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Environmental Justice at the Environmental Regulation in Indonesia and Uzbekistan

Hudali Mukti [a*], Bobur Baxtishodovich Sobirov [b]

[a] Faculty of Law, Universitas Widya Gama Mahakam Samarinda, Indonesia.
[b] Green Economy and Sustainable Business Department, Samarkand Branch of Tashkent State University of Economics, Uzbekistan.

* corresponding author: hudalimukti@uwgm.ac.id

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ABSTRACT (10PT)

Justice theory, which emphasizes the fair and equitable allocation of risks and benefits, has significantly influenced the idea of environmental justice. Indonesia and Uzbekistan have made it mandatory for laws and regulations to implement the concept of environmental justice. Still, in practice, the rules created give birth to social-environmental conflict dimensions that are increasingly prevalent and far removed from environmental justice. This research aims to understand and analyze environmental justice regulation in Indonesia and Uzbekistan. This research uses a normative juridical approach with a literature review involving primary and secondary legal sources. The results show that the provisions of the Job Creation Bill in the forestry and environmental sectors negate access to justice via litigation at the State Administrative Court (PTUN) so that there is no public space to continue an AMDAL decision or environmental approval as part of an environmental licensing instrument in the realm of administrative law. Regulatory problems that co-occur and are followed by implementation problems at a later date relating to the legitimacy and protection of people's constitutional rights will harm the community's sense of justice. At the same time, the issue of environmental injustice in Uzbekistan arises from the ecological crisis beginning with green space, waste management, and the water crisis that has afflicted the nation, as indicated by the preceding explanation. The government must establish national policies, institutional instruments, and central and regional environmental management authorities to facilitate development with an eye toward environmental justice.

1. Introduction

The global environment is significantly transforming, primarily influenced by human activities. These human-caused changes have historical precedents that predate the Industrial Revolution, highlighting humanity's profound and enduring imprint on our planet. Increasingly, the traditional tenet of prioritizing relentless economic development, frequently at the expense of the environment, is being reevaluated. The clarion call now is for a paradigm of sustainable development that

harmonizes economic aspirations with environmental imperatives, ensuring that development initiatives expand and grow within the limits imposed by the environment.[1]

Globally, the industrial sector serves as the foundation of economic growth. However, with progress comes several obstacles, most notably environmental degradation. For instance, industrial pollution is a pressing concern for nations, particularly those undergoing rapid industrialization. In numerous cases, protected spaces do not exclusively serve as catalysts for conflict but manifest as social, geographical, and political arenas in which diverse types of opposition to these regions display.[2] The practice of extractivism emerged and subsequently underwent development. Large-scale human activities pose a significant threat to the effectiveness of protected areas as initiatives for biodiversity conservation.

Distinguished by its diverse ecosystems and abundant landscapes, Indonesia faces complex environmental issues. Combined with population growth, the country's accelerated industrial development has exacerbated pressures on its ecological systems. Deforestation, primarily caused by the expanding palm oil industry and forestry, is a primary concern. This has resulted in significant habitat loss, threatening Indonesia's abundant biodiversity.[3] The degradation of these habitats endangers the numerous species they support and the livelihoods of innumerable people who depend on these ecosystems. In addition, frequent peatland fires, primarily caused by slash-and-burn agriculture, exacerbate air pollution levels and greenhouse gas concentrations, aggravating the global climate challenge and posing immediate health concerns for the indigenous population.

As a result of its location on the Pacific Ring of Fire, Indonesia is predisposed to various natural disasters, including volcanic eruptions, earthquakes, and tsunamis. When combined with human-induced environmental degradation, these natural adversities can intensify their adverse effects. Extensive deforestation, for instance, can induce landslides during heavy rainfall events, and damaged coral reefs may provide limited protection against storm surges.[4] Moreover, the unrestricted expansion of urban areas, which frequently lacks strategic planning, results in settlements in flood-prone regions, thereby increasing their vulnerability to potential dangers. Sustainable ecological practices and developmental goals must

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[1] M I Khan and Y.-C. Chang, 'Love for the Climate in Sino–Pakistan Economic Romance: A Perspective of Environmental Laws', *Clean Technologies and Environmental Policy*, 23.2 (2021), 387–99 https://doi.org/10.1007/s10098-020-01938-4

[2] Michele L. Thieme and others, 'Dams and Protected Areas: Quantifying the Spatial and Temporal Extent of Global Dam Construction within Protected Areas', *Conservation Letters*, 13.4 (2020) https://doi.org/10.1111/conl.12719

[3] Wayan G Santika and others, 'An Assessment of Energy Policy Impacts on Achieving Sustainable Development Goal 7 in Indonesia', *Energy for Sustainable Development*, 59 (2020), 33–48 https://doi.org/https://doi.org/10.1016/j.esd.2020.08.011

[4] Lisa Hiwasaki and others, 'Local and Indigenous Knowledge on Climate-Related Hazards of Coastal and Small Island Communities in Southeast Asia', *Climatic Change*, 128.1–2 (2015), 35–56 https://doi.org/10.1007/s10584-014-1288-8

coexist as Indonesia navigates the development path. To address these environmental challenges requires an integrated strategy that combines stringent legal frameworks, active community participation, and global cooperation.[5] In this specific situation, it is essential to investigate the proposed conservation theories that place equity and justice as their primary concerns. For instance, ecological conservation scholars and endeavors provide numerous insights. When analyzing the effects of climate change through the lens of equity, it is essential to ensure that the most vulnerable individuals are not subjected to disproportionate burdens. Providing clean water and sanitation, improving housing conditions, and facilitating adaptive measures for small-scale cultivators in response to environmental change are examples of initiatives that can effectively address the needs of the most vulnerable members of society.[6]

Justice theory has significantly influenced the environmental justice concept, which emphasizes the fair and equitable distribution of risks and benefits. The term "environmental justice" refers to a framework that assists in identifying and addressing the unequal, unjust, or disproportionate environmental burdens that people experiencing poverty and communities of color endure due to their exposure to toxic substances and lack of adequate legal protection.[7] In the context of disaster recovery, the concept of environmental justice can provide a valuable framework for analyzing disparities. Ecological justice frequently refers to the disparate experience of environmental disadvantages and benefits among distinct communities, including ethnic minorities and socioeconomically disadvantaged individuals.[8] In this intricate dance between preservation and development, it is essential to have explicitly defined metrics. The purpose of environmental quality standards is precisely this. They delineate the acceptable parameters, ensuring any deviation from these benchmarks is promptly identified and addressed. When these standards are exceeded, the result is not merely statistical deviations but measurable environmental damage that impacts communities and ecosystems. Environmental justice is a principle that seeks to ensure equitable access to environmental resources for all individuals and groups and prevent any disproportionately adverse effects caused by environmental degradation.[9]

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[5] Kanokporn Swangjang, 'Comparative Review of EIA in the Association of Southeast Asian Nations', *Environmental Impact Assessment Review*, 72 (2018), 33–42 https://doi.org/10.1016/j.eiar.2018.04.011

[6] Antaya March and Pierre Failler, 'Small-Scale Fisheries Development in Africa: Lessons Learned and Best Practices for Enhancing Food Security and Livelihoods', *Marine Policy*, 136 (2022), 104925 https://doi.org/10.1016/j.marpol.2021.104925

[7] Suharko Suharko, 'Urban Environmental Justice Movements in Yogyakarta, Indonesia', *Environmental Sociology*, 6.3 (2020), 231–41 https://doi.org/10.1080/23251042.2020.1778263

[8] Olivia Vilá and others, 'Environmental Justice in Disaster Recovery: Recognition of the Latinx Community by Nonprofit Leaders', *Climate Risk Management*, 40 (2023), 100502 https://doi.org/10.1016/j.crm.2023.100502

[9] Muhammad Khalid Anser and others, 'Beyond Climate Change: Examining the Role of Environmental Justice, Agricultural Mechanization, and Social Expenditures in Alleviating Rural Poverty', *Sustainable Futures*, 6 (2023), 100130 https://doi.org/10.1016/j.sftr.2023.100130

According to Bunyan Bryan, environmental justice refers to the interplay of cultural norms and values, regulations, laws, customary practices, and decision-making processes that promote a community's long-term viability and resilience. Individuals can develop relationships and mutual understanding in a safe, hospitable, and constructive environment. Environmental justice encompasses numerous aspects that contribute to the overall well-being of individuals and communities. These include the provision of equitable employment opportunities and compensation, access to high-quality education and recreational facilities, availability of suitable housing and healthcare services, participatory democratic processes, individual empowerment, and the creation of a violence-free environment that alleviates poverty. Consequently, it is essential to gain a deeper understanding of the effects of this strategy on people and the natural environment.[10]

Environmental law consists of Law No. 32 of 2009 about Environmental Protection and Management, Law No. 05 of 1990 relating to Conservation of Living Natural Resources and Ecosystems, and Law No. 41 of 1999 related to Forestry.[11] Environmental law enforcement is the final arrangement in the cycle of ecological policy planning. The process includes the elements of laws, standards, permission to grant, and application. If only legal certainty is involved in law enforcement, according to Mertokusumo, then the other elements are sacrificed. Similarly, legal certainty and justice are compromised if only the advantages are considered. Therefore, enforcing environmental legislation requires certainty, expediency, and justice. This necessitates a proportionally balanced focus on all three when managing it, although this is only sometimes simple.[12]

The following Indonesian regulations do not implement environmental justice, which is detrimental to environmental sustainability and causes a chain reaction of social injustice in environmental management that the Indonesian people should appreciate.

