



Coal Mining and MSME: Is it Mutually Beneficial?

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ABSTRACT

The existence of a coal mining company in the vicinity of the community is something to be feared related to environmental damage due to coal mining. On the other hand, coal mining can have a positive impact on the economy of communities around the mine through corporate social responsibility programs. The problem in this research is that MSMEs need help to improve their performance. Therefore, this research aims to examine how the role of mining companies through corporate social responsibility (CSR) programs can contribute to the development of MSMEs in communities around mining areas. The company provides promotional assistance, funding, and capacity building. This research conducted surveys and interviews with respondents, namely MSMEs, around mining locations. The findings show that corporate social responsibility programs in coal mining companies have a positive impact on empowering MSMEs in communities around the mine. By providing training and promotion facilities to MSMEs, mining companies can also improve MSME performance compared to providing access to financial assistance programs. The company not only takes advantage of mining and focuses on its environmental impact but also the company's role in empowering MSMEs.

INTRODUCTION

The existence of coal mining companies around the community is something to be afraid of related to the environmental damage due to coal mining. According to (Coelho et al. 2022), the community around the mining site is dissatisfied with the impacts caused by mining companies. The community around the location also considers the landscape's influences to be severe, aside from the effect on air, water, and health, while the community feels the economic and social benefits at a lower intensity level. On the other side, coal mining impacts regions like no other industry. Revenues generated by that industry are substantial and contribute to local economic development. Coal mining also offers numerous high-paying jobs in regional areas where other employment options are often scarce. Unfortunately, the coal mining benefits are primarily limited in time, highly dependent on foreign demand for coal, and may not systematically result in sustained regional development in the long run (De Valck et al. 2021). In addition to impacting the environment, coal mining can impact the community, including conflicts in the community, declining quality of public health, changes in community life patterns, and social structures that tend to change. However, coal mining is expected to impact the community's economy around the mine positively. For this reason, coal mining companies

must contribute to the community through a corporate social responsibility (CSR) program to improve the surrounding community's living standards and alleviate poverty.

Moreover, the mining sector, especially coal mining, significantly increases Indonesia's exports. It was proven in 2019 that coal production had the highest contribution compared to other mining products. Statistical data on non-oil and gas mining published by BPS also reported that coal production is still the prima donna, where the total production reached 565,640,928 tons in 2020, and this value was the highest among the production of other mineral mining goods.

CSR investments have been proven to contribute to the company's capacity to influence governmental actors and, therefore, for its expansion projects to go through (Carmona & Jaramillo 2020). Besides, many mining companies stated they have carried out their CSR activities aimed at sustainable and community development with various approaches. Mining companies have also highlighted the financial investments and their contributions to local community development focused on sustainable development (Wilson 2022). Furthermore, to improve the economy, the government's main priority is fostering and empowering MSMEs. This MSME coaching program is not only carried out by the government but the involvement of companies or the private sector is expected to contribute to developing

MSMEs. It is done by a company in its social responsibility to the community, especially around the mining company.

One of the company's community empowerment programs is assisting in creating creative and innovative businesses through MSMEs. Micro, small, and medium enterprises, commonly referred to as MSMEs, are businesses with a considerable role in the Indonesian economy. When viewed from a national scale, MSME economic activities significantly contribute to Indonesia's total Gross Domestic Product (GDP). MSMEs also have a massive role in the economy since they can be a driving force for economic revival, as evidenced by the many challenges faced in the globalization and free trade eras and the downturn during the COVID-19 pandemic.

Specifically, according to (ELTI 2013), East Kalimantan has 17 PKP2B (Coal Mining Concession Work Agreements) companies with a total production in 2020 of 114,293,563.23 tons. In this case, Paser Regency is one of the regencies in East Kalimantan province with immense potential for mining resources. As reported (Paser 2017), 275 companies in mining, plantation, forestry, banking, telecommunications, hotels, and restaurants exist in Paser Regency.

