and balance in the environment is an overarching goal, emphasizing the need to strike a balance between development and conservation.

Furthermore, environmental law in Indonesia has a forward-looking perspective, ensuring justice not only for the current generation but also for future generations. This intergenerational equity principle emphasizes the responsibility to pass on a sustainable and healthy environment to the following cohorts. It aligns with the broader goal of ensuring the fulfilment and protection of environmental rights as an integral part of human rights, recognizing the interconnectedness of environmental well-being and human dignity.

The prudent management of natural resources is a significant aspect of Indonesia's environmental law. The regulations emphasize the need to utilize natural resources wisely, acknowledging their finite nature and the importance of sustainable resource management. Realizing sustainable development is a central theme, highlighting the imperative of balancing economic growth with environmental conservation to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Anticipating global environmental issues is a proactive stance embedded in Indonesia's environmental law. Recognizing the interconnectedness of

environmental challenges on a global scale, the legal framework seeks to address and prepare for issues that extend beyond national boundaries. This forward-thinking approach positions Indonesia as a responsible actor in the global environmental arena.

Nommy Horas Thombang Siahaan (2004) theoretically views the environment as an inevitable part of human life, inseparable from human interactions. Otto Soemarwoto (1994) strengthens this relationship, stating that the environment comprises all entities and conditions within the space humans occupy, influencing human life extensively across economic, social, and cultural dimensions and the living and non-living entities composing ecosystems that support human life. The definition of the environment and the portrayal of humans needing the environment to fulfil their fundamental rights make it an obligation for humans to preserve the environment for survival.

In a nation valuing law and protection for its people, any potential threats endangering its citizens are regulated by laws correcting such actions. In this context, any act damaging the environment, tantamount to threatening human life, is subject to legal correction. Environmental law, particularly criminal law, speaks of corrective measures that realign actions deviating from regulated norms to their rightful positions. Although criminal law, especially in the environmental field, protects the environment by safeguarding human rights threatened by environmental damage, the impact of such actions often escapes criminal law attention (Nurse, 2020).

Repressive law enforcement in the environmental field primarily operates through legal mechanisms or administrative sanctions, currently playing a pivotal role in environmental protection efforts(Faure, 2017). Arguments suggest that

implementing administrative sanctions can mitigate the damages caused, especially when these sanctions can lead to the revocation of environmental and business permits owned by violators engaging in resource exploitation. Nevertheless, environmental degradation persists, threatening human rights and deviating from the earlier ideals of protection, including the fundamental rights of future generations (Petersmann, 2022).

Many perceive environmental protection and management as the state's responsibility, implying that the government is obligated to regulate collective behaviour through various policies. However, bureaucratic government structures need to build a commitment to ecological values, especially environmental justice values. This lack of sensitivity results in the neglect of environmental issues in various policy and legal products. Additionally, the current allocation of sectoral authority becomes a shield often used to evade responsibilities for environmental protection and law enforcement, disregarding the inherent indivisibility of ecosystem jurisdiction across sectoral agencies.

2. Criminal law enforcement in the environmental sector: a neglected aspect

Environmental criminal law emerges from a systematic evolution of legal frameworks, shaped by society's increasing demand for a legal system that aligns more closely with its environmental protection objectives. It is essential for governments in a democratic system to criminalize environmental violations and impose suitable sanctions for significant breaches of state legal norms that are designed to safeguard public health and natural resources. This represents the fundamental reasoning behind a national environmental criminal law framework.

Nonetheless, a significant limitation persists: the effective integration of two separate legal frameworks, specifically environmental regulations and criminal sanctions, into a cohesive system characterized by clarity in laws, equitable enforcement, and just interpretation. In this context, the legislature, the executive, and the judiciary are required to, "within the scope of their respective responsibilities, examine the nature, purpose, and limitations of the criminal law and its relationship to the underlying substantive offenses outlined in environmental law" (Blomquist, 2011).

