How To Cite: Kadji, J., Baderan, S., & Rogi, S. A. T. (2026). The Hybrid Decentralization Paradox in Mining Governance: Authority, Responsibility, and Accountability Misalignment in Pohuwato, Indonesia. *Publisia: Jurnal Ilmu Administrasi Publik, 11*(1), 165–186. https://doi.org/10.26905/pjiap.v11i1.17420

Jurnal PUBLISIA

Volume 11 Issue 1, 2026

P-ISSN: 2541-2515, **E-ISSN:** 2541-2035

PUBLISIA*: Jurnal Ilmu Administrasi Publik* *http://jurnal.unmer.ac.id/index.php/jkpp*

The Hybrid Decentralization Paradox in Mining Governance: Authority, Responsibility, and Accountability Misalignment in Pohuwato, Indonesia

Jurisman M. Kadji [1]*, Suprisno Baderan [2], Shelda Adriana Taimaris Rogi [3]

[1,2] Department of Islamic Political Thought, IAIN Sultan Amai, Gorontalo, Indonesia.
Jl. Gelatik, North Heledulaa, East City, Gorontalo 96112. Indonesia.

[3] Master of Public Policy and Management, University of Melbourne, Australia.
Grattan Street, Parkville, Victoria 3010, Australia

* Corresponding email: jurisman@iaingorontalo.ac.id

Article History:

Received: 10/07/2026

Revised: 13/09/2026

Accepted: 13/09/2026

Published: 13/09/2026

Keywords:

Accountability

Authority

Decentralization

Hybrid Decentralization Paradox

Mining Governance.

Abstract: The evolving relationship between decentralization and recentralization poses fresh challenges for natural resource governance, especially as the power to extract strategic resources is increasingly centralized at a higher level of governance, while the social, economic, and ecological consequences remain at the local level. This study examines how the configuration of the mining authority within the framework of recentralization generates a hybrid governance pattern through the relationship between authority, responsibility and accountability. This study used a qualitative case study method to study the governance of mining in Gunung Pani, Pohuwato Regency, Indonesia. Data were collected through in-depth interviews, document analysis, field observation, and data to support public perception. The results of the study reveal four main mechanisms in the Hybrid Decentralization Paradox. The first is mismatched authorities, where the strategic authority of mining is at a higher level of government, while local governments are still confronted with community demands. Second, uneven benefits tell us that mining creates economic opportunities but that benefits are not shared equally. Third, participation asymmetry shows that formal participation spaces haven't always had a substantive influence on strategic decisions. Fourth, accountability displacement implies that local governments are under accountability pressures even when they have limited control authority. This research contributes to the development of the Hybrid Decentralization Paradox concept, which refers to the condition when the strategic authority is transferred to a higher level, while responsibility and accountability remain situated at the local level. This idea extends the study of decentralization, recentralization and natural resource governance by explaining how the mismatch between authority, responsibility and accountability shapes governance dynamics in extractive areas.

1. Introduction

Decentralization has become a key approach in public governance reform because it suggests that public decision-making is more effective when authority is brought closer to the communities affected by those policies. By transferring authority from the central government to local governments, decentralization is expected to increase responsiveness, strengthen accountability, and expand opportunities for public participation in the governance process. Local governments are considered to have institutional advantages because they are closer to a region's social, economic, and ecological conditions, enabling them to produce more context-specific policies (Larson & Soto, 2008; Rodríguez et al., 2023; Shah, 2022). From a local governance perspective, proximity between government and the public relates not only to administrative efficiency but also to public institutions' capacity to build legitimacy and respond to citizens' needs. However, these expectations become more complex when decentralization is applied to the natural resource sector, which involves strategic value, national economic interests, and long-term ecological consequences.

Mining governance differs from other public sectors because it involves managing strategic resources, large investments, national economic interests, and social and environmental risks that often transcend local administrative boundaries. These characteristics suggest that the central government still controls strategic elements of the industry such as regulation, permitting, operating standards, and oversight. Local governments interact directly with the public when mining activities create problems, such as social conflicts, environmental changes, and requests for the distribution of economic benefits. This creates institutional challenges, since the actors with the authority to make decisions are not always the same as those who must manage the consequences of those decisions (Adam et al., 2021; Fiorillo et al., 2021).

Thus, the main challenge of mining governance is not only about how authority is distributed, but also how the relationship between authority, responsibility, and accountability is established in practice. This phenomenon is evident in Indonesia's development of mining governance (Putra & Wardhani, 2024). After the reform era, decentralization gave local governments more room to participate in managing public affairs, including the natural resources sector. In mining, these changes initially expanded local governments' roles in administrative and local management (Brodjonegoro & Shinji Asanuma, 2000). Regulatory changes since then, however, have tended to recentralize authority, altering the division of governmental responsibilities and the regulations that apply to the mineral and coal sectors. The central government's role in licensing, supervision, and strategic control over mining was reinforced through Law No. 23 of 2014 on Regional Government and Law No. 3 of 2020 further revised the Minerba regulations (Salmon & Lekipiouw, 2024; Tinambunan et al., 2025) There is scope for coordination and some delegation of authority to local governments, but these changes represent a move toward strategic control by higher-level governments, not a full devolution of authority.

This configuration change leaves a fundamental theoretical gap that previous studies have not identified. The decentralization discourse, by contrast, rests on the belief that institutional proximity between local authorities and communities is an absolute precondition for improving the quality of governance (Larson & Soto, 2008; Rodríguez et al., 2023). The narrative of recentralization, by contrast, justifies the central regime's retreat from strategic authority to enable policy alignment, coordination, integration, and supervision of critical sectors (Hartati & Ayub, 2024; Luo et al., 2019). Asymmetric decentralization then seeks to mediate this dualism by distributing mandates proportionally to disparities in capacity between levels of government (Fiorillo et al., 2021; Verbrugge, 2015). Nevertheless, these three theoretical lenses fail to capture governance anomalies when power is pulled upward, while the overflow of social, administrative, and ecological degradation piles up on local governments.

Pohuwato Regency in Gorontalo Province can serve as a case study of this problem. This case matters not only for gold mining at Mount Pani but also for the insight it offers into the complex interrelationship between changes in authority, local government capacity, and community expectations. Mining activities have created economic, social, and ecological dynamics that communities around the mining area experience directly (Irwan, 2022). Shifting configurations of authority have made local governments the main actors in responding to community demands on conflict resolution, distribution of economic benefits, and environmental protection, though some strategic mining decisions are made at higher levels of government. Thus, Pohuwato offers a strong analytical case for how centralized strategic control can coexist with local governance outcomes.

Previous studies have helped explain decentralization, recentralization, and natural resource governance. The literature on the extractive sector has identified the distribution of economic benefits, institutional capacity, and the relationships between actors as important factors for the quality of mining governance (Gustafsson et al., 2020; Hidayat et al., 2024; Lovett & Thomas, 2021). However, the literature still struggles to explain how the mismatch between the location of authority and the location of responsibility produces unbalanced accountability pressures. This article presents the concept of the Hybrid Decentralization Paradox, a condition in which strategic authority is centralized, but administrative responsibility, social expectations, and accountability pressures are localized. It differs from recentralization, which concerns the transfer of authority, and asymmetric decentralization, which accounts for differences in the distribution of authority. Instead, the Hybrid Decentralization Paradox highlights the governance implications of misalignment among power, responsibility, and accountability across levels of government.

This study aims to explain the Hybrid Decentralization Paradox in mining governance in Pohuwato through this framework by showing how the reconfiguration of mining authority within recentralization has led to that paradox. This paper examines how authority over mining is distributed across levels of government, the consequences of this distribution for economic benefits and opportunities for public participation, and local governments' responses to demands for social and ecological accountability in the absence of effective authority. This study is expected to contribute to the emerging literature on decentralization, recentralization, and natural resource governance by developing the Hybrid Decentralization Paradox as a conceptual framework for analysis.

