

Community Perceptions of the Progo River Sand and Stone Mining Activities in Yogyakarta (Study in the Communities of Sendangagung Village)

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ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Djaja, S. I., Sujatmika, S., Kusharyanti, K. (2023). Community Perceptions of the Progo River Sand and Stone Mining Activities in Yogyakarta (Study in the Communities of Sendangagung Village). *Journal of International Conference Proceedings*, 6(6), 403-415.

DOI:

<https://doi.org/10.32535/jicp.v6i6.2850>

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Received: 07 October 2023

Accepted: 06 November 2023

Published: 04 December 2023

ABSTRACT

This research aims to determine the perceptions of people living in mining areas regarding the impacts of sand and stone mining activities on the Progo River, Yogyakarta. This research uses a qualitative type with a case study method. Primary data collection was carried out by interviews as well as observations and supporting documents or literature for secondary data. Sand and stone mining activities in the Progo River using heavy equipment by individuals and companies under the pretext of normalizing river flow after the eruption of Mount Merapi based on Decree Number 284 of 2011. This regulation has been misunderstood by various parties, which has given rise to uncontrolled sand mining. One example of mining that caused community rejection occurred in Sendangagung Village, especially the Jomboran, Pundak Wetan and Wiyu areas of Yogyakarta. Researchers found that the community rejected mining because the community had the perception that mining companies took it with heavy equipment without paying attention to the preservation of the land and the environment, which resulted in land degradation, landslides, air pollution and water pollution. Apart from that, the community questions the legitimacy of the government in issuing non-transparent mining permits.

Keywords: Environmental Accounting, Legitimacy, Mining Activities, Perception

INTRODUCTION

The world, including Indonesia, is experiencing environmental damage and a serious socio-environmental crisis that is endangering the sustainability of the earth and the lives of all mankind (Wahana Lingkungan Hidup Indonesia [WALHI], 2021). Various parties accuse that the main cause of environmental damage and socio-environmental crises so far is the result of development strategies and policies that are not environmentally friendly and pro-people. National development strategies and policies prioritize achieving the economic interests of the state and capital owners (investors) rather than the interests of the environment and society. This inequality can be seen in Law no. 3 of 2020 concerning Amendments to Law no. 4 of 2009 concerning Mineral and Coal Mining (The Audit Board of Indonesia, 2020). Several articles that have the potential to harm society and the environment are contained in Article 8, Article 96, Article 162, and Article 169 A of Law no. 3 of 2020 concerning Mineral and Coal Mining.

The fundamental role of accounting is as a provider of information and a source of answers for all matters related to company finances (Jonathan, 2021). However, in the current era, accounting science is required to face various challenges and meet various demands that arise from social, technological, and economic changes. The current environmental problem is a complex crisis that has a widespread impact and influences many aspects of life, including accounting (Swastha & Irawan, 2001). The emergence of environmental accounting is a response to awareness of increasingly pressing environmental and social issues (Putri, Mimba, & Sari, 2019).

The main economic source in the Special Region of Yogyakarta Province (DIY) apart from the agricultural, tourism and education sectors is sand and stone excavation or known as Sirtu. Sand mining in DIY Province is closely related to the activities of Mount Merapi. Sand mining in the Mount Merapi area began in the 1970s as a response from local residents to the abundance of sand resulting from the eruption (Umay, Soekmadi, & Sunito, 2020). The sand mining process in the Basin River which originates at Mount Merapi has experienced a transition from traditional mining to mining with heavy equipment since 1992 (Kusmiyati, 2019).

The eruption of volcanic material in the Mount Merapi area has been utilized by the local community for mining activities for mineral C. This activity has made a significant economic contribution to the surrounding community, resulting in an increase in their income (Yudhistira, Hidayat, & Hadiyanto, 2011), after the eruption of Mount Merapi. In 2010, sand mining increased significantly in the area. In response to this situation, the Regent of Sleman issued Decree (SK) Number 284 of 2011 concerning Normalization of River Flows After the Merapi Eruption (Slemankab, 2013). The aim of this normalization is to return river flows and land that has been buried by post-eruption volcanic material to a more normal condition. Research conducted by Bahtiar in 2016 showed that the river flow normalization regulations were often misunderstood by various parties. This has resulted in the uncontrolled development of sand mining in the area. Bahtiar also found that the uncontrolled use of heavy equipment in sand mining activities had a negative impact. The decline in water sources occurred due to sand being continuously excavated by heavy equipment, so that the number of water sources around the Mount Merapi area decreased by up to 50 percent.

