



Social Tensions in Mining Areas Through the Hydrosocial Territories Perspective: A Case Study in Sumberagung Village, Banyuwangi

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Abstract. This research aims to investigate the social tensions arising from mining activities in Sumberagung Village, Banyuwangi. The focus of this study is on the dynamics of interaction between residents and the village government, as well as the psychological impact of mining conflicts on the residents. The analysis utilizes the Hydrosocial Territories perspective (Boelens et al., 2016), which elucidates the formation of territorial meaning through complex interactions among social, environmental, technological, and socio-political factors. The research employs a qualitative approach with a case study methodology. Data is acquired through in-depth interviews with residents and village officials, as well as observation and document analysis. The goal is to understand the enduring conflict dynamics in this village, including the meaning attributed by residents and its psychological impact. The research findings demonstrate variations in residents' viewpoints toward mining, with differences between supportive and opposing groups. This study not only depicts conflicts within the village context but also offers insights into emerging social dynamics and their psychological consequences. The implication underscores the necessity for inclusive interventions to alleviate tensions and promote collaboration between the village government and the community in managing this conflict.

Keywords: social tension, mining, hydrosocial-territories, banyuwangi

1 Introduction

Since long ago, the gold mining industry has continued to captivate the hearts of various parties. In Indonesia, the history of mining has been an integral part of economic growth since the 8th century AD [1]. To this day, interest in mining continues to grow rapidly along with technological advancements. However, one thing remains unchanged over time. The gold mining industry almost always carries a potential threat to natural sustainability [2]. This is due to the fact that gold mining activities involve extraction processes that include separating valuable minerals from soil and rocks. This process has the potential to generate toxic waste that can adversely affect water resources, soil, as well as the surrounding ecosystem[1], [2].

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Environmental impact is a challenge for the gold mining industry because nature is an important element in various lines of human life. The potential damage to nature due to the presence of mining areas poses a threat to communities in the surrounding area and often triggers conflicts, both vertical and horizontal. Intensive use of water resources, changes to the physical environment, and economic changes in the villages involved can create tensions between local residents, village governments, and mining companies. Sumberagung Village, Pesanggaran Sub-district, Banyuwangi Regency, is one proof that the phenomenon of conflict due to the presence of gold and its threat to the environment does exist [2], [3].

The gold mine in Sumberagung Village, Pesanggaran District, Banyuwangi Regency is located in the Tumpang Pitu Mountain area. This mine is one of the largest mining areas in Indonesia. Gold exploration in this area was first carried out in 1997 by PT Hakman Platino Metallindo (HPM) after receiving permission to explore the area at the end of the New Order era, namely in 1995-1996. Since then, the mining management authority has changed hands several times, namely to PT Indo Multi Niaga (IMN) in 2006, and then from PT IMN to PT BSI (2012). PT BSI, as a subsidiary of PT Merdeka Copper Gold Tbk, started its first operation in 2017. During the initial period until it was finally managed by PT BSI, permit and legality issues became a problem for the company because Mount Tumpang Pitu is a Protected Forest. The existence of a mine in the area contradicts Article 38 paragraph (4) of Law Number 41 of 1999 concerning Forestry [4].

Since that early period, residents around the mine have protested, especially farmers and fishermen[2]. Even so, mining activities continued. Until 2013, through SK.826/Menhut-II/2013, the Indonesian Ministry of Forests at that time downgraded the status of part of the mountain area that became a mining area to Production Forest. This downgrading triggered more resistance from residents. The peak occurred in 2015, when the community, accompanied by a number of environmental activists and NGOs held a massive demonstration at the PT BSI office . This action was accompanied by the burning of office buildings, attacks on company employees, and clashes with the police. At this moment, there was a shooting by a police officer that left three people injured [2].

The wave of rejection since the 2015 demonstration has become more intense. However, the escalation of the conflict ended in 2017, when the resistance movement led to the arrest of one of the local activists, Budi Budiawan, better known as "Budi Pego". The reason for the arrest of Budi and three other colleagues was the police's discovery of a banner with a hammer and sickle logo, a symbol of the Indonesian Communist Party (PKI)[5]. This arrest was considered a form of criminalization, because basically no residents felt that they were carrying the banner. The residents suspected that the banner was carried by provocateurs.

