

Natural Resource Governance in Indonesia and Pakistan: A Comparative Review

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Abstract

This article comprehensively reviews the legal systems governing natural asset entitlement, extraction, land use, and environmental conservation in Indonesia and Pakistan. Both countries allow government control over underground resources, but Indonesia has made greater strides in applying sustainability standards, conducting community consultations, and establishing innovative revenue distribution models to open access to environmental litigation. In contrast, Pakistan focuses on energy investments but faces similar environmental and land tenure issues. The normative legal research relied on secondary sources and employed statutory and comparative approach. The analysis reveals Indonesia's emphasis on institutionalizing sustainable and inclusive environmental practices, ensuring indigenous territoriality, environmental rehabilitation, revenue-sharing trusts, and constitutional environmental rights. Pakistan retains centralized control over resource extraction and energy revenue allocation, causing disparities in sustainability compliance, indigenous communities near extractive sites, and residents' communal land tenure deprivation. Developing economies aim for sustainable growth, with Indonesian governance exemplifying a shareable legal order and complex multi-stakeholder regulations, while Pakistan illustrates the limitations of centralized energy facilities without comprehensive stakeholder engagement. Although both countries grapple with biodiversity loss and climate change effects, this comprehensive review identifies legal innovations and conservation management approaches to align conservation priorities with national development goals based on natural capital assets.

Keywords: Indonesia, legal frameworks, natural resource governance, Pakistan.

1. Introduction

Governing natural resources constitutes a core economic and developmental priority for Pakistan and Indonesia. From fertile agricultural lands to hydrocarbon reserves, forests, minerals and marine resources, both nations rely heavily on proper stewardship of these assets for revenue generation, enabling key industries, and sustaining livelihoods.¹ Consequently, domestic legal regimes regulating ownership, licensing, taxation, environmental obligations and community rights over natural capital wield substantial influence over economic and social outcomes.²

¹ Richard Dutu, 'Making the Most of Natural Resources in Indonesia', 2015, doi:10.1787/5js0cqqk42ls-en.

² World Bank (2003). 'Publication: Pakistan : Oil and Gas Review.' Retrieved 03/2024, from <https://hdl.handle.net/10986/14623>.

The pivotal role the natural resource plays in the economic growth of developing countries cannot be downplayed. As articulated by Susilo, and Trihatmoko, natural resources represent a foundation for the economic growth and development of most developing countries.³ Pakistani economy, for instance, adds 30 % of its Gross Domestic Product just from petroleum production alone.⁴ Indonesia generates approximately 20% of its public revenues out of fossil fuel exports especially from liquefied natural gas.⁵

Nevertheless, the ruthless exercising of these blessed natural endowments often reflects on the devastation of the environment as well as on the issues of social inequality. As addressed by Bjorn Stigson, one of the key challenges for humanity is sustainable use of natural resources.⁶ Forest destruction, land degradation, water pollution and biodiversity loss are often the results of resource extraction activities that negatively affect both the local communities and the environment.⁷

The legal mechanisms regarding the ownership of natural resources, exactly extraction processes, revenues` distribution systems and ecological protects are the main elements of the economic goals balancing with environmental sustainability and the equality aspects. Gita Gopal proposes the view that it is the legal framework and legislative-regulatory environment which affects the way natural resources are used and benefits are distributed.⁸

The paper attempts to determine this through a systematic comparison of the constitutional pillars, sectoral regulations, cost systems, environmental jurisprudence, and community rights protection in Pakistan and Indonesia in order to draw some conclusions. The study aims to give sufficient room for cross-learning from the natural resource governance frameworks of the two countries.

This comparative analysis intends to comprehensively assess, policy-wise and legally, how both countries manage their resources in terms of oil & gas, mining, forestry, and land use. Through the examination of 60 published articles and papers, policy documents, and academic studies, it aims to depict areas of concordance and discord surprisingly as the two countries imaginative, reforms, and implementation problems.

