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Implementation of the Non-Tax State Revenue Policy on the Use of Forest Areas in Controlling Mining Activities in Forest Areas

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Abstract: This study examines the implementation of Non-Tax State Revenue – Forest Area Utilization (PNBP-PKH) as an instrument for controlling mining in forest areas. The background is the high economic contribution—PNBP-PKH reached IDR 2.42 trillion (2021), IDR 2.88 trillion (2022), and IDR 2.55 trillion (2023)—but accompanied by net deforestation of 104,000 ha (2021–2022). A qualitative descriptive method was used through interviews with six key informants from the government and business actors. The results show that impact category-based tariffs (L1–L3) encourage early reclamation, but are hampered by institutional coordination, regional verification capacity, unintegrated cross-ministerial information systems, and suboptimal business actors. Several companies experience administrative delays and spatial data discrepancies. The conclusion is that digital integration, increased regional technical capacity, and simplified procedures are needed to strengthen the dual role of PNBP-PKH as a fiscal and environmental policy.

Keywords: Forest Area Utilization, Non-Tax State Revenue, Mining Policy, Environmental Sustainability, Governance.

INTRODUCTION

Utilizing tropical forest resources and associated ecosystems is vital for Indonesia, a nation with a sizable population that is situated in the world's tropical forest zone. Since the 1960s, commercial forest exploitation has been conducted under regulations pertaining to permits for foreign investment (Law Number 1 of 1967) and domestic investment (Law Number 6 of 1968) (Aronggear & Ungirwalu, 2021). The abundance of natural resources has fueled an increase in mining and other investment activity. Research indicates that 2,078 of Indonesia's 10,991 Mining Business Permits (Izin Usaha Pertambangan, or IUP) are scheduled to be revoked for non-compliance, such as insufficient submission of work plans and budget papers (Lutfulloh & Donri, 2021; Hasti et al., 2023). 1,118 faulty IUPs were revoked in 2022.

The destruction of forest areas by natural resource exploitation, particularly mining activities, indicates that the ecological function and sustainability of forests in Indonesia are in

grave danger. According to data from the Ministry of Environment and Forestry (PPID KLHK, 2024), Indonesia's net deforestation in 2021–2022 reached 104,000 hectares, of which approximately 71.3% was within forest areas. Since the 1960s, commercial forest utilization has been carried out through policies regulating foreign investment permits, such as Law Number 1 of 1967, and domestic investment permits, such as Law Number 6 of 1968 (Aronggear & Ungirwalu, 2021). The wealth of natural resources creates investment business activities, one of which is mining. Research (Lutfulloh & Donri, 2021) explains that there are 10,991 Mining Business Permits (IUP) spread throughout Indonesia. Of these numerous IUPs, some remain problematic and will be revoked. The government announced the revocation of 2,078 IUPs in the mining sector because mining companies failed to submit their Work Plan and Budget (RKAB). These permits were also revoked because they had been granted for years but not used. In 2022, the Investment Coordinating Board (BKPM) revoked 1,118 problematic IUPs (Hasti et al., 2023). This situation indicates that, despite the government's implementation of the Non-Tax State Revenue for Forest Area Use (PNBP-PKH) policy, mining activities in forest areas remain poorly controlled.

Government Regulation No. 36 of 2024 oversees PNBP in the Ministry of Environment and Forestry, including methods for controlling forest use by the mining sector. The sustainability of forest ecological functions is significantly affected by mining activities in forest areas. Previous research shows a debate between two conflicting interests. On the one hand, mining is considered essential to support national development through the provision of natural resources. On the other hand, forest areas, especially protected forests, have important hydrological and ecological roles for environmental sustainability. (Madjid & Putra, 2023). Due to poor implementation at the executive level, the effectiveness of these controls remains questionable.

The government uses the Non-Tax State Revenue from the Use of Forest Areas (PNBP-PKH) policy to control forest area utilization, particularly by the mining sector. Part of the forestry administration regulations, Government Regulation Number 23 of 2021 allows businesses to mine within forest areas through a business licensing mechanism. This regulation also regulates the management and exploitation of natural resources in forest areas, but its implementation continues to create controversy between the interests of economic development and environmental preservation. According to previous research (Robbani et al., 2021; Agussalim et al., 2023), many mining companies have not fully complied with environmental sustainability principles. Furthermore, the government is considered to prioritize fiscal aspects over environmental control efforts. This creates a gap between established policies and their implementation, particularly in terms of oversight, intersectoral coordination, and the performance of implementing agencies. The mining sector is the largest source of state revenue through Non-Tax State Revenue, according to the Planning Sector Statistics Forestry (2023) Non-Tax State Revenue (PNBP) from Forest Area Use (PKH) from mining activities amounted to IDR 2,421,926,406,700 in 2021, IDR 2,886,016,393,673 in 2022, and IDR 2,559,420,105,697 in 2023.