Mining activities pose serious risks to the communities involved and the environment as a whole (Quarm et al. 2022). Mining has a negative impact on surrounding agriculture (Dibattista et al. 2023). An important factor in determining the Company's actions in determining compensation by providing incentives to stakeholders (Bhaskar et al. 2023). Only a few people say that the social impacts that occur due to mining require the implementation of a community participation process. CSR can identify and understand how to strengthen quality partnerships in its performance (Neto & Mallett 2023). Companies that implement and follow CSR strategies will gain many benefits, not only economic benefits but also social benefits (Diaye et al. 2023). The company carries out its business activities around where people live. They not only get economic benefits but also provide benefits to the surrounding community. The company fosters and develops MSMEs as a form of corporate social responsibility in contributing to developing MSMEs. MSMEs that are located around mining sites far from the city center. This results in MSMEs being less capable of increasing their sales. MSMEs need companies to be able to provide assistance to improve their performance. Therefore, this research examines whether mining companies help MSMEs to improve performance. MSMEs need assistance that suits their needs.

Corporate Social Responsibility in Mining Companies

Majer (2013) explained that mining activities significantly disrupt the lives of local communities and cause mining

damage. Hence, it is worth analyzing the mining company's approach to maintaining positive relationships with local communities and governments by CSR principles, considering the applicable laws or codes of conduct developed in this area and the potential differences.

The way to do in conducting modern mining operations for the impact that occurs on all aspects of the environment and society. This can be done by planning projects carefully, implementing control measures, exercising control over the impacts of mining and rehabilitating post-mining land, as well as the coal industry and the impact of these activities on the surrounding community, the surrounding environment, and land sustainability capabilities (Dontala et al. 2015). It is more interesting to note that the effectiveness of Corporate Social Responsibility activities can be influenced by the dynamics of social, cultural, and power structures in the communities around mining (Wilson 2022).

In Indonesia, programs as a form of corporate social responsibility are very much spread in various regions. In the scope of corporate social responsibility, the programs cover the fields of economy, education, health, socio-culture, and infrastructure (Nirmaya et al. 2014). Not only large-scale companies but several small companies take part in providing social responsibility to the community.

Moreover, corporate social responsibility is a well-known concept widely used in implementing large and small mining companies. The vital role of CSR in mining companies is to ensure that businesses are responsible for reducing and lowering potential risks arising from work safety problems and possible negative environmental impacts, as well as to make employees better and gain acceptance from the local community. However, the CSR activities' scope and function depend not on the company's profile and size but on the area where they carry out mining operations, so CSR functions are sometimes less than optimal in developing countries (Wirth et al. 2016). Several mining companies have also implemented policies to provide social responsibility to communities around mining sites. Not only that, but they have also carried out activities and programs to empower the community to be economically and financially independent.

MSMEs (Micro, Small and Medium Enterprises)

MSMEs are community businesses that can provide socio-economic welfare. MSMEs, which can be said to be micro, small, and medium enterprises, are the spearheads of the community's economy. Of all businesses, 99% of them can provide 60% employment. They also contribute to a country's sustainable and inclusive economic growth. In addition, people who are transforming globalization and digitalization can be supported by the existence of MSMEs.

(Noviarto & Samputra 2021). MSMEs in developing countries still face several obstacles in increasing sales and technological delays (Mantri & Mishra 2023).

In this case, micro-enterprises are productive businesses owned by one or more persons or individual business entities that meet the criteria for micro-enterprises (PP Republik Indonesia 2021). The criteria for MSMEs included in micro-enterprises are that they have a business capital of up to a maximum of IDR 1 billion and do not include land and buildings for the place of business. Then, small businesses have a business capital of more than IDR 1 to IDR 5 billion, excluding land and buildings for business. In comparison, medium enterprises have a business capital of IDR 5 to IDR 10 billion, excluding land and buildings for business premises. Besides, following the definition of MSMEs according to government regulation, MSMEs are classified from business capital and sales results in one year. Small businesses that adopt and use business management to increase revenue will maximize the resources they have (Lemańska-Majdzik & Okręglińska 2015).

Furthermore, creative human resources are an effort to increase a person's or organization's value, especially MSMEs. They are essential to a country's economy, especially in Indonesia. In realizing this, the creativity of human resources requires support in the form of protection that ensures that intellectual works are safe from misuse and counterfeiting (Nurani, Fahmi, and Fauzi 2021). In addition, MSMEs have a very strategic role in the economic development of a country. Their role is vital to distributing a country's production and playing a role in economic growth and employment. Therefore, if there is a financial crisis, it does not affect MSMEs (Gunawan et al. 2019).