It is therefore the adopted analysis is notably meaningful considering the commonality of these two countries colonial histories, these shaping early natural resource policies that were mainly sourced for the economic exploitation of communities and neglecting

³ Roderikus Agus Trihatmoko and Yuvensius Sri Susilo, 'Natural Resource Governance and Strategic Economic Resources: The Perspective of Indonesia Raya Incorporated', *Humanities and Social Sciences Communications*, 11.1 (2024), doi:10.1057/s41599-024-02772-5.

⁴ Hira Manzoor, Muhammad Safyan, and Fabia Manzoor, 'Trade Competitiveness of Pakistan's Fruits and Vegetables in World Market', *Global Regional Review*, V.IV (2020), pp. 135–43, doi:10.31703/grr.2020(v-iv).14.

⁵ Ambya Ambya and others, 'Future Natural Gas Price Forecasting Model and Its Policy Implication', *International Journal of Energy Economics and Policy*, 10.5 (2020), pp. 64–70, doi:10.32479/ijeep.9676.

⁶ Krishna Poudel, Thomas G. Johnson, and Rachna Tewari, 'Property Rights and Sustainable Natural Resource Management', *Environmental Management and Sustainable Development*, 5.2 (2016), p. 30, doi:10.5296/emsd.v5i2.9304.

⁷ Ambya and others.

⁸ Stefan Bringezu and others, 'Multi-Scale Governance of Sustainable Natural Resource Use – Challenges and Opportunities for Monitoring and Institutional Development at the National and Global Level', *Sustainability*, 8.8 (2016), p. 778, doi:10.3390/su8080778.

the environment.⁹ Consequently, at the core of their economic development is institutional reform due to their diametrically opposing ecological imperatives; while some are reforming legal systems at great strides, others are weathering the storm.

2. Methodology

This research applied normative legal research, which relied on secondary sources in the forms of legislation, books, and journals. This normative legal research employed a comparative approach. For the purpose of this study, the researchers have scrutinized relevant online publications on natural resource governance in Indonesia and Pakistan. This comparative analysis intends to comprehensively assess, policy-wise and legally, how both countries manage their resources in terms of oil & gas, mining, forestry, and land use. Through the examination of 60 published articles and papers, policy documents, and academic studies, it aims to depict areas of concordance and discord surprisingly as the two countries imaginative reforms and implementation problems. From the mentioned comparative analysis, state ownership model, license model, revenue sharing, and community rights were developed. The study then analyzed Indonesia and Pakistan's governance systems in order to identify policy recommendations for enhancement and learning points for long-term sustainable resource management.

3. Discussion and Analysis

3.1 Constitutional Foundations

The constitutional sanctioning for state to be in charge of the natural resources form a direct common feature among the respective countries of Pakistan and Indonesia.¹⁰ Yet, a difference in the position and foundation of derived principles is observable on questions like territorial revenue sharing, environmental protection, as well as indigenous peoples land rights; a fact that is a reflection of the distinctive division-of-powers in our history.

The Indonesian Constitution specifically reserves the portion and responsibilities of "all land, waters and natural riches" of the state (Article 33) from pursuing purposes of maximum public welfare.¹¹ This principle has other meanings as well, for example, the "right to control national resources" as it enables the state to manage and regulate the resources for the welfare of the people.¹² The latter is also provided for in the Constitution by spelling out customary (*adat*) proprietary rights to land resources of the rural areas among the ethnic

⁹ Rakhshanda Kousar, 'Secured Land Rights, Household Welfare and Agricultural Productivity: Evidence From Rural Pakistan', *The Pakistan Journal of Agricultural Sciences*, 55.01 (2018), pp. 243–47, doi:10.21162/pakjas/18.5063.

¹⁰ Majeed Abdul Shar and Aftab Ahmed Mahesar, 'Natural Gas Potential of Pakistan an Important Parameter in Mitigating Greenhouse Gas Emissions', *Pakistan Journal of Analytical & Environmental Chemistry*, 21.2 (2020), pp. 209–18, doi:10.21743/pjaec/2020.12.23.