The Sleman Regent's regulations were misunderstood by various parties, which gave rise to uncontrolled sand and stone mining. Sand and stone mining activities in the Progo River using heavy equipment, both by individuals and companies, under the pretext of normalizing river flow after the eruption of Mount Merapi, have raised community concerns about the threat to residents' springs and also concerns about land collapsing

due to sand mining operations close to residential areas. One of the mining areas that caused community rejection occurred in Sendangagung Village, especially the Wiyu, Pundak Wetan, and Jomboran areas of Yogyakarta. This mining conflict between residents and mining companies has been going on since 2016, the community refuses mining because they are worried about the negative impact on the surrounding environment. The existence of mining activities in the area around the Progo River, apart from destroying the natural beauty of the Progo River, has also changed social relations in the community to become divided between those who are for and against mining.

Based on field observations, the sand and stone mining location in Sendangagung Village carried out by the Company is very close to residential areas. The distance between sand mining to Dukuh Jomboran is 500 m, to Dukuh Wiyu is 500 m, and to Dukuh Pundak Wetan is 400 m. From this data, it can be ascertained that sand and stone mining is very detrimental to the health and quality of the local environment. Very worrying environmental damage is not the only impact arising from mining activities. The impact of this mining activity can trigger potential conflict between local residents, or in formal terms, horizontal conflict in society.

This research aims to determine the perceptions of people living in mining areas regarding the impacts of sand and stone mining activities on the Progo River, Yogyakarta. This research is also to find out the perceptions of the Yogyakarta Police and Legal Aid Institute (LBH) from a legal perspective and WALHI Yogyakarta from an environmental perspective to find out how they view sand and stone mining, including their views on the social, economic, and environmental impacts of the activity. This can help governments, mining companies, and other organizations gain insight into community concerns and expectations.

LITERATURE REVIEW

Legitimacy

Legitimacy in the mining context refers to the level of trust, acceptance and support of the community, government, and other stakeholders towards mining operations. The primary interest in ensuring legitimacy in mining is to ensure that mining operations are recognized as legitimate, beneficial, and fair by local communities and governments. This is extremely important as mining operations often have significant impacts on the environment, communities, and local economies.

Perception

Perception is a process that is preceded by sensing, namely a process that takes the form of receiving a stimulus by an individual through the sense organs or also called a sensory process (Walgito, 2010). Nevertheless, it is important to recognize that a person's perceptions can often differ from objective reality (Robbins & Coulter, 2005; Hafni, Hanum, & Hasibuan, 2021). There are several stages in the process of perception in individuals, namely the object causes a stimulus, and the stimulus hits the sensory organs or receptors (Sunaryo, 2002). This process involves individual attention, transmission of information to the brain, individual awareness of certain objects, and giving meaning to the stimuli received. Next, the individual provides a subjective assessment of the object. Therefore, people's understanding of sand and stone mining activities in the Progo River can vary because each individual experiences different cognitive processes in providing meaning and assessment of these mining objects.

Environmental Accounting

Environmental accounting is the identification, measurement and allocation of environmental costs and integrating these costs into business decision making and communicating the results to company stakeholders (Ikhsan, 2008). In order to maintain sustainability and minimize negative impacts on the environment, mining companies must pay attention to environmental accounting and commit to involving sustainable practices in their operations. This involves measuring, reporting, and managing environmental impacts as well as compliance with applicable regulations. Disclosure of environmental information in financial reports and sustainability reports is increasingly important in providing transparency regarding the environmental impacts of mining companies. This allows stakeholders, such as investors and the public, to better understand how companies manage environmental issues.