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[10] Antonio Bontempi and others, 'Conflict and Conservation: On the Role of Protected Areas for Environmental Justice', *Global Environmental Change*, 82 (2023), 102740 https://doi.org/10.1016/j.gloenvcha.2023.102740

[11] Lego Karjoko, Zaidah Nur Rosidah, and I Gusti Ayu Ketut Rahmi Handayani, 'Refleksi Paradigma Ilmu Pengetahuan Bagi Pembangunan Hukum Pengadaan Tanah', *BESTUUR*, 7.2 (2020), 1 https://doi.org/10.20961/bestuur.v7i1.42694

[12] Suwari Akhmaddhian, 'Discourse on Creating a Special Environmental Court in Indonesia to Resolve Environmental Disputes', *BESTUUR*, 8.2 (2020), 129 https://doi.org/10.20961/bestuur.v8i2.42774

Table 1. Indonesian policies that do not implement Environmental Justice

Policy	Implication and Problem Effect In Indonesia
Law Number 11 of 2020 concerning Job Creation Law	There are questions about Indonesia's environmental commitment because environmental restrictions are considered barriers to commercial activities. Indonesia's dedication to the environment has been questioned since environmental conditions are considered barriers to commercial activity—a negative correlation between ecological factors and corporate growth. The JCL makes it simpler to omit environmental assessment standards rather than advancing ecological monitoring and management technology or techniques. This possesses environmental ecology, as shown by earlier experiments with comparable situations.[13]
Government Regulation Number 5 of 2021 concerning Implementation of Risk-Based Utilization Permits	For instance, if the organization requests to demonstrate that the proposed activities won't affect the environment or the community, the use permit may be granted or renewed. A dedicated group of government officials and resource users' representatives should objectively monitor and evaluate the permitted use of maritime resources as mandated by the regulations. Additionally, the state requires that environmental impact assessments (Analisis Dampak Lingkungan/AMDAL) be regularly performed by private companies or people who use resources that represent a high risk of harming the environment (aquaculture) to total permits. However, reality has no discernible impact on the welfare of people or nature. They are utilizing the environment. They use instruments to encourage and promote environmentally beneficial activities while penalizing those that do not contribute to the management and protection of nature is the most realistic strategy.[14]
Government Regulation Number 23 2021 of the Republic of Indonesia Regarding Forestry Implementation	The most significant obstacles to forest management are space for development, a high rate of biodiversity (population and values), and intense pressure to maintain the dominant economic function of forests. However, there needs to be more focus on ecological and social processes. Sustainable practices must be demonstrated to implement forest management policies through community empowerment. The procedures governing forest

[13] Sudharto P. Hadi, Rizkiana S. Hamdani, and Ali Roziqin, 'A Sustainability Review on the Indonesian Job Creation Law', *Heliyon*, 9.2 (2023), e13431 https://doi.org/10.1016/j.heliyon.2023.e13431

[14] Estradivari and others, 'Marine Conservation beyond MPAs: Towards the Recognition of Other Effective Area-Based Conservation Measures (OECMs) in Indonesia', *Marine Policy*, 137 (2022), 104939 https://doi.org/10.1016/j.marpol.2021.104939

	management must also foster sustainable forest management. Despite the accomplishments, the discipline has yet to make progress to date. Community-based forest management requires altruism and a sustainable business model and encourages long-term changes to the ecosystem.[15]
Government regulation No 27/2020 specific solid waste	National policies and regulations adequately covered all aspects of solid refuse management. Sadly, only 99 out of 514 local governments have rules on plastic bags with a single use. Furthermore, the impact of plastic waste regulations on reducing marine plastic pollution is still challenging and required. It requires annual monitoring, as only 42% of local government solid waste data is available. Given the ongoing COVID-19 pandemic, which increases plastic usage and masking, and the fact that only a portion of strategic objectives on plastic litter reduction were established (), achieving the target of a 70% reduction in marine plastic litter entering the seas may require more time. Therefore, stringent law enforcement is necessary for the NAP objectives. Accordingly, neither the community nor the people feel protected from environmental pollution nor reside in and enjoy a clean and healthy environment.[16]

The policy still needs to uphold environmental justice. Many regulations impair the environment, do not involve the community, and have inadequate enforcement. Problems arise when business interests and economics conflict, laws do not provide a long-term, sustainable ecosystem, etc. In Indonesia, environmental justice requires additional regulatory improvements. In reality, the law imposes on national and local governments a great deal of ecological destruction and conflicting interests.

Development and environmental conflicts have increasingly diverged between environmental management policies' representations of justice and locally affected social groups' demands for justice. A multifaceted conception of environmental justice has become influential in identifying, explaining, and addressing unequal distributions of ecological impacts on forest-dependent communities and other socially disadvantaged groups.[17] The recently enacted Job Creation Law (Omnibus

[15] Drasospolino and others, 'The Forest Management Policy and Its Influence in Forest Area Utilization and Empowering Forest Communities in Yogyakarta', *Land Use Policy*, 127 (2023), 106539 https://doi.org/10.1016/j.landusepol.2023.106539

[16] Zainal Arifin and others, 'Indonesian Policy and Researches toward 70% Reduction of Marine Plastic Pollution by 2025', *Marine Policy*, 155 (2023), 105692 https://doi.org/10.1016/j.marpol.2023.105692

[17] Jia Yen Lai, Sam Staddon, and Alistair Hamilton, 'Technical Experts' Perspectives of Justice-Related Norms: Lessons from Everyday Environmental Practices in Indonesia', *Land Use Policy*, 102 (2021), 105234 https://doi.org/10.1016/j.landusepol.2020.105234

Law) discusses an exceptionally intriguing and widely debated topic: the revision of Law No. 41 of 1999 concerning forestry, specifically in Article 18 Paragraph 2, namely the elimination of the 30 percent minimum forest area limit. Before enacting the Job Creation Law, several laws set the minimal forest area threshold at 30 percent of the administrative area. However, following the enactment of the Job Creation Law, the minimum forest area threshold of 30 percent was eliminated and replaced with adequate forest area and forest cover.

Furthermore, article 70, paragraph 1 of UUPPLH emphasizes that the community has the same and broadest rights and opportunities to participate in environmental protection and management actively. The objective is to: a. increase ecological conservation and management awareness; b. increase independence, community empowerment, and partnerships; c. develop community capabilities and pioneering; d. develop community responsiveness to social supervision, and build and maintain local culture and wisdom in preserving environmental functions. Based On These Two Provisions, the UUPPLH has defined the recognition and benefits of community participation in environmental management. However, after the promulgation of Law No. 11 of 2020 regarding Job Creation (UUCK), a controversy arose regarding the perception that community participation in the Amdal process had diminished. The law reduces community participation in the environment. Reach and limitations of directly affected communities limit community participation.[18] The Job Creation Law has garnered significant attention and has become a subject of protests and criticism from multiple stakeholders. One of the reasons is that the Job Creation Law is considered to hurt the environment because it is deemed not to provide adequate provisions regarding environmental safety and has the potential to threaten ecological sustainability and justice for affected communities. There are allegations suggesting that these regulations primarily cater to the interests of investors and enterprises, thereby posing a risk of undermining the efficacy of environmental law enforcement. The present issue concerns the purported alteration of the role of AMDAL, formerly a prerequisite for licensing, under the Job Creation Law. This modification has rendered its function either insignificant or merely an ancillary necessity.

There are provisions in the Mineral and Coal Law that tend to be highly exploitative of coal and lucrative for coal mining companies. This article's contents include, among other things, the provision of tax relief and facilities for mining companies, guarantees for mining contract extensions, loss of environmental carrying capacity criteria for determining mining business permit areas, etc. This article is not guided by spatial planning rules, specifically sustainability, which guarantees to preserve and to continue the carrying and environmental capacity. In addition, it does not adhere to the UUPPLH's preservation and continuity principles. Therefore, it can be asserted that the government does not guarantee environmental preservation and sustainability. Even though it is believed to be

[18] Lai, Staddon, and Hamilton.

capable of bringing about positive economic change in the aftermath of the pandemic, the Job Creation Law has numerous flaws. It needs to be by Indonesia's commitment to reduce greenhouse gas emissions. Weakening environmental instruments by amending the Mining and Coal Law and the Job Creation Law can increase Indonesia's greenhouse gas emissions by encouraging investment in a high-carbon economy rather than transitioning to a low-carbon economy. The transition to a low-carbon, sustainable economy can survive a crisis. Therefore, structural policy changes in the direction of sustainability are required.