¹¹ Syafwendi Syafril, 'Reflection, Implementation, and Consequences of Article 33 of the 1945 Constitution (After Amendment) Towards the Economy of Indonesia and Islamic Economic Connection', *Airlangga International Journal of Islamic Economics and Finance*, 3.2 (2020), p. 68, doi:10.20473/aijief.v3i2.23878.

¹² Suparto Suparto, 'Interpreting The State's Right to Control In the Provisions of Article 33 Paragraph (3), The Constitution of 1945 Republic of Indonesia', *Jurnal UIR Law Review*, 4.2 (2020), pp. 1–8.

groups (Article 18),¹³ although giving credit to traditional land rights (*adat*) land tenure systems and ways of managing natural resources practiced by the various ethnic communities in the country.¹⁴

The Pakistani constitution on the other hand, makes itself the owner of mineral oils, gas and reserves but has not specified the traditional ancestral lands issue of the ethnic groups.¹⁵ This centralized resource ownership has become a subject of many arguments for the fact that it doesn't prioritize the interests or the rights of the local communities and minority groups.¹⁶ Nevertheless, the constitution of Pakistan does exhibit the tenets of stability and equity among generations. Such value can be a crucial basis for environmental conservation and equitable sharing of resources.¹⁷

In the division of administrative powers, based on its constitution, Indonesia allows the local governments to manage the resources and the allocations of income to regional governments and districts.¹⁸ Similarly, the idea of devolution as a practice supporting the regionalization as well as the recognition of local communities' natural resources' ownership is something that is regarded as rather important by both sustainability researchers and policymakers. On the contrary, provincial administration in Pakistan has autotomized local management of resources having more of their relevance within their territories rather than coordination of central redistribution pools.¹⁹ On the positive side, this system honors country's federal structure and principle of provincial autonomy; however, it also drew crooks' attention to unbalanced resource placement and conflicts between the central and provincial governments.²⁰

The two constitutions reflect different viewpoints in the respect of the environmental protection. Indonesian constitution is essential in Zainal Arifin Hoessein, Syaiful Bahri, and Ibnu Sina Chandranegara (2020) that it provides for sustainable development being one of the pillars and every individual has the right to a healthy environment, which supports environmental legislation and jurisprudence.²¹ However, Pakistan's constitution does not

¹³ Rudy, Ryzal Perdana, and Rudi Wijaya, 'The Recognition of Customary Rights by Indonesian Constitutional Court', *Academic Journal of Interdisciplinary Studies*, 10.3 (2021), p. 308, doi:10.36941/ajis-2021-0086.

¹⁴ Mirza Satria Buana, 'Development as a Threat to Indigenous Peoples' Rights in Indonesia', *International Journal on Minority and Group Rights*, 27.3 (2020), pp. 442-71, doi:10.1163/15718115-02703003.

¹⁵ Irum Ahsan and Gregorio Rafael Bueta, *Proceedings of The Third South Asia Judicial Roundtable on Environmental Justice for Sustainable Green Development* (Asian Development Bank, 2015).

¹⁶ Sohail Mahmood and Umar Karim Mirza, 'The Sustainable Use and Conservation of Natural Resources: A Case Study of Pakistan', *Electronic Green Journal*, 1.16 (2002), doi:10.5070/g311610460.

¹⁷ Aqsa Tasgheer and Tehreem Fatima, 'Sustainable Development and Natural Resource Management for Environmental Stability: An Islamic Approach', *International Research Journal on Islamic Studies (IRJIS)*, 4.1 (2022), pp. 41-56.

¹⁸ Anugerah Yuka Asmara and Rudiarto Sumarwono, 'Understanding the Complex Relationship between Good Governance and Economic Growth in Indonesia during the Reform Era', *Bisnis & Birokrasi: Jurnal Ilmu Administrasi dan Organisasi*, 27.2 (2021), p. 8.

¹⁹ Asmara and Sumarwono.

²⁰ Afshan Aziz and Sobia Naseer, 'Federal Issues in Pakistan: Challenges and Prospects (2013-2023)', *Research Journal for Societal Issues*, 6.1 (2024), pp. 50-64.