Three of Budi's colleagues were released, while Budi was sentenced to four years in prison on charges of spreading the teachings of communism, marxism-leninism. Since then, acts of rejection in the form of physical clashes and demonstrations have subsided [2], [6]. However, this does not mean that tensions have diminished. The rejection movement remains, except that the communities and their allies have taken more secure spaces to voice their unrest and discomfort, such as blocking access to the

company, hunger strikes, or cycling to the East Java Governor's office in Surabaya. In addition, tensions in the community towards the existence of mining can also be shown through changes in the form of rejection of the existence of mining into campaigns on social media, legal advocacy, education, and collaboration between sectors, through the formation of the Banyuwangi People's Forum alliance (ForBanyuwangi)[2], [5].

The conflict between the villagers of Sumberagung is essentially broader and does not only involve disputes between the community and the company. Behind the various conflicts, there are tensions in the relations between the actors involved in the phenomenon. Tensions between management companies that occurred during the transition period, between companies and the government related to legality, between central and local governments, communities with the government, communities with companies - as explained earlier, as well as tensions between community groups supporting and opposing the existence of mining. Tension does not always appear as an angry reaction, but also, the reaction and resolution of tension will be different for each individual and group. However, due to its various triggers, the tension between residents and the company is the most visible tension because it is manifested in demonstrations [3].

Tension, from a psychological point of view, is an affective state associated with instability about events that has an emotional reaction built on predictive processes and creates a drive for resolution. [7] Social tension, then, is tension that is the result of human interaction with the social environment. Social tension refers to an individual or group response to an unfavorable social, economic, or political situation, impeding the fulfillment of needs, goals, expectations, or ideals regarding justice [8]. Social tension is a multidimensional component involving physiological, psychophysiological and socio-psychological adaptation dynamics. Tension can take any form, including optimistic feelings, because according to a study, cognitively, it precedes emotions [7]. This model is in line with the opinion that tension does not always cause direct angry reactions, as residents did during the 2015-2017 period, but can also manifest into concern, as well as concern for the conditions that are the source of tension - social situations that are contrary to individual expectations.

Given the series of events and situations in Sumberagung Village after the presence of the Tumpang Pitu gold mine, there are a variety of factors that can trigger social tensions: inequality of access, injustice in the distribution of benefits, threats to economic fulfillment, polarization of pro and contra residents, water pollution, noise pollution, and a history of natural disasters. Thus, when the eruption of conflict between residents and mine managers has subsided, it does not mean that the social situation is stable and ideal for residents around the mine. These factors indicate a gap between the current situation and expectations, which can cause feelings of discomfort, anger, worry, and other socio-psychological conditions relevant to social tension [8]. And if examined further, the factors that cause social tensions that lead to conflict in communities around mining areas, come from one cause, namely the exploitation of nature. Therefore, this research tries to describe the social tensions that occur in the region through the perspective of Hydrosocial Territories.

Hydrosocial Territories is a framework that aims to provide an overview of the complexity of the configuration of a particular region formed from interactions between humans, ecological aspects, infrastructure, water, technology, regulation and culture

[9]. In this approach, water - as a symbol that represents nature and the ecosystems within it, has an equally important position as humans, socio-political systems, and other elements. Nature is not only an object, but also a subject that plays a role in shaping the meaning of a region [10].

The Hydrosocial Territories perspective can provide new insights into how the natural configuration of the Tumpang Pitu gold mining area is perceived by various parties as playing a key role in shaping social tensions. The gold mine in Sumberagung Village, located on Mount Tumpang Pitu - formerly a Protected Forest - has impacted on various aspects of the surrounding community's lives. The conversion of the forest into a gold mine has created tensions. These environmental changes have altered patterns of community life, forced the government to make decisions, attracted environmental activists, and created tensions that have led to disputes, both vertically and horizontally. All this is happening in a region where control over water and its ecosystems is an element in every event. Therefore, the Hydrosocial Territories approach is important in understanding and addressing social tensions in the region.