The enforcement pattern of criminal law in the environmental sector, which is only carried out after the issuance of administrative sanctions or repeated offences, as depicted in the previous description, implies that the prosecution or enforcement of criminal law in the field of the environment in Indonesia essentially does not directly target "acts of environmental destruction" but instead focuses on acts of evasion or non-compliance with previously imposed administrative sanctions. This also indicates that the enforcement of criminal law in the environmental field is still far from the criteria of environmental justice values (Purwani, 2022).

Several key points in explaining environmental justice, as stated by Mónica Ramirez-Andreotta (2019), affirm that environmental justice values manifest as an affirmation of the "sacredness" of Mother Earth, ecological unity, and recognition of interdependence among species, emphasizing that all elements of life are entitled to be free from environmental harm. Environmental justice emphasizes the right to the ethical, balanced, and responsible use of land and natural resources for the sustainable goals of human life and other living beings on Earth.

The enforcement of criminal law in the context of correcting environmental destruction and stopping and preventing environmental damage from the perspective of environmental justice correlates with the preservation of life or, more importantly, the protection of the balanced relationship between humans and the environment so that their livelihoods are equally protected. The protection of the environment portrayed through the existing "environmental law" can still be considered far from justice values, especially environmental justice (Obiora, 1999). If indeed it contains environmental justice values, it logically follows that the interests of humans and the environment will be placed on an equal footing and become the main focus of law enforcement. Basically, referring to principles in environmental criminal law that refer to principles of legality, sustainable development, prevention, and control, the enforcement of criminal law in the environmental field should end in the controlled and prevented environmental damage aimed at sustainable development.

The dependence on the application of criminal law is based on the condition that the imposed administrative sanctions are not complied with, or violations are committed more than once, seemingly overshadowing the importance of criminal law enforcement in environmental issues; in other words, criminal law is not applied to environmental destruction but to the negligence of the perpetrator towards administrative sanctions. Such a situation can be considered as an inconsistent step with the view of criminal law as the ultimum remedium, especially in the field of environmental issues, as reflected in the enforcement of criminal law for repetition or non-compliance with administrative sanctions for environmental damage. In other words, environmental destruction is not the primary offence in the framework of environmental criminal law. Moreover,

considering criminal elements that are difficult to prove, such as the element of unlawfulness in the case of water pollution referring to actions against formal law, which in this case is environmental permits or businesses (environmental licensing), and when the legal entity has a permit, proving the element of unlawfulness (against the permit) is impossible (impossible to violate legislation) (M. Ali et al., 2022).

The discussion does not reflect the cause-and-effect element as the main element that must be proven. In contrast, from the perspective of environmental destruction, the cause-and-effect relationship is undoubtedly crucial in the occurrence of the intended damage. Focusing on the element of unlawfulness is not appropriate when applied to the enforcement of criminal law in the environmental field. In the aim to accommodate environmental justice values, the cause-and-effect relationship should be the main focus.

The enforcement of criminal law in the environmental field is not only regulated in Law Number 32 of 2009 but also other sectoral laws such as Law Number 41 of 1999 concerning Forestry, Law Number 18 of 2004 concerning Plantations, Law Number 4 of 2009 concerning Minerals and Coal, and others, although later legislation mentioned was consolidated with the enactment of Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into Law, especially regarding Law Number 32 of 2009, which is the parent law for environmental issues in Indonesia. The extent to which the enforcement of criminal law in the environment focuses on realizing environmental justice and ensuring the right to a good and healthy environment remains unanswered through related legislation until the enforcement stage. The dominance of economic interests in environmental issues

is still clearly evident in at least two dimensions within the legal system (in the context of environmental law): substantive and structural laws that exist until now.

The assessment of the enforcement of criminal law in the environmental field from the perspective of the legal system covering cultural dimensions becomes a crucial guide to the shortcomings and potential development of environmental law, which ultimately reflects environmental justice values. Various studies showing deficiencies or obstacles in the substantive and structural aspects of environmental law have been conducted. However, views or assessments through the cultural aspects of the law (both internal and external) still need to be carried out because, fundamentally, this aspect is the spectre in law enforcement, including in the context of environmental law.

