

# The Role of Benefits, Impacts and Community Trust in Predicting Mining Operational Acceptance in the Community

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## Abstract

*Mining activities are one of the activities that make a positive contribution to community life. However, in addition to making a positive contribution to mining activities, it also has a negative impact on society and the environment. This study was conducted to try to determine the role of benefits, impacts and community trust in influencing community acceptance of mining operations carried out by the company. This research will be carried out using questionnaires and conducting a question and answer directly to the people who live in the area around the mine. The population of this research is the entire community living around the mining area with a sample of about 210 community respondents living around the mining area in Lampung. The renewal of this study is that this study will add diversity and sample criteria compared to previous studies, such as people who live around the mine but also work in related mining companies, environmental activists, and civil servants who work in services that benefit from mining activities. company.*

**Keywords:** Acceptance of Public, Trust, Benefit From Mining, Negative Impact of Mining

## 1. Introduction

Closure of several mining points conducted by the Lampung Provincial Government is always related to environmental problems caused by the company. Starting from licensing issues to environmental pollution ended in rejection from the community which led to the closure of mining activities and permits. One concrete example that occurred in the temporary suspension of gold mining activities carried out by PT Karya Bukit Utama in Babakan Loa Village, Lampung because it is considered reflecting the environment. This proves that besides getting permission from the government to carry out mining activities, the company also needs to ensure the smooth operation of the company by getting full support from the surrounding community. Community acceptance of mining companies that operate may not be obtained directly without an approach to the community. When the community benefits directly from the mining company, this will, of course, support the company in gaining the community's trust, which in turn gets acceptance from the community. This is what underlies the study of the role of benefits, impacts and community trust in predicting acceptance of mining operations around the community. Mining has played an important role in a country's economic development. Mining is one of the industries that is quite contributing to Indonesia's GDP. In 2018, the mining and quarrying sector contributed 8.08% to GDP with

a value of Rp796 trillion (Indonesian Economic Outlook, 2019). However, the most striking thing about mining activity is that it is disturbing the environment. For example, mining operations tend to produce dust and noise and have an impact on the quality and quantity of groundwater (Franks et al., 2010; Roarty, 2010). The perceived future risks associated with mining activities also include environmental disturbance to nature and contribute to climate change (Roarty, 2010; Weng et al., 2012). Previous studies provide empirical evidence that community acceptance is influenced by various factors, one of them is the benefits, impacts and community trust in mining companies. Zhang & Moffat's research (2015) explains that people will be more receptive to mining activities when they get appropriate benefits and have a good trust in the associated mining company. The community will also consider the impact of mining activities on the benefits received. Zhang & Moffat's research (2015) is in line with the research of Zhang & Moffat (2014), Zhang, Airon et.al (2015), and Zhang, Measham, & Moffat (2017). Terwel et al. (2010) provide more direct evidence of how trust can mediate the effects of procedural fairness on attitudes and behavior. They found that when opportunities were offered to voice opinions in the decision-making process, the participants considered the process to be fairer, which then triggered the inferred confidence in decision making. Furthermore, this increased trust leads to a willingness to receive from the community. Siegrist et al. (2012), examined the relationship between perceived procedural fairness and acceptance of genetically modified plants in several field experiments. They found a positive relationship between procedural justice and public acceptance of this controversial new technology.

## **2. Literature Review**

### **2.1 Social Exchange Theory**

Social Exchange Theory assumes that everyone will be rational in evaluating the impacts and benefits caused. Modern social exchange theory has evolved from the work of Homans (1961), Blau (1964), and Emerson (1972). Social exchange is defined as "exchange of activities, tangible or intangible, and beneficial or less beneficial or detrimental, these activities are carried out by at least two parties" (Homans, 1961, p.13). Thus, the exchange is considered as a process in which the parties conducting the exchange supply each other with resources that provide benefits. It is also seen as an interest between the two parties in the social life that underlies inter-group relations (Blau, 1964).

### **2.2 Stakeholder Theory**

Stakeholder theory is a view that emphasizes the interrelated relationship between a business and its customers, suppliers, employees, investors, communities, and others who have an interest in the organization. This theory argues that companies must create value for all stakeholders, not just shareholders. Social/community expectations of the company's business are changing, shareholders are no longer the sole stakeholder in the organizational environment.

### **2.3 Trust**

Community acceptance of mining operational activities according to Zhang & Moffat (2014) is influenced by the impact on social infrastructure, contact quantity, contact quality, procedural fairness and trust from

the community. When the company has gained the trust of the community, of course, it will be followed by community acceptance. According to Siegrist, Connor, and Keller (2012), the basis for gaining trust is the belief that people who will be trusted will act as people who can be trusted will be in the same situation as they should. In empirical studies, trust can be indicated variously with morality, virtue, integrity, inferred nature and intention, and caring.

