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# Gold Mining Impacts and Corporate Social Responsibility: Corporate, Community and Government Reflection

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## Abstract

The implementation of Corporate Social Responsibility (CSR) programmes in Indonesia still largely involves charity to the community or efforts to earn a good name in the wider sphere. This is most especially the case in gold mining, where both large companies and community mining use hazardous materials such as mercury which cause various types of environmental damage. This study aims to look at a series of CSR activities that have been carried out by the company, whether these activities have successfully completed the impacts caused by mining activities. In-depth interviews with informants from all groups were conducted. The results showed that various CSR activities carried out by the company have not been designed to improve the impact caused by gold mining activities, nor CSR programme has not yet had an impact on increasing the capacity of the community; most CSR activities were still charity or inducements to the community or elite groups. Some facts also show the demonstrable result of the use of mercury which has had an impact on public health as well as disruption to people's livelihoods, due to damage to the previously clean water sources.

**Keywords:** CSR, Charity, Capacity Building, Community, Environmental

## 1. Introduction

The European Commission defined Corporate Social Responsibility (CSR) as "a concept in which companies integrate social and environmental issues in their business operations and in their voluntary interactions with their stakeholders" (Zapata, 2011). Companies should use CSR as evidence of the acknowledgement of their impact of its activities on society. A company is responsible for integrating social, environmental, ethical, consumer and human rights issues into their business strategies and operations in accordance with applicable law (Hamann, 2003; Barrena et al, 2016).

This study aimed to evaluate the CSR programmes conducted by gold mining companies in Bombana regency of Southeast Sulawesi, Indonesia. The evaluation considered whether the CSR program undertaken has answered

various problems arising from gold mining activities and implementing the principles of community development, or is it still charity and apparently philanthropic. (Melé, 2009) stated that the CSR approach must integrate four dimensions, namely (i) Profits where the company is seen only as an instrument for wealth creation. (ii) Integrative theories, in which the corporation is focused on the satisfaction of social demands, (iii) Political performance, relating to corporate power in society and the use of this power responsibly in the political arena, (iv) Social demands and ethical values, based on corporate ethical responsibility to the community. Based on these definitions, the CSR program should be able to combine the interests of gaining profits by the company with various efforts designed to increase community development.

Many of gold mining companies (hereinafter GMCs) have been carrying out gold mining activities in Bombana Regency since 2008. GMCs claimed to have carried out CSR activities for the community, but the surrounding community felt dissatisfied. Petrova & Marinova (2013) emphasized that in implementing a CSR programme companies need to carry out a study to achieve better understanding of the complex nature of the communities in which they operate in order that suitably tailored strategies can be developed.

This dissatisfaction of the community indicated that the CSR program carried out by GMCs was neither appropriate nor sufficient to support a better prosperity for the community. Moreover, people felt that they had never been involved in the preparation of CSR programme plans. Local newspaper stated that there had been mercury pollution in the river flowing into the waters of Bombana Regency. In addition to the problem of mercury pollution, the problem of drought was a factor causing the decline in agricultural productivity. Mining activities have caused lands in agricultural areas to suffer from drought because water circulation in watersheds has been monopolized by mining companies, a problem which has been compounded by deforestation. Mining activities have had a wide negative impact on the community in Bombana regency. The mining management conducted by GMCs is considered not to have touched and prioritized the principle of sustainable development; to make matters worse, there is little equity because the CSR has benefitted only certain parties.

Suharto (2007) stated that in terms of motivation there are four dimensions or approaches to CSR, namely: First, corporate giving that is motivated by charity. Second, is corporate philanthropy which is motivated by humanity. Third, corporate community relations that breathe charm. Fourth, community development is more empowered. Specifically, in the context of managing CSR programs, a community development approach can be a guideline for companies not to get caught up in programs whose motives are merely charitable, humanitarian or philanthropic, promotion or imaging whose impacts will only cause community dependency on the companies and does not have a sustainable impact.

## **2. Theoretical Framework**

In fact, in the last few decades, several company practices have been found that are not in line with CSR concepts, such as: (i) more and more corporate fiscal violations and opportunistic strategies in finance and valuation; (ii) the increase of social inequalities reflected in poverty, hunger or discrimination among countries; (iii) the great power held by multinationals (Barrena Martínez et al, 2016).