Previous studies have shown that social tension is a determinant of change. Social tensions have also been empirically proven to be a predictor of conflicts in Russia related to mining areas [11]. In addition, social tension can also be used as a measure of community welfare. So, by knowing the description of social tensions in one of the largest mining areas in Indonesia through a perspective that humanizes nature, Hydro-social Territories, this research is expected to provide comprehensive insights for science. Thus, it can also contribute to policy makers to formulate targeted strategies.

2 Research Methods

This research was conducted in Sumberagung Village, Pesanggaran District, Banyuwangi Regency. The method used is qualitative with the aim of obtaining an in-depth understanding of social phenomena in the Tumpang Pitu Gold Mine area in Sumberagung Village, Pesanggaran District, Banyuwangi Regency related to social tensions based on the configuration of Hydrosocial Territories. This research uses primary data and secondary data. Primary data was obtained through a series of semi-structured interviews. The participants of this research are residents who live in the area, both from the supporters and opponents groups. Other participants were environmental activists who had been involved in assisting cases, community leaders, and local village officials.

The data collection process through direct interview techniques and field observations was carried out between August and September 2022. In addition to using primary data, this research also collected secondary data, as additional ammunition to triangulate data for verification and validation. Secondary data collection was carried out by searching for documents, official records, media news, and scientific literature related to the research theme. The data analysis technique used in this research follows the Miles and Huberman model, which includes three stages: data reduction, data presentation, and conclusion drawing/verification. This method is expected to provide an in-

depth and comprehensive understanding of the social dynamics in Sumberagung Village related to mining issues and hydrosocial areas.

3 Result and Discussion

Social transformation requires conflict as the catalyst that drives change. Without friction and differences, communities will not be able to reach new agreements that go beyond the previous consensus. Dahrendorf's view accurately describes the social dynamics that occurred in Sumberagung Village, Pesanggaran Subdistrict, Banyuwangi Regency, after the operation of the gold mine on Mount Tumpang Pitu. However, Syah [3] criticized his thesis and argued that there are community groups in the Tumpang Pitu gold mining area that cannot be integrated with Dahrendorf's dual model mechanism. The reason is that the case in the mining area managed by PT BSI continues to be reproduced and causes disintegration. This shows that this group has a more complex class and caste structure than it appears.

Conflicts in the Tumpang Pitu gold mining area have existed since the beginning of operations. Various actions to respond to the conflict have been taken, especially by the current mine management authority holder, PT BSI [3]. The implication is that the conflict transformed into a concession and was able to bring changes to people's lives in a positive direction. One of the strategies is the distribution of Corporate Social Responsibility (CSR) in the form of meeting the economic needs of the community, such as employment opportunities, educational scholarships, cash and basic food assistance, health assistance, as well as maintenance and repair of road infrastructure to tourist sites [3].

Economic motives are almost always the most instrumental factor in shaping conflicts that occur in mining areas [3]. This is because this factor has flexibility that allows it to enter into various layers. This is what causes conflicts over mining areas to have complexity, because ultimately the actors involved in the conflict do not become many. This includes the government, both at the local and national levels. In other words, PT BSI's strategy of choosing this strategy to reduce conflict is the right choice.

However, in practice, this only applies to certain groups in the social fabric of society. Because, until now, there are still groups in different social orders that have negative sentiments towards the existence of the gold mine. Some of them work as farmers and fishermen. The existence of the mine changes the way they survive. For fishermen, the existence of the mine changed their strategy to get fish, while for farmers, they were forced to change their irrigation system.

3.1 Dynamic Boundary of the Hydrosocial Territories

Water, within the framework of the Hydrosocial territories, is a representation of nature. Water is not just a mineral H₂O, subject to universal measurements of volume, flow, pollution and temperature [10]. Water is a multi-scale component that has social, cultural, economic, ecological, and political dimensions. While territory, in this concept, has no physical boundaries. Territory in the hydrosocial framework is imaginary.

Therefore, the hydrosocial territory is dynamic and has no objective boundaries. Boelens et al [9], state that there are four conditions for a space to be called a hydrosocial territory.