2. Literature Review

Recent studies on decentralization, recentralization, and natural resource governance have evolved to explain how public authority is distributed, how local governments perform administrative functions, and how communities engage in decision-making (Aysan et al., 2023; Fischer et al., 2023; Larson & Soto, 2008). In this context – especially in the mining sector – this relationship between authority, responsibility, and accountability often does not run in parallel. Local governments may have close social ties to affected communities, but they do not always have strategic authority—especially to set policy directions with social and ecological consequences. These conditions show the limits of traditional approaches to decentralization, especially in accounting for governance patterns when decentralization and recentralization occur simultaneously.

Decentralization and Local Authority in Natural Resource Governance

Decentralization is commonly defined as the transfer of authority, responsibility, and resources from the central to local governments. This approach is based on local governments' greater capacity to provide responsive governance because of their proximity to the community and their knowledge of their regions' characteristics (Larson & Soto, 2008; Rodríguez et al., 2023). Decentralization is expected to build local governments' capacity in natural resources management. This depends on local governments managing conflicts of interest, fostering community participation, and ensuring that the economic benefits of natural resources flow to local communities.

However, the natural resources sector has features that set it apart from other public service sectors. Mining deals with strategic resources, large-scale investments, economic interests of the nation, and ecological risks which may cross administrative boundaries. Hence, transferring administrative power does not necessarily mean fully transferring strategic control. The central government often retains regulation, permitting, and oversight to ensure consistency in national policy (Adam et al., 2021; Gustafsson et al., 2020). This creates a misalignment in which local authorities pay the costs of mining activities, but cannot influence strategic decisions that affect their territories (Fiorillo et al., 2021; Orozco, 2022). The literature on decentralization therefore provides key insights into the function of local governments, but does not fully explain how governance works when local responsibilities are not matched by commensurate substantive authority.

Recentralization and Asymmetric Authority in Mining Governance

Recentralization is the process of restoring central government authority over strategic sectors that were previously decentralized. The recentralization of the mining sector is often linked to the need to enhance national coordination, improve regulatory standards, and oversee extractive activities (Tinambunan et al., 2025; Yanto & Hikmah, 2023). That mechanism gives the central government control over mineral policy, regulation of permits, and investment." But recentralization also has consequences for local authorities. Local governments are the institutions that come into direct contact with the public when social conflicts, environmental issues, or demands for the distribution of economic benefits arise; when strategic authority is transferred to a higher level of government. This disconnection between where policies are made and where they affect people (Baral, 2018; López-Murcia, 2021) stems from the geographical scope of the policies.

This situation implies that recentralization changes not only the distribution of authority but also the accountability arrangements in mining governance. The idea of asymmetric decentralization helps account for the asymmetrical dispersion of authority between levels of government. In some sectors, the central government may retain strategic control, while local governments handle administrative and social functions (Fiorillo et al., 2021; Verbrugge, 2015). However, this concept still has shortcomings, because it explains variations in the distribution of authority more than the governance consequences that arise when local responsibilities are not matched by local decision-making capacity. This creates a policy paradox concerning authority and the ensuing burden on local authorities.

Developing Hybrid Decentralization Paradox Framework

To explain these limitations, this article develops the concept of the Hybrid Decentralization Paradox as an analytical framework describing governance configurations in which two institutional trends occur simultaneously. On the one hand, higher-level governments strengthen their control over strategic authorities such as regulation, investment, and permitting. On the other hand, local governments continue to bear administrative responsibilities, social pressures, and the ecological consequences of mining activities. This framework is grounded in the argument that the central issue in decentralization is not merely the location of authority, but also the relationship between authority, responsibility, and accountability (Barr et al., 2006; Ribot, 2002).

The Hybrid Decentralization Paradox has three dimensions. First, "authority mismatch," which refers to a situation where actors experiencing the impacts of a policy lack equivalent authority to make strategic decisions. Second, "accountability displacement," which refers to shifting accountability pressures to local actors who do not control the source of the problem. Third, participation asymmetry, a condition in which formal avenues of participation are available, but the public's capacity to affect strategic decisions is limited. This article contributes to the study of decentralization with this framework. It shows that recentralization not only shifts authority to higher levels of government, but may also engender an imbalance between those making decisions and those bearing the consequences.

Research Gap and Analytical Framework

Earlier work has been important in explaining several aspects of natural resource governance. Decentralization studies confirm that decentralization transfers authority to local government to improve governance quality (Larson & Soto, 2008; Rodríguez et al., 2023; Shah, 2022). Studies on recentralization help explain the mechanisms by which the central government restores power in strategic sectors (Gustafsson et al., 2020). The natural resource governance literature also highlights the importance of inter-actor relations in governing common pool resources (Carlisle & Gruby, 2019; Ostrom, 2020). However, this literature still tends to address these processes in isolation. Few studies explain how these three dynamics interact to produce a situation in which strategic authority remains at the central government level, local administrative responsibility remains with local governments, and community expectations remain directed toward local governments. This article fills this gap by developing the Hybrid Decentralization Paradox framework.

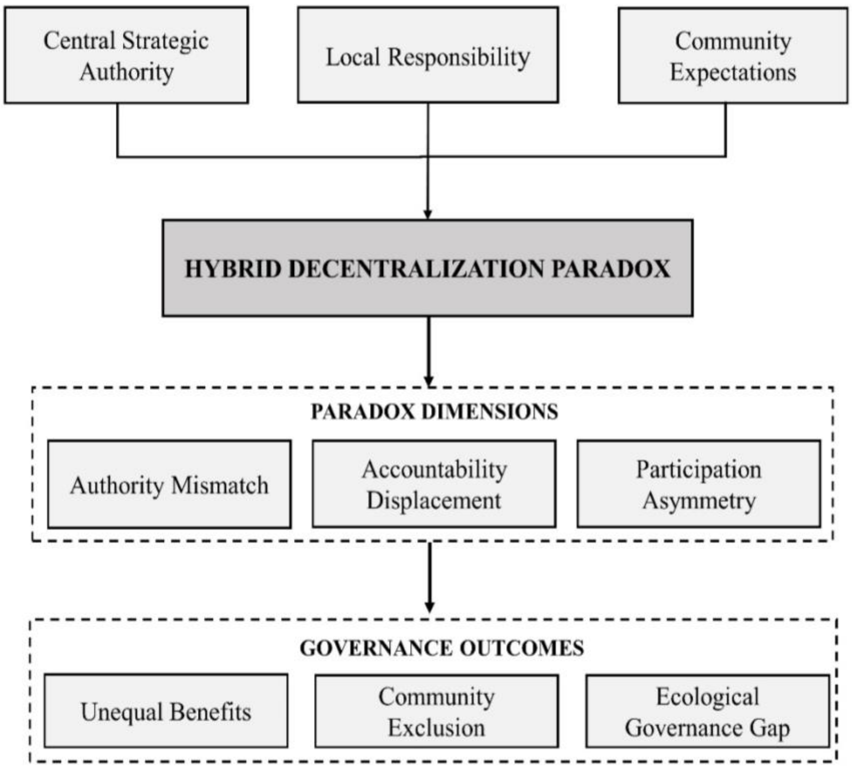

Figure 1. Conceptual Framework of Hybrid Decentralization Paradox
Source: Researcher analysis based on research data.

This conceptual framework explains that the combination of centralized strategic authority, local administrative responsibility, and community expectations creates the Hybrid Decentralization Paradox. This situation then gives rise to three main mechanisms: 1) authority mismatch; 2) accountability displacement; 3) participation asymmetry. These mechanisms then shape governance outcomes, including limited community participation, unequal distribution of benefits, and gaps in ecological governance.

Thus, this framework provides an analytical basis for understanding mining governance not only as resource exploitation but also as institutional alignment among authority, responsibility, and accountability.

3. Research Methods

Research Design and Case Selection

This study employs a qualitative case study approach to analyze how changes in the configuration of authority within mining governance shape the relationship between strategic authority, local administrative responsibility, and community expectations. The case study approach was chosen because this research focuses on gaining an in-depth understanding of institutional processes, actors' experiences, and governance mechanisms that emerge within a specific context, rather than on producing statistical generalizations (Priya, 2021; Steinberg, 2015). Case studies allow analysis of the complex relationships among regulatory structures, governance practices, inter-actor relations, and the socio-ecological consequences of mining activities (Creswell & Creswell, 2023; Yin, 2003).