Separating CSR policies into a variety of different initiatives such as training, social and professional skills development has a positive effect on customer satisfaction, environmental related initiatives also have a positive impact on customer satisfaction (Rivera, Bigne, & Curras-Perez, 2016). Corporate social responsibility is determined by ethics and morals in corporate decision making. Socially responsible CSR activities can not only increase stakeholder satisfaction, but also have a positive effect on the company's reputation (Gras-Gil, Palacios Manzano, & Hernández Fernández, 2016).

Implementation of sustainable development means the integration of activities in three main areas, including; (i) technical and economic activities that guarantee economic growth, (ii) ensure the protection of natural resources and the social environment, (iii) concern for employees in the workplace and community development in the mining environment means corporate social responsibility (Gras-Gil et al, 2016). The practice of CSR is

contingent on both the firm's macro-environment and micro-environment. Understanding these potential barriers can help companies avoid or overcome them and improve chances of successfully implementing CSR strategies (Yuen & Lim, 2016).

All social policies increase financial resources, and vice versa, that improving financial performance leads to greater social benefits. Investment in financial resources needs to be done to develop policies that encourage the level of components of social behavior to contribute globally to the improvement of society (Esteves, 2008). The lack of resources, lack of strategic vision, lack of measurement system, high regulatory standards, and low willingness to pay for CSR are significant barriers to implementing CSR.

### **3. Methodology**

This study used a qualitative approach, in which the researcher acted as the main instrument and was involved in the implementation process. The researcher also might explain various forms of CSR programs and the development of farming communities.

The study was conducted in the North Rarowatu sub-district of Bombana Regency, precisely in Wumbubangka Village, which is the main area for gold mining conducted by GMC. In addition, the village of North Rarowatu was chosen with consideration, this area is an agricultural area that has experienced a decline in agricultural production, especially lowland rice since the mining company.

The unit of analysis of this research is (1) the directors or the head of division of CSR in several GMCs (2) 20 farm households and (3) government agencies, namely sub-district heads, village heads, and related agencies. The research lasted for 9 (nine) months, which began with exploratory research locations and initial observations (pre-study).

Data were collected by in-depth interviews with each unit of analysis to determine the impact of gold mining. In addition, participatory observation was carried out to find out firsthand and details about how the practice of implementing CSR programs by the companies.

### **4. Result and Discussion**

#### *4.1. The Impact of Gold Mining*

Gold in Bombana Regency was discovered by the local community in 2008. The discovery of gold, has driven the flow of human migration towards the River Tahi Ite and Langkowala. The migrants came from communities around the Bombana District as well as from various regions in Indonesia. Only a few months after the discovery, the area around the two rivers became a sea of people. The increase in the number of people triggered an increase in the price of basic needs. The price of rice which originally only ranged between IDR 6,000-7,000 per liter, increased to become IDR 11,000 - 13,000 per liter, the price of instant noodles which was originally only IDR 2,000 increased to IDR 5,000 - 6,000 per pack. The average price of basic needs increases between 200-300%. Such fast-changing conditions have an impact on the decreasing purchasing power of local people, so that some of them then leave their agricultural land to also seek their fortune from gold mining.

The camps of the gold seekers are scattered along the River Tahi Ite (Figure 1), for about 15 km. At its peak it was estimated that around 60,000 gold panners obtained local government permission. One of the recurrent features of new gold discoveries, both globally and over the course of human history, is the phenomenon of the booming gold rush where increasing numbers of people are attracted to gold fields in search of fast money and easy fortunes. At this early stage, relatively abundant amounts of gold can be extracted from river beds and gold-bearing deposits, which attracts even larger numbers of prospective miners (Beavis & McWilliam, 2018).





Figure 1: Miners' Tents

The massive migration of miners has caused considerable environmental damage to villages in mining areas along the Tahi Ite and Langkowala Rivers. The increasing number of temporary settlements at mining sites has triggered the growth of local economic activity in response to increasing population. Lodging and restaurants are scattered, sales of tents, tarpaulins, ropes, building equipment, generators, pumps, lamps, beds, pans, cutlery, cosmetics and toiletries have increased, as have sales of all kinds of vegetables and ready-to-eat foods such as rice and instant noodles, meatballs, chicken porridge and more. The lack of availability of clean water facilities has also made the sale of clean water a profitable business; even the sales of cellular phones and hairdressing salons, mechanical workshops and mini pharmacies are growing rapidly.