First, *socionature*, hydrosocial network, and territorialization. This means that water in a region needs to have a socio nature, which forms a socio-material network, and through the process of meaning formation resulting from interactions between actors in the socio-material network. Second, The politics of scalar territorial reconfiguration. This refers to the political processes involved in defining, transforming, and manipulating scale and space in social-ecological relations. Third, the governmentalization of territory, which is the idea that nature is shaped and influenced by human activities, and that socio-cultural aspects are themselves part of nature. Lastly, Territorial pluralism, as a form of diversity in the meaning of territory (imaginary) contained in a (geographical) territory itself.

Hydrosocial territories is a political ecology framework that was developed with the aim of helping various parties understand the relationship between nature, society and territory as a result of political and social processes involving diverse actors, flows, technologies, elements and institutions. [10] The concept has, for example, helped understand the inequalities created by urbanization and rural-to-urban water transfers in the Lima region (Peru) [12], provided a basis for critiquing a mining company's CSR program in the Atacama Desert (Chile)[13] , or challenged the 'pro-indigenous' and inclusive discourse promoted by local governments that ignores local diversity in Bolivia[14].

3.2 Reconfiguration and Social Dynamics in the Mining Era

Sumberagung Village, Pesanggaran Subdistrict, Banyuwangi Regency has four hamlets, namely Sungailembu, Silirbaru, Rejoagung, and Pancer. Silirbaru and Rejoagung are located in the village center. Sungailembu, meanwhile, is at the northwestern end of the sub-district and is about 7.8 km from the village office. Pancer hamlet is about 7.2 km away and is located in the southernmost part of the Red Island coastline. Among the other hamlets, Pancer Hamlet is the location that is directly adjacent to Mount Tumpang Pitu.

Water is an inseparable part of this region. Because most of the residents there work as farmers and fishermen [2]. The farmers depend on the flow of the river that comes from the spring. While fishermen, obviously, look for fish for a living. The first reconfiguration of the area in Pancer Hamlet began when in 1997, PT HPM began exploring the potential for gold on Mount Tumpang Pitu. The fishermen group was the first to feel disturbed [5]. This is because there were concerns among some fishermen that the activity would cause the marine ecosystem to be disturbed and reduce fish catches. Due to the economic crisis, PT HPM did not continue its project until 2005, there was a transfer of power from PT HPM to PT IMN. The presence of PT IMN is inseparable from the role of the government, which issued the operating license [15]. There are a number of questions, why the local government at that time issued a mining business license when the area is a Protected Forest area. Fishermen also became a group that began to be concerned about the presence of the mine.

PT IMN began operations in 2007[4]. The opposition movement did not have enough strength due to the lack of public participation. Only in 2008, student organizations and civil society movements became involved and made PT IMN postpone mining activities [5]. However, during this period, there were changes in the community as illegal gold mines emerged. Some residents who previously worked as farmers and fishermen switched professions to become miners. In 2012, during the leadership of Regent Abdullah Azwar Anas, a mining business license was granted to PT BSI and replaced the previous IUP owned by PT IMN [3]. This was followed by a decree from the Ministry of Forestry that downgraded the status of the land to Production Forest. This decree gave PT BSI full power to conduct exploration. During this period, traditional gold mining was banned. Residents could no longer mine gold on their own. A series of negative impacts, such as mud flooding, mercury-contaminated water, drying springs, and vehicle noise, began to be felt by the community [5]. This triggered a larger mass movement that culminated in 2015. The scale of resistance increased as public participation was greater than in previous years.

Regional reconfiguration occurred again after the death of the village head who previously supported the movement to reject the mine, to the village head who was pro PT BSI. Polarization between pro and contra residents began to appear. At this moment, there was a reconfiguration of the Sumberagung Village area, which consisted of the hamlet near the village office, with Pacer Hamlet. In addition, in 2016, the same year as the mud floods on Red Island beach, the Tumpang Pitu gold mine was designated as a National Vital Object (Obvitnas) by the Ministry of Energy and Mineral Resources. As such, security forces have the privilege to conduct security in the gold mine area. People's movements became more cautious as the security forces became tighter. This mass movement reached its peak in 2017, when Budi Pego, a farmer, was criminalized. The movement to reject mining en masse faded.

