

MINING REGULATION AND IT'S IMPACT ON PUBLIC WELFARE

Hamartoni Ahadis¹, Wan Abbas Zakaria², Irwan Sukri Banuwa³ and *Lindrianasari⁴

¹Graduate School of Environmental Science, University of Lampung, Indonesia;

^{2,3,4}University of Lampung, Indonesia.

*Corresponding Author, Received: 10 June 2019, Revised: 16 Dec. 2019, Accepted: 16 March 2020

ABSTRACT: This study aims to provide empirical evidence on the impact of mining company policies in Lampung Province on improving community welfare. The issue used in this study was the enactment of Law No. 23 of 2014 which transferred the authority to manage mineral and coal mining to the Province (previously managed by the Regency/City). This study separates two periods of observation, namely before and after the authority to administer affairs in the mineral and coal mining sector has shifted to the provincial government. Using secondary data derived from records of receipts sourced from mining companies in each region for five years of observation (2010-2014 for the before period). While the 2015-2018 data will be collected from the government of Lampung Province, because since 2015 the authority to administer affairs in the mineral and coal mining sector has shifted to the Provincial government (2015-2018 for the after period). This welfare is measured using local original income. The greater the annual average local original income from mining received by the Province compared to the average accumulated annual local original income from mining received in all districts / cities in Lampung, the welfare index in Lampung Province also increases. The results of the 2010-2018 analysis show an increase in local original income from mining companies after the enactment of Law No. 23 of 2014. This finding indicates that mining regulations issued by the government improve community welfare and confirm regulatory theory, especially the theory of public interest.

Keywords: Regulation, Mining Companies, Public Welfare.

1. INTRODUCTION

Mining companies are companies that are very sensitive to the environment, because their operational activities are exploiting natural resources. Because the impact of environmental damage caused by the activities of this company is quite large, the policy on social responsibility and the environment of mining companies must be designed by the government. Without policy, ecosystems in the region will be threatened, and conflicts between communities and companies will increase. In this condition, government interference must be able to deal with problems that might arise from mining activities. From the company side, the social and environmental responsibility of mining companies should not be limited to Philanthropy but must be within the company's business strategy [1]. Thus, social and environmental accountability will indeed be managed by considering the relevance of the program to the activities of the company.

Through Law 23 of 2014 concerning Regional Government, mandates the authority of the Provincial Government in the field of energy and mineral resources. This law is strengthened by the Minister of Energy and Mineral Resources Circular Letter Number 04.E / 30.DJB / 2015 which confirms that the Regents / Mayors no longer have authority in the administration of minerals and coal.

The imposition of penalties in the form of revocation of mining company licenses in several regions in Indonesia shows the inconsistency of the

company's activities with the will of the community. The difficulty of meeting public needs with corporate actions results in a conflict of interest. Government intervention is indeed a way that is expected to be able to converge the needs of both parties.

Based on data from the Ministry of Energy and Mineral Resources as of 1 January 2019, a total of 539 Mining Business Licenses (IUP) or 15.92% of 3384 Coal Mining IUPs are in non-Clean and Clear (non-CnC) status. The Director General of Mineral and Coal has asked the provincial government to immediately revoke the Mining and Mineral Business License (IUP) which does not have a non-CnC certificate. Because, there are still many mining companies that do not try to respond to the status of non-CnC to become CnC. In other words, mining companies should strive to improve their business processes to comply with the rules so that they are in the status of CnC (<https://www.cnnindonesia.com>).

This condition may be driven by the note that funds that must be deposited from mining companies to regional governments are still very low. Government revenues from mining activities are defined contributions, such as; exploration fees (work contracts/ feasibility studies, construction), exploitation contributions (Royalties) and other payments related to the granting of mining rights (Decree of the Minister of Finance of the Republic of Indonesia number 344 / kmk.06 / 2001).

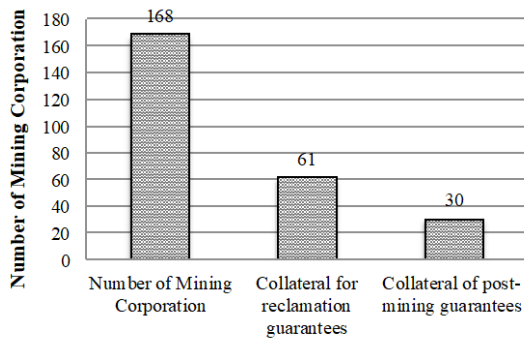


Fig. 1 Collateral for reclamation and post-mining guarantee in Lampung Province, 2018.