RESEARCH METHOD

This type of research is field research. In carrying out this research, researchers attempted to collect primary data obtained through direct observation of mining activities in Sendangagung Village, Minggir, Sleman.

In this study, the research approach included a case study. Researchers will collect data through interviews, observations, or document analysis, and then describe in detail the characteristics, context, and dynamics of the case.

The subjects in this research were Tipider Investigators from the DIY Regional Police who handled mining cases in DIY Province, Head of the Advocacy Division from the DIY Province Forum for the Environment (WALHI) who handled environmental damage due to sand and stone mining in the Progo River, Legal Expert Staff from Aid Institutions Law (LBH) Yogyakarta which handles cases of sand and stone mining in the Progo River, Yogyakarta and some local communities who live in the area around mining activities, namely the people of Sendangagung, Minggir, Sleman Villages, especially the residents of Jomboran, Wiyu and Pundak Wetan.

The data collection technique used in this research uses documents obtained from public complaint reports and mass media related to research regarding the perceptions of the people of Sendangagung Village, especially the residents of Wiyu, Pundak Wetan, and Jomboran regarding sand and stone mining activities on the banks of the Progo River in Yogyakarta. In the observation stage, researchers looked directly in the field at the condition of the people of Sendangagung Village who live around the sand and stone mining activities on the banks of the Progo River in Yogyakarta. In this research, the in-depth interview method was used to find out and obtain data directly from the research object regarding the perceptions of the Sendangagung Village community regarding sand and stone mining activities on the banks of the Progo River in Yogyakarta. In-depth interviews in this research will be aimed at the research subjects, namely the DIY Regional Police Tipider Investigator, Head of the Advocacy Division of WALHI Yogyakarta, Legal Expert Staff of LBH Yogyakarta, and local residents of Sendangagung Village who live around the sand and stone mining activities on the banks of the Progo River. These questions can help in exploring community views, needs and aspirations regarding mining activities. Research on community perceptions can play an important role in designing more sustainable policies and seeking to achieve a balance between economic and environmental interests by involving the opinions and concerns of local communities.

Questions to investigators regarding class C mining activities based on public complaints. This question aims to gain in-depth insight into the dynamics between the mine, the local community, and the handling of the investigation. This is important to ensure that handling problems that arise can reflect the interests and needs of all parties involved. Questions to the Head of the DIY Province WALHI Advocacy Division about community perceptions regarding mining activities can help in understanding how WALHI works with local communities, exploring their views, and utilizing community perceptions in their efforts to protect the environment from destructive mining activities. Questions to the Legal Expert Staff of LBH Yogyakarta regarding sand mining activities in Sendangagung Village can help in understanding how LBH Yogyakarta's role is in dealing with mining activity problems in Sendangagung Village and how they are trying to help the affected communities. Questions to the Sendangagung Village community regarding sand and stone mining activities on the banks of the Progo River aimed to gain a deeper understanding of the dynamics between the mine and the local community. This can help companies, governments and communities work together to create solutions that are more sustainable and in line with the needs and interests of all parties involved.

RESULTS

Overview of the Research Area

Sendangagung Village is part of the Minggir District Government area, Sleman Regency, which is located in the center of Minggir District City. Geographically, Sendangagung Village can be seen from several aspects, including as follows.

Table 1. Administrative Boundaries

Boundary	Adjacent Area
North	Sendangsari Village, Sleman Regency
South	Sendangmulyo Village, Sleman Regency
West	Progo River, Kulon Progo Regency
East	Sendangmulyo Village/Sendangsari Village, Sleman

Source: Sendangagung (2017).

Table 2. Administrative Area

Lowland Soil Conditions	Area Size
Residential Land	213.65 ha
Rice Fields	236.24 ha
Plantation Land	16.3 ha
Grave Area	2.45 ha
Yard Size	35.95 ha
Garden Size	4.35 ha
Office Area	0.34 ha
Area of Public Infrastructure	55.83 ha

Source: Sendangagung (2017).