Through the Non-Tax State Revenue from the Use of Forest Areas (PNBP-PKH) scheme, mining within forest areas (KH) significantly increases state revenue. These businesses are permitted to utilize space within forest areas and are subject to PNBP fees as compensation for the utilization of these resources. However, behind the large value of state revenue through Non-Tax State Revenue from the Use of Forest Areas, the deforestation rate in Indonesia is quite large. For information, the area of net deforestation in Indonesia in 2021-2022 was 104 thousand hectares, which came from gross deforestation of 119.4 thousand hectares minus reforestation of 15.4 thousand hectares. Secondary forest reached the highest area at 105.2 thousand hectares, of which 71.3%, or 75,000 hectares, were located within forest areas, and

the remaining 30.2 thousand hectares, or 28.7%, were located outside forest areas (PPID Ministry of Forestry, 2024).

Prior research has noted a number of difficulties in putting rules controlling the use of forest areas for mining operations into practice, such as a lack of effective oversight, overlapping power, and ambiguous control mechanisms. Suhendro et al. (2024) draw attention to more general bureaucratic inefficiencies that make it difficult to enforce policies. According to Robbani et al. (2021), policy approaches frequently give mining priority as an economic commodity while paying little consideration to environmental sustainability and sustainable development. In order to reconcile social, ecological, and economic goals, De Pater et al. (2023) and Fathoni (2023) stress the importance of incorporating spiritual and cultural values into sustainable forest management. Nevertheless, the majority of these studies concentrate on legal and policy issues without evaluating how well the PNBP-PKH policy alters the behavior of corporate actors in the use of forests.

Therefore, with the rise in mining and other non-mining activities, it is crucial to analyze how the PNBP-PKH policy is used to control mining activities in forest areas. This research focuses more on the implementation of the PNBP-PKH policy. The research problem is how the PNBP-PKH Policy is implemented in the context of controlling mining activities in forest areas. This research aims to analyze the implementation of the PNBP-PKH Policy in the context of controlling mining activities in forest areas. By conducting this research, it is hoped to obtain an overview of whether the PNBP-PKH Policy has functioned well as a tool to control the use of forest areas in accordance with Government Regulation Number 36 of 2024?

METHODS

This study examines the benefits of imposing Non-Tax State Revenue (PNBP) on Forest Area Usage Permits (PKH) in order to restrict mining in forest areas and boost state revenue using a qualitative descriptive technique (Ministry of Environment and Forestry, 2022). Research that focuses on identifying and examining specific people or groups who face social or humanitarian issues is known as qualitative research (Saleha Mufida, Timur, & Waluyo, 2023). The qualitative approach is chosen because of its efforts to get a deep, real, and fundamental understanding of the topic being observed or examined (Agustino & Wicaksana, 2020). Six carefully selected informants comprise the research subjects: three business actors with forest area usage permits and three representatives from the Directorate of Forest Area Utilization, including the Director, Head of the Monitoring and Administration Sub-Directorate, and Chair of the PNBP-PKH Administration Working Group. These people were chosen because they were involved in the implementation of PNBP-PKH and were familiar with it (Yin, 2016). Informants who had been selected based on the requirements of this study in order to generate reliable data were the subjects of interviews and observations (Rustanto & Akhmad, 2020).

