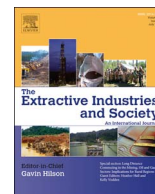




Contents lists available at ScienceDirect

The Extractive Industries and Society

journal homepage: www.elsevier.com/locate/exis

Original article

Marginalization of a coastal resource-dependent community: A study on Tin Mining in Indonesia

Isma Rosyida*, Wahidullah Khan, Masatoshi Sasaoka

Department of Human System Science, Graduate School of Letters, Hokkaido University, Kita 10, Nishi 7, Kita-ku, Sapporo, Hokkaido, JP 060-0808, Japan

ARTICLE INFO

Keywords:

Marginalization
Decision-Making
Coastal Tin Mining
Indonesia

ABSTRACT

This study, conducted in Bangka Island of Indonesia, reveals how local power dynamics spawn ‘grey participation’ within local decision-making frameworks and how the imbalanced distribution of impacts and benefits from suction dredger operations shift local people’s perceptions, potentially marginalizing them. This study utilized structured and semi-structured questions through household surveys of 80 respondents, 35 key informant interviews, and one focus group discussion to study how large-scale coastal tin mining marginalizes a local community in Bangka Island and how it impacts people’s livelihoods. Results show that villagers initially accepted suction dredger operations because they were unaware of the impacts, public consultation meetings did not guarantee active participation in the decision-making process and took advantage of the communities’ lack of knowledge and understanding of the purpose of the meetings, and that companies emphasized community benefits rather than the potential adverse impacts caused by suction dredging. The community is marginalized because locals do not have equal access to benefits and because not all impacts are equally shared among all stakeholders. We suggest that locals be given equal opportunities in decision-making ensuring that benefits are fairly received. We encourage good mining governance formation to avoid larger negative impacts on both community and the environment.

1. Introduction

The mining sector plays a profoundly significant role in the Indonesian economy, contributing approximately five percent to the total Indonesian gross domestic product and a much greater share than the regional economies of some resource-rich provinces (IM4DC Action Research Report, 2013). Since 1998, policies and regulations related to the mining sector in Indonesia have undergone considerable changes (Dutton, 2005). For instance, the deregulation of the tin trade that accompanied the introduction of regional autonomy in January 2001 led to a new era in the history of Indonesia’s tin mining management (Cribb and Ford, 2009). Consequently, the region’s response to the transfer of authority from the centre to the regions and its search for sources of regional revenue were rapid and radical (Erman, 2007a, 2007b). One of the perceived drawbacks of this transfer was legalized offshore tin mining by suction dredging (SD) operations (Ibrahim, 2016). SD operations are used for the underwater excavation of alluvial deposits, and without proper mitigation and monitoring, they can have definite negative environmental impacts, such as sedimentation, the death of nearly 30% of the local coral reef (within one year), water contamination, coastal erosion, and pollution. Operating within 0-6

miles geographical proximity under the authority of the district and provincial government, a suction dredger is capable of digging 70 cubic meters below sea level (Manap, 2008).

However, extractive industries bring significant social, economic, and environmental changes to the regions in which they operate (Aguilera et al., 2007), threatening the sources of peoples’ livelihoods (Ashraf et al., 2012). Similarly, Bangka Island SD operations have influenced the livelihoods of many people, particularly fishers whose lives depend on coastal and marine resource availability, such as fish, shrimp, and crabs, and those who work near the SD operating areas (Muslih, 2014). A press report by KIARA (2013) mentioned that the operation of more than 70 SD companies is threatening the livelihoods of 16,000 of the 45,000 fishers on Bangka Island. As a result, operational costs are increasing owing to longer fishing distances, which is time consuming and ultimately leading to a drastic reduction in the average income of fishers in Bangka Island by up to 80%. Income ranges from 400,000 rupiah (USD 25) per day to 1,000,000 rupiah (USD 60) per day per fisher, with an annual loss of approximately 15 billion rupiah. It creates serious conflict of interest issues between mining companies and potentially affected local communities, among which, fishers are considered the most vulnerable (KIARA, 2013).

* Corresponding author.

E-mail addresses: ismarosyida@gmail.com (I. Rosyida), waheedullah@live.in (W. Khan), m.sasaoka@let.hokudai.ac.jp (M. Sasaoka).

<https://doi.org/10.1016/j.exis.2017.11.002>

Received 30 August 2017; Received in revised form 5 November 2017; Accepted 5 November 2017
2214-790X/ © 2017 Elsevier Ltd. All rights reserved.

In Indonesia, issuing licenses for tin extraction is authorized by state regulations and policies pertaining to sea mining activities, including Decree No. 4 of 2009 (Minerals and Coal) (Mujiyanto and Tiess, 2013), Decree No. 27 of 2007 (Management of Small Islands and Coastal Resources) (Siry, 2011), and Decree No. 32 of 2009 (Protection and Management of the Environment) (Campbell et al., 2012). According to the aforementioned regulations, all mining companies are required to conduct environmental feasibility studies and environmental impact assessments (EIAs) and to pay royalties. A shift from a centralized to a decentralized government encouraged district-level governments to draft their own rules governing natural resources, giving district heads the authority to issue permits for SD operations. Nevertheless, full legal compliance with state environmental regulations has thus become an increasingly insufficient means of satisfying society's expectations with regard to mining issues (Prno and Slocombe, 2012).