**2.4 Acceptance of Mining**

There is no overall accepted definition of what a social license to operate is or how it can be obtained. However, the concept relates to the acceptance and approval of mining operations from local communities and other important stakeholders (Prno and Slocombe 2012; Moffat and Zhang 2014; Owen and Kemp 2012). From a company perspective, efforts to obtain or negotiate SLOs are usually mediated through corporate social responsibility (CSR) programs and initiatives, to gain acceptance by communities affected by mining activities carried out (Idemudia 2007; Prno and Slocombe 2012). When the community feels the benefits received are real and directly impact their lives, this will affect the community's acceptance of the mining activities carried out by the company.

**Figure 2.1  
Research Model**



**2.5 General Benefit from mining and Acceptance of Mining**

One of the actions that can generate revenue from the community is by providing benefits from mining for the surrounding community. The benefits from mining obtained by the community in the form of employment, business opportunities (business opportunities) (Moffat & Zhang, 2014) (Que et al, 2015) and economic conditions (Zhang & Moffat, 2015) (Que et al, 2015). Furthermore (Zhang & Moffat, 2015) found that the benefits of mining in the form of increasing the wealth of individuals and families have a positive effect on community acceptance. Supported by research (Leena, 2019) in Finland which mentions the benefits in the form of social life resulting from mining activities is an important aspect in gaining community acceptance

**Ha1:** General benefits perceived by the community will increase community acceptance of the company's mining operations

### **2.6 Infrastructure Benefit from Mining and Acceptance of Mining**

Studies (Zhang & Moffat, 2015) in Australia show that the benefits of improving the state of infrastructure such as the construction of roads, ports, public facilities, and information and telecommunications facilities by mining companies can make people more receptive to mining activities. Supported (Que et al, 2015) the increase in infrastructure is an important factor in the acceptance of mining activities.

**Ha2:** The benefits of infrastructure development felt by the community will increase community acceptance of the company's mining operations.

### **2.7 Employment and Community Benefits and Acceptance of Mining**

Community empowerment is a benefit that can be offered by mining companies. Mining activities that can create opportunities and employment have a positive influence and are an important factor in the acceptance of mining activities (Zhang & Moffat, 2015) (Que et al, 2015).

**Ha3:** The benefits of community development and empowerment will increase community acceptance of operational mining company

### **2.8 Increased Living Cost and Acceptance of Mining**

Increasing the cost of living is one of the impacts resulting from mining activities, and the increase in the cost of living is certainly detrimental to the community. (Zhang & Moffat, 2015) found that an increase in the cost of living chose a negative effect on revenue from mining activities but the impact was not too large and significant.

**Ha4:** Increasing the cost of living of the community will reduce community acceptance of the company's mining operations

### **2.9 Impact On Other Industries and Acceptance of Mining**

Not only is the increase in living costs, but mining activities also have an influence on other industries in the community. The results of the study (Zhang & Moffat, 2015) mention the higher the negative impact of mining activities on other industries such as tourism, the public perception of mining revenue will be reduced.

**Ha5:** The negative impact on other industries will reduce community acceptance of the company's mining operations

### **2.10 Environment Cost and Acceptance of Mining**

Environmental damage is one of the factors that cause harm to the community. Community's perception of the negative impact of mining activities on the environment influences the decline in community income, (Zhang & Moffat, 2015) & (Que et al, 2015) find that environmental impact is an important factor in receiving or not mining activity.

**Ha6:** Costs arising from environmental damage will reduce community acceptance of the company's mining operations

### **2.11 Intimacy of Contact and Trust**

(Moffat & Zhang, 2014) (Hall et al, 2015) found that good relations established by mining companies were more effective in building trust in society. Likewise, the findings (Leena, 2019) in Finland that good interactions and relationships between communities and companies are important in gaining acceptance of mining activities.

**Ha7:** Intimate contact between the community and the company will increase public trust in the company's mining operations

### **2.12 Procedural Fairness and Trust**

According to Siegrist, Connor, and Keller (2011), procedural fairness is defined as how fair the community feels the results of the decision making process company. Thus, a fair procedure will be a promising approach to increase community acceptance of mining operations.

(Moffat & Zhang, 2014) (Zhang et al, 2015) found that when community aspirations are more considered, trust in mining companies will go well to increase revenue from mining activities,

**Ha8:** Procedural justice perceived by the community will affect community trust in the company's mining operations

### **2.13 Trust and Acceptance of Mining**

According to Thomson and Boutilier (2011), Trust is always discussed comprehensively in discussions on social licenses to conduct mining operations around the community. (Moffat & Zhang, 2014) (Zhang et al, 2015) concluded that when trust is built between the community and the mining company, mining activities are more acceptable to the community.