The low awareness of mining companies to provide guarantees of reclamation and post-mining is shown in Figure 1. From figure 1, it can be seen that there were only 36% of mining companies out of a total of 168 companies that paid collateral for reclamation. Meanwhile, companies that pay post-mining guarantees are only 18%, and all of them come from companies that also pay collateral for reclamation. The low number of mining companies paying collateral for reclamation and post-mining guarantees to the Lampung Provincial Government shows the lack of awareness of mining companies to allocate company funds for environmental improvement after mining activities are completed (especially for post-mining). The state policy to regulate and provide morning penalties for violating rules related to post-mining environmental recovery is one of the policies that will provide changes and improvements in the quality of the environment around mining.

2. LITERATURE REVIEW

Regulatory theory, specifically public interest theory, introduced 1934 in the book *The Economics of Welfare* [2], explains that the policies issued by regulators are in the interests of the people, namely improving inefficiency and injustice in practices that occur in the field. Lindrianasari et al. [3] found that the theory of regulation (particularly for public interest theory) can explain clearly the reasons why the four variables research has increased after the environmental regulations issued. Their research found similar results in all companies listed on stock exchanges in three developing countries, namely Indonesia, Malaysia and Thailand, related to new policies on social and environmental responsibility.

Deegan and Unerman [4] explained that policies will not only bring benefits to the people but also to protect the environment and maintain sustainability. Regulatory theory predicts that policies issued by the government related to the authority of environmental management (in terms of activities of exploitation of

natural resources), should be able to improve the quality and sustainability of the environment.

The stakeholder theory explains which parties the company must be responsible for [5]. At the very least, the company must be able to maintain its relationship with stakeholders, by fulfilling obligations that are the will and needs of stakeholders, including powerless-stakeholders. In this case, the company must ensure the availability of resources used for the operational activities of the company and the surrounding community.

In according with Law 23 of 2014 concerning Regional Government that mandates the authority of the Provincial Government in the field of energy and mineral resources, the assessment of social impacts on mining is an important matter. The purpose of this social impact assessment is to see whether regulatory theory can be confirmed in the application of the law. At present, there is no global regulatory system or an international legal system can force companies to be responsible for their operations in weak governance zones [6]. Because in weak governance zones, social and environmental problems are relatively higher, vice versa. Therefore, there must be an alternative accountability mechanism that applies at least within the scope of the state and the region that regulates corporate social responsibility. Enforcement of the Act 23 of 2014 has become the answer to the needs of regulation in mining issues in Indonesia.

As the company aims, mining activities are managed to generate profits. But if there is mismanagement, mining activities can have a negative impact on human society, the environment, even for the sustainability of the company. The study conducted a test of how people around mining companies evaluate the benefits and negative impacts of mining has been carried out in Australia. Evaluation is carried out on communities around mining about the influence of the order of life of communities around mining [7]. They found that strong governance will increase the respect of the community towards the company relatively higher compared to when governance is weak, even when environmental conditions get worse.

Mining companies, are one of the companies that can be the highest source of state income. Even in the Democratic Republic of Congo (DRC) mining companies are expected to contribute 50% of GDP in 2015 (Reuters, 25 October 2010) up from 23-25% in 2010 [8]. Companies are required to assess the environmental losses of mining activities carried out, record them with the aim of transparency [9], and "pay" the damage as a form of corporate social responsibility to the public.

Previous studies have found empirical evidence that the public in developing countries consider the welfare factor [10] when they decide to accept mining companies, since environmental conditions

around mining often experience a decline in quality. Excessive pollution, droughts, and declining water quality are a measurement of environmental degradation. All these aspects will ultimately be directly proportional to the decline in public welfare.

From theoretical, practical explanations, and supported by previous studies, the research hypothesis as below:

Ha: Government policies on management authority in the field of energy and mineral resources improve public welfare.

3. RESEARCH METHOD

This research is a preliminary study conducted on the impact of the issuance of Law 23 of 2014 concerning Regional Government, regarding the transfer of management authority in the field of energy and mineral resources from the Regency / City Government to the Provincial Government. This law has also been strengthened by the issuance of the Minister of Energy and Mineral Resources Circular Letter Number 04.E / 30.DJB / 2015.