Through the framework of hydrosocial territories, we can recognize the reconfiguration many times since the first exploration of mining in Mount Tumpang Pitu. First, the start of PT GMT with the permission of President Soeharto[3], [4] made changes in the meaning of fishermen towards the existence of Mount Tumpang Pitu threatening their livelihoods. Other community groups did not share the concern about the existence of GMT. Besides because it has not had a direct impact, PT GMT received permission from President Soeharto, who has a role for some Pancer residents who are survivors of the 1994 Tsunami disaster. Second, when the transfer of power to PT IMN occurred, a new political force entered, namely the Banyuwangi Regency Government. The involvement of the Banyuwangi government in the contestation at Mount Tumpang Pitu invited new political forces on the side of the fishermen, namely student organizations and civil society movements. The new power on the fishermen's side was able to make PT IMN delay its mining activities, until in 2010, when a new regent was elected, PT IMN resumed its activities. However, in the midst of these mining activities, there began to be a change in the meaning of Mount Tumpang Pitu for some fishermen who switched professions to become traditional gold miners.

The next round was when there was a transfer of power back from PT IMN to PT BSI. In this period, Mount Tumpang Pitu became a contestation of power from various

parties. First, there was an increase in scale from local to national when PT BSI submitted a direct application for a downgrade of forest function status to the Ministry of Forestry. Second, there were negotiations between the Regional Government led by Abdullah Azwar Anas and PT BSI regarding share ownership. The application was accepted by the ministry in 2013, with the approval of the regent who also agreed to a golden share mechanism, whereby the Banyuwangi regency owned 10% of PT BSI's shares. PT BSI became the full authority and reconfigured the water area which actually made the community movement in Pancer Hamlet reunite. This is because after PT BSI became the power holder, traditional mining was eradicated. Many farmers and fishermen returned to their original professions.

Consecutive bad impacts hit residents after the decline in forest function status. This unified the vision of the community around the mining area. Plus, in the period before 2015, Pancer Hamlet residents received support from the village head. This period was a period when the movement was intense and involved various elements of residents in Sumberagung Village, after previously various rejection actions mostly came from fishing groups. 2015 was the year when the mass movement erupted. During the period 2015-2017, mass movements occurred several times. However, in 2016, national forces reconfigured the area again by deciding that the Tumpang Pitu gold mine was an Obvitnas. This gave the authorities permission to conduct guarding. In other words, the police have control over the area around the mine. Moreover, since the time Budi Pego was criminalized, the community's participation in physical movement actions has decreased.

4 Conclusion

From the beginning until now, the residents of Pancer Hamlet have always been the parties involved in the repeated reconfiguration of resources in Mount Tumpang Pitu. With the entry of new forces in PT BSI, especially since 2013, the construction of the hydrosocial area for the community in Pancer Hamlet has narrowed. Moreover, after the current government became supportive of the mine, the concept of the Pancer area as part of Sumberagung Village became blurred. In Sumberagung Village, there is a strong polarization. The research collected at least four patterns that occur in the village, namely 1) residents who firmly reject the existence of the mine, 2) residents who do not like the existence of the mine because they do not receive assistance, 3) residents who are ignorant, and 4) residents who support the existence of a gold mine in Pancer Hamlet.

As a framework for analyzing social tension, this study uses Slyusarevskyy, Chukhina, and Flaherty's 6 indicators of social tension.

For residents who reject the existence of the mine, the presence of the mine has changed their perception of control over their own territory. Initially, they had a strong belief that they had control over their territory, their environment and their own situation. The presence of the mine has succeeded in making residents who oppose the mine feel that they have lost control over their own territory and situation. This condition eventually led to social tensions in the Sumberagung Village area. Tensions were also

sparked by the dissatisfaction of residents who opposed the mine over their powerlessness in influencing the situation. Efforts to reject the existence of mining, both through legal and non-legal channels, which are not lacking, are felt to have not produced significant changes.

For residents who do not like the existence of the mine because they do not get help, dissatisfaction formed from external influences on the situation can also be a source of tension. Dissatisfaction is formed because the existence of the mine is deemed not to provide fair benefits to residents. For example, they feel that the distribution of assistance from mining companies is uneven and unfair.

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