Now, the Tahi Ite River is dry, because the water is used for panning needs. Another impact that is very influential on the decline in public health, arises from the use of mercury. The results of the Bali Fokus research conducted in 2014 showed that gold mining in Bombana uses around 80 tons of mercury each year. Measurement results using Lumex RA 915+, results vary from place to place. The lowest mercury is 28.07 ng / m<sup>3</sup> in one of the homes of children suspected of mercury poisoning, and 41,000.00 ng / m<sup>3</sup> in a gold shop.

The most common cases of mercury poisoning are diseases related to neurological disorders, if they occur in women, they can cause birth defects in the child they are carrying, and cause birth defects. If the child is exposed at the time after birth, can cause neurological defects in children later in life (Table 1). This defect will arise gradually and increase with increasing age of the child (Balifokus, 2015).

Table 1: Several Cases, the Impacts of using mercury in gold mining in Bombana Regency

Description	Picture
Name : Agung Address: Boepinang,Poleang, Bombana Case: Problems with the superior limb, <i>Os.Humerus</i> both short arms, skin eruptions throughout the body, congenital cataracts, undescended testes or cryptorchidism	
Name : Fauzan Address: SP2, Bombana Case:Anokuli, high Miopa	

Name : Amir  
Address: Watu-Watu, Bombana  
Case : Inferior limb defects



Source : Bali Fokus Indonesia, 2015

There are still some more cases such as partial paralysis, muscle weakness in the neck, medical conditions with permanent shortening of muscles or joints, as well as several other cases.



Figure 2: Tahi Ite River has become dry

Before the discovery of gold, the area of Bombana Regency was well-known as one of the food suppliers, especially rice, which supplied the needs of the Southeast Sulawesi province, but since the discovery of gold, rice production from this district has declined dramatically, planting paddy rice, which previously could be done twice now can only be undertaken once a year; agricultural land experiencing drought due to lack of water sources (Figure 2) due to dammed mining companies. Furthermore, research conducted by Charles Darwin University in collaboration with Haluoleo and Nusa Cendana University shows that there has been pollution of several heavy metals in several major rivers in Bombana Regency. The study concludes that

(1) the status of river water quality in the category of Bombana Regency is lightly polluted, where the concentration of Total Suspended Solid (TSS), Biological Oxygen Demand (BOD) in the water exceeded the quality standards based on existing regulations, and

(2) Status of water quality in the sea waters in the category of lightly polluted districts, where 'Total Suspended Solid (TSS), Nitrite (as NO<sub>2</sub>) and Mercury (Hg) have exceeded water quality standards based on regulations' (Ido, 2019).

Based on statistical data from the district of Bombana in figures for 2010 and Southeast Sulawesi the figures for 2009, the area of harvest of rice fields in the district of Bombana has dropped dramatically. It was noted that in 2009 the production of lowland rice only reached 17,252.3 tons with a harvest area of 4,172 ha; this yield was far lower than the previous production which reached 51,378 tons with a harvested area of 12,423 ha. The significant decrease in production was due to a drastic reduction in the area of which was able to be used for rice cultivation.

#### 4.2. Corporate Social Responsibility (CSR) Programme

The company's social and environmental responsibility towards the environment and surrounding communities has been stipulated in Law Number 40 of 2007, specifically in Articles 74 paragraphs 1 - 4. This law was followed by Government Regulation Number 47 of 2012.

CSR programs carried out by GMCs are categorized into three parts namely; social action activities, infrastructure development and public facilities and community development programs. The social action program is dominated by health assistance in the form of mass circumcision, dental examinations and general health examinations. In addition, sacrificial meat assistance, cash assistance to the poor, holiday gifts, study completion assistance, and several other activities were proposed by the community to carry out activities that are incidental. Infrastructure assistance includes the construction of clean water facilities, repair of houses, construction of telecommunications facilities, procurement of ambulances and repair of roads and bridges. The community development program can be carried out in the form of providing computer assistance, training of local football clubs, fostering the reading and writing of the Qur'an. In detail, the activities claimed by the company as CSR activities are presented in the following Table.