Business Activities of the Sendangagung Village Community

Sendangagung Village is a village located on the outskirts of Sleman Regency, Yogyakarta Special Region. The village is still beautiful with rice plants that look spread out and hamlets that look green. With its vast expanse of rice fields, it is not wrong that Sendangagung Village is one of the rice barns in the Yogyakarta area. Sendangagung Village, Minggir District, Sleman Regency has been declared a food independent village. At least Sendangagung Village has 15 food barns that are still active and store rice reserves of up to one ton.

Relations between the Sendangagung Village Community and the Progo River

The people of Sendangagung Village, Minggir, Sleman, Yogyakarta, have a very strong relationship with the Progo River. This river has an important meaning in their daily life, culture, and beliefs. Several important aspects related to the relationship between the Sendangagung Village community and the Progo River. The Progo River is often considered a sacred place that has spiritual and religious value for the local community. They believe that this river is a source of blessings and life. The Progo River is also a source of livelihood for some people. They use this river for fishing, farming, or other economic activities. The Progo River is widely used for other purposes. In the area around the estuary, there is a lot of sand mining.

DISCUSSION

Perceptions of DIY Regional Police Tipider Investigators Regarding Sand and Stone Mining Activities

Investigators at mines are included as Tipider Investigators (Regional Police Development and Supervision Team) in the field of Special Criminal Investigation (Reskrimsus) in the Police covering various aspects related to law enforcement and the investigation of complex and serious criminal acts.

Based on the results of interviews with sources, Tipider Investigators from the DIY Regional Police and their staff who have handled sand and stone mining cases gave the perception that there were positive and negative impacts from sand and stone mining activities in the Progo River. Perception according to AKP Bowo as Head of the Tipider Unit for the DIY Regional Police expressed as follows.

"The positive impact is that the economy is running, many people get jobs, income goes to the village treasury, village roads along mining routes become better, many people work in these activities, including drivers. The negative impact when mining is carried out illegally without study can damage the environment in the future, there will be definitely impacts, perhaps the effects will be indirect. For example, if the embankment collapses during the rainy season, flooding occurs, the ecosystem habitat will be disturbed if studies are not carried out, the environment and ecosystem will be damaged."

The same perception was expressed by AKP Iswahyudi as Tipider Investigator for the Kulon Progo Police that the impact of sand and stone mining has both positive and negative impacts on the community around mining activities, namely as follows.

"The positive impact is that the community has employment opportunities, village areas are developed, for example by building roads. The negative impacts are damaged roads, dust, noise, dry well water."

The same perception also came from Briпка Yusvi who served as a Tipider Investigator for the Gunungkidul Police, stating as follows.

“The positive impact is improving community welfare and improving public facilities for the better. Meanwhile, the negative impact of life around mining is that people feel noisy due to the use of heavy equipment and air pollution which is not good for health.”

In accordance with the perception of Tipider Investigators both at the Yogyakarta Regional Police and their ranks, it can be concluded that mining activities can have a positive impact but behind that there are also negative impacts that have a bad effect on public health, namely air pollution caused by sand dust and noise pollution due to the use of heavy tools. Environmental damage such as landslides, erosion and depletion of water sources need to be anticipated early by miners so as not to worsen the health conditions of the community and the environment around mining activities.

WALHI Yogyakarta Province’s Perception of Sand and Stone Mining Activities

Indonesian Forum for the Environment (WAHLI) is a non-profit organization and environmental NGO based in Indonesia. This organization was founded in 1980 and has played an important role in advocacy and activism for environmental conservation and community rights in Indonesia. WAHLI focuses on various environmental issues, including forest protection, natural resource conservation, waste management, land restoration, and other issues related to nature conservation and environmental sustainability.

Based on the results of interviews with resource persons, Mr. Asegraf as Head of the WALHI Advocacy Division, DIY Province, who handles environmental damage from sand and stone mining activities in the Progo River, gave his perception that initially residents saw that the mining company would change their economic life, but the reality was beyond the community’s expectations. Mr. Asegraf’s explanation, namely as follows.