The Ministry of Environment and Forestry, license offices, and mining sites were visited in order to conduct the research. During permission filings and policy-related conversations, observations were also made. Participatory observation, concentrated observation, selective observation, evaluation of particular documents, and in-depth interviews are some methods for gathering data (Diatmono, Mariam, & Ramli, 2023). Field notes were taken while speaking with ministry staff and business actors. Laws, rules, SOPs, and pertinent internet data sources were all examined in the literature review. The main instrument in this study is the researcher, who collected data directly from participants. No third-party tools or standardized questionnaires were employed, in accordance with the nature of qualitative research. The data was analyzed using NVivo 12 software (QSR International, 2020). Coding was done based on indicators related to PNBP-PKH's significance. Findings from observations, documentation, and interviews were compared using triangulation to ensure data validity (Patton, 2002). Data

reduction, data display, and conclusion drawing or verification are all examples of data analysis that is used (Nefianto, 2023). The findings are presented narratively in order to find trends, interpretations, and causal relationships that may guide further research and policy recommendations. Finally, qualitative approaches may be more appropriate to the nature of the research problem than quantitative methods, which may be less suitable for measuring more substantial and complex aspects of the research (Utami et al., 2024).

The descriptive qualitative methodology, which uses three corporate players and three related government officials as precisely specified informants, is sufficiently explained. Along with the usage of NVivo 12 software and triangulation to assure validity, data gathering methods such as observations, interviews, and document studies are suitably discussed. Standards for qualitative research are met by this. To improve methodological transparency and enable better study replication, the description of the data analysis process might be expanded, especially with relation to the coding phases, theme creation, and interpretation techniques.

RESULTS AND DISCUSSION

Overview of Mining Activities in Forest Areas

Mining activities in forest areas in Indonesia are a national strategic sector that contributes significantly to state revenue (Farhaby & Anwar, 2021, 145). However, this activity also carries risks in the form of ecological damage, deforestation, and environmental degradation if left uncontrolled (Agussalim et al., 2023, 44). Therefore, the government, through the Non-Tax State Revenue for the Use of Forest Areas (PNBP-PKH) policy, requires holders of forest area utilization permits for non-forestry sectors, particularly forest area mining, to pay compensation according to the extent and level of land damage used by business actors. A study conducted by Robbani et al. (2021) shows that, when people agree to the use of forest areas for mining purposes, they often do not comply with the principle of ecological justice, which is mandated by the environmental constitution. Indonesia is one of the countries with the largest forest cover in the world. Based on data from the Ministry of Environment and Forestry (2024), the forested area in Indonesia reached 95.5 million hectares or 51.1% of the total land area, with 87.8 million hectares (91.9%) within official forest areas. In 2024, the net deforestation rate was recorded at 175.4 thousand hectares, obtained from gross deforestation of 216.2 thousand hectares minus reforestation of 40.8 thousand hectares. The majority of deforestation occurred in secondary forests, both inside and outside forest areas. To reduce deforestation, the Ministry of Environment and Forestry rehabilitated 217.9 thousand hectares of forest and non-forest land. This effort supports the Indonesia FOLU Net Sink 2030 program, which targets a balance of carbon emissions and absorption from the forestry sector and other land uses.

Policy Content Analysis

1. Interests influenced by policy

   The PNBP-PKH policy impacts various interests, reflecting shifts between economic, environmental, and natural resource governance interests. The central government has a primary interest in ensuring optimal state revenue from the mining sector, particularly those operating in forest areas, according to six informants. "*Replace the lost value, but continue to encourage legal investment,*" said Doni Sri Putra, Director of Forest Area Utilization at the Ministry of Environment and Forestry. This statement reflects the government's goal of striking a balance between sustainable investment and financial rewards. Conversely, local governments anticipate that this policy will consider environmental protection and sustainable development in their regions. Civil society tends to demand strict oversight of mining that can damage forests and ecosystems, particularly for those living near mine

sites. Meanwhile, mining industry players are more focused on cost-effectiveness and expedited licensing processes, which sometimes conflict with conservation principles. Policy content, or policy content, is a crucial part of public policy implementation, according to Merilee S. Grindle's policy implementation theory. Implementation is the process of implementing a policy to the public to ensure it produces the desired results (Syaukani, 2006, in Meilan, Wicaksana, Hidayat, & Rustanto, 2024).

Interviews and document analysis indicate that policymakers, business actors, and communities are often engaged in conflicting interests. Local governments typically emphasize a balance between revenue and environmental sustainability, while the central government focuses on increasing non-tax state revenues (PNBP) as part of optimizing state revenue. While civil society demands stricter oversight and ecosystem protection, mining businesses focus on reducing costs and expediting permitting. In such situations, negotiations become difficult, and final decisions often depend on lobbying and political support from each party. Transparent cross-stakeholder coordination mechanisms and greater public participation in the decision-making process are needed to ensure that the PNBP-PKH policy achieves its objectives.

