Appropriateness of Disclosure of Social and Environmental Responsibility: *Sitinaja*'s Perspective

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Abstract. Mineral resources are contributors to state and regional income but are also prone to environmental damage and social conflict. The government, as the trustee of the community, is obligated to regulate the operations of mining companies to prevent harm to the environment and society. The concept of *Sitinaja*, representing propriety in interactions, is an important value for Bugis community living in mining areas on Sulawesi Island. The study aims to analyze the propriety of mining companies in their relations with the environment and society. The research method uses a qualitative method with a critical paradigm approach to two mining companies operating on Sulawesi Island, namely J Resources and Merdeka Copper Gold. Data were obtained from secondary sources, namely company sustainability reports and their propriety was analyzed using the Global Reporting Initiative (GRI) indicators and the *sitinaja* perspective. The disclosure of the general standards of both companies in the sustainability report is in accordance with the GRI indicators. The activities of the two mining companies show propriety where both as managers have complied with government regulations as entities that own mineral resources both in maintaining environmental quality at the company's operational locations and minimizing, mitigating, and managing social impacts. The propriety demonstrated by both companies can be a reference model for mining companies operating on Sulawesi Island so that in their operational processes they do not only prioritize temporary profits from obtaining mining materials but also pay attention to environmental and community conditions.

Keywords: Global reporting index, Mining corporate, *Sitinaja*,

1. Introduction

Natural disasters that are likely to occur in addition to natural factors are also man-made such as industrial accidents, social conflicts that can contribute to instability and disaster risk. Indonesia with a high potential for natural disasters will also be threatened by disasters due to environmental awareness factors that are still very low. Indonesia is threatened by various disasters caused by low environmental awareness such as forest and land fires, erosion and soil degradation, floods, water pollution and climate change[1].

There are many parameters in this world that have an impact on climate change. Significant impacts include those caused by daily human activities such as energy use, transportation, food consumption and waste management with climate change[2]. Public awareness in protecting the environment is very low because their

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environmental literacy is still very minimal. In fact, public awareness of the environment is very important to reduce the risk of disasters and protect ecosystems and human life[3], [4]. The problems that occur in Indonesia are not only related to public awareness but also to company operations. The environmental impacts of the company's operational processes, especially mining, include gas emissions, air pollution, water pollution, impacts on biodiversity, and land conversion. To minimize these impacts, integration is needed between production processes, business strategies, and environmentally friendly business concepts[5], [6]. Exploitative companies are required to implement the concept of cleaner production practices to improve environmental, economic, waste reduction, and occupational health and safety operational performance[7].

In the early 2000s, the world officially published sustainability reports using the GRI (Global Reporting Initiative) guidelines which were later adopted in Indonesia through OJK Regulation No. 51/PJOK.03/2017 concerning the implementation of sustainable finance for financial services institutions, issuers and public companies. Regulation of the Minister of Environment and Forestry of Indonesia Number 4 of 2021 shows the obligation of businesses to have an environmental impact analysis. This is one of the important steps taken by the government to always invite industry players to comply with environmental regulations.

Environmental documents, such as AMDAL and Sustainability Reports, are not just documents to attract the attention of investors and the public regarding the company's environmental compliance, but far from that, an honest and transparent disclosure is expected by the company in reporting all aspects that they have worked on. To ensure transparency and accountability of sustainability reports, accounting science has a role [8].

The application of accounting science in the context of corporate sustainability is because accounting is able to measure and report environmental impacts into business strategies which in turn support long-term sustainability[9]. Through the involvement of accounting science, environmental impact measurement can be integrated into decision making so that company operations can be more responsible and sustainable both environmentally and socially[10], [11] . This concept can position accounting science to contribute to minimizing environmental impacts and climate crises caused by company operations[12].