The research was carried out in Pohuwato Regency, Gorontalo Province, Indonesia, with an empirical focus on the mining governance of Mount Pani. This case was picked because it is a relevant analytical case for understanding the Hybrid Decentralization Paradox. Pohuwato is an example of a governance configuration in which the strategic authority of mining is increasingly centralized at higher levels of government, while local governments still carry administrative responsibilities, social pressure, and ecological consequences of mining (BBC News, 2023). The choice of this case was therefore made not only because of its geographical features but also because it is an example of a situation where authority and responsibility are institutionally separated.

Figure 2. Gunung Pani Gold Mining Location
Source: Mount Pani region (BBC News, 2023).

Data Sources and Participants

This study used four data sources. They are interviews, field observations, analysis of policy documents, and questionnaires as additional descriptive data. We drew on several data sources to provide a more holistic view of mining governance from the perspective of the different stakeholders involved

(Adranyi et al., 2024). We mainly collected data through semi-structured interviews. We interviewed stakeholders with direct experience of mining governance, including local governments, mining companies, civil society organizations, and affected communities. The interviews focused on four major issues: the creation of mining authority; the sharing of economic benefits; experiences of community participation; and reactions to ecological impacts. Field observations were conducted to understand the social and environmental context in which the mines are located, including community relationships, mine-related economic activities, and the state of the local environment (Lèbre et al., 2020; Seloa & Ngole-Jeme, 2022).

In addition, the study analyzed policy documents to understand changes in central-local government relations, mining regulations, and the distribution of authority among levels of government. This study also used open-ended questionnaires as supporting data. These instruments were not used as quantitative surveys and were not intended to produce statistical generalizations. Questionnaire data served solely as supporting descriptive evidence to illustrate patterns of public perception and reinforce the interpretation of interview results. Thus, questionnaire responses were treated as narrative data that aided triangulation, rather than as the basis for hypothesis testing. The selection of informants used both purposive and snowball sampling. The purposive approach ensured representation of strategic positions held by actors in mining governance, while the snowball technique identified other informants with direct experience related to the research issue. This is especially relevant for governance research, since access to some actors is often dependent on pre-existing relations of trust and social networks (Razavi et al., 2020; Siqueira et al., 2024). This study included 23 informants. Table 1 presents the composition of the informants.

Table 1. Composition of Research Informants and Analytical Roles in Mining Governance

Actor	Number of Informants	Analytical Role
Local government	4	Understanding administrative authority and policy implementation
Mining companies	2	Understanding operational activities and economic relationships
Civil society organizations/NGOs	3	Describing perspectives on accountability and advocacy
Affected communities	14	Explaining social, economic, and ecological experiences
Total	**23**	

Source: Researcher's analysis based on research data.

The composition of the study made it possible to capture different perspectives on mining governance. Local governments provided information on administrative authority and institutional capacity constraints. Mining company informants provided information on operational activities and economic relations. Civil society organizations discussed accountability and advocacy on behalf of communities. At the same time, participants from affected communities shared firsthand their experiences of the benefits, participation, and ecological consequences of mining activities.

Data Collection Procedures

Data collection followed several complementary stages. Semi-structured interviews used a questionnaire developed from the Hybrid Decentralization Paradox framework (Abarzúa & Glückler, 2022; Duijn et al., 2021). The research questions focused on how mining authority is distributed, how local governments carry out their responsibilities, and how communities experience social and ecological changes resulting from mining activities. Observations were conducted to build a contextual understanding of conditions in the study area, patterns of interaction among actors, and the community's relationship to mining activities. These observations complemented the interview data. Policy documents were analyzed to understand institutional changes in mining governance, particularly the distribution of authority between central government, provincial government, and district government. Document analysis helped link the actors' empirical experiences to the regulatory structures that shape mining governance. Meanwhile, questionnaires provided insight into the community's perceptions of economic benefits, social changes, and environmental conditions. However, these data were used only as supporting information and were not analyzed using statistical methods (Pandey & Mishra, 2022).

Data Analysis and Analytical Approach

The research data were analyzed using a thematic analysis approach to identify patterns of meaning, relationships among categories, and institutional mechanisms emerging from various research data sources (Braun & Clarke, 2006). This approach was chosen because it allows researchers to understand how government actors, companies, and the public interpret changes in the distribution of authority and their impact on mining governance. The analysis was carried out in stages through a detailed examination of interview transcripts, policy documents, observation notes, and other supporting data. The analysis followed a process of familiarizing oneself with the data, coding it, grouping codes into broader categories, and developing analytical themes that describe the phenomena under study (Miles et al., 2014). The coding identified four main themes: authority configuration, benefit distribution, participation, and ecological governance. These themes helped explain the distribution of authority, patterns of economic benefits, forms of community participation, and institutional capacity to respond to ecological impacts.

In addition, these themes were analyzed with the key conceptual dimensions of the Hybrid Decentralization Paradox: authority mismatch, unequal benefits, participation asymmetry, and accountability displacement. This analytical strategy enabled the study to move beyond describing mining governance and explain how institutional configurations shape relationships among authority, responsibility, and accountability. The interpretation's credibility is enhanced by triangulating data sources, meaning by comparing interview results, field observations, policy documents, and questionnaires as supporting data (Holt et al., 2012; Miles et al., 2014). The study systematically documented the entire analytical process to ensure transparency in developing codes, themes, and interpretations.

4. Results and Discussion

The research findings indicate that mining governance in Pohuwato Regency exhibits a hybrid institutional configuration. Changes in the distribution of authority between the central government and local governments have not fully strengthened local capacity, nor have they eliminated local governments' role in managing the impacts of mining (Daud et al., 2025; Rahayu et al., 2023). Field findings indicate that strategic authority over mining is increasingly concentrated at higher levels of government, while local governments remain the actors directly facing the social, economic, and ecological consequences of mining activities. This configuration helps explain the Hybrid Decentralization Paradox, where strategic authority sits at a higher level of government, but administrative responsibilities and accountability pressures sit at a lower level.

The paradox in Pohuwato can be seen in four dimensions: the mismatch of authority, the unequal distribution of economic benefits, the limited influence of the community in decision-making processes (participation asymmetry), and the displacement of accountability pressures on local actors (accountability displacement). The next section addresses the first dimension: how recentralization has altered the configuration of mining authority, creating an authority mismatch in the governance of Mount Pani.

Authority Mismatch: Reconfiguration of Mining Authority under Recentralization

The decentralization of natural resource management was originally justified on the assumption that local governments are more likely to be responsive because of their geographic, social, and political proximity to affected communities (Larson & Soto, 2008; Rodríguez et al., 2023). However, research in Pohuwato shows that administrative proximity does not necessarily translate into stronger substantive authority. In fact, mining governance at Mount Pani shows a fragmented distribution of authority, as different actors hold different forms of authority in the governance process.

The configuration of actors in the governance of the Gunung Pani mine shows that authority lies not only with the government, but also with mining companies, local intermediary institutions, local miners, affected communities, and civil society organizations. The central government is the custodian of strategic authority through its powers of regulation, licensing, and supervision of the mineral sector. The provincial government serves as an intermediate authority that links central policies to their implementation at the regional level. Meanwhile, the local administrative authority of the Pohuwato Regency Government is responsible for delivering public services, social communication, and responding to community complaints. This actor mapping shows that mining governance at Mount Pani is characterized by differences in sources of authority, capacity for intervention, and responsibilities inherent in each actor.