2. Types of Benefits Generated

Informants emphasized the expected economic and environmental benefits of PNBP-PKH implementation. From a fiscal perspective, the benefit is increased state revenues more proportional to the forest destruction caused by mining activities. "*It boosts state revenue, funds are used for forest area restoration, and it encourages business compliance,*" said Arif Pratisto, Acting Head of the Sub-Directorate for Monitoring Obligations and Administration of PNBP-PKH. This is seen as a way to internalize the negative impacts of mining on the environment. From an ecological perspective, a mechanism that calculates tariffs based on the area cleared and the level of land degradation is expected to help encourage mining operators to be more cautious when clearing land. However, informants from civil society organizations stated that social benefits such as protecting environmental rights and involving local communities are still lacking in implementation on the ground. According to Agussalim et al. (2023), tariff-based policies that internalize environmental costs can reduce environmental damage. However, there are technical and verification challenges in implementing them.

Economic, environmental, and social benefits are the primary benefits of the PNBP-PKH policy, according to data and interviews. Fiscally, this policy has successfully increased state revenue based on the level of forest utilization. As a result, mining production costs partially include environmental damage. From an ecological perspective, setting tariffs based on the area of land cleared and the level of damage encourages businesses to be more cautious when developing their businesses. However, social benefits such as local community involvement, protection of environmental rights, and improved quality of life have not yet reached their optimal levels. The positive impact of the policy has not been fully felt due to community empowerment programs surrounding the mines. Therefore, the synergy between fiscal aspects and socio-ecological development needs to be strengthened to ensure more comprehensive policy benefits.

3. Degree of desired change

The expected changes from this policy are categorized as moderate to high. Information from the ministry states that this policy represents a step forward in forest area management, which previously did not systematically consider environmental aspects. With stricter tariff regulations, it is hoped that mining operators will adopt more environmentally friendly practices. However, several sources emphasized that these changes have not yet been fully felt, especially in places where monitoring and verification are still limited. Due to the lack of an effective sanctions system, even increasing tariffs is

sometimes insufficient to incentivize businesses. In reality, some businesses fail to adhere to the principles of ecological justice, which should underlie the use of forest areas for mining, as stated by Robbani et al. (2021), who point out that these principles violate the environmental constitution.

The research findings indicate that the desired policy changes range from moderate to high. The PNBP-PKH policy is considered to bring significant changes to forest area governance, particularly by incorporating environmental parameters into tariff calculations. Several respondents stated that the impact of these changes on the ground has not been significant, particularly in areas with limited oversight. Because there are no clear sanctions for violations, many businesses are not motivated to improve. To achieve the desired changes, the policy must be complemented by technology-based monitoring tools, a consistent sanctions system, and measurable indicators of success. This will allow for more comprehensive and sustainable changes in business practices.

4. Position of policy maker

A crucial factor in the policy implementation process is the position of the policymaker within the government structure. A ministry source explained that the Ministry of Environment and Forestry is responsible for formulating PNBP-PKH policies, with support from the Ministry of Finance in setting tariffs and the technical aspects of levies. This provides strong legitimacy, as both ministries have the authority to manage forest areas and state revenues.

5. Program Implementer

Technical verification officers, regional environmental agencies, and teams from the Ministry of Forestry responsible for monitoring and evaluating compliance by mining operators are among the program's field implementers. Data indicates that many implementers at the regional level still face limitations in terms of staff size, technical capabilities, and understanding of the policy's substance. Some do not even understand all the parameters required for calculating tariffs based on environmental damage. Central verification officers, on the other hand, often face logistical challenges and access to remote mining areas. As a result, the verification process is less than ideal, allowing individuals to alter data. This indicates that the implementation structure does not fully support consistent implementation across all areas.

6. Resources generated

According to informants, resources generated by this policy include increased fiscal resources in the form of non-tax state revenue (PNBP) and information resources in the form of spatial and technical data related to mining activities in forest areas. However, several informants indicated that the increase in PNBP has not been accompanied by sufficient funding allocation for environmental rehabilitation. Furthermore, the data collected is often incomplete and cannot be fully utilized in the decision-making process. The mismatch between available human resources and the complexity of the policy is an additional problem. It is hoped that in the near future, institutional capacity will be enhanced to manage these resources more efficiently and accountably thanks to Government Regulation No. 36 of 2024, which establishes the legal basis for managing PNBP tariffs based on extensive openings and damage.