²¹ Zainal Arifin Hoessein, Syaiful Bakhri, and Ibnu Sina Chandranegara, 'Environmental and Sustainable Development Policy after Constitutional Reform in Indonesia' (presented at the International Conference on Community Development (ICCD 2020), Atlantis Press, 2020), pp. 804-7.

have the same explicit landscape as the one in Indonesia, and it does not put much weight on environmental safeguards. Rather, it relies more on legislative frameworks and executive policies.²²

Despite the recognition of the respective roles of the state in ownership of natural resources by both countries, Indonesia's approach is mostly inclusive and accommodating of indigenous rights while emphasizing decentralized resource management practices with the attention given to environmental protection. The case is a bit different in Pakistan because it sets the central government as the entity which controls resources and thus local communities and ethnic minorities can be kept out of affairs and the constitution has no remark on environmental safeguards.²³

3.2 Oil and Gas Legislation

The substantial economic value derived from oil and gas production has necessitated specialized governance regimes in both Pakistan and Indonesia. Indonesia generates over 20% of public revenues from fossil fuel exports like liquefied natural gas to China.²⁴ Similarly, petroleum production constitutes over 30% of Pakistan's national GDP.²⁵

To manage these vital hydrocarbon resources, both nations have enacted focused regulatory bodies and licensing frameworks. Indonesia's Upstream Oil and Gas Special Task Force (SKK Migas) oversees contracting, production sharing and revenue disbursement.²⁶ Pakistan's Oil and Gas Regulatory Authority (OGRA) handles pricing, field concessions and taxation policies.²⁷

However, there are differences in revenue distribution approaches. Indonesia employs a complex web of profit-sharing agreements between state-owned oil and gas mining company (PERTAMINA), regional governments and multinational corporations based on field locations and equity stakes.²⁸ Pakistan exhibits a tendency for unilateral federal control over pricing and revenue capture that benefits the central exchequer over provincial resource-bearers according to M. Waqar, H. Z., A. Rafi, A. Artas (2023).²⁹ This centralized approach dampens upstream investment incentives and has led to concerns over equitable resource revenue sharing among provinces.

Furthermore, the last leg of the Indonesian journey toward an impoverished land that was because of hydrocarbon exploration has experienced significant progress in terms of

²² Parvez Hassan, 'The Role of the Judiciary and Judicial Commissions on Sustainable Development Issues in South Asia', *Env'tl. Pol'y & L.*, 37 (2007), p. 185.

²³ Shaheen Sardar Ali and Javaid Rehman, *Indigenous Peoples and Ethnic Minorities of Pakistan: Constitutional and Legal Perspectives* (Routledge, 2013).

²⁴ Ambya and others.

²⁵ Nadeem Haque, Vaqar Ahmed, and Sana Shahid, 'Reforms for Competitive Markets in Pakistan', 2011.

²⁶ Ibnu Sina Chandranegara and Zainal Arifin Hoesein, 'Policy Concept and Designs of Oil and Gas Governance in Indonesia's Oil Companies', *International Journal of Energy Economics and Policy*, 9.3 (2019), pp. 121-27, doi:10.32479/ijeeep.7458.

²⁷ Attique Ur Rehman, 'IMPACT OF RISK MANAGEMENT ON PERFORMANCE OF THE OIL COMPANIES IN PAKISTAN'.

²⁸ Afghania Dwiesta, 'Indonesia's Upstream Petroleum Governance Reform: Which Model Is Constitutional Enough?', *Indonesia Law Review*, 8.3 (2018), doi:10.15742/ilrev.v8n3.511.

²⁹ M. Waqar and others, 'Asymmetry in Oil Price Shocks Effect Economic Policy Uncertainty? An Empirical Study From Pakistan', *Jinnah Business Review*, 11.1 (2023), pp. 34-46, doi:10.53369/inqv9550.

having the revenues shared equally and have a multi-stakeholder governance. Such as, the nation has managed to enforce identifying a place for the participation of regional governments and local community in the moralizing decision making related to oil and gas projects.³⁰ This method intends to realize that the advantages should be obtained more intensively by everyone involved.