It starts with the view that law referring to values or norms that will be believed and practised will show a pattern of interaction with its "practitioners," in this case, "legal culture" can be used as an instrument to understand these patterns through symbols, behaviours, and the collective views of society or law enforcement. Moreover, legal culture directly refers to attitudes towards the prevailing legal order, and the intended attitude can refer to compliance or the opposite (Friedman, 1975).

The current condition of the enforcement of criminal environmental law in Indonesia, according to Hartiwiningsih, cannot meet the expectations of the public, especially on a macro level (in terms of legal certainty, justice, and the utility of the law) related to various forms of preferences that do not prioritize environmental sustainability, the suboptimal application of criminal legal means in the environmental field, and the inappropriate sanctions for committed violations. Moreover, law enforcement holds diverse perceptions regarding

environmental crimes, not to mention the misalignment of environmental law in the context of general environmental law and sectoral environmental law. The failure in the law enforcement process against environmental destruction in Indonesia can be traced back, for example, to cases of illegal logging where, for the last ten years, almost 90% of total cases processed by law enforcement were not continued to the trial stage, with the excuse of not finding enough evidence. Similarly, Bambang Prabowo Soedarso (2008) states that environmental law enforcement in Indonesia is currently experiencing a stagnation phase marked by poor implementation of existing rules that merely prioritize command and control instruments. Bambang Prabowo Soedarso also emphasizes that the current number of environmental legal instruments can be considered abundant in quantity but minimal in terms of organization, as indicated by the judiciary products that ultimately acquit perpetrators of environmental destruction, contrary to environmental justice values and show failure to identify the environmental crisis currently occurring in Indonesia. Especially in the context of enforcing criminal law, especially in terms of law enforcement infrastructure that implies difficulties in the proof process, such as the difficulty in proving the perpetrators of forest burning that has been frequently occurring in Indonesia. Perpetrators caught are essentially not intelligent masterminds but only workers performing tasks as instructed by their "superiors."

3. Building a legal culture as a solution for sustainable environmental criminal law enforcement based on environmental justice

Environmental damage, whether direct or indirect, should be a primary criterion for categorizing an act as a threat to fundamental human rights in relation

to the environment. This thesis is proposed with the assessment that the impairment of environmental functions and sustainability will place human life in dangerous conditions, even jeopardizing its continuity. The term "ecocide" becomes a substance that can be used to manifest how these threats endanger human life. In some perspectives, the introduction of the term "ecocide" in environmental issues is considered excessive because, in terms of definition, ecocide closely relates to genocide, involving a specific intent to destroy "life"(Setiyono & Natalis, 2021). However, not all environmental damage can be casually labelled as ecocide; nevertheless, introducing such a term is seen to bring a new perspective that environmental harm is not distinct from genocide, and its impacts have the potential to affect human rights and environmental sustainability broadly and substantially, given that environmental damage includes the balance between humans and the environment (White, 2013).

Clifford and Edward (2011) explicitly state that any form of environmental violation or damage should be considered an environmental crime, and its sanctions need to be reconsidered. White and Habibis (2004) argue that environmental crimes stem from a social construction that encompasses the definition process and extends to the enforcement of environmental law. Both opinions share a common thread concerning how perspectives on environmental crimes influence the enforcement of violations, encompassing social, organizational, and other entities reflected in specific viewpoints or frameworks.

In this context, the keyword that emerges as the most significant influence on the enforcement of environmental crime is "perspective," closely related to how a community interprets a set of values or norms inherent in the law or even those that have long existed within the community as a necessity to be

implemented or enforced against any form of deviation. This concept aligns with what is advocated in shaping legal culture.

In such a setting, if a community interprets environmental preservation as highly valuable, signifying that any form of environmental harm is a serious crime, then that community will take corrective measures to restore the supremacy of the values they believe in. Referring to the definition of environmental law, environmental crime (based on Law No. 32 of 2009) is described as commands and prohibitions arising from the law against legal subjects, with criminal sanctions, including imprisonment and fines, aimed at protecting the entire environment, including every element contained in the "environment" such as animals, soil, plants, water, air, and even humans (Tacconi et al., 2019). The value contained in this legal definition is the value of environmental protection so that its sustainability can be ensured. Furthermore, any action contrary to these values can be declared a crime punishable by criminal sanctions.