The research method used in this study is to involve the mining office in all cities and districts in Lampung Province. By using secondary data from two different recording sources. First, sourced from the mining offices of each district / city for data on revenues from mining companies in each region for the five-year period (2010-2014). Second, sourced from the environmental office for data acquisition from 2015-2018. The mechanism for obtaining data is by collecting it centrally at the Lampung Province government office. Moreover, since 2015 the authority to carry out affairs in mineral and coal mining has shifted to the provincial government.

This study will investigate the benefits of central government policies through Law 23 of 2014 concerning Regional Government. Whether after the authority in administering government affairs in the field of mineral and coal mining is transferred to the Province, public welfare will be better. This welfare will be measured by using Regional Original Income (PAD). The greater the annual average PAD from mining received by the Province compared to the average accumulated annual PAD from mining received in all districts / cities in Lampung, the welfare index in Lampung Province also increases.

4. RESULTS AND DISCUSSION

This research will determine the different test of regional original income from mining obtained in Lampung Province. Before and after the enactment of Law Number 23 Year 2014, which transferred the authority to manage mineral and coal mining to the Province (previously managed by Regency /City). This regulation of substance is not only transferring

management, but furthermore, this movement aims to provide greater authority to the Province to apply the pattern of uniformity that is applied to the mining sector to be responsible for the exploration and exploitation activities they carry out. With this pattern of uniformity, it is expected that the transparency and accountability of fund management from the mining sector will be better, and the misuse of funds can be minimized.

4.1 Regional Original Income

Regional original income obtained from the mining sector four years before the transfer of authority for the management of mineral and coal mining to the Province, in accumulated from 15 Regency/City in Lampung Province, is shown in Fig. 2 and Fig. 3.

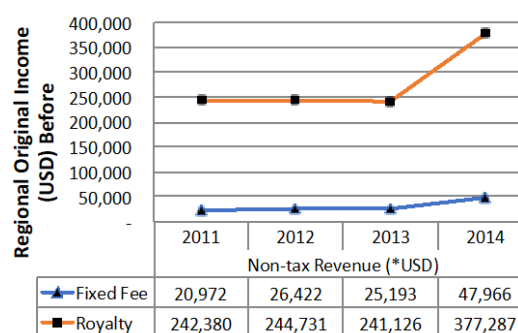


Fig. 2 Non-tax Revenue from fixed fee and royalties (Before).

Figure 2 show the local revenue originating from contributions fixed and royalty, while Figure 3 shows the total regional income from the mining sector. Figure 2 shows that income from fixed royalty fees before 2014 tends to be low (stable). But this was not the case in 2014, when the government issued its new policy. Even though Law number 23 of 2014 was effectively implemented in 2015, the fixed fees and royalties obtained from the mining sector showed an increase. So that we can visually see how the new regulation affects regional revenues. In Figure 3, it shows how the total revenue from the mining sector increased in 2014, in line with the income from each fixed contribution and royalty increase in 2014. These findings indicate that regulations will form a legal certainty of how a person or entity behaves, in line with the rules made.

Data from the Lampung Provincial Government shows an increase in the total non-tax revenue from the mining sector over the past 4 years (2015-2018). These results indicate an increase in the welfare of the community, assuming the rate of return to the community is directly proportional to the total non-tax income.

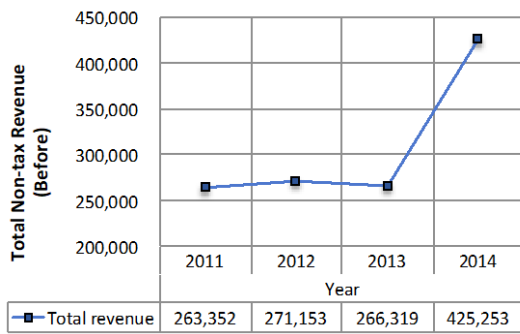


Fig. 3 Total Non-tax Revenue from fixed fee and royalties (Before).

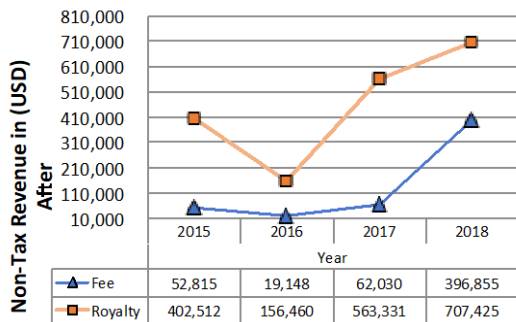


Fig. 4 Non-tax Revenue from fixed fee and royalties (After).