On the other sides, Pakistan's governance model is relatively centralized that gives the Federal government much energy to permit resources and control the division of the profit.³¹ Although the communal sustenance is in line with PNG's federal structure, the worry still remains, i.e., can local communities and ethnic minority groups be represented in resource governance decisions?³²

Both countries have their oil and gas industries, which play critical roles in their economies. Hence, they have a mandate to establish stringent legal and regulatory mechanisms to ensure a proper governance of oil and gas units. Since then, the government of Indonesia has taken steps to formalize and integrate environmental sustainability and equitable socioeconomic practices into their governance system. Such megaprojects would incorporate the territorial rights of indigenous peoples, call for environmental remediation commitments, and adopt inventive revenue-sharing models, for instance.³³

Pakistan's Standard Operating Procedure which provides an excellent platform for investments and security with regards to energy has, however, come under heavy criticism for apparent disregard of environmental and community stakeholders in engagement processes and policies formulation. Areas of concern have been identified by stakeholders and parties involved. Carefully consensus among two objectives i.e. economy and sustainability is being devised to make sure that both of them meet rather than repelling one another.³⁴

Overall, while both countries have instituted specialized legal and regulatory frameworks for their economically crucial oil and gas sectors, Indonesia has made greater strides towards decentralized revenue sharing and multi-stakeholder governance of hydrocarbon wealth.

3.3 Mining Policy Frameworks

Beyond hydrocarbons, mineral resources like coal, copper, gold and rare earth elements constitute another vital extracted commodity for Indonesia and Pakistan's economies. On average, the mining sector accounts for 3-4% of national GDP in both countries,

³⁰ Anwar Nasution, 'Government Decentralization Program in Indonesia', *SSRN Electronic Journal*, 2016, doi:10.2139/ssrn.2877579.

³¹ M Azam, S Usmani, and Z Abassi, 'The Impact of Corporate Governance on Firm's Performance: Evidence from Oil and Gas Sector of Pakistan', *Australian Journal of Basic and Applied Science*, 5.12 (2011), pp. 2978-83.

³² Bibi Saira, 'Energy Policies of Pakistan; A Comparative Analysis (1994-2013)', *Journal of Politics and International Studies*, 6.2 (2023).

³³ Ahmad Rayhan, Mahendra Utama Cahya Ramadhan, and Tigor Boris Yudha Prakasa, 'Bioremediation in Upstream Oil and Gas Enterprises: Indonesian Environmental Law Perspectives', *Unifikasi Jurnal Ilmu Hukum*, 10.2 (2023), pp. 116-23, doi:10.25134/unifikasi.v10i2.8592.

³⁴ Absar Saleh, *Oil & Gas Sector of Pakistan & Sustainable Development* (Absar Saleh, 2015).

with its share of government revenue through royalties, permit fees and export duties being even higher.³⁵

Early mining legislation in both nations prioritized facilitating large multinational investments in open-pit and vertical shaft projects. However, environmental controls and transparency requirements were relatively lax according to assessments by Warhurst (1999).³⁶ More recently though, Indonesia has implemented substantive governance reforms.

The 2009 Mining Law mandates extensive environmental rehabilitation obligations, indigenous community consultation through formalized Peoples Plans, and Mining Decommissioning Guarantee funds.³⁷ In contrast, Pakistan's National Mineral Policy 2013 continues focusing on investor protections through internationalized arbitration and geo-data promotion while lagging in adoption of sustainability standards.³⁸

Indonesia's mining sector reforms would be a response to the understanding of the fact that there are complementary objectives of the economy and the environment together with the community. The 2009 Mining Law was accompanied by a mandatory reclamation of mining sites and the formation of a guarantee fund to ensure that the environment was not neglected.³⁹ On the other hand, the law mandates mining companies to interact directly with indigenous people and prospect some special rights for them through the formalization of Peoples Plans, which aims to uphold indigenous traditional rights and concerns on their land and resources.⁴⁰