Table 2. Actor Mapping in Gunung Pani Mining Governance

Governance Actor	Governance Position	Main Interests	Source of Authority	Actual Role in Mining Governance
Central Government	Strategic authority holder	Mineral sector control, investment regulation, national mining governance	National mining regulation and licensing authority	Determines strategic policies, mining permits, and major regulatory decisions
Provincial Government	Intermediate authority	Administrative coordination and regional supervision	Delegated coordination authority	Mediates between national policy and local implementation
Pohuwato Regency Government	Local administrative authority	Social stability, public services, community responses	Local administrative authority	Handles community complaints, social impacts, and local governance responses
Mining Companies	Economic actors	Production, investment, operational continuity, corporate interests	Mining licenses, capital, operational capacity	Conduct mining operations and manage economic activities
KUD Dharma Tani Marisa	Local intermediary institution	Distribution of economic access and community-company relations	Historical institutional legitimacy and contractual relationships	Mediates access between local communities and mining companies

Local Miners	Resource-dependent groups	Livelihoods and mining access	Historical involvement in mining activities	Participate as labor providers and local economic actors
Affected Communities	Social accountability holders	Land rights, environmental protection, economic benefits	Social legitimacy and community claims	Experience direct impacts and articulate demands
NGOs/Civil Society	Accountability actors	Transparency, advocacy, community protection	Knowledge resources and advocacy capacity	Highlight conflicts, inequality, and governance shortcomings

The actor mapping shows that mining governance in Gunung Pani is affected by different actors with different sources of authority and capacity to influence. The central government is the strategic authority holder, as it holds authority over mineral sector regulation, permits, and strategic oversight. As shown in Table 2 (Actor Mapping in Gunung Pani Mining Governance), the provincial government is an intermediary authority that mediates between national policies and their translation to the regional level. Meanwhile, the Pohuwato Regency Government is the local government that directly engages the community through public services, social communication, and resolving complaints arising from mining activities.

This division of roles shows that authority in mining governance is not concentrated but divided according to the types of authority each actor holds. Thus, mining companies secure their economic and operational capacity through business licenses, investments, and production activities. The community's link with the company is through local institutions such as the Dharma Tani Marisa Cooperative (KUD), which connect the community to the company through institutional and economic ties. At the same time, the affected communities and civil society organizations are key actors raising issues of social legitimacy, environmental protection, and accountability. Therefore, Gunung Pani's governance structure reflects asymmetric authority. Asymmetric authority is a condition in which various actors have different types of power but do not have the same capacity to influence mining decisions.

Table 3. Analytical Mapping of Authority and Responsibility Distribution in Mining Governance

Governance Function	Central Government	Provincial Government	Pohuwato Regency Government	Governance Implication
Mining policy formulation	Primary authority	Coordination role	Limited involvement	Strategic decisions remain centralized
Mining licensing	Dominant authority	Limited coordination	Limited authority	Local governments have restricted control over mining approval
Operational supervision	Strategic oversight	Technical coordination	Social monitoring role	Monitoring responsibilities exceed local authority
Environmental management	Regulatory control and oversight	Technical coordination	Receives community complaints	Creates ecological accountability gap
Social conflict resolution	Indirect involvement	Mediation role	First responder	Local government faces public pressure without full authority

Community communication	Limited direct interaction	Moderate engagement	Closest institutional actor	Administrative proximity does not equal decision-making power
Political accountability	Low local accountability	Moderate accountability	High public accountability	Responsibility remains local despite limited control

This distinction between formal authority and practical responsibility becomes increasingly evident in Table 3 (Analytical Mapping of the Distribution of Authority and Responsibility in Mining Governance). Table 1 indicates that the central government dominates mining policy formulation, permit issuance, and strategic oversight. In contrast, the Pohuwato Regency government plays a limited role in substantive decision-making but remains the entity that receives public feedback, social complaints, and local political pressure. Thus, the shift in the configuration of authority resulting from recentralization does not eliminate the role of local governments; it alters the nature of the responsibilities they must carry out. Interview findings reinforce this gap between authority and responsibility. One local government informant explained:

This statement illustrates the contradictory role of local governments in mining governance. When communities are facing environmental or social conflicts, local governments are on the front lines, but they don't always have the regulatory tools to take strategic action to address the root causes. Thus, local governments have administrative and social responsibilities, but they lack authority commensurate with them. This finding contributes to the understanding of the consequences of recentralization in the extractive sector. Within the framework of recentralization, the central government's increased authority is often framed as a means to improve national coordination, regulatory uniformity, and supervisory efficiency in strategic sectors (Tinambunan et al., 2025; Yanto & Hikmah, 2023). However, the Pohuwato case shows that recentralization can create new problems if the transfer of authority is not matched by changes in local accountability mechanisms.

In this study, this is theorized as an "authority mismatch", a situation in which the locus of strategic authority does not align with the locus of social and political responsibilities. This idea expands the discussion of "asymmetric decentralization," which to date has focused more on variations in the distribution of authority across levels of government (Fiorillo et al., 2021; Verbrugge, 2015). Unlike these approaches, "authority mismatch" focuses on the governance consequences following the transfer of authority—specifically, how the separation between authority and responsibility creates an unbalanced accountability framework. Thus, the Pohuwato case shows that the success of mining governance cannot be assessed solely by the existence of formal authority at a particular level of government. Evaluating governance must also consider whether actors who assume social and political responsibilities have sufficient capacity to make decisions and take action. This mismatch forms the primary basis for the Hybrid Decentralization Paradox in Indonesia's mining governance.

Unequal Benefits: Economic Opportunities under Unequal Access Structures

Mining activities in Pohuwato Regency are typical of resource-based regions, where the extractive sector can create economic opportunities but also raises benefit-sharing challenges. The mining industry can drive economic activity by providing jobs, supporting business development, and creating new income sources for some local community members (Gustafsson (Gustafsson et al., 2020; Hidayat et al., 2024). There are such economic benefits. But not all community groups will benefit equally. From a natural resource governance perspective, the success of mining management depends on the extractive sector's economic growth and governance institutions' provision of more inclusive access (Adam et al., 2021; Wiryawan & Otchia, 2022).

The results show that mining in Gunung Pani provides economic benefits for some communities in Pohuwato. Mining creates jobs, stimulates local economic activity, and provides opportunities for interaction between community groups that are directly connected to the mine or supporting economic networks. Figure 3 of the survey results shows that the community sees the mining sector as a potential contributor to household income and a source of employment opportunities for residents. However, this data supports community perception patterns, not statistical generalizations. The results show that communities do not uniformly view mining as completely negative, as some groups benefit economically from the industry.

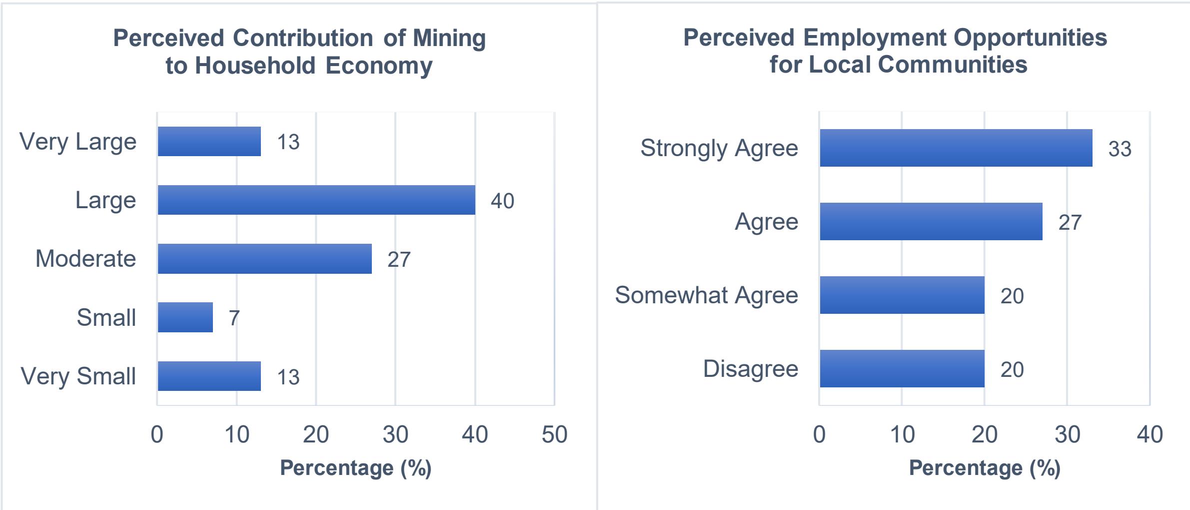

Figure 3. Supporting Perceptions Regarding Economic Contribution of Mining Activities
Source*:* Questionnaire Data (Author's processing, 2024)

Nevertheless, qualitative analysis indicates that the economic benefits of mining are not distributed evenly among community groups. Access to economic opportunities is determined not only by a community's proximity to mining areas, but also by its position within the social, economic, and institutional networks that connect communities to mining activities. Thus, the economic benefits of mining do not operate solely through open mechanisms accessible to the entire community; they are also shaped by actors' ability to enter existing economic networks. This finding is reinforced by a statement from informant NGO-02, who explained:

> *"Those who maintain a direct connection to the Business Contract Network have been shown to receive significantly enhanced economic incentives. In contrast, individuals lacking involvement in the mining sector tend to persist in their economic marginalization"* (NGO-02, in-depth interview, July 5, 2024).