Therefore, when the PNBP-PKH policy is implemented, complex dynamics between various interests, benefits, and implementation structures are evident. While this policy has great potential to create more equitable and environmentally sound governance, efforts to consolidate institutions, increase implementing capacity, and integrate data and resources are still needed to ensure that this policy is not only a fiscal instrument but also capable of improving equity.

Analysis of Implementation Context

1. Power, interests, and strategies of actors

Actors involved in the implementation of the PNBP-PKH policy have different interests and power. Ultimately, the strategies they employ to support and address the implementation of this policy are influenced by these interests. The Ministry of Environment and Forestry (KLHK) is the primary central government agency responsible for establishing technical policies. This is done through derivative regulations, such as Government Regulation No. 36 of 2024. While most consider this policy crucial for increasing state revenue, they also strive to maintain environmental sustainability. Conversely, mining businesses often modify their strategies to improve cost efficiency while complying with minimum administrative requirements. However, as Robbani et al. (2021) demonstrate, this strategy sometimes results in practices that disregard the principle of ecological justice. Meanwhile, local governments are responsible for coordination but are unable to make key decisions because central regulations control them. Environmental organizations and civil society groups often play a role in maintaining accountability through participatory oversight. However, they lack significant influence in structural policy change.

Interviews revealed that interactions between actors do not always align with policy objectives. In some situations, businesses exploit regulatory weaknesses to mitigate their environmental responsibilities, while local officials often focus on revenue targets without considering environmental impacts. Conversely, environmental organizations often face challenges accessing the data and resources necessary for sustained advocacy. Political and economic dynamics also influence the strategies employed by each party. For example, when mining commodity prices rise, campaigns for regulatory relaxation intensify. This situation suggests that stronger public participation mechanisms and more transparent decision-making processes are needed to maintain a balance between economic, social, and ecological interests during the implementation of PNBP-PKH.

2. Characteristics of Institutions and Rulers

The different organizational structures, technical capabilities, and bureaucratic cultures are reflected in the characteristics of the institutions involved in implementing this policy. Although the Ministry of Environment and Forestry (KLHK) has a strong bureaucratic system and the capacity to create extensive technical regulations, it often faces challenges in field supervision, which relies on technical implementation units at the regional level. Forestry and Environment Services at the provincial and district levels face constraints related to the number and competence of staff, as well as limited operational budgets. According to Agussalim et al. (2023), the lack of coordination between agencies often results in unsynchronized spatial data used for verification and monitoring. This lack of synchronization hinders overlapping authority and mining data validation processes. Private sector organizations, including environmental consultants and Forest Area Borrow-to-Use Permit (IPPKH) holders, sometimes ignore the principles of comprehensive ecological evaluation.

The analysis shows that the consistency of implementation in the field is significantly influenced by various characteristics of the implementing agencies. Most local environmental agencies are capable of effectively carrying out their oversight functions due to their adequate technical and financial resources. However, in other locations, the mining data verification process is often delayed due to limited personnel and infrequent technical training. Furthermore, the inconsistency of spatial data and operational reports is caused by differing policy priorities between the central and regional governments. Agency heads focused on economic growth often relax oversight, while regions led by agency heads focused on the environment tend to be proactive in coordination and enforcement.

Leadership is also crucial. This situation suggests that cross-government coordination forums and standardized national procedures are needed to determine policy direction.

3. Compliance and responsiveness

There are differences among actors in terms of compliance and response to policies. Due to their stricter oversight systems, large companies report activities according to procedures and pay PNBP on time. However, administrative and technical violations, such as delayed reporting or manipulation of land clearing data, still occur among small and medium-sized businesses. "*Administrative sanctions such as warnings, license revocations, and fines are sufficient to ensure business compliance*," said Suparno Bayunto, Senior Manager of PT. Borneo Indobara. However, he also suggested that clear regulations are required for addressing overpayments. This is exacerbated by the lack of a sanction system for violations and the limited capacity of verification officers in the field. In some situations, responses to policies are more formal than substantial. Local communities, even those directly impacted by mining activities, do not always have access to adequate grievance mechanisms, so their responses to policy implementation often go unheard. In such situations, reviewing policy feedback channels is crucial to ensure that policies meet not only the needs of the top but also the bottom.