Table 2: CSR activities in Bombana in Period 2009-2015

No.	Activities	Recipient	Time
<b>A. Social Action</b>			
1.	Purchase of the Koran, <i>iqra</i> package, study desk facilities and teacher fees	Darul Ullun Islamic boarding school, North Rarowatu sub-district	Quarter III 2009
2.	Provision of nine staples	Quran recitation place Al Ikhlas Qoulul mufid Darul Ullun Islamic boarding school, North Rarowatu sub-district Hidatullah Islamic boarding school / orphanage Muslimorphange Muhammadiyahorphange, Rumbia sub-district Nursing Home Supported by Social Affairs in Kendari City The Dhuafa, Al-Qautsar Mosque in Kendari Earthquake Victims in Mentawai Jogjakarta	Quarter I 2013 Quarter IV 2009 Quarter I-III 2010 Quarter III 2010 Quarter IV 2013 Quarter I 2014 Quarter II 2014 Quarter III 2012 Quarter II 2012 Quarter II 2010 Quarter IV 2010 Quarter I 2011
3.	Eid al-Fitr and Eid al-Adha gift packages	Wumbubangka Village Community, North Rarowatu sub-district	Every Eid al-Fitr and Eid al-Adha
4.	Distribution of Qurban meat	Poor people in Bombana Regency	Every Eid al-Fitr and Eid al-Adha
5.	Direct Cash Assistance	The poor, widows and elderly parents	- Quarter I 2012 - Quarter II 2012 - Quarter III 2012 - Quarter I 2013
6.	Health services (teeth inspection, mass circumcision and general health inspection)	Communities in: - Wumbubangka village, North rarowatu sub-district - Taubonto village, Rarowatu sub-district - Kasipute village, Rumbia sub-district	- Quarter I 2010 - Quarter III 2011 - Quarter IV 2011 - Quarter III 2012 - Quarter I 2015
7.	Medical Aid Fund	The village priest's wife in Wumbubangka village, North Rarowatu sub-district People name H. Arief Djaya Pimpie, Kasipute village, Rumbia sub-district People name Edain Wumbubangka village North Rarowatu sub-district People name Dewi, Wumbubangka village, North Rarowatu sub-district Baby name Suci, in Kendari	- Quarter I 2012 - Quarter III 2012 - Quarter IV 2012 - Quarter I 2013 - Quarter III 2010

8.	Assistance in education fees	People name Nunung Ermayanti, Wumbubangka village, North Rarowatu sub-district A few college student from Bombana	- Quarter II 2012 - Quarter IV 2012 - Quarter II 2013
<b>B. Infrastructure Development Program and Public Facilities</b>			
1.	Clean water pipeline	Hidayatullah Islamic Boarding School, Lameroro village, Rumbia sub-district Wumbubangka village, North Rarowatu sub-district	- Quarter III 2009 - Quarter III 2009 - Quarter II 2013 - Quarter III 2013
2.	Mosque Renovation	Wumbubangka village, North Rarowatu sub-district Tembe village, North Rarowatu sub-district  Ta'juncu village, Mataoleo sub-district Aneka Marga village, North Rarowatu sub-district Kendaricity	- Quarter III 2009 - Quarter IV 2013 - Quarter III 2010 - Quarter IV 2010 - Quarter II 2012 - Quarter IV 2010 - Quarter I 2013 - Quarter II 2013
3.	Road construction and Bridges (access headed to Wumbubangka village)	Hukaea village, North Rarowatu sub-district Wumbubangka village, North Rarowatu sub-district	- Quarter III 2013 - Quarter IV 2009 - Quarter I-IV 2010 - Quarter I-IV 2011 - Quarter I-IV 2012 - Quarter III 2013 - Quarter II 2014 - Quarter II 2015
4.	Building renovation and provision of education facilities	Hukaea village, North Rarowatu sub-district SP 9 village, North Rarowatu sub-district Junior high school in Wumbubangka village North Rarowatu sub-district Senior high school in Bombana village Central Rumbia sub-district Islamic high school in Rumbia village. Central Rumbia sub-district Pulo Tambako elementary school Kampung baru village, Central Rumbia sub-district	- Quarter IV 2009 - Quarter I 2013 - Quarter I 2012 - Quarter II 2012 Quarter II 2012 Quarter II 2012 Quarter III 2010
6.	Refurbishing of local market	Wumbubangka village of North Rarowatu sub-district	Quarter IV 2014
7.	Procurement of ambulance car	Southeast Sulawesi Provinsi and Bombana regency	Quarter IV 2010
8.	Tower and power ches construction for network quality regulators	Wumbubangka village of North Rarowatu sub-district	- Quarter I 2012 - Quarter II 2012
<b>C. Community Development Programme</b>			
1.	Computers facility asistance	Senior High School in Aneka Marga village of North Rarowatu sub-district	Quarter III 2009
2.	Soccer club coaching and training	Youth organization in Wumbubangka village of North Rarowatu sub-district	- Quarter III 2009 - Quarter I - III 2010
3.	Fostering and managing the Al Mujahidin Qur'an Study Site	Wumbubangka village of North Rarowatu sub-district	- Quarter IV 2009 - Quarter II - IV 2010 - Quarter I - IV 2011 - Quarter I - IV 2012