The finding suggests that economic opportunities in the mining sector are selectively distributed. Groups with links to particular webs of contracts, jobs, or institutional ties are more likely to benefit economically than communities without such links. Thus, the principle of distributive justice does not always align with the economic growth generated by mining activities. This finding is consistent with studies of extractive-industry governance showing that benefits derived from natural resources are often mediated by local access structures and power relations. The mining sector is associated with the risk of "elite capture," whereby certain groups with greater access to political, economic, or institutional networks obtain greater benefits than others (Gustafsson et al., 2020; Orozco, 2022). Previous literature explains this phenomenon. The disparity in benefits in Pohuwato is not mainly caused by formal limitations on the community but by differences in its capacity to access the mining economy.

This view implies that mining investments should be understood not only in terms of their economic contributions but also in terms of the mechanisms that govern benefit distribution. The existing literature has largely studied the extractive industry as a driver of local economic growth, with the case of Pohuwato demonstrating that this can create differential experiences for community groups. Some community members benefit from direct involvement in mining networks, while others still have limited access to current economic opportunities. These conditions in the Hybrid Decentralization Paradox suggest that the discrepancy between strategic authority and local responsibilities is not merely an administrative issue but also affects the allocation of economic benefits. Local governments should strive to enhance community welfare and ensure that the fruits of development are more broadly distributed. However, local governments' power to regulate benefit-distribution mechanisms is limited where strategic decisions about mining, investment, and key economic structures are lodged at higher levels of authority.

Thus, this study's findings do not suggest that mining does not provide economic benefits to the people of Pohuwato. Rather, this study shows that these benefits emerge in an asymmetrical pattern. The main problem in natural resources governance is not whether natural resources contribute to economic growth, but how structures of authority and networks of access determine which groups benefit and which are excluded from the distribution system (Hidayat et al., 2024). Thus, the economic dimension of the Hybrid Decentralization Paradox suggests that separating strategic authority from local responsibility can lead to uneven benefits. Local governments must still pursue economic development but lack the tools to ensure an inclusive distribution of benefits. Comprehensive.

Participation Asymmetry: Participation without Decision-Making Power

Community participation is a key element of natural resource governance, given the role that the participation of groups that are directly affected can play in bolstering the legitimacy of policies, increasing public accountability, and producing decisions that are more sensitive to local conditions (Larson & Soto, 2008; Rodríguez et al., 2023; Shah, 2022). From a decentralization perspective, local governments' closeness to the community is often seen as an opportunity to increase citizen participation in decision-making. However, research findings in Pohuwato Regency reveal that participatory space does not always have a substantive influence on the community regarding strategic mining decisions. The community still has some room to express its desires and complaints, but less room to influence the direction of mining management.

The research results show that the problem of community participation in Pohuwato is not caused by the lack of community engagement, but by the unequal access to participation and decision-making processes. In this context, the study distinguishes between formal and substantive participation. Formal participation refers to administrative mechanisms such as public outreach, public communication, consultations, or the expression of concerns between the community and governance actors. Meanwhile, substantive participation relates to the community's ability to influence decisions, negotiate interests, and alter the direction of policies that impact their lives (Ramenzoni, 2021).

The Pohuwato case shows that community participation mechanisms occur more at the formal level than at the substantive level. The community is not entirely excluded from the mining governance process, but their involvement often comes only after strategic decisions have already been made. This is evident in the community's experiences with information transparency in the mining development process. One informant from the affected community explained:

> *"The mining company has shown a lack of transparency in its operations. We only knew about the mines after heavy machines had arrived on our land*." (LC-05, in-depth interview, 10/07/2024).

Statement LC-05 indicates that participation in Pohuwato is closely linked to how information is shared among stakeholders. The community is informed about mining activities only after operations have begun, limiting its opportunities to express views or negotiate. In natural resource governance, access to information is a critical component that determines actors' capacity for meaningful participation. When strategic information is made available to certain actors first, the community's bargaining position in the governance process becomes weaker (Orozco, 2022). Thus, limitations on participation in Pohuwato cannot be understood solely in terms of the number of communication forums or the existence of consultation mechanisms. The more fundamental issue concerns when communities are involved and how much that involvement influences decision-making. Participation that occurs after key decisions have been made tends to function as an administrative communication mechanism rather than as a space for deliberation that allows communities to influence the direction of policy.

This situation is also reflected in conflicts related to land access and compensation. These conflicts relate not only to land ownership but also to the community's position within the mining governance structure. One local government informant explained:

> *"We locals have been mining for decades from our parents' generation to our generation. Technically this land is still 'ours', but we're still waiting for that promised land compensation. The company grabbed our land through cooperation with KUD…"* (GOV-04, in-depth interview, 06/08/2024).

This statement indicates that land issues have broader social and institutional dimensions. Communities' historical ties to mining areas do not always give them a strong position in decision-making about managing these resources. Communities have social ties to their living spaces, but their capacity to determine how those spaces are used is shaped by relationships among companies, intermediary institutions such as KUDs, and the broader mining authority structure. This finding supports the position that multiple actors in natural resource governance do not necessarily translate into inclusive governance. Finally, polycentric governance focuses on distributing authority, coordination, and access to information among actors to manage resources effectively (Carlisle & Gruby, 2019; Ostrom, 2020). This imbalance is evident in Pohuwato, where the community most affected by mining activities lacks the same ability to influence strategic decisions.

As for the Hybrid Decentralization Paradox, it is a type of "participation asymmetry"—a condition in which communities can participate through participatory mechanisms, but power in decision-making is not equally distributed. Communities may have aspirations, be informed, and engage with governance actors, but may not always have the capacity to influence the decisions that set the direction for mining management. This finding adds to the literature on decentralization and community participation. While decentralization might reduce the administrative distance between government and citizens (Larson & Soto, 2008; Rodríguez et al., 2023), this paper shows that administrative proximity does not equate to community political power. Participatory spaces in the local context may not realize their transformative potential if strategic power is located at higher levels of government. They become only consultative processes of limited impact.

Accountability Displacement: Ecological Governance under Limited Local Authority

The ecological dimension of mining governance in Mount Pani shows that environmental issues are not only technical consequences of extractive activities but also institutional issues linked to the distribution of authority and institutions' capacity to respond to these impacts. The research findings reveal situations where communities experience ecological impacts directly, while local governments are the actors most frequently faced with community demands for resolution. However, strategic authority over the regulation, supervision, and control of mining activities does not fully reside at the regency government level. This situation creates a mismatch between the actors facing accountability pressures and those with the capacity to make strategic decisions.