MATERIALS AND METHODS

This research was conducted in Paser Regency, East Kalimantan. The Paser Regency area consists of 10 sub-districts, 5 sub-districts, and 139 villages. Paser Regency is one of the regencies with several companies and foreign investments. Paser Regency also has 275 companies in mining, plantation, forestry, banking, telecommunications, hotels, and restaurants (Humas 2017). In addition, one of the PKP2B mining companies is located in Paser Regency. However, not all companies had CSR programs; only a few companies, especially coal mining companies, had a corporate social responsibility (CSR) program.

MSMEs assisted by coal mining companies through CSR amounted to 986 fostered MSMEs around the mining sites of Paser Regency. The sample used in this research used a probability sampling method with a proportional sampling technique. The formula calculation uses Slovin, with the

population used being MSMEs assisted by coal mining companies. So, the sample uses the following formula:

$$n = \frac{N}{1 + Ne^2}$$

Information:

N = sample size

N = known population size

e = percent allowance for inaccuracy due to sampling error, the desired precision is 10%.

The Slovin formula calculates samples with an error rate of 10% so that minimal sample data is obtained. To facilitate calculations, 100 samples were taken. Next, data collection uses a questionnaire containing questions for the coached MSME actors. This research conducted tests with STATA 14 by analyzing the influence of the variables Promotion and Marketing Assistance (X1), Capital Assistance (X2), and Training Assistance (X3) on the performance of MSMEs (Y).

Questionnaires given to respondents were then measured using the Likert scale measurement method. The Likert scale was utilized to measure the role of CSR in the fostered MSMEs (Sugiyono 2009). The Likert scale is a scale or measurement used to measure the attitudes, opinions, or perceptions of a person or group of people regarding an event and social phenomenon based on the operational definition that the researcher has determined. Therefore, to facilitate data collection in the field, this research uses a Likert scale.

RESULTS

The increasingly stringent development of the business world requires strategies to face competition. MSMEs and industries need strategy and technology to run their business (Gani et al. 2022). Small businesses never get support from other actors to develop innovation activities (Larios-Francia & Ferasso 2023). There are many things companies can do to help communities around mines. The relationship between CSR and MSME performance is not directly related but rather through an environmentally friendly innovation process, thus providing support for the moderated mediation model (Achi et al. 2022). Business actors to improve their performance requires budgeting and also need training assistance (Ragoobur et al. 2023). CSR can identify and understand how to strengthen quality partnerships in its performance (Erdiaw-Kwasie et al. 2023).

The main focus of mining corporate social responsibility is on leading international actors, with particular attention paid to the situation in developing countries (Majer 2013). Partnerships are carried out through corporate social responsibility (CSR)-based programs regulated by applicable

government regulations. Companies gain profits by still paying attention to the surrounding environment. Companies are obliged to address environmental impacts and improve community welfare. Hence, companies should run CSR programs to reduce and lower their impacts and make MSMEs around companies independent and professional (Ghassani 2015).

Sustainable MSMEs need support and socially responsible activities as a unit. As such, a partner provides a conducive opportunity for MSMEs to adopt collective social responsibility, which will serve the needs of various stakeholders, such as workers, communities, and the environment (Tewari & Pathak 2015).

Data in Table 1 show that gender for men with an undergraduate education is only 1% and 4% for women with an undergraduate education. This shows that for women with a bachelor's degree, it is preferable to be self-employed and become MSME actors. This can also illustrate that the absorption of male workers in mining companies requires more male workers than female workers for Bachelor graduates. Most MSME actors have a high school education, namely 50% of men and 34% of women. Whereas for MSME actors who have elementary school equivalent education, there are still 6 men.

The low level of education does not prevent MSME actors from continuing to develop their businesses in order to

improve the welfare of their families. We can also assume that becoming an MSME actor does not require higher education. It indicates that even though they had higher education in college, MSME actors still wanted to become entrepreneurs. Related to that, the theory of limited rationality explains that rationality is limited when individuals, namely MSMEs, decide by considering the decision problem, limitations regarding cognitive thinking, and the time available to make a decision (Noviarto & Samputra 2021). Women entrepreneurs can develop their companies in an integrative and sustainable manner (Hendratmi et al. 2022).

