
Small Scale Mining by Local Communities: Measuring Progress Towards a Sustainable Environment

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Abstract

The essence of sustainable development is development based on three proportional considerations, namely economic considerations, social considerations and ecological considerations. This article uses normative legal research with case and conceptual approach to analyse mining policy towards small-scale mining by local communities. This research was conducted in North Sulawesi Province, Indonesia, as the research location based on the reality in this area where there are small-scale mining activities. The results show that the regional policy of North Sulawesi Province through the issuance of Regional Regulation No. 3 of 2019 is only a follow-up to the mining law. Guidance and supervision activities can only be given to community miners who have permits under Regional Regulations. The ideal policy of the local government related to small-scale mining by the people illegally is to view that the pattern of mining activities that have been carried out by the community in small groups, without organization, are speculative and illegal. For this reason, they must be changed and explicitly regulated, following their limited capabilities, both limited expertise and finance. For this, several aspects are needed for local governments in responding to the existence of illegal community miners, namely policy aspects, institutional aspects, capital aspects, technology and environmental management.

Keywords: Local Government; Mining; Environmental Law; Small Scale Mining; Sustainable Development

1. Introduction

Sustainable development is development to meet the needs of the current generation without reducing the ability of future generations to meet their own needs. In this context, there are two important ideas that are promoted in the concept of sustainable development, first is the idea of needs, where the essential needs of the poor must get top priority. Then, the second is the idea of limitations, where there are limitations to technology and the ability of the environment to meet the needs of the present and the future.

The essence of sustainable development is development based on three proportional considerations, namely economic considerations, social considerations and ecological considerations. Therefore, the utilization of the environment must be based on policies and efforts to manage rational natural resources in the sense of rational use of natural resources in the sense of utilizing resources and the environment must be balanced with their conservation potential. To implement the sustainable development, it is required three conditions, namely the sustainability of economic, social, and ecological.¹

The concept of sustainable development needs to be an effort to reunite economics and ecology, where the process of integrating the two sciences through the formulation of paradigms and policy directions that grow in partnership and development actors in order to manage natural resources optimally.² For this reason, there must be coordination from all aspects in the direction of economic development with an environmental perspective.

¹ Emil Salim. 2010. *Sustainable Development (Role and Contribution of Emil Salim)*. Jakarta: Kompas, p 43

² Owusu, O., Bansah, K. J., & Mensah, A. K. (2019). "Small in size, but big in impact": socio-environmental reforms for sustainable artisanal and small-scale mining. *Journal of Sustainable Mining*, 18(1), 38-44.

Mining management in Indonesia cannot be separated from the emergence of realities. Policies in natural resource management are more emphasized and prepared to facilitate economic growth solely so that there is the exploitation of natural resources on a large scale by no longer paying attention to aspects of nature conservation.³ Another reality is the lack of attention to the community in natural resource management policies to reduce the participation of local and indigenous communities in mining management, which has a detrimental impact on the community which distances themselves from the meaning and philosophy of Article 33 of the 1945 Constitution. Law No. 4 of 2009 concerning Mineral and Coal Mining regulates that mineral and/or coal mining is managed based on benefits, justice, and balance, taking sides with the interests of the nation, participatory, transparent, and accountable, sustainable and sustainable environmentally friendly.⁴

As it turns out into practice, however, the reality shows that mining activities, especially in small-scale mining carried out illegally, harm the environment and the community's safety, small-scale mining actors because it is not accompanied by adequate facilities and infrastructure in the implementation of small-scale mining. This gap above raises the idea that small-scale mining activities by local communities need to be supported by policies and policies to create harmonization between the interests of local communities and the interests of sustainable development.⁵ For this reason, the researchers are interested in conducting studies related to state control rights over natural resources and aspects of justice in management. mining in Indonesia to find a policy in the mining sector against small-scale mining by local communities in North Sulawesi Province and find the ideal policy concept for small-scale mining by local communities in North Sulawesi Province, Indonesia.