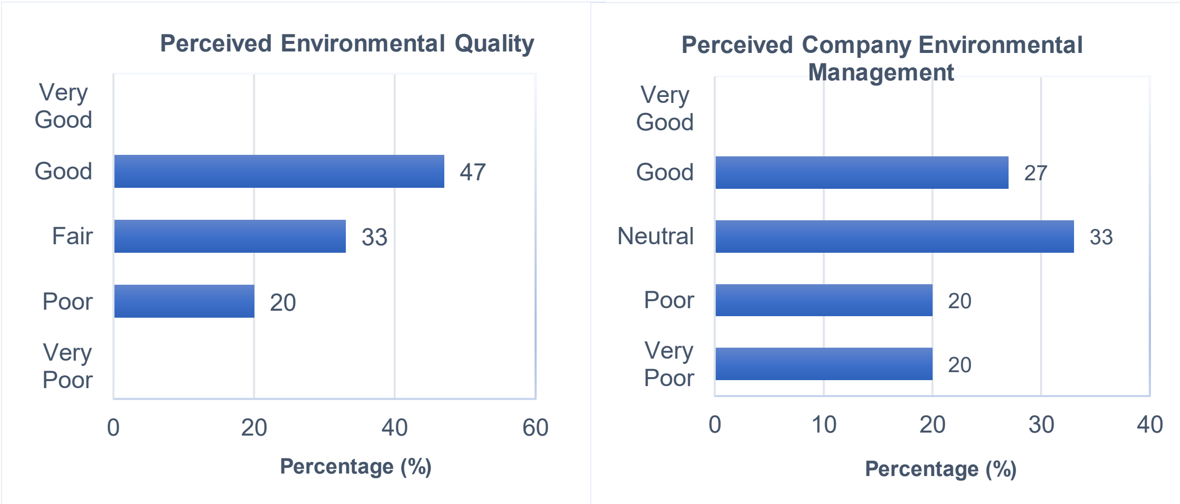

Figure 4. Supporting Perceptions Of Environmental Changes and Company Environmental Management
Source: Questionnaire Data (Author Processing, 2024)

As supporting data, see Figure 4. Environmental Quality and Company Environmental Management shows variations in public perceptions of environmental conditions and environmental management efforts by mining companies. The data from this questionnaire are not used as a statistical measure of environmental quality but as supporting evidence of the diversity of public experience with ecological changes resulting from mining activities. For some community members, mining activities still bring economic benefits; for others, environmental changes affect their day-to-day lives. These different experiences suggest that ecological impacts are not shared equally across the community, mainly because residents' distances to mining sites differ.

Interview findings from impacted communities show that they understand environmental changes through direct experiences in their living spaces. One community informant stated:

> *"We used to bathe in the river, but now the water is cloudy and smelly, so we're rejecting the mining company because it damages the environment and harms the people who live nearby. We demand compensation"* (LC-07, in-depth interview, 05/07/2024).

Statement LC-07 indicates that ecological impacts are not only related to changes in the physical conditions of the environment, but also to changes in communities' social relationships with their living spaces. Rivers that previously served domestic and social functions for communities undergo a shift in meaning when water quality is perceived to have declined. In this context, environmental impacts become a matter of ecological justice because the groups located closest to extractive activities are the first to experience the negative consequences of environmental change (Martinez-Alier et al., 2011).

However, research findings indicate that the primary issue lies not only in the emergence of ecological impacts but also in the limited institutional capacity to address them. The Pohuwato Regency government remains the first institution the community contacts when environmental issues arise because of its administrative and social proximity to the affected residents. However, the local government's ability to carry out substantive interventions is limited by changes in the configuration of mining authority. This situation is evident from the statements of local government informants:

> *"If there is pollution, we can only report it to the province because the authority has been transferred to the central government; there is only coordination with the provincial government"* (GOV-02, in-depth interview, 08/04/2024).

Statement GOV-02 highlights the local government's position within a paradoxical institutional context. Local governments remain the state's closest representatives to the public and face pressure to resolve environmental issues. However, higher levels of government hold the strategic authority to set regulatory direction, conduct primary oversight, and control mining activities. Consequently, local governments function as first responders but do not always have the capacity to decide the primary means of resolving problems.

This situation is an example of a mechanism of 'accountability displacement' – the shifting of accountability pressure onto actors who do not have full control over the consequential decisions. From a governance perspective, an institution's effectiveness depends not only on its administrative proximity to the community but also on the congruence between the authority, resources, and responsibilities held by that actor (Ostrom, 2020). When ecological responsibilities remain at the local level, but substantive authority shifts to a higher level, an environmental management capacity gap emerges. This finding contributes to our knowledge of the effects of recentralisation in the natural resource sector. Recentralisation can improve regulatory consistency and national coordination, but it can also create a disconnect between where decisions are made and where ecological impacts are felt (Baral, 2018; López-Murcia, 2021). The ecological problems in Pohuwato are symptoms of the environmental hazards that accompany the mining industry and of how power is distributed to influence institutions' ability to meet community expectations.

The conditions indicate an ecological governance gap in the Hybrid Decentralization Paradox framework, induced by the spatial separation of strategic authority and local responsibility. Local governments remain the primary actors responsible for working with affected communities, but they do not always have adequate instruments of authority to control sources of ecological risk. Thus, the key question in mining governance is not how to minimize environmental impacts, but rather how to ensure that the actors subjected to accountability claims have sufficient power to take corrective action.

Thus, the Pohuwato case demonstrates that recentralization not only shifts the location of authority but also reshapes the relationship between authority and accountability. Authority moves to higher levels of government, while the social and ecological consequences continue to be felt and debated at the local level. This mechanism helps explain how "accountability displacement" has become a key dimension in the formation of the "Hybrid Decentralization Paradox" in mining governance.

Hybrid Decentralization Paradox: Integrating Governance Mechanisms

The findings in the previous section indicate that mining governance dynamics at Mount Pani in Pohuwato Regency cannot be understood as a single issue involving only authority, economics, participation, or the environment. These four dimensions are interrelated consequences of a single institutional configuration. This study shows that recentralization does not eliminate the role of local government; instead, it produces a hybrid governance pattern in which strategic mining authority becomes increasingly concentrated at higher levels of government, while administrative responsibilities, social pressures, and ecological consequences remain at the local level. This configuration creates the hybrid decentralization paradox.

As shown in Figure 5, the Hybrid Decentralization Paradox Model, this paradox arises through the interaction of three key structural conditions: centralized strategic authority, local administrative responsibility, and community expectations. This model results from an analytical synthesis of research based on interview data, observations, document analysis, and supporting data on community perceptions; it is not a statistical measurement model. These three elements create governance tension because the location where strategic decisions are made is not always at the same level as the location where policies' impacts are felt. In the context of mining in Pohuwato, higher-level governments retain authority over regulation, permitting, and strategic oversight, while the regency government remains the actor that deals directly with the community when social, economic, or ecological issues arise.

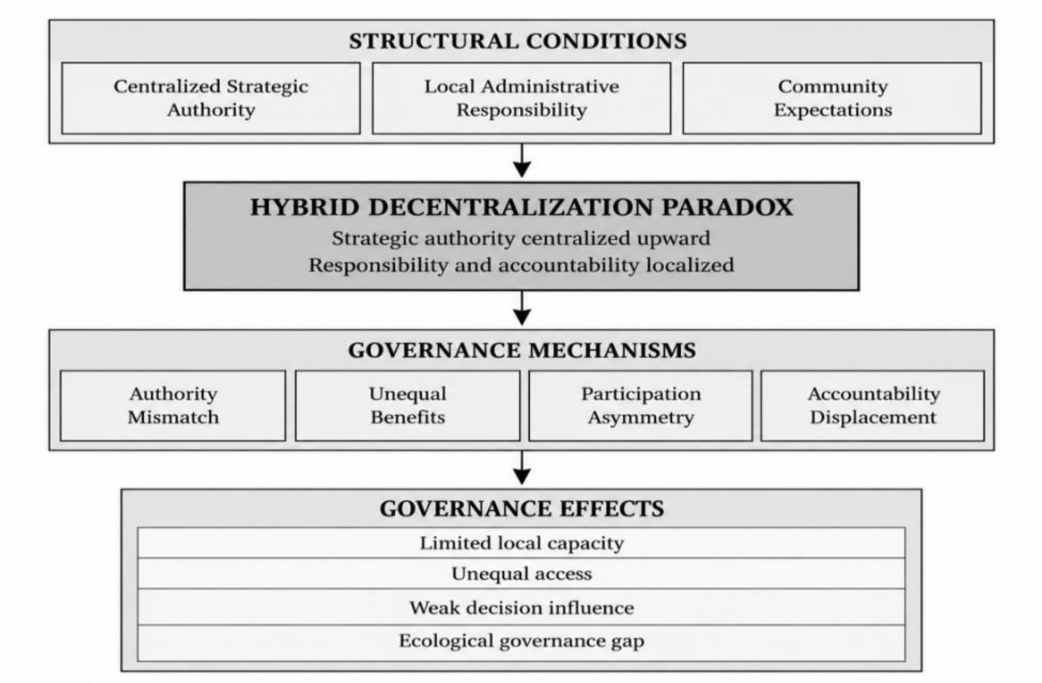

Figure 5. Hybrid Decentralization Paradox Model
Source: Author's analysis based on field research data.