The values outlined above are not fully understood, and all environmental criminal acts only refer to formal elements as written in the law, not delving deeper into the fundamental values that uphold environmental sustainability. This interpretation is part of legal culture, as discussed earlier. In this case, interpretation is the process of internalizing into an individual through the window of meaning that begins with the formation of perspectives, followed by acceptance through symbols and collective views of specific behaviours that reflect the values in question. The desired outcome in this perspective is the formation of a universal view of environmental harm through the enforcement of criminal law. In the proposed understanding by Lawrence M. Friedman (1975), there are two elements in legal culture: internal, possessed by law enforcement, and external legal culture,

owned by the community. Both interact, as stated in the theory of the functioning of law in society. The community's view is manifested as an external push that influences the formation and enforcement of law, in this context, environmental criminal law and its enforcement.

The formation of legal culture can be examined from factors that ultimately create a specific legal culture. In general, various factors undoubtedly contribute in their respective portions. Gert Harald Mueller (2014) provides a strong foundation for the formation of a cultural system based on moral principles containing various forms of values reflecting commitment and collective agreement. In this moral order, there are moral virtues manifested as ethics that coexist with ideological views and loyalty to solidarity. In this context, the issue of right and wrong is discussed in the moral sub-domain, good or bad is assessed in the ideological sub-domain, and friend or foe is included in the loyalty to solidarity sub-domain. Mueller uses the parameters of good and evil when a phenomenon is in the ideological sub-domain, right and wrong when talking about ethics, and true or false when discussing the scientific domain. The things explained by Mueller indicate a social consciousness orientation that is also formed by social situations. This social orientation cannot be separated from the social basis that has a particular dimension of space and time.

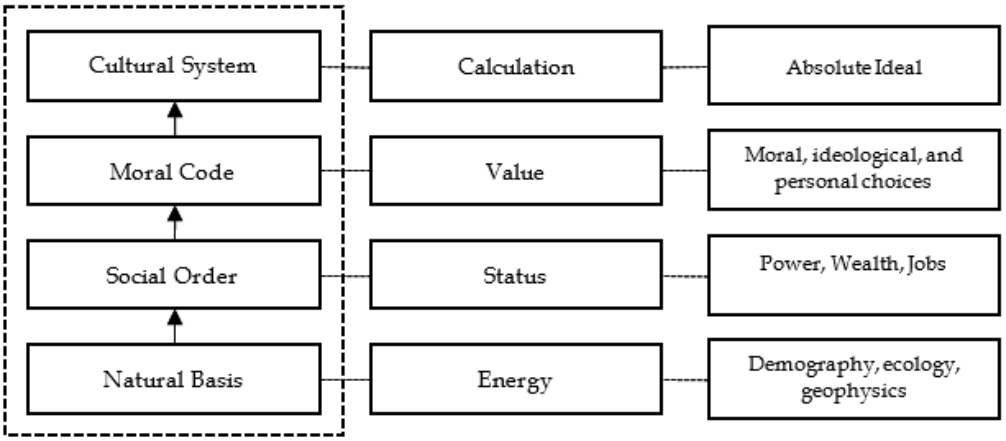
Mueller explains that the social situation he refers to is divided into a natural basis and a social order. The natural basis relates to the sub-domain attached to the dimension of the place where social order takes place, related to demographics, ecology, and geophysics. The ongoing social order has sub-domains related to the existence of state power structures, social welfare structures, and job structures. Both domains interact to form a social basis in the form of demographics, ecology,

and geophysics. In this theory, the cultural system (including legal culture) is a manifestation of moral order based on social order with a specific scientific basis. In this understanding, the formation of a specific legal culture must be done by changing the natural basis (demographics, ecology, and geophysics). Thus, building a new (legal) culture by introducing and even imposing new values contained in positive law is done through a gradual process before eventually becoming values that are ingrained in the minds of the subjects being transformed.