It seems that the activities which are considered as CSR programs are still only conceived as charity. Moreover, the program implementation process is still dominated by the unilateral interests of the companies, more interesting CSR programs that the company defines as community development programs are still nuanced in minor social action and give the aura of caring and concern. Various activities that are claimed as CSR do not address the environmental damage that has occurred which then impacts on and disrupt of local people's livelihoods. Community development programs which emphasize aspects of improving the economy of local communities have not been touched by CSR programs at all. In fact, ideally community development would be a participatory



an ongoing process between the mining company and the community around the mining area in order to improve the economic, social, cultural and environmental situation.

## 5. Discussion

The gold mine in Bombana was originally discovered by a local resident named Budiarkan. Soon after news of this discovery spread, hundreds of occupations around Bombana (Erman, 2015), Southeast Sulawesi and even various provinces in Indonesia came to Bombana to seek their fortunes. Initially the local government gave permission for residents to search for gold around the Tahi Ite River area. The local government made a mining card to increase local revenue. However, when the activities of the miners caused considerable environmental damage, including reduced river water which was used to irrigate rice fields, the local government of Bombana district and the province of Southeast Sulawesi called a temporary halt (moratorium), although in reality, mining activities are still ongoing. Unfortunately, ignorance and poverty combine to make deadly allies.

In 2009, the local government then issued a permit to a large company to have mining concessions in Bombana Regency, hoping that this mining activity could be more easily monitored and could minimize environmental damage. Up until 2012, the local government had given Mining Business Permits (IUP) to 84 companies, 53 of which were gold mining companies with 100,000 hectares of concessions (Environment Agency for Cleaning, Gardening and Cemeteries, Bombana Regency, 2012: Chapter III). Most gold mining companies are located in Rarowatu and North Rarowatu Districts. The granting of the permit to the large company was the beginning of a conflict between the community and the mining company and the local government. This is due to the location of the concession on land that was previously owned by the local community. As a result, for local people to be able to join the mining, they must buy a mining permit card on their own land for Rp. 100,000 (government price), but in reality the price could increase to Rp. 400,000 to 1,500,000.

The local miners were previously engaged in livelihoods as farmers, fishermen, forest product timber traders or small traders (Ma'mun, 2010; Meisanti, Ali, Jusoff, Salman, & Rukmana, 2012; Demmallino, Ibrahim, & Karim, 2018; Mavrommatis & Menegaki, 2017). Most of them have become miners. According to them the profits from mining are partly invested in buying paddy fields, ponds, including buying water pumps to be used to irrigate their paddy fields that have dried up since the rise of gold mining (Basri, Sakakibara, & Ratnawati, 2017; Habo Abbas, Sakakibara, Hakim Arma, & Hardi Yanti, 2017).

Although CSR has been required by the Government of Indonesia through Law Number 40 of 2007 and Government Regulation No. 47 of 2012, based on findings in the field of CSR programs conducted by the company, it seems that it has not touched the environmental problems that arise due to gold mining activities, and has made no attempt to engage in community capacity building. Placing the community actively as the subject of all CSR activities and increasing the involvement of various relevant stakeholders will greatly determine the success of efforts to make the community independent (Rosyida & Tonny Nasdian, 2011).