“Actually, at first the residents saw this mine, I’m sorry, some residents saw this mine as a breath of fresh air, later there will be job opportunities, the construction of the road area will be repaired, but there are also residents who initially saw this, it is proven that in one of the mines in DIY in the Kali area There are no less than 5 people in Progo River in the Progo River who are employed in mining. Even now, before the mining ended, only 2 of them were parking attendants, not operating excavators and trucks, with payment for which I have not yet received a nominal figure, but it is just below the minimum wage. So, in my opinion, the parameters related to job creation are quite ambiguous because if this mining company only takes 1 or 2 people and claims that it has created jobs, for him that is enough, but for the community where the economy has not yet recovered after Covid, there is a stigma that it is that mining provides economic benefits, creating jobs is wrong. It is not factually proven in the field - it can be proven in the field that way. Even in terms of regional income contribution to post-mining village roads, the roads have not been repaired so they are still in a state of disrepair.”

And Mr. Asegraf explained in more depth about the problems that occurred in the Jomboran, Pundak Wetan and Wiyu areas providing assistance with friends from WALHI Yogyakarta. Mr. Asegraf explained that PT X as a mining company that carries out mining activities in the Progo River does not hold socialization to residents who are directly affected by the mining activities and the form of concern already exists, the community sees that mining activities have the potential - the point of the cliff or land of the residents

that collapsed can be seen from the explanation of Mr. Asegraf, representative of WALHI DIY Province, namely as follows.

“There was a form of concern at the beginning, namely that perhaps the community saw that this mining would potentially cause landslides at first and it was proven that after 4 years of mining going on, many cliff points or people’s land had collapsed, even WALHI and also the UPN Environmental Engineering Study Program. Yogyakarta Veterans of Science and Disaster Studies together conducted research related to well points, namely 32 well points in 4 padukuhans around the mine, such as Jomboran, Wiyu, Pondok Wetan and Nanggulan. At the same time, there was a decrease in water discharge, well, this has never happened before there was mining, but when there was in mining, this happens like a decrease in water discharge and landslides and for the water quality standards themselves, at several points in the 32 points that we have carried out research, there are several wells that are contaminated with oil waste and indications are that oil from excavators is proven from the polluted well points. What is polluted is that the well point is not far from the Progo River or the mining point. This could be an indication of water pollution and then the community ended there. We together with the PMKP community (Kali Progo Community Association) reported the mining activities of PT X on grounds such as impacts, violations of the law because before I went deeper into mining from PT X, in fact, there is a formal defect there, namely he manipulated the signatures of residents which he rejected due to mining so that mining could not be carried out because of a formal defect in the administration process. So, we also include excuses related to legal violations regarding mining activities because according to residents, especially PMKP, apart from being a nuisance, this mining has caused quite a lot of harm to the community.”

Based on the explanation from Mr. Asegraf as a representative of WALHI Yogyakarta, it can be concluded that PT X as a mining company carrying out mining activities in the Progo River does not hold socialization to residents who are directly affected from sand and stone mining activities. The local community feels disturbed and disadvantaged by these mining activities. The community formed the Kali Progo Community Association (PMKP) to carry out PT reporting. X on the basis of the impact of pollution, pollution of waste and cliffs that are landslides and the existence of violations of the law such as not conducting socialization until manipulation of citizens’ signatures that clearly reject the mining.

LBH Yogyakarta’s Perception of Sand and Stone Mining Activities in the Progo River

LBH Yogyakarta has collaborated with community groups or individuals affected by mining activities or issues arising from mining activities in Sleman. The mining activity that has drawn rejection is located on the Progo River on the border of Sleman Regency and Kulon Progo Regency. Rejection emerged from residents around the mining location who are members of the Kali Progo Community Association (PMKP). Sand and stone mining activities in the Progo River, Special Region of Yogyakarta, have received rejection from local residents because they are considered to be damaging the environment and the licensing process is not transparent.