**Ha9:** Community trust in the company will increase community acceptance of the company's mining operations

### **2.14 Balance of Benefits over Impact and Acceptance of Mining**

According to Zhang & Moffat, (2015) when the benefits received by the community outweigh the (negative) impacts arising from activities mining will affect the increase in community acceptance of the company's mining activities

**Ha<sub>10</sub>**: When the community feels the benefits obtained are greater than the impact they feel will increase community acceptance of the company's mining operations

### **3. Methods**

#### **3.1 Population and Research Samples**

The population of this research is the entire community living around the mining area with a sample of about 210 community respondents living around the mining area in Lampung.

#### **3.2 Dependent Variables**

The dependent variable of this study is Acceptance of Mining, was measured by three items adapted from the journal Moffat and Zhang (2015).

#### **3.3 Independent Variables**

##### **3.3.1 General Financial Benefit**

General Financial Benefit was measured by three items adapted from the journal Moffat and Zhang (2015). General financial Benefit used to determine how prosperous communities around the mine from the financial side.

##### **3.3.2 Improvement in Infrastructure**

Improvement in Infrastructure was measured by three items adapted from the journal Moffat and Zhang (2015). Improvement in Infrastructure is used to measure the benefits received by the community in terms of infrastructure development around the mining area where they live.

##### **3.3.3 Employment and Community Development**

Employment and Community Development was measured by three items adapted from the journal Moffat and Zhang (2015). Employment and Community Development is used to determine the company's contribution to the development of communities and communities around the mining area.

##### **3.3.4 Increased Living Cost**

Increased Living Cost was measured by two items adapted from the journal Moffat and Zhang (2015). Increased Living Cost is used to measure the increase in living costs felt by the community around the mine as a result of mining operational activities carried out by the company.

##### **3.3.5 Impact on Other Industry**

Impact on Other Industry was measured by one item adapted from the journal Moffat and Zhang (2015). Impact on Other Industry is used to measure the impact felt on other industries as a result of mining operational activities carried out by the company.

### 3.3.6 Environmental Costs

Environmental costs was measured by three items adapted from the journal Moffat and Zhang (2015). Environmental costs are used to measure the impact on the environment around the mining area as a result of mining operational activities carried out by the company.

### 3.3.7 Intimacy of Contact

Building positive contacts is an important thing for companies to do because it will increase the trust of the community. The positive contact that exists between mining companies and community members living around the mine must lead to good intentions and trust, which in turn will increase the likelihood that mining developments will be accepted by the community, which in turn that social licenses will be granted by the community (Moffat and Zhang, 2014 ). This variable is used to measure how far the mining company knows the community around the mine and how often the mining company has two-way communication with the community.

### 3.3.8 Procedural Fairness

Procedural Fairness was measured by three items adapted from the journal Moffat and Zhang (2014) entitled "The paths to social license to operate: An integrative model of explaining community acceptance of mining". This variable measures the community's opinion of the extent of their influence and involvement in company decision making.

### 3.3.9 Trust

Important in obtaining a social license from the community, community trust represents the extent to which the general public has confidence in mining companies (Poppo and Schepker, 2010). Communities may be expected to respond positively to mining companies where the company will not take profits that cause harm to the community itself, demonstrate integrity and competence in how they manage the risks represented by their operations, work with them and meet community expectations of corporate behavior(Moffatand Zhang (2014). this variable measures regarding public confidence in the company and to what extent the influence and involvement in corporate decision-making.

### 3.3.10 Balance of benefits over Costs of mining

Balance of benefits over Costs of mining was measured by one item adapted from the journal Moffat and Zhang (2015). A balance between the benefits and the negative impact of mining activities of the company is important to understand by the surrounding community. This variable measures the trust of the community towards the company and the extent of their influence and involvement in company decision making.

## **4 Discussion**

When the company wants to carry out operational mining activities the company needs a Mining Business License (IUP) from the regulator. However, formal permission from the regulator was not enough to ensure the smooth operation of the mine in the future. The social permission from the community around the mine turned out to affect the smooth operation of the mine in the form of community acceptance of the company's activities. The community's acceptance of the company's mining activities is certainly influenced by a variety of factors, one of which is the benefits (Zhang & Moffat, 2015) obtained by the community, the impact felt by the community and community trust. A rational society will certainly consider the benefits gained against possible negative impacts felt in the future. So in the end by considering all the related factors, the final result will be known by the community to their acceptance of mining operations carried out by the company.

## 5 Conclusion

This study contributes to accounting research related to factors that influence community acceptance of mining activities carried out by the company. The company needs to know that in addition to permits from the regulator, social licenses from the community also need to be obtained because these two things will affect the smooth operation of mining operations in the community. The results of the research are expected to provide information to practitioners such as managers as company executives when they want to channel CSR funds in the community and understand the desires of the community well to get social permission from them and to be able to benefit the government as a regulator in understanding the needs and desires expected by the community around the mining area.

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