The significance of legal environmentalism in Uzbekistan has grown steadily over the previous decade. Consequently, environmentalism has become increasingly significant in various fields, including industry, agriculture, and the daily lives of individuals. The government of Uzbekistan is actively pursuing environmentally friendly policies to preserve Central Asia's pristine landscapes and investigate alternative means of environmental utilization. On the one hand, the significance of ecological regulation frequently presents challenges regarding individual rights.[19] In Uzbekistan, many regulations impede environmental justice. Reality research author state that many rules in Uzbekistan don't involve the community and have inadequate enforcement to achieve sustainability for their citizen. In addition, law entails substantial environmental destruction and competing interests on national and local governments. Numerous policies have no effect in Uzbekistan. This is founded on the fact that multiple issues occur in Uzbekistan. Several problems, such as the water crisis, waste management policy, and others, are challenging to manage, but policy cannot approach environmental justice.[20] Whereas The Republic of Uzbekistan assures legal oversight of ecological management and conservation through a comprehensive framework of more than 50 national laws and over 200 regional regulations—one of the rules, namely Decree No. PF-269, issued by the President of the Republic of Uzbekistan on December 21, 2022, pertains to implementing measures for Uzbekistan's newly introduced administrative reforms. The primary objective of these reforms is to control the optimization of the various systems within the state administration. Other legal provisions governing the use of natural resources, including land, water, biodiversity, and environmental protection measures, carry out primary functions.[21]

Over the past few decades, the global academic community has increasingly focused on understanding the environmental implications of industrial activities.

[19] Shiran Song and others, 'Indicator-Based Assessments of the Coupling Coordination Degree and Correlations of Water-Energy-Food-Ecology Nexus in Uzbekistan', *Journal of Environmental Management*, 345 (2023), 118674 https://doi.org/10.1016/j.jenvman.2023.118674

[20] Mirzokhid Mirshadiev and others, 'Scoping of Promising Land Management and Water Use Practices in the Dry Areas of Uzbekistan', *Agricultural Water Management*, 207.June (2018), 15–25 https://doi.org/10.1016/j.agwat.2018.05.015

[21] Николай Скрипников and Nikolay Skripnikov, 'Issues of Further Improvement of Management in The Sphere of Nature Management and Environmental Protection (Using The Example of Uzbekistan)', *Journal of Foreign Legislation and Comparative Law*, 4.5 (2018), 1–1 https://doi.org/10.12737/art.2018.5.18

Numerous studies, such as those by Dong et al. and Dou et al.,[22] have highlighted regional disparities in pollution mitigation, the ecological impacts of mining, and the role of public supervision in the environment. The study by Wang, Jie, et al. indicated that CEQA exhibits a paradoxical relationship with distributive justice. The authors also emphasize the importance of independently evaluating environmental amenities and their negative consequences to prevent the AMDAL process from hindering the construction of helpful infrastructure in communities seeking environmental justice.[23] Then, research conducted by Xinxin Wang demonstrates how both centralized and decentralized political processes perpetuate injustice and how herders use their knowledge and strategies to resist injustice.[24]

Environmentally sound development is the government's priority in preserving the environment. This obligation includes regulating and developing environmental policies, regulating the use of natural resources and genetic resources, controlling activities that have social impacts, and funding the preservation of ecological functions. In supporting this development, the government needs to establish national policies, appoint institutional tools, and determine the authority of environmental management at the central and regional levels.[25]

This research examines the environmental justice frameworks in Indonesia and Uzbekistan.[26] Regulatory discrepancies exist in Indonesia about imposing penalties

[22] F Dong and others, 'How Public and Government Matter in Industrial Pollution Mitigation Performance: Evidence from China', *Journal of Cleaner Production*, 306 (2021) https://doi.org/10.1016/j.jclepro.2021.127099 S Dou, D Xu, and R J Keenan, 'Effect of Income, Industry Structure and Environmental Regulation on the Ecological Impacts of Mining: An Analysis for Guangxi Province in China', *Journal of Cleaner Production*, 400 (2023) https://doi.org/10.1016/j.jclepro.2023.136654

[23] Jie Wang and others, 'Environmental Justice, Infrastructure Provisioning, and Environmental Impact Assessment: Evidence from the California Environmental Quality Act', *Environmental Science & Policy*, 146 (2023), 66–75 https://doi.org/10.1016/j.envsci.2023.05.003

[24] Xinxin Wang and Kevin Lo, 'Pastoralism and Conservation: The Politics and Notions of Environmental Justice under the Grazing Ban Policy in Inner Mongolia, China', *Political Geography*, 99 (2022), 102779 https://doi.org/10.1016/j.polgeo.2022.102779

[25] Hryhorii Bukanov, 'Instruments for Implementing Environmental Policy at the Regional Level', *Reality of Politics*, 13.3 (2020), 13–28 https://doi.org/10.15804/rop2020301 Malonga Hazemba and Anthony Halog, 'Systematic Review of How Environmental Management Policies Are Incorporated into National Development Plans in Order to Achieve Sustainable Development', *Environmental Challenges*, 3 (2021), 100041 https://doi.org/10.1016/j.envc.2021.100041

[26] Z H A Syahr and S G M S R Putra, 'The Development of Environmental Case Handling Policy in Indonesian Court', *IOP Conference Series: Earth and Environmental Science*, 1109.1 (2022), 012049 https://doi.org/10.1088/1755-1315/1109/1/012049

for ecological and social responsibility.[27] This highlights the imperative of harmonizing and synchronizing legal frameworks to optimize the implementation of these laws.[28] In general, the studies above shed light on diverse facets of environmental justice regulation in Indonesia, encompassing the enforcement of laws, perspectives of stakeholders, and the imperative for achieving regulatory harmonization by evaluating the implementation and efficacy of environmental laws, particularly about industries that contribute to water, air, and environmental degradation. This study examines how ecological justice is implemented in Indonesia and Uzbekistan's environmental laws and regulations. Aside from that, this research attempts to compare Indonesian rules with those of other nations to serve as a guide for improving Indonesian regulations.

2. Research Method

This research applies a normative juridical approach conducted through a literature review. Primary legal sources include the 1945 Constitution of the Republic of Indonesia, various laws, and government regulations relevant to the research topic. Meanwhile, secondary legal materials consist of literature, papers, articles, and other research results pertinent to the research topic. Tertiary legal materials, such as the General Indonesian Dictionary and Legal Dictionary, were also used to explain further and guide primary and secondary legal materials. The data collection method used in this research is a literature study, where information is obtained through a literature review as the primary source in this writing and conducting a comparative study with settings related to environmental protection in Uzbekistan. Materials collected from literature research are then analyzed qualitatively, namely the method of analyzing materials by classifying and selecting legal materials obtained from analysis according to their quality and truth, then connected with theories from literature studies to answer the problems in this study. In analyzing this legal material, an inductive way of thinking is used, namely, concluding the research results from specific things to draw general conclusions.

3. Results and Discussion

Environmental Justice in Environment Regulation with Restoration

Exploring the interplay between law and justice is a captivating thematic inquiry. This pertains to the examination and critique of the relevant legal framework (*ius constitutum*) in terms of its alignment with principles of justice. In addition to this, it is also necessary to consider the future trajectory of legal development (*ius constitendum*) to prevent the emergence of legal norms that cater

[27] Rise Karmilia, 'Legal Analysis Contradictory Regulations on the Granting of Sanctions on Environmental Social Responsibility in Indonesia', *Asia Proceedings of Social Sciences*, 1.3 (2019), 67–70 https://doi.org/10.31580/apss.v1i3.451

[28] Vivi Sofiani et al., 'Harmonization of Environmental Legal Policies with Banking Regulation in Indonesia', *Russian Law Journal*, 11.3 (2023) https://doi.org/10.52783/rlj.v11i3.1641

solely to the interests of certain parties or serve transient objectives. According to John Rawls, the social justice theory encompasses two fundamental principles: the difference principle and the idea of fair equality of opportunity. This implies that pursuing social justice necessitates active efforts to rectify and enhance the circumstances of inequality marginalized individuals face by establishing empowering social, economic, and political structures.[29]

The sense of urgency is genuine. The challenges surrounding environmental justice are growing in intensity, along with the associated hazards to socio-environmental fairness and the well-being of the ecosystem. There exists a diverse range of conceptual frameworks to examine instances of injustice, one of which is intersectionality. This theoretical perspective posits that individuals possess many identities, such as gender and race, which interact and collectively shape their lived experiences. Justice should encompass the ability of individuals to engage in various capabilities, including but not limited to recreational activities and property ownership, which contribute to a well-rounded and fulfilling existence.[30]

There exist three distinct categories of justice, specifically distributive justice, procedural justice, and recognition justice.[31] Distributive justice pertains to the fair allocation of both environmental advantages and disadvantages. The concept of distributive justice forms the core of the early environmental justice (EJ) movement, which aimed to highlight the disproportionate concentration of polluting industrial activities and hazardous waste facilities in economically disadvantaged communities comprised of minority groups and lacked political empowerment.[32] Procedural justice is a theoretical framework emphasizing the importance of fair and equal involvement in decision-making procedures. Procedural justice encompasses three key domains: firstly, a transparent, responsible, honest, and correctible process; secondly, a process that empowers impacted communities by granting them agency, voice, and decision control; and thirdly, a process that ensures equitable treatment of all parties involved, demonstrating respect for their rights and dignity.[33] Recognition justice posits that

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[29] Nafi Mubarok, 'Keadilan Hukum Dalam Penyelesaian Sengketa Lingkungan Hidup Di Indonesia', *Al-Daulah: Jurnal Hukum Dan Perundangan Islam*, 10.2 (2020), 336–68 https://doi.org/10.15642/ad.2020.10.2.335-368

[30] Bontempi and others.