Many research findings show that companies that make environmental disclosures receive a positive response to their financial performance. Companies in Malaysia gain greater profit margins through participation in voluntary disclosure of environmental activities[13]. Similar findings were obtained in Vietnam that the implementation of environmental accounting has a positive impact on sustainable development in environmentally friendly business strategies[14].

Environmental impact disclosure and reporting in critical situations is very effective for stakeholders (natural assets), government (state regulators), and landowners who have land rights. This certainly requires the role of the government in creating regulations because it will affect the intensity of companies to engage in disclosing corporate environmental and social responsibilities. Previous studies have revealed differences in CSR disclosure strategies by large and small companies in the mining sector[15]. In macro situations, the stronger the governance, the stronger the ability to encourage disclosure of environmental and social impacts by companies [16], [17].

Many aspects influence a company's social and environmental disclosure, not limited to the economic side. Qualitative factors such as board diversity, gender distribution, educational background, and tenure diversity also contribute positively to social and environmental disclosure[18]. The lack of studies linking social and environmental accounting with qualitative factors is the basis for why research with a multiparadigm approach needs to be carried out to improve[19].

The research conducted raised the value of *sitinaja* in the disclosure of corporate social and environmental accounting. The concept of *sitinaja* (appropriateness, propriety) is one of the five main values of Bugis customs that can be used as a reference to assess suitability or justice. *Sitinaja* can be applied in various areas of life, from very big things to small things that at first glance seem trivial. This can be seen in the story of Puang Rimanggalatung (1498-1528) who repeatedly rejected the offer of the Wajo customary leaders and people to be appointed as Arung Matoa Wajo when the 3rd Batara Wajo, La Pateddungi Tosamallangi' died. The rejection was not because he was unable but because he felt unworthy (*asitinaja*) to accept it because he did not want to be thought of as a cheater or greedy because he was the one who killed La Pateddungi Tosamallangi' at the will of the customs and people[20]. The wisdom of *asitinaja* prevents humans from greedy behavior, this kind of wisdom is accommodated in Islam which is called al-‘urf (traditions that do not conflict with the spirit of the Qur'an) [21]. The existence of local wisdom to maintain balance and justice in the relationship between humans and nature needs to be maintained to prevent over exploitation and greater losses to humans in the future.

2. Literature Review

2.1 Stakeholder Theory

This theory was first proposed by Edward Freeman in 1984. This theory states that the main purpose of a company is to meet the needs of stakeholders who can affect or be affected by the achievement of the company's goals. In this context, CSR disclosure is considered to be able to improve the company's financial performance by meeting the expectations and needs of stakeholders, which in turn can generate profits for the company.

2.2 Legitimacy Theory

This theory focuses on the relationship between companies and society. According to Dowling and Pfeffer (1975), an entity can exist if its value system is in line with the value system of the larger society and the inconsistency between the two value systems threatens the legitimacy of the entity. Deegan (2002) developed this theory by stating that companies and society have an interrelated and sustainable relationship. CSR disclosure can help companies maintain their legitimacy in the eyes of the public.

This theory argues that business organizations are socially formed institutions and must meet the expectations of society. Failure to meet social expectations can result in sanctions that are detrimental to business operations. Therefore, companies need to consider the expectations of all stakeholders, not just investor rights, to maintain their legitimacy in the eyes of the public.

2.3 Disclosure Theory

Disclosure theory refers to the importance of corporate transparency and accountability in conveying information related to environmental performance and corporate social responsibility (CSR) to stakeholders. This disclosure is considered as one way to increase investor and public trust in the company.

Disclosure theory states that companies that actively disclose information about environmental performance and CSR tend to gain benefits in the form of a better reputation, which in turn can improve financial performance. This is in line with the finding that CSR disclosure has a significant effect on ROE, although it does not affect ROA. Therefore, good disclosure can serve as a positive signal to investors and other stakeholders by showing that the company is not only focused on profitability, but also on the social and environmental impacts of their operations so that it can create added value for the company and increase its attractiveness in the market.