3. Research methods

This article uses a normative legal research with case and conceptual approach to analyse mining policy towards small-scale mining by local communities. This research was conducted in North Sulawesi Province, Indonesia, as the research location based on the reality in this area where there are small-scale mining activities.

4. Mining policy towards small-scale mining by local communities

The weakness of the legislation is that it treats mining by the people the same as large mining by commercial companies, making it difficult for miners from the local community to fulfill it while people's lives demand income for their survival. On the other hand, local governments do not have enough alternatives for miners to become their livelihood. As a result, illegal mining by the community continues to occur, and the local government is only limited to providing appeals and socialization without any real effort to help miners get out of the problems they will face if they no longer carry out mining activities.

The next problem that can be studied related to the substance of mining law in Indonesia is the inconsistency in using terms and definitions and even creates confusion in meaning, for example, between the term community mining and the term Small-Scale Mining. The term community mining is only known in Indonesia and is not used in the regional or global scope. People's mining activities are expressed as artisanal (panning) and/or Small Scale Mining (SSM) in the international world. The two terms are not at the same level or hierarchy of understanding because artisanal only shows an activity descriptively, namely a panning activity without any other description of the information about who did it. How and where to do it, the procedures and equipment used, especially about the organization and mechanisms governing these activities. Meanwhile, the term SSM has an inherent meaning as a mining activity that fulfills good and correct mining rules and on a limited or small scale, both in the capital owned, the number of workers involved and the number of products produced. SSM activities are regulated clearly and in detail in the laws and regulations of other countries, such as in Zimbabwe, South Africa, Bolivia and the Philippines.⁶⁷ Meanwhile in Indonesia, regulations issued regarding TSK activities do not yet exist, although the term The TSK has been introduced since 1986 but has not been specifically accommodated in various laws and regulations that have been issued to date.

³ Deni Bram 2014 *Environmental Law*, Bekasi: Gramata Publising, p. 15

⁴ Setiawan B.B. Mitchel and Dwita Hadi Rahmi, 2003, *Pengeolaan Sumber Daya dan Lingkungan*, Yogyakarta: Gadjra Mada University.

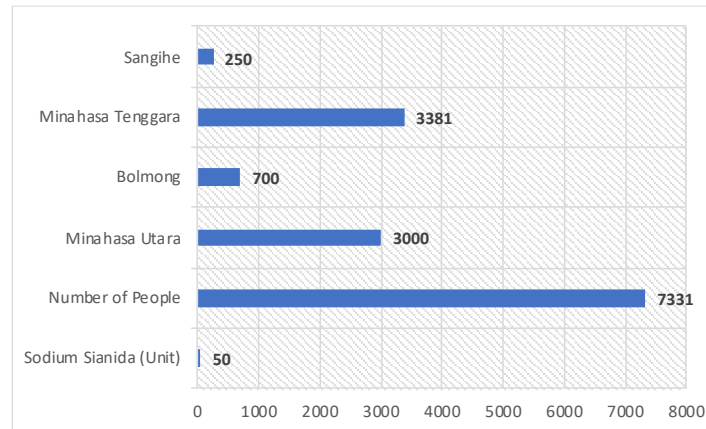
⁵ Ahmad Redi, 2016, Dilema Penegakan Hukum Penambangan Minreraral dan Batu Bara Tanpa Izin Pada Pertambangan Skala Kecil, *Jurnal Rechtsvinding*, Volume 5 Nomor 3.

⁶ Veiga, M. M., Maxson, P. A., & Hylander, L. D. (2006). Origin and consumption of mercury in small-scale gold mining. *Journal of cleaner production*, 14(3-4), 436-447.

⁷ Erna Irawati, Agit Kristiana, and Aldhino Niki Mancerc, Strategi Penataan Kebijakan Nasional, *Jurnal Analisis Kebijakan*, Vol. 1 No. 2 Tahun 2017

Among the wider community, there is often a limited understanding of People's Mining.⁸ People's mining, which is legal and has several rights and obligations in its activities, is often equated with people's mining activities even though it is illegal because the perpetrators, namely the people, only see it. In addition, because of the illegal nature of community activities, people's mining is often equated with community activities, often known as Unlicensed Mining (PETI). However, later, there was a distortion of understanding in the terminology of PETI itself when the term was emphasized more on the illegal aspects regardless of who the perpetrators were, what technology was used and how much capital was invested. So if you use the term Unlicensed Mining, even if it is a commercial company, it is categorized as PETI if it is done without a permit. So, the term PETI is not synonymous with community activities mining without a permit but is used for all mining activities carried out without permission by anyone. So not only by the community but also by business actors.