Morales Méndez & Rodríguez (2016) in their research in Colombia also found that weaknesses found in the gold companies include: lack of clear and transparent hiring practices; lack of programs for employees who are mothers with small children; and lack of sufficient tools for identifying the needs of the closest community to the sites. They do practice diverse social investment strategies but do not track the impact of applying these in the region. It was also found that they have no clear processes for identifying, selecting, contracting and evaluating their suppliers. The greatest weakness found was with respect to the Client given that they have no client service department. Furthermore, Narula, Magray, & Desore (2017) assert that gold mining companies in their CSR programmes should consider to establish sustainable livelihoods for local people.

Livelihood generation is an important need when it comes to the rehabilitation of affected communities in mining areas. How CSR investment can be directed or focused towards livelihood generation activities is important. Unless local capacities are enhanced, the communities would not be able to generate livelihoods for themselves

especially in remote areas, implying emphasis on skill development work (Narula et al., 2017; Newenham-Kahindi, 2011; Nel, Binns, & Gibb, 2014; Apollo, Ndinya, Ogada, & Rop, 2017).

Mining activity is associated with negative impact on the environment (Burchart-Korol, et al, 2014; Erman, 2015). Protecting negative impact from mining activities on the environment is increasingly important in order to establish sustainable development. Over the last four years, the International Monetary Fund (IMF) in collaboration with Natural Resource Governance Institute (NRGI) have revised its fiscal Transparency Code (FTC) in 2019, where the government should publish or disclose project-specific contracts, licences and agreements. In terms of Environmental and Social impact assessments (ESIAs). The code calls for publication of ESIs and accompanying management plans and reports. Such information is crucial for communities affected by extraction (Viveros, 2016).

The sustainability of a community is considered to be its ability to sustain and reproduce itself at an acceptable level of functioning. This is normally associated with 'social capital' and 'social cohesion' as concepts that encompass social networks, norms of reciprocity and features of social organisation. Social capital also contributes to strong, fair and just societies. Distinct from the concept of human capital (which relates to the ability of a labour force to produce economic value), social capital describes the ability of community to achieve a common goal and maintain its normal functioning (Petrova & Marinova, 2013). To assess the social capital in Bombana we considered the levels of trust, social organisation, networks and groups and voluntarism, and how these are changing over time.

The social impacts of mining are not simply negative or positive (Jenkins, 2004); they are always inter-related, mutually dependent, cumulative and synergistic (Petrova & Marinova, 2013). They are closely associated with the dynamics within the local community. While the response to the phenomenon could be the development of specific coping mechanisms through community 'owned' strategies. It includes personal choices and individual lifestyle strategies which require a more in-depth and serious attention. It also raises questions, such as: do we just accept this new culture or do we challenge the existing concept of community to allow for a different approach to planning and mitigating for the social impacts of mining?

Social sustainability is about change. The biggest challenge of the Bombana community faces is how to mobilise its own resources and mechanisms in order to respond to the two new phenomena as part of the changing social landscape triggered by gold mining.

## **6. Conclusion**

Although it did not last long, the existence of mining in Bombana District at an early stage provided great benefits, and the opportunity to collect household assets and capital for the communities around the mining area. After the end of mining permits for the people and the government policy of issuing Mining Business Permits (IUP), this has an impact on the loss of important assets of farmers who have been the basis of livelihoods for families. The loss of land assets, for example those with high potential to narrow the livelihood for farmers, are not followed by clear compensation or community development programs.

It is relatively easier to describe and to a certain degree explain the demographic picture of Bombana than to understand the impact of the mining activities on the local community. Mining appears responsible for the high levels of pressure on the forms of local capital (social and economic). These are complex issues that cannot be simply resolved by the industry itself through its social impact management plans or corporate social responsibility. Nevertheless, a community empowerment programme is pivotal to guide them through an understandings so they can take ownership and become an active agents of change in order to build its resilience and long-term sustainability.

The government, universities and non-governmental organizations as well as all related parties, must work hand in hand to restore people's livelihoods, raise public awareness of the importance of preserving the environment and controlling the use of mercury which negatively impacts public health and can destroy generations.

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