The implementation context is influenced by power relations between actors, institutional capacity, and the level of compliance with regulations, according to Grindle's theory of policy implementation (Syaukani, 2006, in Meilan, Wicaksana, Hidayat, & Rustanto, 2024). These three components interact with each other in practice, forming complex implementation patterns that do not always correlate with the initial policy design. Therefore, a crucial step in comprehensively evaluating the success or failure of public policy is understanding the context by obtaining information from the parties involved.

CONCLUSION

According to this analysis, the PNBP-PKH policy serves as both a tool for controlling mining operations in forested regions and a fiscal tool. This program is anticipated to incentivize companies to adopt more ecologically friendly practices by enacting progressive tariffs that are based on the amount of land cleared and the extent of harm. According to the findings, the state makes a sizable amount of money from this industry, but it is still insufficient to offset the ecological harm that is done. An encouraging step in integrating environmental costs into mining operators' financial burden is the progressive tariff mechanism. However, successful execution on the ground is just as important to the policy's success as the formulation of the regulations. This highlights how crucial interagency cooperation, governance, and integrated monitoring success aspects are.

Despite the fact that the policy was created with a balance between financial interests and environmental sustainability, research shows that there are still major challenges. The primary challenges include inadequate interagency coordination, regional implementers' poor technical proficiency, and the central and regional governments' failure to integrate geographic data and information systems. Remote mining locations, a shortage of experts, and a lack of supporting infrastructure frequently hinder field verification procedures. Additionally, the effectiveness of monitoring is decreased by the frequent delays in reporting and data validation. Due to these factors, violators have not been completely deterred by the introduction of progressive tariffs. As a result, there are still many obstacles in the way of achieving the objective of lowering environmental harm and deforestation.

The Ministry of Environment and Forestry, the Ministry of Finance, the Ministry of Energy and Mineral Resources, local governments, and mining companies are among the entities involved in the PNBP-PKH policy's implementation. Each has distinct roles and interests, which affect how closely the policy is followed. Due to their ability to meet

administrative and technical requirements, large organizations tend to be more compliant. On the other hand, small and medium-sized businesses typically encounter difficulties with resources and regulatory knowledge. As participatory monitors, civil society and environmental organizations are essential, but they still have little impact on changing policy. This discrepancy in adherence indicates that in order to prevent infractions, the policy needs a more comprehensive supervision system that actively involves all stakeholders.

There are a few issues with this study that need to be addressed. First, because the study's scope was limited to a single area, it is unable to accurately depict conditions across Indonesia. Second, because there were comparatively few informants, the range of viewpoints gathered did not accurately represent the complexity of policy implementation in practice. Third, thorough examination was hindered by time constraints and access to technical regulatory materials, especially with regard to the computation of PNBP-PKH tariffs and reporting procedures. Fourth, some field data did not always match the most recent regulations due to dynamic regulatory changes. Lastly, the results of this study were more focused on in-depth comprehension than generalization due to the use of qualitative methodologies; hence, a quantitative investigation is required to more measurably explore the association between PNBP and post-mining environmental conditions.

Concrete actions are required to improve the PNBP-PKH policy's implementation in light of the findings. First, make cross-sectoral governance stronger by establishing frequent forums for cooperation between independent supervisory organizations, local governments, and ministries. Second, give field verification officers continual technical training to enhance their ability to calculate tariffs and assess damage. Third, to guarantee accurate and up-to-date data, digitize the agency-wide integrated reporting and monitoring system. Fourth, match financial rewards to environmental objectives. For instance, offer tariff breaks to businesses who successfully complete restoration or adhere to sustainability guidelines. Fifth, to guarantee corporate compliance, reinforce the legal and administrative sanctions systems.

The long-term effectiveness of the PNBP-PKH program will depend on enhanced governance, incentives, and efficient monitoring. In addition to providing sufficient funding, the central and regional governments must enhance human resource capacity and foster technological synergy. To gauge the effect of the program on lowering deforestation and enhancing environmental quality, future studies should include quantitative and cross-regional comparison techniques. The study might also be extended to look at how the local community views mining in forested regions and how well public involvement works. It is anticipated that the findings of this follow-up study would strengthen the basis for developing evidence-based policies, enabling the balanced and sustainable achievement of environmental and budgetary sustainability objectives.

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