[31] Nicola Ulibarri, Omar Pérez Figueroa, and Anastasia Grant, 'Barriers and Opportunities to Incorporating Environmental Justice in the National Environmental Policy Act', *Environmental Impact Assessment Review*, 97 (2022), 106880 https://doi.org/10.1016/j.eiar.2022.106880

[32] Bongki Woo and others, 'Residential Segregation and Racial/Ethnic Disparities in Ambient Air Pollution', *Race and Social Problems*, 11.1 (2019), 60–67 https://doi.org/10.1007/s12552-018-9254-0

[33] Abraham J. Miller-Rushing and others, 'Conservation Ethics in the Time of the Pandemic: Does Increasing Remote Access Advance Social Justice?', *Biological Conservation*, 276 (2022), 109788 https://doi.org/10.1016/j.biocon.2022.109788

a fair and honest process necessitates the acknowledgment and reverence of the various perspectives, lived experiences, and values that impacted communities contribute to the discourse. In contexts characterized by historical or persistent marginalization or oppression, the mere implementation of due process, facilitated by procedural justice, may prove inadequate in granting disadvantaged communities satisfactory representation and influence.[34]

Throughout the development of environmental governance systems at both national and global levels, scholars, social activists, and public and private organizations have formulated diverse conceptualizations of justice.[35] Environmental justice can be described as the equitable treatment and substantial engagement of individuals, irrespective of their race, color, national origin, or income, in the formulation, execution, and enforcement of environmental legislation, regulations, and policies.[36] The objective of mitigating disparities in ecological justice, typically through implementing rules and regulations, is to establish environmental equality. This entails ensuring that all individuals bear a fair and equitable burden of environmental pollution and associated health risks while enjoying equal opportunities to use ecological amenities.[37] There exist numerous issues that are interconnected with urban environmental justice. These factors include frequent indicators of the environment, such as the supply of ecosystem services, and demographic aspects, such as poverty rates and access to open spaces.[38]

The concept of environmental justice is theoretically closely intertwined with the idea of energy justice. Theoretical and conceptual frameworks about energy justice's distributional, procedural, and restorative dimensions are recognized as

[34] Margot Hurlbert and Jeremy Rayner, 'Reconciling Power, Relations, and Processes: The Role of Recognition in the Achievement of Energy Justice for Aboriginal People', *Applied Energy*, 228 (2018), 1320–27 https://doi.org/10.1016/j.apenergy.2018.06.054

[35] William San Martín and Nathan Wood, 'Pluralising Planetary Justice beyond the North-South Divide: Recentring Procedural, Epistemic, and Recognition-Based Justice in Earth-Systems Governance', *Environmental Science & Policy*, 128 (2022), 256–63 https://doi.org/10.1016/j.envsci.2021.12.002

[36] Marcia S. Meixler, Max R. Piana, and Alexis Henry, 'Modeling Present and Future Ecosystem Services and Environmental Justice within an Urban-Coastal Watershed', *Landscape and Urban Planning*, 232 (2023), 104659 https://doi.org/10.1016/j.landurbplan.2022.104659

[37] Katharine R E Sims and others, 'Environmental Justice Criteria for New Land Protection Can Inform Efforts to Address Disparities in Access to Nearby Open Space', *Environmental Research Letters*, 17.6 (2022), 064014 https://doi.org/10.1088/1748-9326/ac6313

[38] Geoffrey R. Browne, Lucy Dubrelle Gunn, and Melanie Davern, 'A Framework for Developing Environmental Justice Indicators', *Standards*, 2.1 (2022), 90–105 https://doi.org/10.3390/standards2010008

crucial for achieving environmental justice while implementing energy projects.[39] In recent years, there has been a notable growth in the restoration and management of mining areas in dry regions, resulting in significant progress in terms of recovery efficiency. However, considering the long-term outlook, it becomes evident that the ecological restoration capacity in mining areas needs improvement. The restoration and management efforts have yet to yield the anticipated outcomes, primarily manifested by low vegetation coverage and survival rates and negligible enhancements to the ecological environment.[40] While recognition of the necessity for sustainable mining practices is acknowledged, it is evident that the efforts made by relevant departments and firms in terms of exploration and research have yielded little results. This situation is a challenge for both mining enterprises and natural resource management departments. The mining area ecology has a multi-level pattern and process characterized by interconnectedness among its many levels. Furthermore, coupling or feedback mechanisms exist between distinct processes within this ecosystem. The assessment of terrestrial ecosystem degradation in mining areas necessitates the utilization of diverse methodologies.[41]

The notion of environmental justice has arisen as a reaction to the manifestation of diverse indicators of ecological degradation, particularly in the wake of the Industrial Revolution. Environmental restoration in mining areas involves addressing ecological issues, such as geological hazards, land damage, and vegetation damage, that arise from mining activities.[42] This restoration is achieved by utilizing natural processes or implementing artificial interventions. The primary objectives are stabilizing the geological environment, reclaiming the damaged land, and restoring and enhancing ecosystem functions.[43] The issue of land degradation resulting from the spatial connection of extensive mining disturbance with arid, delicate ecological environments is of significant concern.

[39] M. Lacey-Barnacle, R. Robison, and C. Foulds, 'Energy Justice in the Developing World: A Review of Theoretical Frameworks, Key Research Themes and Policy Implications', *Energy for Sustainable Development*, 55 (2020), 122–38 https://doi.org/10.1016/j.esd.2020.01.010

[40] Hailiang Xu and others, 'A Systematic Review and Comprehensive Analysis on Ecological Restoration of Mining Areas in the Arid Region of China: Challenge, Capability and Reconsideration', *Ecological Indicators*, 154 (2023), 110630 https://doi.org/10.1016/j.ecolind.2023.110630

[41] G.R. Hancock, J.F. Martín Duque, and G.R. Willgoose, 'Mining Rehabilitation – Using Geomorphology to Engineer Ecologically Sustainable Landscapes for Highly Disturbed Lands', *Ecological Engineering*, 155 (2020), 105836 https://doi.org/10.1016/j.ecoleng.2020.105836

[42] P.D. Erskine and others, 'Using Reference Sites to Guide Ecological Engineering and Restoration of an Internationally Significant Uranium Mine in the Northern Territory, Australia', *Ecological Engineering*, 129 (2019), 61–70 https://doi.org/10.1016/j.ecoleng.2019.01.008

[43] Elmira Tajvidi Asr and others, 'A Review of Studies on Sustainable Development in Mining Life Cycle', *Journal of Cleaner Production*, 229 (2019), 213–31 https://doi.org/10.1016/j.jclepro.2019.05.029

Restoration or recuperation becomes exceedingly challenging once an object or system has incurred damage.[44]

Despite its purported altruistic objectives, the Job Creation Law contains provisions that pose potential risks to environmental sustainability. Several issues are being addressed, including the simplification of licensing processes. Specifically, there is a focus on transforming environmental permits into ecological agreements, which would effectively eliminate the need for administrative lawsuits in the event of violations. Furthermore, the disorientation associated with strict responsibility can alter the essence of absolute culpability, redefining its definition. The concept of liability is transformed into a fault-based liability, which can undermine justice within the community. This situation is further aggravated by reducing community involvement in environmental decision-making processes, as such participation is limited solely to communities directly impacted. Consequently, this gives rise to limitations. The concept of the right to the environment pertains to the regulations and mechanisms that ensure adherence to environmental legislation, thereby upholding the right to a healthy environment, both in procedural and substantive aspects. This demonstrates a departure from the principles of ecological justice legislation, which have traditionally served as a foundation for developing legislative frameworks to safeguard the environment.[45] There needs to be a legislative framework that effectively supports restoration efforts and occasional ambiguity over jurisdictional boundaries to implement large-scale restoration initiatives to promote ecosystem recovery.[46]

Integrating concepts related to environmental justice into studies on valuation addresses the fundamental inquiry of determining whose values are being evaluated. The determination of the answer is contingent upon identifying the pertinent stakeholder group within the community of justice or the impacted party in the context of distributive justice. Additionally, it relies on the meaningful involvement of these individuals in the decision-making process and the incorporation of their respective values within the framework of recognition justice. Moreover, it should be noted that the term "value" possesses varying interpretations across cultural, academic, and decision-making spheres. Sustainability, justice, and prosperity are overarching principles shaped by many