2.4 Social and Environmental Accounting

Social and Environmental Accounting (SEA) focuses on the collection and analysis of information related to resource use, emissions, and waste, and the social impacts that may arise from these practices. Through an accounting approach, companies can measure and manage the environmental impacts of company activities, including environmental efficiency and social impacts resulting from certain activities.

SEA aims to provide relevant information to stakeholders, including the community, investors, and government, regarding the social and environmental performance of an organization. Gray (2002) states that social and environmental accounting is not only about measurement and reporting, but also about creating positive change in business practices and society through a better understanding of social and environmental impacts.

2.5 Sustainability Report

A sustainability report is a document prepared by companies to communicate their performance in terms of sustainability, including environmental, social, and governance (ESG) aspects. This report aims to provide transparency to stakeholders regarding the company's impact on society and the environment. This report is usually prepared in accordance with the Global Reporting Initiative (GRI) guidelines, which provide a framework for companies to report their impact on the economy, environment, and society.

The purpose of a sustainability report is to increase the transparency and accountability of companies to stakeholders, including investors, customers, employees, and the general public. The availability of a sustainability report that is separate from the financial report and contains clear and detailed information about sustainability practices, companies can reduce information asymmetry, build trust, and meet social expectations[22]. Sustainability reports also serve as an important communication tool, allowing companies to demonstrate their commitment to social and environmental responsibility, as well as to attract the attention of investors and other stakeholders who care about sustainability issues.

The benefits of sustainability reports are financial and non-financial, including improving reputation, risk management, and financial performance indications [23]. Sustainability reports can enhance a company's reputation in the eyes of stakeholders, including customers, investors, and the general public. A company's ability to identify and disclose sustainability-related risks is revealed in the sustainability report, thus representing a prediction of long-term performance. Several studies have shown that companies that are active in sustainability reporting tend to have better financial performance, as they are more responsive to social and environmental issues.

2.6 Sitinaja

Propriety, appropriateness, and feasibility are translations of the Bugis word *asitinajang*. *Asitinajang* is one of the five main values that are considered important in the life of the Bugis community[20]. *Asitinajang* comes from the word *tinaja*, which means suitable, appropriate, proper and appropriate. Lontara said.

"sit in your position, occupy your place."

This obedience is applied in various areas of life, from big things related to power to small or seemingly trivial things such as giving something to someone else[20].

Quoting one of the views of a Bugis scholar regarding the relevance of Bugis cultural values, he said that culture in the context of 'iddah is related to siri' (culture of shame and self-esteem) and *asitinajang* (principle of propriety) which is widely used in the distribution of inheritance rights to boys and girls. In implementing this inheritance, the Bugis community refers to *assitinajang* (principle of propriety) both in cultural terms and in religious teachings, namely worth (value/number) according to culture and religion.

Sitinaja has a sense of impartiality, right, proportional. implies *mappasitinaja*, adjusting, proportional to the rights of others. Based on the Dictionary of Indonesia Language, fair is a characteristic, characteristic possessed by someone who embraces the truth and is not biased in decision making or in treating something proportionally (*sitinaja*). It is said that Puang Rimanggalatung had repeatedly rejected the offer of the Wajo people to be appointed as Arung Matoa Wajo, when the 3rd Batara Wajo, La Pateddungi Tosamallangi died. The rejection was not because he was unable to become king but the principle of propriety. Although the Wajo people were confident in his abilities, he felt unworthy to accept it, he rejected their offer or request[20].

Justice as part of social values has a broad meaning, even at one point it can conflict with the law as one of the social values. discussing the value of justice in doing business, according to them the concept of justice, especially in production costs, is justice for oneself, justice for the environment and justice for society[24].

3. Research Method

The study uses a qualitative approach with a critical paradigm. Through a critical paradigm, an in-depth and comprehensive analysis of an object can be carried out. The critical paradigm views that reality is very dynamic and contains social conflict.

