



Corporate Social Responsibility in Mining Activities

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Abstract. This study aims to examine the problem mining sector in Indonesia in relation to CSR. There is a significant problem with the existence of abandoned mining areas in a degraded condition and detrimental to the social environment. This article tries to divide the stages of mining activities, related to CSR programs, especially from the perspective of instrumental vs normative CSR, so that problems can be identified and focus on solving them for better sustainability purposes. This study is a phenomenological case study that adopts theory to see the problem in mining areas in Indonesia. This article provides an understanding of the need for CSR at a stage that is generally neglected, namely post-mining. The emphasis of CSR programs is usually on pre-mining and mining operations, but by identifying mining activities into 3 parts, the problem of CSR negligence can be identified more.

Keywords: Corporate social responsibility · Indonesia · Mining · CSR

1 Introduction

Corporate Social Responsibility is a concept that is widely implemented in many companies globally. The implementation can be different, depending on the type of industry owned, but the core of this concept is about how companies are responsible for their business operations in a social environment. The social referred here is often associated with the stakeholder concept, which is defined as “any group or individual who can affect or is affected by the achievement of the organization’s objectives” [1]. Thus, the concept of CSR is actually not a social activity that is charitable or donation, as is a term that is often used by an institution or group in its activities.

In the mining sector, this CSR emphasizes the responsibility that should be carried out by mining companies to their social environment. Mining companies as a business organization are an integral part of the social, economic, and environmental systems around them. Therefore, they must be responsible for the impact they produce on stakeholders and the communities that sustain their existence [2]. However, there are many problems that occur in Indonesia in connection with mining areas left without reclamation by mining companies that have finished operating. Jaringan Advokasi Tambang (The Mining Advocacy Network) noted that in 2020 there were 3,092 mining pits that

were not reclaimed in Indonesia, including 814 of them in South Kalimantan [3]. Abandoned mining areas that are not reclaimed not only make it difficult for communities around the mines to utilize the mining area's land, but are even dangerous and cause fatalities. It is recorded that from 2011 to 2021, 40 people died due to mining pits in East Kalimantan. This is an environmental problem or ecological crisis that has a social impact on the local community.

For example, there are mining companies that carry out CSR practices starting when they enter the mining area, by approaching the local community, and providing a number of public facilities such as roads, bridges and school facilities [4]. This lasts as long as mining operations are ongoing, but after mining operations are completed, the mining area is often abandoned by companies regardless of the impact of these mining activities on the environment. Many areas around the mine were damaged, such as abandoned former mining pits, which also lost the initial function of the land which was previously productive land, which has become damaged, even dangerous for the local community [5].

The abandonment of the mining area without a reclamation program has resulted in an environmental problem that has an impact on the social life of the local community. The neglect of the mining company's responsibilities in post-mining reclamation is detrimental to the community around the mine. All these holes are an ecological threat and the death of children.

Thus, this article will address the questions: What constitutes mining activities in Indonesia under the Law of Mineral and Coal mining and how these activities can be divided, and how CSR problems are identified based on the stages of mining activities.

2 Research Method

In this research, the type of research used is a qualitative method with a phenomenological approach, which is research based on subjective or phenomenological experiences experienced by individuals. Collecting data in this study using primary sources and secondary sources. The primary sources in this study were taken through interviews conducted with informants consisting of 5 people who understand and have experience in the mining sector. This dissertation research uses data collection techniques through interviews, observation, and document analysis. The documents used are in the form of news and cases regarding CSR in Indonesia, CSR research articles abroad, data issued by statistical bodies and other credible sources will be used in providing additional data. The analysis used for this research is categorical aggregation.

3. INSTRUMENTAL VERSUS NORMATIVE CSR.

McWilliams and Siegel (2001) define CSR as follows:

“Situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law.”

In understanding the concept of CSR, there are two approaches that can be used which were introduced by Spitzbeck (2013) [6]. He divides this approach into two fields, namely the instrumental approach and the normative approach. The instrumental approach suggests that CSR is an instrument to generate profit. That the company has the

primary responsibility to generate profit and is obliged to respond to requests from shareholders. This can be called the business case for management responsibilities. The basic philosophy of this is that (1) The decision taken is correct if profit is generated; (2) Wrong decisions are wasteful and costly; This instrumental approach can be studied from the relationship between the company and its stakeholders [7].

This instrumental research approach is then further divided into three main groups, related to its economic goals [8], namely:

To maximize shareholder value. It is measured by the value of the stock, and often this results in a short-term profit orientation.

Groups that focus on strategic goals to achieve competitive advantage, which results in long-term profits.

The third group relates to marketing. This is very closely related to the two points above.

Another approach to researching CSR is normative CSR, in which experts argue that the pursuit of self-interest is incompatible with truly responsible behaviour. The point is that in the sense of normative CSR, social responsibility is full of social values, this is a differentiator from CSR goals with benefits as stated in instrumental CSR [9]. The basic philosophy of this approach is that companies have a responsibility to provide meaning to human life and to care about the quality of human life [6, 8]. This implies that companies need to legitimize their actions in the interests of wider stakeholders. The essence of this normative CSR is how to balance the consideration of all stakeholders, which is based on moral considerations for all stakeholders.