MSMEs that receive guidance from coal mining companies have various fields, namely workshops, culinary, fishery, plantation, and agriculture. Table 2 shows that most of the MSMEs in Legai Village have businesses in the Plantation sector, 41%. This is because most Legai villages have large areas of oil palm land, which are used by the local community to own oil palm businesses. As for Culinary, it has 33% of the total MSMEs, and most of them occupy Batukajang village. Batukajang is an area with a large population. It can be said that the need for food will also be high. This is what attracts business actors to be able to develop MSMEs in the culinary field in Batukajang village. The data also shows that for the agriculture sector, it is only 4%, considering that the land in the area is peat land, which is not suitable for agriculture. Still, there are

Table 1: Education level and gender of fostered MSME actors.

Gender	Education					Amount
	College S-1	College D-3	Senior High School	Junior High School	Elementary Level	
Man	1	1	50	3	6	61
Woman	4	1	34	0	0	39
Amount	5	2	84	3	6	100

Source: obtained from primary data

Table 2: Business fields and villages of MSME.

Village	Business Fields					Amount
	Workshop	Culinary	Fishery	Plantation	Agriculture	
Batu Kajang	4	33	0	0	0	37
Biu	0	0	0	0	2	2
Kuaro	0	0	5	0	0	5
Legai	1	0	0	41	0	42
Pndong	0	0	10	0	0	10
Samuranggau	0	2	0	0	0	2
Songka	0	0	0	0	1	1
Sungai Terik	0	0	0	0	1	1
Amount	5	35	15	41	4	100

Source: obtained from primary data

Table 3: Internet use of fostered MSME actors.

Use the Internet	Production needs	Promotion	Not Use	Amount
No	0	0	41	41
Yes	25	34	0	59
Amount	25	34	41	100

Source: obtained from primary data

several methods of managing agriculture that are suitable for this area.

Along with the times, the increasing sophistication of human needs for technology. Humans need technological sophistication in order to carry out their activities, both production activities and consumption activities. MSMEs in carrying out their buying and selling activities, also require technology, namely the use of the Internet. Internet use in SMEs: 59% use the Internet, and 41% do not use the Internet. Of business actors who use the Internet, 25% use the Internet for production purposes and 34% for promotion purposes. Business actors can carry out production with the help of sophisticated technology and the Internet, such as buying raw materials, training, and production information. Not only in the production process but in promoting their products, business actors also use the Internet. By way of promotion, it can increase product sales. MSME actors also use social media to run their business interactions, including WhatsApp, Instagram, and Facebook and employ the marketplace to sell their products.

Moreover, the digital literacy capabilities of the fostered MSMEs are the capital of MSME actors to develop businesses to increase productivity in the current digitalization era. This digital literacy development of a collective awareness of the need to build literacy in the context of the information society. In addition, its international recognition has implied an effort in recent years from organizations, institutions, and governments to that this change into practice (Tejedor et al. 2020).

The use of the Internet for the community needs to be carried out with literacy that can provide learning to MSMEs.

Table 5: Coefficients.

Y	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
xPP	0.343846	0.130724	2.63	0.010	0.084361	0.603332
xPM	-0.074498	0.129392	-0.58	0.566	-0.331338	0.182343
xCB	0.241857	0.099075	2.44	0.016	0.045196	0.438519
_cons	1.896540	0.629581	3.01	0.003	0.646832	3.146247

Source: Stata 14.0 (2023)

Table 4: Internet use of fostered MSME actors.

Business License	Percent.
NIB	40
SIUP	15
SIUDes	45
Total	100

Source: obtained from primary data

This is done to increase the ability of business actors to advance technology. Much can be done if the digital literacy skills of business actors increase, for example, by providing knowledge about product information, production processes, financial literacy, innovation, promotion, and interaction with consumers.

Digital literacy is measured by two indicators, namely digital diffusion and digital literacy. Digital diffusion indicators are presented by device ownership to take advantage of the emergence of digital technology (Mulyaningsih et al. 2020). This also happens to MSME actors who take action to increase their sales. The way for MSMEs to increase sales is to carry out sales promotions using digital devices. The most that is done is by utilizing the social media they have. MSME actors who often take advantage of social media are businesses in the culinary or food sector. Business actors or MSMEs hope that when carrying out promotions, there will also be an increase in income.