Brought to the context of mining businesses, this paradigm is relevant to use because mining activities often cause conflicts, both environmental and social orientations. This also underlies the company's obligation to report GRI as a disclosure of the relationship between company activities with corrections or cohesion in the environmental and social context.

The main object of the study is the sustainability report prepared by a mining company with the analytical tool used, namely *sitinaja* as one of the values of the South Sulawesi community. The mining companies that are the objects of the study are J Resources and Merdeka Copper Gold. The latest sustainability report from each company is used as analysis material to assess its appropriateness in accordance with the *sitinaja* concept.

The data source uses secondary data, namely the latest sustainability report from the three research objects. The report was obtained from the website of each company. In the initial stage, the report will be checked for completeness according to GRI provisions and if declared complete, it will be continued with content analysis. The content of the report is then divided into four parts for further analysis, namely general, economic, environmental, and social aspects.

The analysis tool used is the value of local wisdom, namely *sitinaja*. *Sitinaja* literally means propriety. Propriety is a level beyond obligations where in the context of the research conducted, the propriety of the company's actions will be analyzed through economic contributions, environmental improvements, and social conditions. The company's ability to fulfill reporting obligations determines propriety along with the quality of the relationship built between the company and the environment and society.

4. Results & Discussion

4.1 GRI Suitability

Global Reporting Initiative (GRI) is an international standard that has been implemented in Indonesia regarding the disclosure of corporate sustainability reports. Mining companies specifically use GRI-4 as a reference. To assess its suitability, an analysis was conducted on the comparison between the number of required disclosures and the items identified in the sustainability reports of the three companies.

In the general standard, it is known that the two mining companies have a disclosure compliance percentage of >90%, indicating that the company has met the general GRI reporting standards (Table 1). In the specific standard, namely GRI-4 for mining companies, it can be seen that MCG has the highest disclosure compliance, namely 92.2%, followed by JR (62.3%) (Table 1).

Table 1. Disclosure suitability of GRI Report

Standard	Indicator	J Resources (2023)	Merdeka Copper Gold (2023)
Universal Standard			

Profile	13	12 (92.3%)	13 (100%)
Strategy	2	2 (100%)	2 (100%)
Ethics and Integrity	2	2 (100%)	2 (100%
Government	22	21 (95.4%)	20 (90.9%)
Stakeholder	5	5 (100%)	5 (100%)
Practice Report	12	10 (83.3%)	12 (100%)
Total	56	52 (92.9%)	54 (96.4%)
Spesific Standard			
Economic	13	10 (76.9%)	11 (84.6%)
Environment	30	30 (100%)	30 (100%)
Social	34	23 (67.6%)	30 (88.2%)
Total	77	63 (81.8%)	71 (92.2%)

Referring to the suitability of the GRI report, the MCG company has better propriety in responding to reporting obligations related to sustainability from general, economic, environmental, and social aspects. The availability of information on the GRI shows that the MCG company has a better commitment than J Resources. On the other hand, non-compliance or inability of companies, especially mining companies, to meet the GRI disclosure standards indicates that there has been no serious attention to the impacts of company activities, especially environmental and social impacts.

Disclosure of economic, environmental, and social activities of the company in the form of a sustainability report is a form of transparency and accountability of information. This information is a reference for stakeholders to measure the company's contribution to each aspect and can further be a reference for the government in evaluating the company's performance and contribution, especially economic, environmental, and social aspects, and determining the company's reputation[25].

The company's response to the indicators in the GRI is quite varied. At J Resources, the lowest percentage was found in the social aspect, while at MCG it was found in economic data. These variations can occur depending on the conditions and policies of the company in responding to environmental and social issues that occur at operational locations [26], [27], [28].