One of the stakeholders that deserves attention and is important in the mining sector in Indonesia is the community around the mine. [9] Veiga et al. (2001) describe a mining community as a community whose population is strongly influenced by nearby mining operations. Communities can be linked to mining businesses through direct employment or through environmental, social, economic or other impacts. The size of the community can vary from city to village. He stated in these words:

“Mining communities...where the population is significantly affected by a nearby mining operation. The community may be associated with the mining venture through direct employment or through environmental, social, economic or other impacts. The community can range in size from a city to a village...” [9].

The Mining, Minerals and Sustainable Development Project (MMSD, 2002:200) ‘Breaking New Ground’ describes three different types of mining communities – namely: occupation communities, residential communities and indigenous peoples, as described below:

Occupational communities are households or families that derive all or most of their income from mining.

Residential communities are those who live within the geographical area affected by mining and may have existed prior to mining or have developed as a result of mining operations.

Indigenous communities are described as: “households or families with ancient and cultural attachments to the land where mining occurs or has an impact”.

In the area around the mine, there are communities around the mine who usually live in the area. They are a community that is generally still isolated. For example, in

Eastern Indonesia, there are many Nickel mines which are generally surrounded by local communities in remote conditions, with accessibility, infrastructure, economics, social standards, and relatively low levels of education. While some mining companies operate in mining areas, they have direct contact with indigenous peoples, but in general they deal with residential communities.

3 Three Stages of Mine Activities

Law of the Republic of Indonesia Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining Article 1 paragraph (1) contains the definition of Mining, which states that “Mining is part or all of the stages of activities within the framework, management and mineral or coal exploitation which includes general investigation, exploration, feasibility study, construction, mining, processing and/or refining or development and/or utilization, transportation and sale, as well as post-mining activities”.

The definition of Mining above, it is stated that at least 8 (eight) mining activities from start to finish, namely from general investigations to post-mining activities. Of these eight activities, mining can be grouped into 3 (three) major groups to identify CSR programs carried out by companies, namely:

The first stage, namely the initial stage or before mining operations are carried out, namely when mining companies begin to enter an area, where the infrastructure for mining operations does not yet exist, and mining areas are generally located in quite remote areas. This includes investigation activities to determine regional geological conditions and indications of mineralization, general geology, indication data, potential resources and/or Mineral and/or Coal reserves. Exploration is a stage of mining business activities to obtain detailed and accurate information about the location, shape, dimensions, distribution, quality and measurable resources of excavated materials, as well as information on the social and environmental environment. (3) Feasibility Study, namely to obtain detailed information on all related aspects to determine the economic and technical feasibility of Mining Business, this includes analysis of environmental impacts as well as planning to post-mining. At this stage, socialization and the company’s approach to the community is needed and profits have not yet been generated by the company.

The second stage, namely the operation stage. This stage includes (1) construction to carry out the construction of all facilities required for production operations; (2) mining, namely to produce Minerals and/or coal; (3) processing, purification, development, and/or utilization focused on improving the quality of mineral mining commodities; (4) transportation, to move mining materials from the mining site to the designated area and (5) sales activities of the mining materials. At this stage of mining operations, waste may be generated, and this can have a negative impact on the social environment. However, generally companies continue to exercise control over their business, and this is overseen by the government. In addition, the approach continues, because the community may be disturbed by the company’s operating activities, such as dust, noise, polluted fields and their land, the construction of infrastructure for mining operations is carried out, the transfer of heavy equipment, to the mining activity itself, and delivery of mining products to barges, so it may be necessary to provide compensation to affected communities.

The third stage, namely the final stage or post-mining stage, where mining operations have been stopped and the company leaves the mining location. It is at this stage that reclamation or restoration of areas that have been mined needs to be carried out, namely to organize, restore, and improve the quality of the environment and ecosystem so that they can function again according to their designation. At this stage the company needs to restore the functions of the natural environment and social functions according to local conditions throughout the mining area.

This separation of mining activity stages is necessary to see the relationship with CSR, where corporate responsibility exists at all stages. In the first stage, although the impact of operations does not exist or is not large, as in nickel mining, this CSR program is carried out and used by the company as an approach to society. This is done by providing the local community with the provision of facilities, construction of schools, public facilities, which actually aims to obtain a social license to operate.

In the second stage, when the company starts mining and producing, the impact on operations is generally very large. The impact of this operation can be in the form of pollution or waste disposal that can pollute the environment and harm the lives of local people. At this stage, accompanied by oversight by the government, mining companies pay attention to the impact of their operations. And the company also continues to need a social contract to operate from the community, so that mining operations run smoothly.