[44] Wu Xiao and others, 'Ecological Resilience Assessment of an Arid Coal Mining Area Using Index of Entropy and Linear Weighted Analysis: A Case Study of Shendong Coalfield, China', *Ecological Indicators*, 109 (2020), 105843 https://doi.org/10.1016/j.ecolind.2019.105843

[45] Hario Danang Pambudhi and Ega Ramadayanti, 'Menilai Kembali Politik Hukum Perlindungan Lingkungan Dalam UU Cipta Kerja Untuk Mendukung Keberlanjutan Ekologis', *Jurnal Hukum Lingkungan Indonesia*, 7.2 (2021), 297–322 https://doi.org/10.38011/jhli.v7i2.313

[46] Nicole Shumway and others, 'Policy Solutions to Facilitate Restoration in Coastal Marine Environments', *Marine Policy*, 134 (2021), 104789 https://doi.org/10.1016/j.marpol.2021.104789

worldviews.[47] The urgency to address environmental injustices necessitates promoting and establishing sustainable approaches to achieve environmental justice. This can be accomplished by employing the social determinants of health framework, conducting comprehensive assessments of biological/chemical and non-biological/chemical risk factors, and stress-based risk factors. Additionally, it is crucial to prioritize implementing effective legislative policies that safeguard these vulnerable communities.[48]

The Expanding Global Significance of Environmental Justice Legislation

The environmental justice movement emerged in the United States during the early 1980s, prompted by grassroots demonstrations about the inequitable distribution of landfills within communities predominantly inhabited by low-income and non-white populations. The advantages and disadvantages of infrastructure are significant factors in the context of distributive justice. Communities derive advantages from infrastructure that facilitates social services and environmental benefits.[49] These include the provision of fresh water, the establishment of public green spaces, the mitigation of flood risks, and the amelioration of climate change impacts.[50]

Since the 1980s, various sources such as government reports, academic scholarship, and investigative journalism have consistently identified a pattern wherein racial and ethnic minorities, indigenous groups, individuals with lower levels of education, linguistically isolated households, and low-income communities are disproportionately affected by or susceptible to a diverse array of environmental burdens. These groups are also exposed to procedural imbalances characterized by disparities in treatment, enforcement, and possibilities for meaningful engagement. Research on ecological justice has uncovered differences in the distribution of hazardous waste exposure,[51] air pollution, water pollution, noise pollution, traffic, and, more recently, climate change-enhanced risks of flooding, rising sea levels, excessive heat, and extreme weather. Low-income

[47] M Schaafsma and others, 'Whose Values Count? A Review of the Nature Valuation Studies with a Focus on Justice', *Current Opinion in Environmental Sustainability*, 64 (2023), 101350 https://doi.org/10.1016/j.cosust.2023.101350

[48] James J. García and others, 'Environmental Justice', in *Reference Module in Biomedical Sciences* (Elsevier, 2023) https://doi.org/10.1016/B978-0-12-824315-2.00670-9

[49] Zhanqiang Zhu, Jie Ren, and Xuan Liu, 'Green Infrastructure Provision for Environmental Justice: Application of the Equity Index in Guangzhou, China', *Urban Forestry & Urban Greening*, 46 (2019), 126443 https://doi.org/10.1016/j.ufug.2019.126443

[50] Nicola Ulibarri and David Han, 'NEPA and Climate Change: Consideration of Climate Mitigation and Adaptation in Infrastructure Review Processes', *Environmental Research: Infrastructure and Sustainability*, 2.1 (2022), 015004 https://doi.org/10.1088/2634-4505/ac5006

[51] Debra J. Salazar and others, 'Race, Income, and Environmental Inequality in the U.S. States, 1990–2014', *Social Science Quarterly*, 100.3 (2019), 592–603 https://doi.org/10.1111/ssqu.12608

and minority populations frequently encounter inequitable burdens of exposure to contamination sources and environmental degradation. Moreover, connections between race and ethnicity exist even when considering variations in income levels.

Environmental justice (EJ) pertains to the inequitable allocation of environmental benefits and detriments while advocating for individuals' entitlement to participate in environmental decision-making. Recently, there has been an increased focus on incorporating Environmental Justice (EJ) principles in urban areas, particularly concerning utilizing Nature-based solutions (NbS). This attention primarily examines how the planning and execution of NbS initiatives might influence human well-being and promote social justice.[52] In this context, EJ underscores the importance of addressing environmental concerns by exposing the practices perpetuating social inequities, including discriminatory urban planning policies, the prevalence of exclusionary decision-making processes, and the marginalization of individuals' and communities' needs, capabilities, and identities.[53] Nature-based solutions (NbS) refer to approaches that involve incorporating natural elements into urban environments. These techniques are often advocated as a cost-efficient means of preserving biodiversity and providing supplementary social, economic, and ecological advantages to address urban issues.[54]

There are also policies in the form of The Environmental Impact Assessment (EIA), a widely employed methodology for evaluating the environmental and societal consequences of infrastructure initiatives worldwide. In theoretical terms, Environmental Impact Assessment (EIA) can govern the infrastructure planning process to promote and uphold the principles of environmental justice. This can be achieved by implementing three distinct mechanisms: Assessing and overseeing the distributional ramifications of various projects, plans, and programs.[55] The National Environmental Policy Act (NEPA) of the United States mandates that federal agencies employ environmental impact assessment methodologies to

[52] Jarumi Kato-Huerta and Davide Geneletti, 'Environmental Justice Implications of Nature-Based Solutions in Urban Areas: A Systematic Review of Approaches, Indicators, and Outcomes', *Environmental Science & Policy*, 138 (2022), 122–33 https://doi.org/10.1016/j.envsci.2022.07.034

[53] Harold J. Leraas and others, 'Where Are the Children? A Thematic Analysis of State, Territory, and Tribal Organization Comprehensive Cancer Control Plans', *Journal of Pediatric Surgery*, 2023 https://doi.org/10.1016/j.jpedsurg.2023.09.022

[54] Emmanuelle Cohen-Shacham and others, 'Core Principles for Successfully Implementing and Upscaling Nature-Based Solutions', *Environmental Science & Policy*, 98 (2019), 20–29 https://doi.org/10.1016/j.envsci.2019.04.014

[55] Tyler Andrew Scott, Nicola Ulibarri, and Omar Perez Figueroa, 'NEPA and National Trends in Federal Infrastructure Siting in the United States', *Review of Policy Research*, 37.5 (2020), 605–33 https://doi.org/10.1111/ropr.12399

consolidate scientific data, solicit feedback from relevant stakeholders, and evaluate various options when making decisions regarding the placement and functioning of infrastructure.[56]

The New Environmental Protection Law in China primarily aims to enhance the quantity of green innovation by addressing issues such as government bias and the mitigation of environmental litigations. Nevertheless, it is essential to note that implementing China's New Environmental Protection Law has introduced specific challenges in funding and managerial decision-making. High-quality innovations often necessitate substantial investment and a willingness to accept failure. Consequently, the law's provisions on financial limits and potential myopic administrative practices have the potential to hinder the development and adoption of superior green technologies. Additionally, the implementation of China's New Environmental Protection Law has been found to result in temporary declines in corporate performance. However, it is evident that this legislation effectively encourages improvements in environmental performance.[57]

From its conception, environmental justice has always emphasized the fundamental importance of justice in environmental matters. At its core, environmental justice concerns the equitable allocation of advantages and disadvantages and the inclusion in decision-making processes that impact nearby ecosystems. At the very least, this concept encompasses the fair distribution of resources and the just procedures involved.[58] The idea of the just transition is delineated in this context as a process that is both fair and equitable, aiming to facilitate the transition towards a society that is no longer reliant on carbon-based energy sources. The primary objective of this procedure is to ensure fairness and equity in addressing significant global justice issues, including but not limited to ethnicity, income, and gender, in both developed and developing countries. The nature of this transformation necessitates a global scope while also effectively engaging with various levels of scale. The process encompasses formulating ideas, methods, and agreements to facilitate a just and impartial transition for all individuals and communities.[59]

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[56] Emily Grubert and Kelly T. Sanders, 'Water Use in the United States Energy System: A National Assessment and Unit Process Inventory of Water Consumption and Withdrawals', *Environmental Science & Technology*, 52.11 (2018), 6695–6703 https://doi.org/10.1021/acs.est.8b00139

[57] Xiaoqi Huang and others, 'Quantity or Quality: Environmental Legislation and Corporate Green Innovations', *Ecological Economics*, 204 (2023), 107684 https://doi.org/10.1016/j.ecolecon.2022.107684

[58] Darren McCauley and Raphael Heffron, 'Just Transition: Integrating Climate, Energy and Environmental Justice', *Energy Policy*, 119 (2018), 1–7 https://doi.org/10.1016/j.enpol.2018.04.014

[59] Simon Ejokema Imoisi and Paul Atagamen Aidonojie, 'Legal and Socio-Economic Issues Concerning Black Marketer's Activities of Petroleum Products in Nigeria', *Yuridika*, 38.2 (2023), 261–84 https://doi.org/10.20473/ydk.v38i2.44999