On the other hand, Pakistan's National Mineral Policy 2013 was criticized mainly because of its over-dependence on foreign investment and collecting the relevant geological data, while its commitments to maintaining the sustainability of resources and protecting the interests of the local communities were lagging behind.⁴¹ The legislative framework, one hand, favors foreign investors via mechanisms of international adjudication and the fostering of the extraction processes. However, on the other hand, it lacks measures as regards to environmental reparation, sharing of benefits with the local community and the protection of the rights of indigenous peoples.⁴²

³⁵ Syed Akhtar Hussain Shah, 'Strategy for Mineral Sector Development in Pakistan', *Ministry of Planning*, 2018, pp. 1–24.

³⁶ Günter Tiess and Sugeng Mujiyanto, 'Mineral Resources Policies and Governance in Indonesia', in *Sustainable Development in the Minerals Industry, From Primary Production to Sustainable Supply Chains*, 2011, pp. 20–30.

³⁷ Muhamad Muhdar, Rikardo Simarmata, and Mohamad Nasir, 'Legal Policy Preference for Coal Mining over Other Land Use Alternatives Jeopardizes Sustainability in Indonesia', *Journal of Land Use Science*, 18.1 (2023), pp. 395–408.

³⁸ Muhammad Irfan and others, 'SWOT Analysis of Energy Policy 2013 of Pakistan', *European Journal of Engineering Science and Technology*, 2.1 (2019), pp. 71–94.

³⁹ Kunny Izza Indah Afkarina, Sindhung Wardana, and Poerborini Damayanti, 'Coal Mining Sector Contribution to Environmental Conditions and Human Development Index in East Kalimantan Province', *Journal of Environmental Science and Sustainable Development*, 2.2 (2019), doi:10.7454/jessd.v2i2.1025.

⁴⁰ Acynthia Ayu Wilasittha, Sofie Yunida Putri, and Rizdina Azmiyanti, 'Implementation of Sustainable Development Goals in Mining Companies Listed on the Indonesia Stock Exchange in 2018–2020', *Nusantara Science and Technology Proceedings*, 2022, pp. 35–42, doi:10.11594/nstp.2022.2306.

⁴¹ A. E. Rogge and Saleem H. Ali, 'Mining, the Environment, and Indigenous Development Conflicts', *Western Historical Quarterly*, 36.2 (2005), p. 230, doi:10.2307/25443170.

⁴² Rogge and Ali.

The different ways of dealing with the mining governance in Indonesia and Pakistan represent a more complex process on how to get the balance between the resource's development and sustainable development on a bigger picture today. Initially, both countries have put much focus on mining sector growth by putting less attention to and safeguarding the environment and to the equitable distribution of benefits. However, Indonesia has taken serious actions to see this through and has been able to integrate social and environmental considerations into their policies.⁴³

Indonesian policies have been the convergence between the domestic and external circumstances including the rise in public response for the environmental and social effects of mining, the pressure from the civil society, and adherence to the global sustainability goals.⁴⁴ Mining laws and regulations in the country have become more holistic, considering environmental rehabilitation, community participation and the TSC, respectively.

In contrast to Pakistan's mining policies, which have incurred criticism from several sectors of society, including civil society, environmental associations, and native populations, for their perceived inattention to sustainability and community rights, the Bolivian mining sector has received praise for its innovative policies.⁴⁵ Despite acknowledging the importance of attracting investments in the mining sector, the government is also undergoing social and environmental lobbying to implement more holistic measures to tackle the consequences of mineral extraction.