Graphic 1. Number of Illegal Miners in North Sulawesi Province, 2021



The data obtained from the Department of Energy and Mineral Resources, of the nine companies that carry out mining activities with mining permits, only two companies. Most of these mining activities are carried out without having a production operation mining business permit. These companies do not yet have a Production Operation IUP. However, they have carried out mining activities contrary to the provisions of the applicable laws and can be punished for it.

The study results show that the number of illegal miners in North Sulawesi Province is very high, reaching 7,331 people. Several factors that cause this, according to interviews with officials from the Department of Energy and Mineral Resources of North Sulawesi Province, are:

1. Mine potential locations are in protected forest areas or other protected areas. So it is not possible to open mining;
2. The overlapping of mining sites with other use areas, such as settlements, plantations, agriculture, tourism, protected forests;⁹
3. Overlapping of mining areas for similar minerals;
Economic factors.
4. Actual People's Mining, as stated in Law No. 11 of 1967, is defined as an excavation or mining activity carried out by the community using simple equipment or technology to meet their living needs as emphasized in Article 2 of the law that what is meant by People's Mining is a business of mining minerals from all classes A, B and C which is carried out by local people on a small scale or in cooperation with simple tools for their livelihood. From this definition, it can be said that mining activities that use high technology involving significant capital and for commercial purposes are not included in the limitations of community mining activities.¹⁰

⁸ Hanan Nugroho, 2020. Pandemi Covid-19: Tinjau Ulang Kebijakan Mengenai PETI (Pertambangan Tanpa Izin) di Indonesia, *The Indonesian Journal of Development Planning*, Volume 4 No. 2.

⁹ Cahyani, Silvi Astri, Anang Lastriyanto, Sandra Malin Sutan, and Sumardi Sumardi. "The effects of vacuum cooling to post-pasteurized honey on diastase enzyme activity and physical properties of Riau Forest Honey." *Canrea Journal: Food Technology, Nutritions, and Culinary Journal* (2021): 114-122.

¹⁰ Crispin, G. (2003). Environmental management in small scale mining in PNG. *Journal of Cleaner Production*, 11(2), 175-183.

The description above shows that there is still ambiguity in the definition of community mining. The term community mining in the mining law is only based on the perpetrators, namely the people who are generally local people or local people and on a small scale. Thus, it can be said that people's mining referred to by the law can be equated with small-scale mining, whose concept has been known since 1986. In this context, a legal entity generally carries out the mining business with a specific capital and generally aims commercial.¹¹ However, this law allows people's mining permits to be granted to individuals and not only to a business entity, which will open up opportunities for not achieving a good and correct mining business based on good mining practice. This is because it is more difficult to demand accountability from individuals than companies in obligations, economic obligations (taxes, royalties and so on) and reclamation obligations. Thus, it can be said that this law has not been fully regulated, or its regulation has not been based on the real problems of the mining community even though it has used the terminology of People's Mining Areas (WPR) for its mining areas and used IPR for its permits. If it is based on the limitations or definitions mentioned above, then with its illegal status, all mining activities of the community cannot be categorized as community mining. However, because it is the people who do it, these activities are often in the community or by the government referred to as people's mining activities.