Incorporating justice principles is inherent to implementing impact assessment (IA) methods and regulations. Upon conducting a more in-depth analysis of the scholarly literature on environmental justice, it becomes evident that this concept has multiple interpretations and applications. The trivalent framework evaluates the conceptualization of justice within English language IA journal articles published between 2000 and 2019. This study's findings indicate a notable focus on justice's distributive and procedural aspects. At the same time, comparatively less consideration is given to matters about recognition and framing. Incorporating expansive conceptualizations of environmental justice can benefit scholars in the field of international affairs, as it enables them to effectively address issues related to justice in many international affairs practices and contexts. This includes considering how international affairs can effectively meet the concerns of marginalized populations.[60]

The Regulation of Environmental Justice Analyses in Indonesia

Problem settings are characterized by their great complexity and require multiple approaches to address them effectively. Given the extensive range of the current scope, it appears imperative to establish a legal framework for addressing enforcement issues within the context of the law environment. Achieving holistic environmental integration is necessary in the context of sustainable development within the framework of the skeletal structure.[61] Norms about ecological justice have become evident in local assertions for social equity and global aspirations for sustainable development. Critical institutional analysis, with a particular emphasis on standards, has significantly enhanced our comprehension of how notions of justice are formed within natural resource management.[62] Environmental governance is a complex and ever-changing process involving various levels of authority and is influenced by official government legislation and local traditions. These factors collectively shape the implementation and results of environmental and development policies. Translating externally derived standards, such as those about justice, from the international or national level to sub-national implementation necessitates the involvement of several intermediary actors,

[60] Gwendolyn Blue, Kelly Bronson, and Alana Lajoie-O'Malley, 'Beyond Distribution and Participation: A Scoping Review to Advance a Comprehensive Environmental Justice Framework for Impact Assessment', *Environmental Impact Assessment Review*, 90 (2021), 106607 https://doi.org/10.1016/j.eiar.2021.106607

[61] Fatma Ulfatun Najicha, Muhamad Mahrus Setia Wijaksana, and Nurita Wulandari, 'The Optimization of Environmental Policy to Achieve Sustainable Development Goals', *Journal of Sustainable Development and Regulatory Issues (JSDERI)*, 1.2 (2023), 98–107 https://doi.org/10.53955/jsderi.v1i2.10

[62] Leah Temper and others, 'The Global Environmental Justice Atlas (EJAtlas): Ecological Distribution Conflicts as Forces for Sustainability', *Sustainability Science*, 13.3 (2018), 573–84 https://doi.org/10.1007/s11625-018-0563-4

including governmental bodies, civil society organizations, and commercial sector entities.[63]

The Environmental Impact Assessment (EIA) is a widely recognized environmental policy tool that addresses local justice concerns and promotes global sustainability goals. This is particularly important in natural resource-rich countries where EIAs are the sole publicly acknowledged ecological policy instruments. The United Nations Environment Programme (UNEP) recognizes the Environmental Impact Assessment (EIA) as a pivotal mechanism for attaining the objectives outlined in the 2030 Agenda for Sustainable Development and other interconnected frameworks like the Strategic Plan for Biodiversity. The relevance of Environmental Impact Assessment (EIA) to distributive justice stems from its core aims, which primarily focus on evaluating the effects of project actions on certain groups or communities.[64] To uphold procedural fairness, involving the public in decision-making processes about project-related matters that may directly impact them is imperative. This can be achieved by implementing acquisition procedures that prioritize prior and informed consent and by actively engaging the public in meaningful consultation processes, particularly during assessments of environmental and social impacts.

In addition to the policy of Environmental Impact Assessment, the consideration of renewable energy electrification policies is also a significant issue in the present context. In response to the point of environmental deterioration, countries worldwide are enacting various measures, including the adoption of renewable energy sources, the promotion of eco-innovation, and the implementation of green financing mechanisms. The allocation of resources towards renewable energy sources is crucial for fostering economic development.[65] Numerous nations worldwide are increasingly dedicated to attaining universal electrification by Sustainable Development Goal 7. Indonesia is one of the nations that has actively endeavored to address the issue of energy poverty, recognizing that around 25 million of its population lack access to power. Indonesia's energy justice vision is reflected in its policies and programs, which primarily prioritize distributive energy justice by addressing issues of energy accessibility and cost. Nevertheless, there needs to be more attention given to the

[63] Samuel Ziem Bonye, Gordon Yenglier Yiridomoh, and Vivian Nsiah, 'Multi-Stakeholder Actors in Resource Management in Ghana: Dynamics of Community-State Collaboration in Resource Use Management of the Mole National Park, Larabanga', *Forest Policy and Economics*, 154 (2023), 103036 https://doi.org/10.1016/j.forpol.2023.103036

[64] Lai, Staddon, and Hamilton.

[65] Fatma Ulfatun Najicha and others, 'The Shaping of Future Sustainable Energy Policy in Management Areas of Indonesia's Energy Transition', *Journal of Human Rights, Culture and Legal System*, 3.2 (2023), 362–82 https://doi.org/10.53955/jhcls.v3i2.110

procedural and recognition dimensions of energy justice. The limited perspective on energy justice has led to implementing policies that promote the development of large-scale and on-grid energy solutions while significantly limiting funding opportunities for small-scale and distributed renewable energy projects. Furthermore, it serves to sustain geographical disparities and fortify the marginalization and disempowerment of groups lacking access to adequate energy resources in the decision-making processes related to energy. The results indicate that to achieve a more comprehensive understanding of energy justice; it will be imperative to develop and execute energy policies that comprehensively tackle all aspects of energy justice and enable the utilization of various financial mechanisms to combat energy poverty.[66]

Notably, ASEAN has tried establishing supplementary laws and policies to enhance justice. However, these endeavors are only sometimes supported by external interests inside the ASEAN community. The governance of minerals in Indonesia exhibits similarities to the power of other forms of energy resources. In Indonesia, the utilization of resources is vested in the Indonesian populace, as stipulated in Article 33, Paragraph (3) of the 1945 Constitution. Including this ambitious objective in the Indonesian Constitution indicates the social need for more significant equity within the energy industry. One of the primary objectives of promoting greater justice is to foster a more inclusive society, thereby ensuring that no individuals are marginalized or excluded. Indonesia has made efforts to expedite the development of the CM industry through a series of legislative reforms following the enactment of Law No. 4/2009 on Mining and Coal Mining Activities. This legislation was published in the State Gazette of the Republic of Indonesia in 2009, specifically in Volume 4, as a supplement to Volume 4959. The purpose of this legislation was to provide incentives for the promotion of new investments in the minerals (including coal) sector. Nevertheless, there continued to be a dearth of interest in venturing into the Indonesian market, potentially attributable to the extent of governmental regulation and the projected measures necessary to fulfill the lofty objective outlined in the Constitution, namely the need to provide widespread prosperity through mineral extraction.[67] Then, the modification of the Minerba Law, namely Law Number 3 of 2020, is perceived as lacking consideration for the welfare of the Indonesian populace. Therefore, it is necessary to introduce a fresh stimulus in the mineral and coal mining sector that

[66] Abidah B. Setyowati, 'Mitigating Inequality with Emissions? Exploring Energy Justice and Financing Transitions to Low Carbon Energy in Indonesia', *Energy Research & Social Science*, 71 (2021), 101817 https://doi.org/10.1016/j.erss.2020.101817

[67] Indah Dwi Qurbani, Raphael J Heffron, and Arrial Thoriq Setyo Rifano, 'Justice and Critical Mineral Development in Indonesia and across ASEAN', *The Extractive Industries and Society*, 8.1 (2021), 355–62 https://doi.org/10.1016/j.exis.2020.11.017

prioritizes regional autonomy while ensuring no conflicts of interest. Furthermore, to enhance regulatory measures in the respective regions, it is imperative to establish explicit and robust implementation protocols as a subsequent step to the current legal framework to mitigate significant losses encountered.[68]

The current licensing system and oversight of environmental policies, as outlined in Law No. 3 of 2020, have yet to be aligned with the provisions outlined in Law No. 32 of 2009, which serves as the overarching legislation governing environmental matters. Licensing and supervision play a crucial role in environmental protection and management, constituting an essential component rather than a mere fraction. Therefore, enhancing these measures by establishing regional environmental institutions and rigorous compliance with environmental instruments is imperative, thereby serving as a means of control.[69]

The comprehensive evaluation of energy use regulations should encompass the wide-ranging implications for the environment and ecological systems. The Triangle Theory of Energy Law and Policy is a conceptual framework designed to analyze energy-related matters from the vantage point of economic, political, and environmental dimensions.[70] Hefron claimed that the underlying purpose of this theory was to effectively address and combat instances of economic hegemony in the realm of energy use. This geometric shape is called the 'Energy Trilemma' and is a tool for comprehending energy law and policy. Energy law and policy occupy a central position, interlinked with other facets. The three focal areas this analysis encompasses are economics, precisely money; politics, focusing on energy security; and the environment, particularly climate change mitigation.[71]