Each business sector also had a community that became its organization to strengthen its business capabilities. In addition, business permits had been obtained by 40% of MSMEs with already having a Business Identification Number (NIB). Some of them also had village business permits and special permits from agencies. Most of them, 45%, also obtained a trading business license issued by the local government. And the rest obtained a business license from the village government. Business actors need to look for business opportunities amidst the instability of the current business environment (Choi et al. 2022). As an MSME partner, the company will help provide branding and business permits. A business needs branding as an important element in company storytelling (Olivares-Delgado et al. 2016).

Coefficients

Table 5 shows that after testing to determine the effect how are the programs implemented by coal companies on community welfare by developing SMEs, the result is that training assistance or human resource development significantly improves the performance of SMEs. This means that if the company implements social responsibility programs properly by providing capacity building to the assisted MSMEs, it will improve the performance of MSMEs.

Nonetheless, access to financing or capital programs provided to assisted MSMEs does not have an impact on MSME performance. This is because most MSMEs do not fully know how to access financing provided by companies. This lack of understanding is what causes MSME actors to not use the facilities of the company in accessing financing. MSMEs' inability to access funding is hindered by institutional, structural, and non-financial factors (Cruz & Ashley 2023).

MSME players will take action to increase their sales. MSMEs need the role of other parties to increase sales by carrying out sales promotions (Boberg et al. 2023). For testing, the variables of promotion and marketing assistance have a significant relationship to MSME performance and positively influence MSME performance. In other words, if promotion and marketing increase, the performance of MSMEs will increase. This is per the Mining Company Program, which provides a place for MSMEs to carry out promotions and marketing. The company does help carry out promotions and marketing not only offline but also online.

Mining companies provide training programs, financing access assistance programs, as well as promotion and marketing assistance programs to MSMEs. Corporate social responsibility programs affect the performance of MSMEs and, of course, can affect the welfare of the community around mining locations.

DISCUSSION

The role of mining companies in community empowerment, especially for MSMEs, has a significant impact in the long term. In this study, mining companies in Paser Regency implemented CSR programs for MSMEs around the mining area by conducting training programs, assistance programs for access to financing and capital, and promotion and marketing assistance. The analysis results on the assisted MSMEs were more effective in training assistance programs, improving human resource capabilities. In addition, the training assistance program had a positive effect. Therefore, if the company's CSR increases the training program and

promotion facilities, it will enhance the performance of the assisted MSMEs. The role of companies is through Community Empowerment by utilizing resources to increase MSME innovation (Sahi et al. 2023).

Moreover, business development programs may actively consider choosing partnerships for business development. Here, there is a lack of appropriate commercial service providers to develop businesses and provide optimal services to meet the needs of a more significant segment of entrepreneurs in those operating in the micro-enterprise sector and semi-urban and rural areas (Huq & Moyeen 2011).

Specifically, as MSME actors, they must be 'authorized,' while employees must also be 'authorized.' Thus, someone with authority usually uses his authority from internal leadership traits and not only by his power title. In comparison, authority is power with a title given to someone in an organization. It helps develop self-discipline among employees; thus, although leadership is centralized, the balance of power is also decentralized (Khanzode et al. 2021).

Furthermore, the business has changed substantially recently, from being conceived as a field of ruthless people motivated solely by profit to being perceived as an institution with a serious moral responsibility to society. Traditional businesses, whose mission is the profit of their owners, are always in conflict with the remaining elements in the system, i.e., employees, society, environment, and others (Sanchez-Infante et al. 2020). Thus, companies must adapt and focus on social responsibility activities as a cost of running a business. Many countries have also faced challenging economic development, education, health care, and basic infrastructure (Cesar 2021).

CONCLUSION

Although mining companies are said to be damaging the environment, from an economic point of view, mining can have a positive impact on society. Mining companies have tried to provide social responsibility both to the environment and the community, especially around mining areas. Then one of the programs carried out by the company is to empower the community. The company's CSR roles include providing training programs, capital assistance programs, and promotion and marketing programs. The three CSR programs carried out by mining companies have a positive effect on the performance of MSMEs. For this reason, mining companies provide social responsibility to the community through programs to improve community welfare. Support from the government is needed to collaborate with companies to continue to empower communities around coal mines.

RECOMMENDATION

Mining companies have substantial social impacts, and a vital policy solution is to empower local communities. This involves prioritizing the well-being of residents, reducing poverty, and promoting economic independence through targeted community capacity building.

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