Since the enactment of Law 23 of 2014 that transferred the authority to manage mineral and coal mining to the Province (previously managed by the Regency/City), there has been an increase from sources of income from mining to the government. Figure 4 shows the growth of non-tax revenues originating from fixed fee and royalties of mining companies. Meanwhile, figure 3 shows the total non-tax revenue obtained by the province. Both images show non-tax revenues from mining over the past 4 years after the management of mineral and coal mining management was transferred to the province, which was previously managed in the district /city.

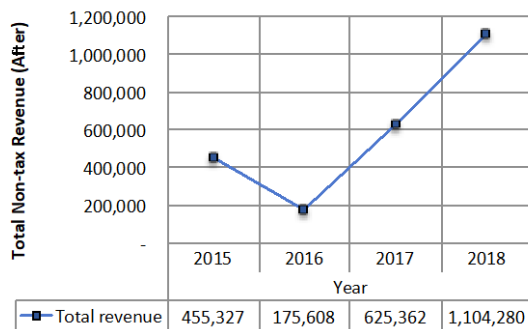


Fig. 5 Total Non-tax Revenue from fixed fee and royalties (After).

Figure 4 and Figure 5 show the growth of non-tax revenues obtained from mining companies. The income of the provincial government from the mining sector has been able to increase the amount of local revenue. Therefore, it is assumed that the higher the local revenue, the better welfare of the people in Lampung province.

The main operation of a mining company is to explore and exploit natural resources. Meanwhile, around the area where the company is exploring and exploiting, there are other interests that require a balanced ecosystem for a good life. For this reason, the function of the government is required to cover all the interests of the parties in this area, so that no party can obtain maximum benefits, while other parties only get negative impacts from mining activities.

The government must show its role as regional leader. The role of the government must be to minimize gaps between community groups and groups of companies, and / or in one region with other regions. Therefore, the existence of regulations that take over the authority at the lower level to a higher level is highly expected to create better welfare equality. Law 23 of 2014 concerning Regional Government which mandates the authority of the Provincial Government in the field of energy and mineral resources is one of the regulations that is expected to create welfare equality. This law is also strengthened by the Minister of Energy and Mineral Resources Circular Letter Number 04.E / 30.DJB / 2015 which confirms that the Regent / Mayor no longer has the authority to administer government affairs in mineral and coal mining.

4.2 Comparison of Original Regional

We conducted an independent sample t-test to assess differences in government revenues from the mining sector before and after the enactment of Law 23 of 2014. The reason for using this test is because we use the average income for 4 years before and 4 years after, so the total sample used is < 30.

Table 1 Comparison test

Levene's Test for Equality of Variances	
F	10.100
Sig	.034
Equal variances not assumed	
t	-4.177
Sig. (2-tailed)	.047*

Note: *significant at the 0.05 level.

The results of the homogeneity test using the Levene's test method show the value based on Mean, which is 0.001 with p value (sig) of 0.034 where > 0.05. These results indicate that there are

inequalities in variance between groups or heterogeneous. Therefore, we use the value of equal variances not assumed to determine whether there are any differences between the groups tested. Table 1 shows the results of the independent sample t-test.

The result of equal variances not assumed shows the $t = -4,177$ with sig. (2-tailed) $0.047 < 0.05$ which indicates that the regional original income from the mining sector after the application of Law 23 of 2014 was significantly higher. These results mean that what is predicted by regulatory theory (public interest theory) that policy should be publicly confirmed is confirmed through this research. Because with the increase in the amount of local revenue, the greater funding can also be made in the area to improve the welfare of the community.

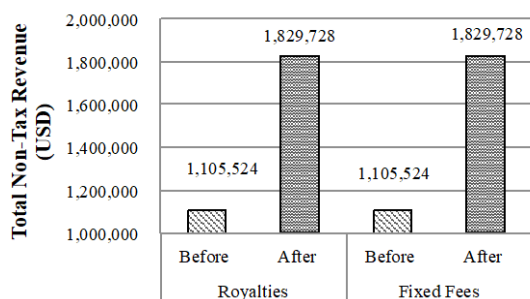


Fig. 6 Non-tax revenue before and after enactment of Law No. 23 of 2014

This finding is in line with previous research that found that the intervention of developing country governments greatly determines the company's compliance in considering social and environmental aspects [8][10]. This finding also indicates that the government issued a new policy to regulate the management of funding revenues from mining activities to improve community welfare. This finding concludes that the hypothesis of this study that states that government policies on management authority in the field of energy and minerals improve public welfare is supported.