A review of the Job Creation Bill's provisions about the environment and forestry reveals significant changes to the laws governing environmental protection and management, with the forestry law, modifications to environmental permits into ecological approvals that are not the subject of state administration lawsuits, licensing and supervision authority by the government

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[68] Rizal Akbar, Charissa Azha Rasyid, and Muhammad Ikram Nur Fuady, 'Undang-Undang Minerba untuk Kepentingan Rakyat atau Pemerintah?', *Bilancia: Jurnal Studi Ilmu Syariah Dan Hukum*, 15.2 (2021), 253–62 https://doi.org/10.24239/blc.v15i2.750

[69] Wahyu Nugroho, 'Persoalan Hukum Penyelesaian Hak Atas Tanah Dan Lingkungan Berdasarkan Perubahan Undang-Undang Minerba', *Jurnal Hukum Ius Quia Iustum*, 27.3 (2020) https://doi.org/10.20885/iustum.vol27.iss3.art7

[70] Willy Naresta Hanum, I Gusti Ayu Ketut Rachmi Handayani, and Hilaire Tegnan, 'The Geothermal Development Policy on Environmental in Indonesia and the USA', *Journal of Human Rights, Culture and Legal System*, 3.2 (2023), 160–84 https://doi.org/10.53955/jhcls.v3i2.85

[71] Simon Marsden, 'The "Triangle" of Australian Energy Law and Policy: Omissions, Connections and Evaluating Environmental Effects', *Journal of Environmental Law*, 29.3 (2017), 475–503 https://doi.org/10.1093/jel/eqx018

central government, and the elimination of state administration lawsuits.[72] This alters the essence of regional autonomy in the environmental and forestry sectors, which are increasingly threatened by the function of space and areas with the impact of pollution and environmental harm due to escape from regional and environmental observers' supervision. Apart from that, the AMDAL preparation process only involves affected communities, while environmental observers are no longer given space to provide input regarding the AMDAL process, the lack of access to justice in state administrative courts negates provisions in the government administration law, and the gazettement of forest areas does not involve regional governments and communities living in forest areas, thereby opening up space for disputes over land rights in the forest area.[73]

The provisions of the Job Creation Bill in the forestry and environmental sectors negate access to justice via litigation at the State Administrative Court (PTUN) so that there is no public space to continue an AMDAL decision or environmental approval as part of an ecological licensing instrument in the realm of administrative law—Jurisdiction before the Administrative Jurisdiction Court. There is no further explanation regarding the type of community economic empowerment, even though it is governed by subsidiary provisions that define community participation in enhancing village or community welfare in forest areas. Government and private businesses that obtain business licenses must only collaborate with cooperatives or village-owned companies managed by the local community. This provision should have derivative regulations, for example, in the form of a Government Regulation (PP), so that it has legal force and precise procedures/mechanisms regarding the obligations of government and private corporate entities to collaborate with local communities and cooperatives. This means that these provisions continue to view individuals who are a part of local communities through self-management and cooperatives as not being the primary subject of forest area utilization, including the products therein, thereby weakening and eroding the roles of local communities and cooperatives. Simultaneous regulatory problems followed by implementation problems in the future relating to the legitimacy and protection of the constitutional rights of communities living in forest areas for generations will harm the sense of justice in

[72] Ahmad Dirwan, Mohammad Jamin, and Jadmiko Anom Husodo, 'Indigenous Community Perspectives on Forest Area Protection Governance Policy', *Journal of Sustainable Development and Regulatory Issues*, 1.2 (2023) https://doi.org/https://doi.org/10.53955/jsderi.v1i2.12

[73] Zaka Firma Aditya and Sholahuddin Al-Fatih, 'The Legal Protection System of Indigenous Peoples in Southeast Asia', *Legality : Jurnal Ilmiah Hukum*, 31.2 (2023), 285–309 https://doi.org/10.22219/ljih.v31i2.27619

society because it is limited to utilizing forest products to meet daily living needs, not to the point of environmental damage.[74]

Environmental impact analysis (AMDAL) can be a valuable instrument for promoting sustainable development if conducted correctly, as it consists of several components that can facilitate intragenerational and intergenerational justice. Law No. 32/2009 on Environmental Protection and Management establishes the EIA system's general framework. This law has adopted and is implementing an inclusive policy framework and mainstreaming the decentralization of policies that grant the local government the broadest possible authority over the EIA process. The EIMMP and EIMP documents mention and describe the various programs, including the socio-cultural, environmental, and economic dimensions, by analyzing the anticipated significant impacts and community feedback due to the public participation process by Decree No. P.26/2018 of the Ministry of Environment and Forestry on the preparation and appraisal procedure of environmental documents via Online Single Submission, a community may be represented by elected or representative individuals (typically three affected local leaders). The public's participation is utilized solely as an additional data source or to educate those affected. This provision must be actively enforced, and consultation is primarily restricted to local leaders and specialists. The number of participants in each project's public participation activity is limited. Following public participation, the EIA review committee is provided with the meeting minutes. Considering local conditions, the project proponents construct programs based on the available technology and the relevance of the management options.[75]

The lack of satisfaction of the parties regarding the handling of natural resource conflict resolution, which cannot provide environmental justice in the management of natural resources or access to justice in the environmental and forestry sector, the inadequacy of human resource capacity in handling natural resource conflicts in areas, and the incomplete handling of natural resource conflicts, including regulatory issues, can result in provisions that are not operational.[76] The concept of environmental justice is presently manifested

[74] Abdul Mutakabbir, Hastuti Hastuti, and Mikdar Rusdi, 'The System of Inheritance Distribution in South Sulawesi', *Ijtihad : Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 23.1 (2023), 57–76 https://doi.org/10.18326/ijtihad.v23i1.57-76

[75] Kartika Winkar Setya, Abdul Aziz Nasihuddin, and Izawati Wook, 'Fulfilling Communal Rights through the Implementation of the Second Principle of Pancasila towards the Regulation on Agrarian Reform', *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 2023, 89–102 https://doi.org/10.24090/volksgeist.v6i1.7867

[76] Rodiyah Rodiyah, Siti Hafsyah Idris, and Robert Brian Smith, 'Mainstreaming Justice in the Establishment of Laws and Regulations Process: Comparing Case in Indonesia, Malaysia, and

through implementing sector-specific legislation that prioritizes the interests of various sectors. Therefore, within the framework of a unitary state with an archipelagic vision, the state assumes a significant responsibility for ensuring environmental and societal justice. The legislation known as Law Number 32 of 2009 pertains to Environmental Protection and Management and encompasses a set of fundamental principles governing the environment's safeguarding and administration. It is evident that both the central and regional governments must prioritize these principles while implementing environmental management, particularly within the framework of sustainable development. Sustainable development encompasses a framework that safeguards the environment and guides development policies.

The Regulation of Environmental Justice Analyses in Uzbekistan

Uzbekistan exhibits a high degree of vulnerability to the impacts of climate change. Failure to implement timely adaptation measures and a lack of regulation on rational land use by the state forest fund could result in the country's deforestation and land degradation issues. Frequent and progressively severe droughts pose a significant threat to the long-term viability of agricultural systems and the stability of food supply.[77] Environmental justice occurs when a country has fair treatment and meaningful participation of all people, regardless of race, color, national origin, or income, in formulating, implementing, and enforcing environmental laws, regulations, and policies. Addressing environmental justice inequities, typically through policies and regulations, aims to create ecological equity.[78] However, there is an issue with environmental justice in Uzbekistan, which hurts its citizens' use of the environment.

The management idea in the realm of nature management and environmental protection refers to a deliberate process of exerting influence through a system of normative legal measures that ensure the efficient utilization of natural resources and safeguarding of the environment. The outcomes of exemplary implementation are the rational utilization, protection, reproduction, and potential restoration of natural resources and the environment. The Republic of Uzbekistan ensures legal oversight of environmental management through a comprehensive framework consisting of 50 statutes and over 200 regional regulations[79]. In the past three years, approximately thirty normative legal acts concerning forest (plant) growth

Australia', *Journal of Indonesian Legal Studies*, 8.1 (2023), 333–78 https://doi.org/10.15294/jils.v7i2.60096

[77] O. Narzullaev, 'Scientific and Theoretical Analysis of the Right to Use Forest Land (in the Example of Uzbekistan)', ed. by L. Foldvary and I. Abdurahmanov, *E3S Web of Conferences*, 386 (2023), 05004 https://doi.org/10.1051/e3sconf/202338605004

[78] Meixler, Piana, and Henry.