4.2 Economic Aspect

Natural resources in Indonesia can actually be used and directed for the economic welfare of the community. Mining companies are one of the entities that manage natural resources in Indonesia, especially land, to obtain mining commodities. Mining company operations are carried out extractively and can disrupt environmental conditions and cause social conflict, but to support the government's economic activities, they are permitted to carry out the extractive process. The permit is not given responsibly by the government, one of which is by considering the economic potential that can be obtained and its environmental and social impacts.

Based on the economic aspect, both companies contribute economically. The economic value is directly distributed to the state through taxes and direct distribution to the community. The J Source company earned revenues of IDR 1.5 trillion with taxes paid of IDR 150 billion and investment in the community of IDR 50 billion, while the MCG entity with revenues of IDR 27.2 trillion and a total economic value distributed of IDR 5.9 trillion.

The distribution of income from the company to the state is appropriate because basically the natural resources managed by the company belong to the state. Often, reporting economic performance in GRI format is more informative than the other two aspects[29]. Therefore, it has become appropriate for companies to make deposits to the state through tax mechanisms. In the long term, this has been proven to significantly affect company performance directly and indirectly[30], [31], [32].

Sitinaja's view on the interaction between land owners and tenants requires that land owners (the state) and managers (companies) need to work together to manage natural resources through institutional arrangements. These institutional arrangements need to prioritize a sense of justice for each party in the context of fairness (*sitinaja*). Tax payments to the government are part of an effort to fulfill obligations according to PP 37/2018 that mining businesses deposit PPH 21 of 15% of gross income. Therefore, both companies have fulfilled their propriety fairly in the economic aspect according to the agreement (regulation) set by the government.

Reporting in the economic sector is considered to have a positive impact on the company's financial performance. Evana (2017) analyzed the effect of sustainability report disclosure from three dimensions, namely economic, environmental and social, on company performance as measured by Tobin's Q for companies listed on the Indonesia Stock Exchange in 2014-2015[33]. The results showed that the economic dimension had an effect on company performance, while the environment and social dimensions did not show a significant effect. Amin, et al (2022) found that reporting of economic performance in Bangladesh in the GRI guidelines was better than the other two dimensions[34].

4.3 Environment Aspect

Mineral resource management often conflicts with environmental aspects. Mining activities ranging from land preparation, extraction, to post-operations as a whole affect environmental conditions. Cutting down trees and digging to obtain minerals leaves holes that change the landscape so that if not managed properly from preparation to post-operations, mining activities only provide benefits to a handful of parties and long-term losses for communities living around mining sites or former mines.

There are several rules that must be obeyed by mining business actors regarding obligations to the environment from before to after mining operations. In 2023, MCG realized environmental costs of IDR 125.8 billion including environmental management and monitoring costs, while J Resources did not include the amount of the budget for environmental costs but outlined related activities such as monitoring water and air quality parameters, reclamation of former mining land, management of dangerous waste, and biodiversity.

Environmental monitoring results at MCG and J Resources' operating locations show that air and water quality conditions are below the ambient limits set by the government (PP 22/2021, PermenLH 03/2008, PermenLHK 6/2021) so that mining operations do not have a negative impact on the environment. Land reclamation efforts by J Resources are also being carried out at operating locations with a total disturbed land of 1246.38 Ha and 299.89 Ha of which has been reclaimed, as well as MCG which has reclaimed 88.4 Ha of 482.95 Ha of disturbed land. Both companies are also carrying out other environmental initiatives such as mangrove planting, coral transplantation, environmental education, and socialization of environmental policies by the MCG entity, while J Resources is innovating the use of biofuel to reduce carbon emissions. The MCG and J Resources entities have obtained ISO 14001:2015 certificates as a sign that the company has implemented and complied with environmental management system standards. Handling of environmental complaints was also reported where in the sustainability report presented by MCG it was stated that there were 2 (two) complaints related to the environment, namely garbage and flooding, where both complaints had been resolved.