A legal culture containing these values is nothing more than an orientation closely related to perspectives on the values trying to be instilled, thus building trust. The trust referred to can come from the law enforcement process, which in this context is the enforcement of criminal (environmental) law that should be able to show how the role of law enforcement can create a positive perspective and build the trust in question. With the emergence of this trust, the planting of new values through positive law will not encounter significant resistance or will be easier to accept. On the other hand, the enforcement of criminal law in the environmental field that cannot prevent environmental damage will only create distrust in the values contained in the positive law trying to be introduced (Redi, 2023).

Looking back at law enforcement in the environmental field in Indonesia that has been carried out so far and the ongoing environmental problems, this will create a different orientation with the values trying to be introduced. The emergence of distrust in society, in turn, will increase resistance to the acceptance of the values contained in positive law. It is a necessity to create an orientation that aligns with the values contained in positive law so that efforts to build a new

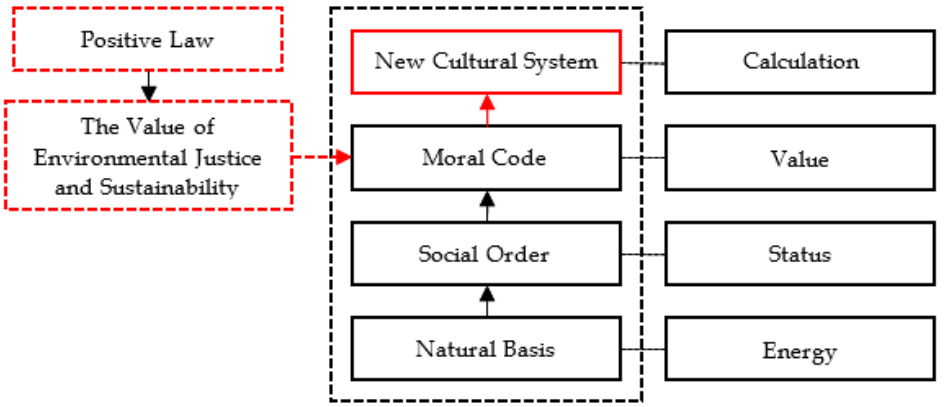
legal culture can occur. This process can be illustrated through the following scheme:



Through the given illustrations, it is evident that the scientific foundation serves as the most profound basis for the social formation process, which, from a social perspective, is manifested as a cultural system encompassing legal culture within legal discourse. When discussing the establishment of legal culture in the enforcement of criminal law in the environmental domain, mainly based on environmental justice values, it seems achievable through similar mechanisms. Introducing a new value system in the realm of social formation, resulting in a new legal culture, is carried out through moral order stages, as advocated by Mueller. The introduction of this new value system is certainly executed through the values embedded in positive law because it is upon these values that environmental criminal law will be enforced. In other words, the current set of values within positive law (legislation) governing environmental crimes must be overhauled to accurately reflect environmental justice values, especially in the concept of sustainability (sustainable development).

Looking at the formation process as illustrated above, the aspect that might be directly influenced is the cultural system, which is undoubtedly an essential aspect of change. However, it remains to be seen whether social institutions and the natural foundation will be affected. This becomes a question that must be addressed next. Nevertheless, if attention is solely directed towards the illustrated orientation flow, the natural foundation is not likely to be easily influenced. However, if the assessment begins with the argument that the cultural system shapes specific behaviours, it is plausible that social institutions and the natural foundation will eventually be influenced.

The desired change in social formation in this context is based on the values of environmental justice and sustainable development. Two values are proposed as the foundation for shaping a new legal culture: any form of environmental degradation is considered an environmental crime, and every act of utilizing environmental resources must be based on a sustainable concept that considers the ability of environmental recovery. In this regard, the development of legal culture in the enforcement of criminal law in the environmental domain is illustrated in the following scheme:



The mechanism offered essentially creates the impression that legal changes are ultimately the main focus in the development of a new legal culture in the enforcement of criminal law in the environmental field. When discussing law enforcement, one must recognize aspects of legal certainty, utility, and justice. Furthermore, regarding the assessment of the existing positive law, it turns out to contain values of environmental justice and sustainability. Therefore, what needs to be done or pursued is the formation of an orientation that aligns with the values contained in the law so that the community can assess the values inherent in this positive law. If this aligns with the value orientation they already possess, then ultimately, through this method, a new legal culture can be formed.