5. CONCLUSIONS AND SUGGESTIONS

This study found a significant increase in regional original income in Lampung Province after the enactment of Law No. 23 of 2014. This finding also shows that the aim of the government in issuing a new policy is to manage the amount of funds in the regions from mining activities which has succeeded in increasing the revenue of the Province.

Although this study was only conducted in Lampung Province, this study can be used as a reference that the regulations issued turned out to be in favor of the interests of the community. Because

with the increase in local revenue, capital expenditure for the community is also expected to increase. That way, people's welfare will increase with this new policy.

This study can be applied to other regions in Indonesia. Future research can use the same approach and / or use other approaches, to test the superiority of the issuance of laws relating to the management of mining (related to the environment and social community). Further studies are also expected to expand research content, by combining secondary and primary data (surveys into the community) so that subsequent studies can provide more comprehensive and useful results.

This study faces data difficulties in gathering data on local revenue sourced from mining companies / activities in the district / city. This difficulty is because since 2015 this section has been merged with the environmental office, and the person responsible for the data has been transferred to another office. In addition, the performance of data archiving (in all matters including income data from mining) in the regions must still be improved. This transition period makes data acquisition more difficult.

This study suggests that the next research is the need to expand the observation area, in this case the local government. The broader the object of research observation, the higher the external generalization of research in this topic. This good research contribution can have implications for strong policies, not only regarding policies related to mining companies but also including the importance of good data documentation in the government sector.

6. ACKNOWLEDGMENTS

This paper was completed thanks to the support of many parties, especially the team of promoters and lecturers in the Doctoral Program in Environmental Sciences, University of Lampung. Valuable discussions with colleagues in the doctoral program, fellow practitioners from mining companies in Indonesia, heads of mining departments, heads of environmental offices, and Lampung provinces. In addition, this study received highly input from reviewers at the GEOMATE International Conference, Tokyo 2019. For all the support, we say thank you.

7. REFERENCES

- [1] Ralph H. and Kapelus P. Corporate Social Responsibility in Mining in Southern Africa: Fair accountability or just greenwash? *Development*, Vol. 47, Issue 3, 2004, pp.85-92.
- [2] Pigou, A. C. *The Economics of Welfare*.

- London: Macmillan and Co. 1932, pp. 1-948.
- [3] Lindrianasari M., Kufepaksi Y., Asmaranti A., Komalasari. Social and Environmental Responsibility in Developing Countries: A Theoretical Approach to Regulation. International Journal of GEOMATE, Vol. 15 Issue 49, 2018, pp. 47 -52.
- [4] Deegan C. and Unerman J., *Financial Accounting Theory*. Maidenhead: McGrawHill Education, 2011.
- [5] Freeman R.E., Harrison J.S., Wicks A.C., Parmar B., de Colle V., Stakeholder Theory. The State of the Art. Cambridge University Press. New York, 2010. pp. 1-364.
- [6] Catherine C., Alternative Accountability Mechanisms and Mining: The Problems of Effective Impunity, Human Rights, and Agency. Canadian Journal of Development Studies Revue canadienne d'etudes du developpement. Special Issue: Rethinking Extractive Industry Issue 1-2, 2010, pp. 27-48.
- [7] Airong Z. and Moffat K., A balancing act: The role of benefits, impacts and confidence in governance in predicting acceptance of mining in Australia. Resources Policy, Vol. 44, 2015, pp. 25–34
- [8] Rebecca H. and Christopher H., The view from below: 'lock in' and local procurement in the African gold mining sector. Resources Policy, Vol. 37, Issue 4, 2012, pp. 468–474.
- [9] Evana E., Lindrianasari, and Andriyanto R. W., How Does the Accounting Treatment of the Environment Transaction and How it Impacts to Company's Performance? Case from Indonesia. Indonesian Journal of Sustainability Accounting and Management, 3(1), 2019, pp. 49–54.
- [10] Evana E., Lindrianasari H., Ahadis, and Asmaranti Y., Public acceptance of mining companies in Indonesia. International Journal of GEOMATE, Vol.19, Issue 72, pp. 159 – 165.

Copyright © Int. J. of GEOMATE. All rights reserved, including the making of copies unless permission is obtained from the copyright proprietors.