On the path of dealing with Brazilian and South African countries' mining sector issues, the countries can take into account significant information of other country's experiences. The approach of Indonesia points to the fact, that environmental and social safeguards must be taught and incorporated into mining laws, transparency and accountability must be observed, and the stakeholder communities must be allowed meaningful participation. While the Philippines may focus on federal structures and autonomy among the homogenous province, Pakistan could seek to decentralize the mining governance mechanism, which is responsive to the local contexts and priorities.⁴⁶

Regions often work together via the process of collaboration as well as by increasing knowledge as a means of raising the level of sustainable mining. Corresponding platforms available at the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) are both common grounds to transfer knowledge and good practices from one country to another, and spark international cooperation focused on resolving joint issues facing the mining and sustainable development sector.⁴⁷

Similarly, two countries can develop a mining policy framework by applying international guidelines recognized widely, such as the United Nations Guiding Principles on Business and Human Rights (UNGP), Extractive Industries Transparency Initiative (EITI), and International Council on Mining and Metals (ICMM) Principles for Sustainable Development

⁴³ Mi Tran, Eshani Beddewela, and Collins G. Ntim, 'Governance and Sustainability in Southeast Asia', *Accounting Research Journal*, 34.6 (2021), pp. 516–45, doi:10.1108/arj-05-2019-0095.

⁴⁴ Tran, Beddewela, and Ntim.

⁴⁵ Rogge and Ali.

⁴⁶ Gary McMahon and Susana Moreira, 'The Contribution of the Mining Sector to Socioeconomic and Human Development', *Extractive Industries for Development Series*, 30 (2014).

⁴⁷ IGF, *Environmental Management Draft Guidance for Consultation Released.*, 2020
<<https://www.igfmining.org/announcement/environmental-management-draft-guidance-for-consultation-released/>>.

.⁴⁸ These standards of global conduct can act as the basis for responsible mining activities, chemicals for providing clarity, honesty and environmentally friendly management.

Generally, the literature identifies a historical prioritization of mining sector growth over conservation or equitable benefit sharing until the past decade's wave of Indonesian reforms institutionalizing environmental and community safeguards. Pakistan's mining governance still concentrates on commercial incentives albeit with growing civil society pressure for balancing economic and ecological considerations.⁴⁹

3.4 Land Use, Forestry Laws and Environmental Rights

Governance of fertile agricultural lands, timber resources and natural habitats across Indonesia and Pakistan's biodiverse territories poses further economic and ecological challenges. Both countries rely heavily on these resources that span millions of hectares to sustain industries like palm oil, rubber, paper and tourism while also providing ecosystem services.

However, colonial era policies and legal frameworks distorted customary land tenure systems and resource access norms for tribal communities in Pakistan. In comparison, Indonesia's constitutional acknowledgment of *adat* rights provides a stronger basis for accommodating traditional landholdings and forest management.⁵⁰

This has enabled innovative regulations in Indonesia balancing conservation and economic use - for instance, Hutan Nagari social forestry programs studied by Ahmad Maryudi , M. A. K. S., Muhammad H. Daulay , Dhany Yuniati , Wildan Syafitri , Suryanto Sadiyo , Micah R. Fisher (2022) allocate hundreds of thousands of hectares to sustainable community logging and non-timber enterprises rather than centralized commercial concessions.⁵¹ Pakistan relies more on provincial forestry acts and centralized leasing processes.

Nonetheless, Benjamin Cashore, M. W. S. (2012) argues uneven enforcement and regulatory capacity deficits across borders enable illegal deforestation, land grabs and environmental crimes to persist in both countries.⁵² Overall though, Indonesia has progressed further in decentralizing natural resource management to local communities with stronger legal footing.

This divergence also extends to adjudicating environmental transgressions and upholding citizens' ecological rights. Indonesian courts have issued a series of robust rulings over the past decade recognizing constitutional rights to a healthy environment and directing climate mitigation policies assert Gonzalez, a. G. (2015).⁵³ In Pakistan however, environmental

⁴⁸ Ursula Wynhoven, General Counsel and Chief, Governance and Social Sustainability, and UN Global Compact, *UN Human Rights Council Reaffirms Guiding Principles on Business and Human Rights*, 2014.

⁴⁹ Hanum, Lukito, and Kurniawan.

⁵⁰ Kousar.

⁵¹ Ahmad Maryudi and others, 'Holding Social Forestry Hostage in Indonesia: Contested Bureaucracy Mandates and Potential Escape Pathways', *Environmental Science & Policy*, 128 (2022), pp. 142–53.