The researcher did not find any substance in the regulation that accommodates the characteristics and interests of local communities in North Sulawesi Province related to mining activities by people who do not have sufficient requirements to obtain mining permits. In contrast, they do not have other livelihood options for their survival.¹²

5. The Ideal Policy Concept for Small-Scale Mining by Local Communities

Small-scale mining carried out by the people without a permit or referred to as illegal mining is a reality that cannot be denied, will cause losses to both the miners, the local government, and the community and the environment if allowed to occur continuously. These illegal miners are part of the community who carry out mining because of their powerlessness and inability to obtain other livelihoods for their lives. The existence of mining activities that they carry out, of course, does not contribute to regional income and even tends to cause damage, but that does not mean that local governments should turn away and not pay attention to their existence. This issue needs to be reviewed from the authority and responsibility of local governments to empower their communities to implement sustainable development.

Responding to these unlicensed people miners solely as perpetrators of illegal activities who must be given legal sanctions is, of course, not the right choice if it is associated with the role of local governments in empowering their people. Therefore, it is necessary to have a political will from the local government to make practical efforts to provide a policy that is beneficial to illegal mining actors that will support the continuity of national and regional development.¹³ In order to change the nature of the community's activities from being harmful towards an economically beneficial and environmentally sound activity, the relevant government needs to organize it systematically, effectively and efficiently in a comprehensive concept. This concept must involve all stakeholders involved in the activities of the mining community, namely local governments, mining communities and local communities. The community's pattern of mining activities in small groups, without organization, is speculative and illegal, must be changed and specifically regulated, under their limited capabilities, both limited expertise and financial.¹⁴ For this, several aspects are needed for local governments to respond to illegal artisanal miners, namely policy aspects, institutional aspects, capital aspects, technology, and environmental management.

Illegal mining actors carry out mining activities without permits because they have limitations, namely capital, technology, and lack of understanding of the environment. Hence, the role of local governments in minimizing these problems is significant to provide benefits to the communities of mining players without these permits. After providing education and training to the community, people who already have the knowledge and skills can be given the right to do business independently. Local governments with mechanisms regulated in regional legal

¹¹ Helmi, Helmi, Fauzi Syam, Nopyandri Nopyandri, and Akbar Kurnia Putra. "Evaluation of the Regulation Changes on Environment and Forestry in Indonesia." *Hasanuddin Law Review* 6, no. 1 (2020): 100-108. DOI: <http://dx.doi.org/10.20956/halrev.v6i1.2290>

¹² Sulista, 2019, *Tambang Inkonvensional : Peran Masyarakat dan Daya Tarik Ekonomi Bagi Penambang, Jurnal Teknologi Mineral dan Batubara*, Volume 15, Nomor 1.

¹³ Mochammad Aziz, 2014. Model Pertambangan Emas Rakyat dan Pengelolaan Lingkungan Tambang di Wilayah Desa Paningkaban, Kecamatan Gumelar, Kabupaten Banyumas, Jawa Tengah, *Jurnal Dinamika Rekayasa*, Vol. 10 No. 1.

¹⁴ Shen, L., & Gunson, A. J. (2006). The role of artisanal and small-scale mining in China's economy. *Journal of Cleaner Production*, 14(3-4), 427-435.

products can help them access financial institutions to obtain capital and assistance. Technology that will support them to conduct mining business that is friendly to the environment.

From all the descriptions above, it can be said that the perpetrators of community mining without a permit are not the people's miners mentioned in the mining law and are not included in the category of small-scale miners but are referred to by researchers as unlicensed people miners. Those who carry out illegal activities cannot be viewed only from a normative point of view but must be viewed from other aspects that require a policy from the local government by placing them in the perspective of community empowerment. The government should be present in their midst not to impose sanctions but to provide empowerment so that their existence can be beneficial for development.

5. Conclusion

The policy of the local government of North Sulawesi Province through the issuance of Regional Regulation No. 3 of 2019 is only a follow-up to the mining law. Guidance and supervision activities can only be given to community miners who have permits under Regional Regulations. The ideal policy of the local government related to small-scale mining by the people illegally is to view that the pattern of mining activities that have been carried out by the community in small groups, without organization, are speculative and illegal. For this reason, they must be changed and explicitly regulated, following their limited capabilities, both limited expertise and finance. For this, several aspects are needed for local governments in responding to the existence of illegal community miners, namely policy aspects, institutional aspects, capital aspects, technology and environmental management.

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