However, looking at the existence of current environmental criminal law, especially the fact that Law Number 6 of 2023 concerning the Determination of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation has been enacted, concerns about the prioritization of environmental justice and sustainability values are now placed in a more worrisome position than before. The situation identified from the natural and social basis must align with the orientation identified from moral and cultural (legal) systems, as outlined by Mueller.

Another aspect to consider is the fact that the law always operates in a systemic form (legal system), where each component influences the others. If changes to one aspect are deemed more challenging, changes to another relatively more straightforward aspect can be made to transform the “legal system” as a whole ultimately. For example, if changing legal culture is more challenging than changing legal structure and substance, changes to the structure and substance of the law have the potential to eventually shape changes in the legal culture

components because these three components of the legal system fundamentally influence each other (Watson, 1983).

The belief in the law or legal system as the definition of legal culture, as articulated by Lawrence M. Friedman, implies the necessity to achieve consistency in implementing the values contained in legal substance by legal structure. In this regard, it is an obligation to realize legal substance that has ecological sensitivity based on environmental justice values, which is then consistently applied by the structural components of the law. Only in this way will the value orientation be accepted by the community, including law enforcers, leading to the formation of both external and internal legal culture.

Conclusion

In responding to the challenges of criminal law enforcement in the environmental field, this research delineates the complexity of the disparity between ideals and realities in establishing a responsive and effective legal culture. Gustav Radbruch's theory of justice, utility, and legal certainty serves as the primary foundation for investigating these dynamics. The research focuses on Indonesia's environmental law, mainly Law Number 32 of 2009, reflecting the determination to protect the environment from pollution, ensure human safety, and preserve ecosystems.

Despite the law's robust intent, its implementation needs to be improved. One major challenge is addressing behavioural changes towards the environment, which in some cases can be more demanding than merely creating regulations. This creates a mismatch between the ideal expectations of the law and its implementation in the field.

The role of criminal law is identified as the final corrective measure in environmental law enforcement. However, constraints arise when understanding environmental crimes needs to be expanded, especially within the context of environmental justice values. The research highlights imbalances in the enforcement pattern of criminal law, which tends to focus more on administrative sanctions than actions against environmental degradation. Therefore, the necessity of integrating environmental justice values into criminal law enforcement becomes imperative, considering its implications involving human rights and environmental sustainability.

The reactive enforcement pattern towards administrative violations or repetitions is also highlighted in the research. Not fully accommodating environmental justice values, this pattern sometimes becomes trapped in responding to past violations without addressing the root changes in behaviour needed. Real challenges, such as a lack of awareness of the importance of the environment and the dominance of economic interests in government policies, need to be overcome.

As a solution, the research emphasizes the urgency to build a better legal culture as a foundation for effective criminal law enforcement in the environmental field. A legal culture responsive to environmental justice values needs to be strengthened not only among law enforcement officials but also within society at large. In-depth research on societal perspectives and the internalization of legal values by law enforcement examines how they mutually influence and shape an effective legal system.

The importance of legal culture change is reflected in efforts to introduce the concept of ecocide as a new legal basis. This concept brings about a paradigm

shift in assessing environmental degradation, leading to a more proactive response in criminal law enforcement. The research strongly advocates for criminal law enforcement aligned with environmental justice values, given the severe threats to fundamental human rights related to the environment.

In achieving sustainable criminal law enforcement, the research emphasizes that legal culture change is the key to responding to changes in behaviour and perspectives towards the environment. This process is not just about creating stricter regulations but also about imbuing environmental justice values in the awareness of society and law enforcement agencies. Only through comprehensive legal culture change can it be expected that criminal law enforcement in the environmental field will achieve the desired sustainability and effectiveness.

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