MCG and J Resources are companies that have been registered as public companies so they are very vulnerable if they take inappropriate actions towards the environment. The availability of sustainability reports by both companies shows an awareness of the damage caused by the company's operations and a serious commitment to continuously improve it. The government as the landowner and regulator has set limits regarding environmental parameters where these limits can be met by both research objects so that they are considered appropriate. Commitment to the environment is also shown by the willingness of J Resources and MCG to participate in the PROPER program implemented by the Ministry of Environment and Forestry where the J Resources entity has received the Blue Proper predicate for environmental management compliance in 2022-2023. This achievement shows that the company has acted appropriately and fairly towards the environment where it operates.

Awareness of transparent environmental reporting is urgently needed by the world because we are all facing the impacts of climate change in various sectors. However, Safari and Amreen (2020) found that the main challenge faced by companies in Australia in disclosing sustainability is the difficulty in measuring accurate sustainability data[35]. Likewise, there are still many companies that are not compliant in environmental reporting. Machado, Livia and Alberto (2020) found that not all companies in Brazil report their environmental activities comprehensively, as well as diversity in disclosure[36].

4.4 Social Aspect

Horizontal conflicts between companies and communities are often a phenomenon in concession areas owned by mining companies. The struggle for the management of natural resources is inevitable, especially in the early stages of land clearing for mining operations and in certain locations the conflict becomes prolonged until the company's operational and post-operational phases. The government as a regulator is required to play a role in protecting the interests of the community and the company so that there is no protracted conflict.

Regarding the social aspect, MCG has stated that the costs incurred are IDR 49.1 billion with several derivative programs, namely community empowerment, community involvement, and CSR. The J Resources entity did not mention the nominal amount of costs for the social aspect but explained the activities carried out, namely community empowerment programs, socio-culture, formation of communication forums, mitigation of social impacts, and holding capacity building training. Both companies focus on targeting community groups that fall into ring areas 1 and 2 at each operational location.

The emergence of social unrest at mining operations locations can hamper company operations and cause cost overruns. Realizing this, both MCG and J Resources are handling and mitigating the possibility of social conflicts that arise. Both companies use a community approach where MCG intensifies the involvement of the community around the operational area for policy socialization activities while J Resources uses a more structural approach through the creation of a communication forum.

The intersection in the use of space between the mining operation location and community activities is often the entry point for conflict. This was also identified in the GRI of both companies where there were issues related to land acquisition at mining operation locations including the nickel mine in Konawe (MCG) and the doup project in Kotabunan (J Resources). Efforts to mitigate and minimize conflict are also carried out through complaint services both online and offline.

The existence of the community around the mining location is an entity that must be considered by the company and needs to be protected by the government. The government that is entrusted to manage natural resources is obliged to pay attention to the fulfillment of human rights for the community around the mining location. This social protection has been regulated through Law 40/2007 concerning Limited Liability Companies which regulates corporate social responsibility. Both companies have referred to these regulations in disclosing social responsibility and have routinely allocated costs and realized programs to mitigate conflict, manage complaints, provide facilities and infrastructure, and improve community skills. This fact is a manifestation of the company's proper behavior in interacting with the community.

Various cases found related to social compliance. The previous research found that a mismatch between sustainability reports prepared by companies in America and the values desired by consumers such as the social justice dimension[37]. The comparison by research between GRI reporting of companies in Italy, Spain and Greece found that companies in Spain disclosed the largest number of indicators specifically related to labor but the indicator that was least disclosed was human rights[38].

5. Conclusion

Environmental damage caused by mining activities is fully recognized by companies and the government, so that provisions containing operational standards are drawn up so that companies in mining are still able to maintain environmental and social conditions and contribute to the economy. The two companies that are the objects of the study have reported their activities according to the universal standards of the Global Reporting Initiative.

Sitinaja's perspective views the two companies as having contributed appropriately and fairly to the economy. The trust of the government as the owner of resources to the company can be responded to responsibly by acting appropriately or appropriately in the relationship between the company and the environment and social community.

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