[79] Song and others.

trends have emerged. In reality, however, Uzbekistan is still linked to increased environmental exploitation, both domestically (on the periphery) and internationally (in the core). Conversely, The Republic of Uzbekistan remains vulnerable to domestic ecological degradation and low socioeconomic development.[80]

One issue that needs to be addressed is the construction of an efficient state management system in the field of ecology in the Republic of Uzbekistan, as well as the implementation of a body system repair mechanism that governs this particular subject: the present document, namely Decree No. PF-269, issued by the President of the Republic of Uzbekistan on December 21, 2022, pertains to implementing measures for Uzbekistan's newly introduced administrative reforms[81]. But, in reality, in green space activity, the policy framework in the Republic of Uzbekistan still doesn't accommodate environmental justice for people. This reality is that green space issues demand a multifaceted solution that addresses rapid urbanization, ecological concerns, and urban growth. Green spaces in Uzbekistan include woods, parks, gardens, street trees, riparian plantings, and groves. In Uzbekistan's desert and riparian forests, illicit tree-cutting is a problem. Since people depend on forests and trees for firewood and local timber, their scarcity worsens the issue. Fuelwood exploitation has degraded desert saxaul forests, while illicit logging has devastated riparian poplar forests over the past two decades (State Committee of Forestry of Uzbekistan)[82].

Environmental injustice in Uzbekistan occurs in land management. The Uzbek Parliament adopted the land code on 30 June 1998 and has revised it many times. The last revision was 2019. The Uzbekistan Land Code regulates land use, administration, and preservation. It explains zoning, land use planning, and land user rights and duties. It describes land allocation and transfer methods. The land code of Uzbekistan has 14 chapters and 91 articles. However, the regulation broadly addresses agricultural soil management, leaving other land categories with poor soil management. Biological soil study standards, soil laboratory rules, and soil's carbon storage and climate change relationship are necessary. Urban soil management becomes more critical as cities grow. NGO soil governance

[80] Jeffrey Althouse and others, 'Ecologically Unequal Exchange and Uneven Development Patterns along Global Value Chains', *World Development*, 170 (2023), 106308 https://doi.org/10.1016/j.worlddev.2023.106308

[81] Elke Herrfahrdt-Pähle and others, 'Sustainability Transformations: Socio-Political Shocks as Opportunities for Governance Transitions', *Global Environmental Change*, 63 (2020), 102097 https://doi.org/10.1016/j.gloenvcha.2020.102097

[82] Young-Jin Ahn and Zuhriddin Juraev, 'Green Spaces in Uzbekistan: Historical Heritage and Challenges for Urban Environment', *Nature-Based Solutions*, 4 (2023), 100077 https://doi.org/10.1016/j.nbsj.2023.100077

participation must also rise[83]. Land management correlation with the production of cotton Uzbekistan, Uzbekistan is the second-largest exporter and fifth-largest producer of cotton in the world, respectively. However, reducing the use of agrochemicals could prevent the acceleration of heavy metal accumulation on croplands, which could become a significant problem in conjunction with salinization. Uzbekistan must seriously consider fertilization management[84].

Talk about environmental injustice in Uzbekistan; large quantities of natural resources are required to produce sustenance, while their treatment pollutes the environment. The waste management problem in Uzbekistan is significant, as the country generates approximately 9 Mt of solid refuse annually, with household waste constituting one of the most significant fractions. This is especially pertinent to the problem of the Aral Sea region, which is frequently referred to as "one of the world's worst environmental disasters." The desiccation of the Aral Sea affected 3.5 million people and had irreversible and enduring environmental and socioeconomic consequences for all Central Asian states. But, the policy Waste Management Act No. 362 of 5 April 2002 on waste doesn't accommodate this problem. Authorities must address this issue, and general management and individuals must not interfere. Authorized bodies uniquely manage natural entities, including their use, reproduction, and protection. Logically, prominent management groups at various levels are unmatched in tackling natural resource use and conservation issues. These people organize, manage the environment, and oversee licensing, certification, and control. Specialized agencies address society-nature concerns.[85]

There are problems in Uzbekistan that should have been mentioned above. In Uzbekistan, water purity issues have arisen due to the government's failure to provide for the environmental sector. On March 6, 1993, the Republic of Uzbekistan Law on Water and Water Use was implemented by Ministerial Decree No. 11, validating the Regulation on Maintaining the State Water Register. There are severe issues that Uzbekistan was classified as having "severe water stress" because Central Asian countries, particularly Kyrgyzstan and Tajikistan, are experiencing accelerated population growth and poverty rates exceeding 30

[83] Shovkat Kholdorov, Zafarjon Jabbarov, and Tulkin Shamsiddinov, 'Soil Governance: A Review of the Current Legislative Framework for Managing Soil Resources in Uzbekistan', *Soil Security*, 13 (2023), 100105 https://doi.org/10.1016/j.soisec.2023.100105

[84] Sayidjakhon Khasanov and others, 'Impact Assessment of Soil Salinity on Crop Production in Uzbekistan and Its Global Significance', *Agriculture, Ecosystems & Environment*, 342 (2023), 108262 https://doi.org/10.1016/j.agee.2022.108262

[85] Adkhamjon Akhrorov, 'Activities Of Specially Authorized Government Bodies In The Field Of Ecology In The Republic Of Uzbekistan: Theoretical And Legal Analysis', *Review of Law Sciences*, 7.1 (2023), 16–24 https://doi.org/10.51788/tsul.rols.2023.7.1./TDVX7627

percent[86]. Due to destitution, water supply and irrigation facilities must be maintained, posing a threat to regional water security, particularly in rural areas. Creating a coordinated policy for water resources in Uzbekistan could have increased water security. It would be preferable if these nations conformed to their water policies and sought international political and economic water accords.[87]

Some of the issues highlighted above should concern the government of Uzbekistan, of which Uzbekistan remains the sole nation within the Central Asian region that has yet to ratify the Aarhus Convention. Simultaneously, Uzbekistan is actively establishing a Common Environmental Information System (SEIS) by applying SEIS principles encompassing its three fundamental components: content, infrastructure, and cooperation. Uzbekistan is actively engaged in the Working Group on Environmental Monitoring and Assessment initiatives and the Joint Task Force on Environmental Statistics and Indicators under the United Nations Economic Commission for Europe (UNECE). These initiatives aim to assist the countries of Eastern Europe, the Caucasus, and Central Asia in establishing a Shared Environmental Information System (SEIS) by 2021.[88] The legislation lacks specific provisions outlining the grounds for refusing to disclose environmental information. These grounds include encroachments on international relations, national defense, or state security, as well as the administration of justice, the right to a fair trial, and the ability of state bodies to carry out criminal or disciplinary investigations. Additionally, the legislation does not address the protection of confidential commercial and industrial information when such confidentiality is legally safeguarded to protect legitimate economic interests. Consequently, based on the preceding explanation, we must conclude that the Uzbekistan government's problems in regulating the environment and caring for its people result from environmental injustice. The government must address this issue immediately to enhance social welfare and environmental sustainability, which will affect the economy.

4. Conclusion

Indonesia and Uzbekistan have made it mandatory for laws and regulations to implement the concept of environmental justice. Still, in practice, the rules created

[86] Xuanxuan Wang, Yaning Chen, Gonghuan Fang, and others, 'The Growing Water Crisis in Central Asia and the Driving Forces behind It', *Journal of Cleaner Production*, 378 (2022), 134574 https://doi.org/10.1016/j.jclepro.2022.134574

[87] Xuanxuan Wang, Yaning Chen, Zhi Li, and others, 'Development and Utilization of Water Resources and Assessment of Water Security in Central Asia', *Agricultural Water Management*, 240 (2020), 106297 https://doi.org/10.1016/j.agwat.2020.106297

[88] Toshboeva Robiya Sobirovna, 'Issues of Further Improvement of Water Cadastre Legislation of Uzbekistan', *ACADEMICIA: An International Multidisciplinary Research Journal*, 11.4 (2021), 1241–53 https://doi.org/10.5958/2249-7137.2021.01258.1

give birth to social-environmental conflict dimensions that are increasingly prevalent and far removed from environmental justice. The challenges surrounding environmental justice are growing in intensity, along with the associated hazards to socio-environmental fairness and the well-being of the ecosystem. In Indonesia, the provisions of the Job Creation Bill in the forestry and environmental sectors negate access to justice via litigation at the State Administrative Court (PTUN), so that there is no public space to continue an AMDAL decision or environmental approval as part of an environmental licensing instrument in the realm of administrative law. Regulatory problems that co-occur and are followed by implementation problems at a later date relating to the legitimacy and protection of people's constitutional rights will harm the community's sense of justice. At the same time, Uzbekistan exhibits a high degree of vulnerability to the impacts of climate change. The problem of environmental injustice in Uzbekistan arises from the environmental crisis beginning with green space, waste management, and the water crisis that has afflicted the nation, as indicated by the preceding explanation. To address this issue, regulations have been enacted. Nonetheless, the Uzbek government has never been able to resolve this issue. Environmental justice-based actions and rules are essential for problems to be fixed and future impacts to be mitigated. The lack of satisfaction of the parties regarding the resolution of natural resource conflicts, which cannot provide environmental justice in the management of natural resources or access to justice in the environmental and forestry sector, and the inadequacy of human resource capacity in resolving natural resource conflicts in the regions can result in ineffective provisions. To preserve the environment, the government must establish national policies, institutional instruments, and central and regional environmental management authorities to facilitate development with an eye toward environmental justice.

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