This configuration then gives rise to four governance mechanisms that explain how this paradox operates in practice. First, “authority mismatch” highlights the separation between actors holding substantive authority and those facing demands for problem resolution. Second, unequal benefits show that mining activities create economic opportunities through jobs, business networks, and contractual relationships, but access to these benefits is uneven because it depends on actors’ positions within economic and institutional mining networks. Third, participation asymmetry describes a situation where communities still have space for communication and consultation, but that involvement does not always translate into substantive influence over strategic decisions. Thus, formal participation mechanisms do not automatically produce a more balanced distribution of power within the governance process. Fourth, “accountability displacement” indicates that communities continue to direct their demands for environmental protection toward local governments due to their administrative proximity, even though some strategic oversight authority resides at higher levels of government.

Based on these findings, this study's main contribution is the development of the Hybrid Decentralization Paradox as an analytical framework for understanding the relationship between authority, responsibility, and accountability in natural resource governance. Unlike studies on recentralization, which generally focus on the transfer of authority between levels of government, and studies on asymmetric decentralization, which emphasize variations in the distribution of authority, this concept explains the governance consequences when strategic authority shifts to a higher level, while administrative responsibility and accountability pressures remain at the local level. Thus, the Pohuwato case shows that the primary challenge in mining governance is not merely who controls the resources, but how misalignment among authority, responsibility, and accountability shapes new governance patterns in the extractive sector.

5. Conclusion

This study shows that mining governance in the context of recentralization cannot be understood only through the dichotomy between decentralization and centralization. The Gunung Pani mining case in Pohuwato Regency shows the emergence of a hybrid governance configuration, where strategic mining authority is increasingly concentrated at higher levels of government, while administrative responsibilities, social pressures, and ecological consequences remain at the local level. These configurations create the Hybrid Decentralization Paradox: strategic authority is centralized upward, while responsibility and accountability remain localized. These findings suggest that changes in the distribution of authority do not necessarily clarify institutional relationships; instead, they can create mismatches between actors with decision-making capacity and those who face policy consequences.

This research identifies four governance mechanisms that explain how the paradox functions in practice. First, authority mismatch signals a discrepancy between those with strategic authority and those who comply with demands of problem-solving. Higher-level governments retain control over strategic issues, such as mining regulation, licensing, and supervision. Local governments remain institutions that deal directly with the community. These findings suggest that administrative proximity does not always result in substantive power proximity. Second, unequal benefits show that mining activities create economic opportunities, but access to these benefits is uneven because actors' positions in certain economic and institutional networks shape it. Thus, the main problem of mining governance is not only whether economic growth exists, but how institutional structures determine the distribution of these benefits.

Third, the study found participation asymmetry, a condition in which the community has formal participation space through communication, consultation, and the expression of aspirations but has not had a substantive influence on mining strategic decisions. These findings suggest that a participation mechanism does not automatically redistribute power in the decision-making process. Fourth, accountability displacement shows that public accountability pressure is not always on actors who control strategic decisions. When social and ecological issues arise, the community's main focus is local government. Some power to control mining lies at a higher level of government.

The main contribution of this work is the development of the concept of the Hybrid Decentralization Paradox as an analytical framework for understanding the relationship between authority, responsibility, and accountability in natural resource management. This concept expands the study of decentralization and re-centralization, which has focused on where authority resides. The research suggests that when authority shifts to a higher level of government, but social and ecological responsibility remains at the local level, it creates greater complexity. Thus, the main challenge of mining governance is not only about who controls resources, but how the mismatch between authority, responsibility, and accountability shapes different governance outcomes for governments and communities.

From a policy perspective, this study shows that mining governance reform cannot be achieved by strengthening control at a single level of government. It requires aligning decision-making authority with implementation responsibilities, strengthening coordination across levels of government, and building community participation mechanisms that move beyond administrative consultation to more substantive involvement. This study has limitations because it uses a single case study, namely mining governance in Pohuwato Regency, so it is not intended to produce statistical generalizations of all mining areas in Indonesia. However, the case study approach allows this study to identify institutional mechanisms that explain how mismatches among authority, responsibility, and accountability can form. Finally, as an important note. Further research could expand the study through comparative studies across mining areas or longitudinal analyses of decentralization policy changes to understand how institutional design can reduce governance gaps in natural resource management in Indonesia.

Acknowledgments

The researcher extends profound gratitude to the Ministry of Religion of the Republic of Indonesia and the Community Service Research Institute (LPPM) IAIN Sultan Amai for the financial support essential to this research. The researcher also expressed his profound gratitude to the research participants, informants, and all parties who contributed to this study. However, given the nature of the research, it is not feasible to acknowledge every individual. Their involvement and contributions were instrumental in providing the valuable data on which this research is based.

6. References

Abarzúa, G. E. B., & Glückler, J. (2022). Network Governance at the Margin of the State: Rural Drinking Water Communities in Chile. *Environmental Management*, *71*(2), 451–464. https://doi.org/10.1007/s00267-022-01760-2

Adam, J. N., Adams, T., Gerber, J. D., & Haller, T. (2021). Decentralization For Increased Sustainability In Natural Resource Management? Two Cautionary Cases from Ghana. *Sustainability (Switzerland)*, *13*(12), 6885. https://doi.org/10.3390/su13126885

Adranyi, E., Stringer, L. C., & Altink, H. (2024). Artisanal And Small-Scale Gold Mining Governance and Cross-Sectoral Policy Coherence in Ghana. *Resources Policy*, *96*, 105235. https://doi.org/10.1016/j.resourpol.2024.105235

Aysan, A. F., Bakkar, Y., Ul-Durar, S., & Kayani, U. N. (2023). Natural Resources Governance and Conflicts: Retrospective Analysis. *Resources Policy*, *85*, 103942. https://doi.org/10.1016/j.resourpol.2023.103942

Baral, S. (2018). Attempts of Recentralization of Nepal's Community Forestry. *Forestry Journal of Institute of Forestry Nepal*, *15*, 97–115. https://doi.org/10.3126/forestry.v15i0.24925

Barr, C. M., Resosudarmo, I. A. P., Dermawan, A., McCarthy, J. F., Moeliono, M., Setiono, B., & eds. (2006). Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods. In *Center for International Forestry Research (CIFOR) eBooks*. https://doi.org/10.17528/cifor/002113

BBC News. (2023). Konflik Dua Dekade Tambang Emas Pohuwato Berujung Pembakaran Kantor Bupati. Bbc.Com. https://www.bbc.com/indonesia/articles/crg1l2y4zmzo

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brodjonegoro, B., & Shinji Asanuma. (2000). Regional Autonomy and Fiscal Decentralization in Democratic Indonesia. *Hitotsubashi Journal of Economicsconomics*, *41*(2), 111–122.

Carlisle, K., & Gruby, R. L. (2019). Polycentric Systems of Governance: A Theoretical Model for the Commons. *Policy Studies Journal*, *47*(4), 921–946. https://doi.org/10.1111/psj.12212

Creswell, J. W., & Creswell, J. D. (2023). Research Design, Qualitative, Quantitative and Mixed Methods Approaches. In *SAGE Publications,Inc.: Sixth Edit* (Number 1). SAGE Publications.