In the third stage, when the company finished operating, and the company left the mining area, at that time, the condition of the mining area was no longer as before because it had been exploited. In this third stage, the company needs to carry out its responsibility to reclaim and restore the mining area, so that it does not damage the ecology and is not harmful to the community. This stage is a part that needs to be considered, because this is part of the company's social responsibility for the local community, although the approach to the community that was carried out in the previous stages for a social license to operate is no longer needed.

In terms of regulations in Indonesia, the problematic on corporate responsibility continues to improve. Previously, this regulation regarding post-mining was carried out by means of mining companies submitting deposits to the government, but the large number of abandoned post-mining areas shows the inefficiency of this arrangement. The improvement of this rule can be seen in the issuance of Law Number 3 of 2020 Article 161B which regulates the existence of criminal sanctions for avoiding reclamation and post-mining activities for holders of Mining Business Permits and Special Mining Business Permits. The article reads:

Any person whose IUP or IUPK is revoked or expires and does not carry out:
Reclamation and/or Post-mining; and/or.

Placement of the Reclamation guarantee fund and/or post-mining guarantee fund, shall be punished with a maximum imprisonment of 5 (five) years and a maximum fine of Rp. 100,000,000,000, - (one hundred billion rupiah).

The new regulation above is a response to the many problems that occur in the post-mining phase. The regulation stipulates the need to place post-mining guarantees, as regulated in the Regulation of the Minister of Energy and Mineral Resources of the Republic of Indonesia Number 26 of 2018 concerning the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining, Article 22 paragraph (1b)

and Article 22 paragraph (2a) above. However, the Ministry of Energy and Mineral Resources (ESDM) noted that there were 3,121 mining companies that had not placed post-mining guarantees, out of a total of 4,524 companies in July 2019 [10], but after the issuance of Law Number 3 of 2020 regarding amendments to Law Number 4 of 2009, this figure has increased to close to 100%.

References

1. Clarke, E.M., Emerson, E.A.: Design and synthesis of synchronization skeletons using branching time temporal logic, in: D. Kozen (Eds.). Workshop on Logics of Programs, Lecture Notes in Computer Science. 131, 52–71 (1981).
2. Queille, J.P., Sifakis, J.: Specification and verification of concurrent systems in CESAR, in: M. Dezani-Ciancaglini and U. Montanari (Eds.). Proceedings of the 5th International Symposium on Programming, Lecture Notes in Computer Science, Springer, Berlin, Heidelberg. 137, 337–351 (1982).
3. Baier, C., Katoen, J-P: Principles of Model Checking. MIT Press. (2008).
4. Kwiatkowska, M., Norman, G., Parker, D.: Stochastic model checking. M. Bernardo, J. Hillston (Eds.). Proceedings of the Formal Methods for the Design of Computer, Communication and Software Systems: Performance Evaluation (SFM), Springer, Berlin, Heidelberg. 220–270, (2007)
5. Forejt, V., Kwiatkowska, M., Norman, G., Parker, D.: Automated verification techniques for probabilistic systems, in: M. Bernardo, V. Issarny (Eds.). Proceedings of the Formal Methods for Eternal Networked Software Systems (SFM). Springer, Berlin, Heidelberg. 53–113, (2011).
6. Penna, G.D., Intrigila, B., Melatti, I., Tronci, E., Zilli, M.V.: Bounded probabilistic model checking with the muralpha verifier, in: A.J. Hu, A.K. Martin (Eds.). Proceedings of the Formal Methods in Computer-Aided Design, Springer, Berlin, Heidelberg. 214–229, (2004).
7. Clarke, E., Grumberg, O., Jha, et al, S.: Counterexample-guided abstraction refinement, in: E.A. Emerson, A.P. Sistla (Eds.). Computer Aided Verification, Springer, Berlin, Heidelberg. 154–169, (2000).
8. Barringer, H., Kuiper, R., Pnueli, A.: Now you may compose temporal logic specifications. in: Proceedings of the Sixteenth Annual ACM Symposium on the Theory of Computing (STOC), ACM. 51–63, (1984).
9. Pnueli, A.: In transition from global to modular temporal reasoning about programs. in: K.R. Apt (Ed.), Logics and Models of Concurrent Systems, Springer, Berlin, Heidelberg. 123–144, (1984)
10. Meyer, B.: Applying “Design by Contract”. Computer. 25(10), 40–51 (1992).
11. Bensalem, S., Bogza, M., Legay, A. Nguyen, T.H., Sifakis, J., Yan, R.: Incremental component-based construction and verification using invariants, in: Proceedings of the Conference on Formal Methods in Computer Aided Design (FMCAD). IEEE Press, Piscataway, NJ. 257–256, (2010).
12. Barringer, H., Pasareanu, C.S., Giannakopoulou, D.: Proof rules for automated compositional verification through learning. in Proc. of the 2nd International Workshop on Specification and Verification of Component Based Systems. (2003).
13. Bobaru, M.G., Pasareanu, C.S., Giannakopoulou, D.: Automated assume-guarantee reasoning by abstraction refinement, in: A. Gupta, S. Malik (Eds.). Proceedings of the Computer Aided Verification, Springer, Berlin, Heidelberg. 135–148, (2008).

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