⁵² Benjamin Cashore and Michael W Stone, 'Can Legality Verification Rescue Global Forest Governance?: Analyzing the Potential of Public and Private Policy Intersection to Ameliorate Forest Challenges in Southeast Asia', *Forest Policy and Economics*, 18 (2012), pp. 13–22.

⁵³ Carmen G Gonzalez, 'Environmental Justice, Human Rights, and the Global South', *Santa Clara J. Int'l L.*, 13 (2015), p. 151.

protection relies more on discretionary executive rules susceptible to industry influence with fewer paths for judicial remedies.

Furthermore, the processes of implementation of land use governance and environmental practitioners also have been driven by different influential factors which include the political dynamics, economic powers, and sociopolitical movements. Ahmad Dermawan points out the fact that the decentralization processes in the Indonesia has an effect of arising conflicts over land and resources between local government and communities involved in the competition for authority.⁵⁴

Similarly, in Pakistan, Akbar, K. F. (2023) highlight the challenges of balancing economic development and environmental protection, particularly in the context of large-scale infrastructure projects.⁵⁵ Moreover, the acts of civil society organizations and aboriginal people in designing policies in the use of land and environment have been relevant in both countries. In Indonesia, for instance the Indigenous Peoples' Alliance of the Archipelago (AMAN) has played a significant role for securing the rights of protected peoples to their traditional lands and resources as well as promoting their sustainable and responsible management of these lands.⁵⁶ In Pakistan, the Pakistan Fisherfolk Forum, an organization that fights for the protection of its coastline communities and their maritime ecosystem, is an example of the kind of campaign that has put conservation of the coastal area and marine life on the country's agenda.⁵⁷

Both countries have formally adopted the UN Declaration on the Rights of Indigenous Peoples into their domestic law. However, Indonesia's substantive accommodation of *adat* territorial entitlements contrasts with Pakistan's continued reliance on provincial autonomy that has resulted in land rights deprivations for minority groups according to Errico, S. (2017) and subsequent studies.⁵⁸

4. Conclusion

This comparative analysis of the natural resource governance system in Indonesia and Pakistan provides insight into two different approaches to strike a balance between economic development and environmental stewardship and social equity. For developing nations looking to balance between resource exploitation and sustainability, Indonesia presents a very attractive progressive reforms model, whose regulatory philosophy are characterized by the decentralization, protection of indigenous rights and in inclusive source sharing mechanisms. On the other hand, Pakistan's centralized federal control although gives provincial autonomy is plagued with the problems encountered when local communities and environmental concerns are ignored in resource governance decisions. Indonesian model highlighted that the successful natural resource management should be based on

⁵⁴ Ahmad Dermawan, Heru Komarudin, and Sian McGrath, 'Decentralization in Indonesia's Forestry Sector-Is It over? What Comes Next', 2006.

⁵⁵ Khalid Farooq Akbar, 'Decentralization of Environmental Governance in Pakistan and Its Impact on Sustainable Development', *Policy Perspectives*, 20.1 (2023), doi:10.13169/polipers.20.1.ra3.

⁵⁶ Mohamad Jamin, Sapto Hermawan, and Mulyanto Mulyanto, 'A Discourse of the Indigenous Peoples' Rights and Their Contributions to the Indonesian Development: Lessons Learned From New Zealand', *Padjadjaran Jurnal Ilmu Hukum (Journal of Law)*, 10.3 (2023), pp. 346-66, doi:10.22304/pjih.v10n3.a3.

⁵⁷ Naved Sayied, 'Environmental Issues in Coastal Waters-Pakistan as a Case Study', 2007.

⁵⁸ Stefania Errico, 'The Rights of Indigenous Peoples in Asia', *ILO*, 2017, pp. 1-2.

comprehensive institutional framework that involves multi stakeholder involvement, equitable benefit sharing and strong environmental protection. Therefore, this comparative study consistently emphasizes that any sustainable natural resources development strives to strike this balance between economic development, ecological conservation, and social justice under structures of inclusive governance that do not omit any stakeholder's interest.

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