Previous research shows that there is growing recognition within the extractive sector concerning the importance of obtaining approval from the local community before conducting activities (Franks et al., 2014). Similarly, a study by Lesser et al. (2017) highlighted the significant role of the local community in Finnish Lapland regarding the issuance of social licenses. Both studies demonstrate the widespread recognition of local approval, commonly known as social license, as a community's ongoing acceptance of a company's operations in their area. In parallel with the emergence of the social license, Prno and Slocombe (2012) recognized two different perspectives on the importance of such a license. For mining companies, it reduces social risk and facilitates operations without community conflict, and for local communities, it often implies that they have been meaningfully involved in decision-making and have received sufficient benefits from the project. As Hitch and Fidler (2007) suggested, communities recognize their rights to local resources as a critical way to end dependency and regain control over their livelihoods. Conflicting interests can be the result between different stakeholder groups, which means that the satisfaction of one stakeholder group may be at the expense of another group's well-being. Furthermore, Lesser et al. (2017) also emphasized the urgency of developing social licensing procedures to safeguard the local community, which may be particularly adversely affected, but it is not considered a majority voice. In the context of Indonesia, Spiegel (2012) pointed out that numerous controversies in Bangka Island over tin mining governance occurred because of conflicts between companies and communities, and the resulting environmental and social problems associated with the revenues derived from their regions. Such procedures would encompass the idea of public participation in the decision-making process of issuing social licenses.

However, few empirical field studies have investigated the decision-making process of issuing social licenses with regard to the underlying factors influencing local acceptance of SD operations, along with community perceptions of their impact on local livelihoods. In this paper, we explore how the local people issue social licenses for large-scale coastal tin mining in Bangka Island and how such decision-making affects people's livelihoods through intensive household surveys, in-depth interviews, and an empirical analysis. We then provide some implications for local decision-making on tin mining SD.

This paper is organized as follows. First, we look into the local subsistence dynamics and the history of SD penetration. Then, we describe how local people perceive the benefits and impacts of SD operations, causing them to shift their attitudes toward SD operations. Subsequently, we investigate decision-making processes by describing how SD operation licenses are issued, the roles and responsibilities of the actors involved, and the distribution of compensation and royalties by the SD company. Finally, we suggest several important points that should be considered to make fair and just decisions on tin mining SD.

2. Methods and materials

2.1. Study site

This study was conducted in Desa¹ Y, which is located on Bangka Island in Indonesia and which, from an administrative perspective, consists of five hamlets. This study site, however, covers only one hamlet, Dusun² X. It is geographically remote and isolated from the rest of the *desa* with difficult and time-consuming access owing to a muddy road and no public transportation. People living in the *dusun* are poorly connected to the rest of the *desa*, its market, schools, and the district government. According to a local elder, SP (75 years old), the Bangka Malay are the dominant ethnic group in Dusun X, which is comprised of traditional fisheries and shifting cultivation communities and is characterized by strong mutual cooperation among the people. For locals, fishing is not only an economic activity but also a personal actualization passed down through the generations, and agricultural activities are also passed down from one's ancestors. Subsistence activities in the coastal community of Dusun X are strongly influenced by seasonal conditions, resource availability, and ownership. The *bagan*³ is the primary fishing instrument the *dusun* fishers use. Agriculture is a livelihood source for locals, in which pepper is the most successful and valuable cash crop because it has a relatively stable and high selling price. Therefore, in difficult times, locals can sell it to meet urgent needs. Today, rubber is cultivated with a long-term perspective owing to the depletion of fish stocks.

The introduction of small-scale tin mining in the 2000s shifted the primary source of income, attracting not only locals but also individuals from other regions, and an influx of migrants began. Some local people were driven to mining because of poor crop harvests, stemming from unfavourable weather conditions, and/or to supplement household income following the end of the agricultural season. Thus, shifting modes of production to capital-oriented, small-scale mining activities commenced, followed by large-scale tin extraction using SD, creating socioeconomic dependence on tin resources. The presence of large-scale tin mining companies boosted the *dusun*'s development by providing alternative temporary income sources and improving public infrastructure. Consequently, SD activities have exploited tin resources unsustainably and have destroyed the local marine and coastal ecosystem. The research site was selected based on the local dependence on marine and coastal resources. Historically, people living in Desa Y have engaged in small-scale fishing as the primary economic activity, with subsistence agriculture as a supporting economic activity.

2.2. Data collection techniques

This study employed structured and semi-structured questions in household surveys (80 respondents), key informant interviews (35 informants), and one focus group discussion (FGD) involving 25 participants. Among the information collected via household surveys, we specifically asked about household characteristics, household subsistence and livelihoods assets, dependency on coastal resources, perceptions of SD operations, compensation and royalties, perceived impacts of SD on local resources, participation in Public Consultation Meetings (PCMs), tin loading activities, and committee involvement. We interviewed 85 respondents in total and excluded five respondents from the analysis as they were not permanent residents of the study

¹ A term used for 'village' in the Indonesian language.

² A term used for 'hamlet' in the Indonesian language.

³ 'Bagan' is locally defined as one of the fishing instruments in the form of a lift net that is linked to a bamboo frame building and that is normally operated at night because it uses lamp light as a means of attracting the fish. The area of operation for the installation of a bagan is a clear aqueous coastal water, having a depth of 7–10 meters. The distance from the beach is 2–4 miles and the distance between from one bagan to other is 200–300 meters.

Download English Version:

<https://daneshyari.com/en/article/7454280>

Download Persian Version:

<https://daneshyari.com/article/7454280>

[Daneshyari.com](https://daneshyari.com)