Daud, T. O. N., Rahim, E. I., & Imran, S. Y. (2025). Reconstruction of Regional Government Authority in Mining Management Post Law No. 23 of 2014: Legal Review Based on Hans Kelsen's Theory. *International Journal of Law, Crime and Justice*, *2*(2), 197–206. https://doi.org/10.62951/ijlcj.v2i2.620

Duijn, S. van, Bannink, D., & Ybema, S. (2021). Working Toward Network Governance: Local Actors' Strategies for Navigating Tensions in Localized Health Care Governance. *Administration & Society*, *54*(4), 660–689. https://doi.org/10.1177/00953997211033818

Fiorillo, F., Giuranno, M. G., & Sacchi, A. (2021). Asymmetric Decentralization: Distortions And Opportunities. *Economia Politica*, *38*(2), 625–656. https://doi.org/10.1007/s40888-020-00211-7

Fischer, H. W., Chhatre, A., Duddu, A., Pradhan, N., & Agrawal, A. (2023). Community Forest Governance and Synergies Among Carbon, Biodiversity and Livelihoods. *Nature Climate Change*, *13*(12), 1340–1347. https://doi.org/10.1038/s41558-023-01863-6

Gustafsson, M. T., Merino, R., & Scurrah, M. (2020). Domestication Of International Norms For Sustainable Resource Governance: Elite Capture in Peru. *Environmental Policy and Governance*, *30*(5), 227–238. https://doi.org/10.1002/eet.1904

Hartati, H., & Ayub, Z. A. (2024). Jurisdictional Disputes Between Central and Local Governments in the Management of Coal Mining. *Sriwijaya Law Review*, *8*(2), 269–285. https://doi.org/10.28946/slrev.vol8.iss2.3003.pp269-285

Hidayat, B. A., Supartoyo, Y. H., Setiawan, S., Ragimun, R., & Salim, Z. (2024). Government Infrastructure Investment Stimulation Through Booming Natural Resources: Evidence From a Lower-Middle-Income Country. *Plos One*, *19*(5 May), e0301710. https://doi.org/10.1371/journal.pone.0301710

Holt, A. R., Moug, P., & Lerner, D. N. (2012). The Network Governance of Urban River Corridors. *Ecology and Society*, *17*(4). https://doi.org/10.5751/es-05200-170425

Irwan. (2022). Perizinan Pertambangan Emas Di Kabupaten Pohuwato. *Journal of Lex Theory*, *3*(1), 34–46.

Larson, A. M., & Soto, F. (2008). Decentralization of Natural Resource Governance Regimes. *Annual Review of Environment and Resources*, *33*(1), 213–239. https://doi.org/10.1146/annurev.environ.33.020607.095522

Lèbre, É., Stringer, M., Svobodová, K., Owen, J. R., Kemp, D., Côte, C. M., Arratia-Solar, A., & Valenta, R. (2020). The social and environmental complexities of extracting energy transition metals. *Nature Communications*, *11*(1). https://doi.org/10.1038/s41467-020-18661-9

López-Murcia, J. D. (2021). *An Interactive and Cross-Temporal Framework to Explain Recentralisation*.

35–51. https://doi.org/10.1007/978-3-030-81674-2_3

Lovett, M., & Thomas, L. (2021). A Fork in the Road: Perspectives on Sustainability and Decentralized Governance in Digital Institutions. *First Monday*. https://doi.org/10.5210/fm.v26i11.12357

Luo, Z., Hu, X., Li, M., Yang, J., & Wen, C. (2019). Centralization Or Decentralization Of Environmental Governance-Evidence from China. *Sustainability (Switzerland)*, *11*(24), 6938. https://doi.org/10.3390/SU11246938

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis*. sage.

Orozco, Z. T. (2022). Informal Gold Miners, State Fragmentation, and Resource Governance in Bolivia and Peru. *Latin American Politics and Society*, *64*(2), 45–66. https://doi.org/10.1017/lap.2022.5

Ostrom, E. (2020). Beyond Markets And States: Polycentric Governance Of Complex Economic Systems. *Shaping Entrepreneurship Research: Made, as Well as Found*, *100*(3), 353–392. https://doi.org/10.5040/9781666993905.ch-6

Pandey, B. P., & Mishra, D. P. (2022). Improved Methodology for Monitoring the Impact of Mining Activities on Socio-Economic Conditions of Local Communities. *Journal of Sustainable Mining*, *21*(1), 65–79. https://doi.org/10.46873/2300-3960.1348

Priya, A. (2021). *Case Study Methodology of Qualitative Research : Key Attributes and Navigating the Conundrums in Its Application*. https://doi.org/10.1177/0038022920970318

Putra, I. M. A. W. W., & Wardhani, A. S. (2024). Decentralization Policy Implementation in Malang City ' s Public Service. *J-TRAGOS: Journal of Transformative Governance and Social Justice*, *2*(2), 103–119. https://doi.org/https://doi.org/10.26905/jtragos.v2i2.13387

Rahayu, D. P., Faisal, F., Darwance, D., & Ferdian, K. J. (2023). Environmental And Social Injustice: Impact And Sustainability of Small Scale Tin Mining Under Indonesia's New Mineral And Coal Regulation. *Cepalo*, *7*(2), 119–130. https://doi.org/10.25041/cepalo.v7no2.3137

Ribot, J. (2002). Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation. In *VTechWorks (Virginia Tech)*. Virginia Tech.

Rodríguez, D. C., Balaji, L. N., Chamdimba, E., Kafumba, J., Koon, A. D., Mazalale, J., Mkombe, D., Munywoki, J., Mwase-Vuma, T., Namakula, J., Nambiar, B., Neel, A. H., Nsabagasani, X., Paina, L., Rogers, B., Tsoka, M., Waweru, E., Munthali, A., Ssengooba, F., & Tsofa, B. (2023). Political Economy Analysis of Subnational Health Management in Kenya, Malawi and Uganda. *Health Policy and Planning*, *38*(5), 631–647. https://doi.org/10.1093/heapol/czad021

Salmon, H., & Lekipiouw, S. (2024). Division Construction Government Authority in Law Number 23 of 2014. *Journal of Ecohumanism*, *3*(4), 664–674. https://doi.org/10.62754/joe.v3i4.3516

Seloa, P., & Ngole-Jeme, V. (2022). Community Perceptions on Environmental and Social Impacts of Mining in Limpopo South Africa and the Implications on Corporate Social Responsibility. *Journal of Integrative Environmental Sciences*, *19*(1), 189–207. https://doi.org/10.1080/1943815x.2022.2131827

Shah, M. Q. (2022). The Conundrum of Policy Stability: The Case of Afghanistan's Centralized Planning and Budgeting Policies. *Asian Journal of Peacebuilding*, *10*(1), 159–183.

https://doi.org/10.18588/202204.00a239

Steinberg, P. F. (2015). *Can We Generalize from Case Studies ?* (August). https://doi.org/10.1162/GLEP

Tinambunan, H. S. R., Istislam, Hadiyantina, S., Kusumaningrum, A., & Tajudin, A. A. (2025). Recentralization of Mining Licensing Authority and Its Impact on Local Autonomy in Indonesia. *Jurnal Suara Hukum*, *7*(2), 520–539. https://doi.org/10.26740/jsh.v7n2.p520-539

Verbrugge, B. (2015). Decentralization, Institutional Ambiguity, and Mineral Resource Conflict in Mindanao, Philippines. *World Development*, *67*, 449–460. https://doi.org/10.1016/j.worlddev.2014.11.007

Wiryawan, B. A., & Otchia, C. (2022). The Legacy Of The Reformasi: The Role of Local Government Spending On Industrial Development in A Decentralized Indonesia. *Journal of Economic Structures*, *11*(1). https://doi.org/10.1186/s40008-022-00262-y

Yanto, A., & Hikmah, F. (2023). Aspek Hukum Hak Menguasai Negara DI Bidang Pertambangan Pasca Pembaruan Undang-Undang Mineral Dan Batubara Di Indonesia. *Jurnal Penelitian Hukum De Jure*, *23*(4), 419–432. https://doi.org/10.30641/dejure.2023.v23.419-432

Yin, R. K. (2003). Designing Case Studies. *Qualitative Research Methods*, *5*(14), 359–386.