Based on the results of an interview with the resource person, Mr. Wandi, as Legal Expert Staff at LBH Yogyakarta, who accompanied the Sendangagung Village community in their action to reject mining activities on the Progo River, gave his perception that the community took action to reject it because the local community's fears about the environmental damage occurring on the banks of the Progo River were visible. in Mr. Wandi's explanation, as follows.

"We have been assisting the residents since 2017 there until now and that is the mining issue. The problem with mining is that the majority reject mining there because of what. Due to the environmental damage that occurs, whether from local people's wells, from local residents' surroundings, whether from mining activities that are there, it erodes irrigation and changes the flow of the river itself, the river's habitat is also lost, small children don't dare to play in it. there because of fear of its depths. The landslides continued like that, so the fears were real and they are still ongoing to this day, the impacts of which are still on the residents so that from there the residents forcibly refused and they no longer want mining there."

Further explanation from Mr. Wandi, the main problem is the miners' obligations at the post-mining stage, namely to restore the environment of the mining area, which is not implemented and makes the community disappointed by taking action to reject it, as can be seen from Mr. Wandi's explanation, as follows.

"Actually, compensation is different from the miners' obligations when after their permits expire, they have to carry out several conditions, including reclamation, environmental damage, it becomes an obligation and cannot be claimed as compensation. This compensation means that people's disapproval becomes a form of rupiah or money. The residents rejected this. The residents did not want to accept it and the residents agreed that reclamation was the responsibility of the miners and it could be directly supervised by the department to carry it out. Until now it turns out that the reclamation has not been carried out, that is the problem. After mining, it becomes the company's obligation."

Based on the explanation from Mr. Wandi as a legal expert at LBH Yogyakarta, it can be concluded that LBH is still assisting the residents of Sendangagung Village since 2017 regarding the issue of sand and stone mining, where majority of the majority reject sand and stone mining in the Progo River due to environmental damage. This happens whether it's people's wells drying up, changes in the social environment, the emergence of pros and cons, mining activities that erode irrigation and change river flow, loss of river habitat, small children don't dare to play there because they are afraid of the depth of the Progo River, so these fears actually happen and is experienced by residents.

Perception of the Sendangagung Village Community Regarding Sand and Stone Mining Activities in the Progo River

Public perception is the collective view or understanding held by a group of people in a society regarding various things, including shared values, beliefs, norms, and goals. People are increasingly aware of the importance of protecting the natural environment for the sustainability of life on this planet as well as efforts to preserve the environment and reduce negative impacts on the ecosystem.

Researchers interviewed 6 residents of Sendangagung Village, each represented by 2 residents from Jomboran, Pundak Wetan and Wiyu as sources who live around 100 meters to 500 meters from mining activities. From the residents' explanations, they have the same perception that the community is concerned about mining activities using heavy equipment which disrupts the residents' social environment, as can be seen from the explanation of Mrs. Yuli, a Wiyu resident who was interviewed on November 5 2023 as follows.

"Yes, I lived less than 100 meters from the sand mining site when I was surveyed by the disaster service. What is clear is that the impact is negative, in the sense that it is physically disturbed, our ears are automatically uncomfortable, the sound of the machine is always loud and visible to the naked eye, we have never seen an excavator, when we see a big excavator, we are afraid. Then socially we are disturbed, in the sense that not only physically, we are disturbed socially, meaning that after we find out who gave us permission, we seem to have a conflict with them, as if there is a distance from them, and the economy is also different from the start, we know that they got it from the miners, whereas we cannot. There was no socialization and suddenly it was like we were being lied to."

It is not only the social environment that is being disturbed, the impact of changes in the natural environment where they live is starting to become worrying, as explained by Mr. Marwoto as Head of the Jomboran Community Association (RW) who was interviewed on 29 October 2023 as follows.

"Yes, we feel air pollution, noise and water sources are shrinking. Moreover, people living in areas near the mine, plus the dry season, the springs dry up."

Likewise, the explanation of Mr. Samiyo as Head of the Pundak Wetan Neighborhood Association (RT) who was interviewed on October 29 2023 is as follows.

"Yes, what is certain is that the environment is damaged, dust, noise, all of this has an impact on the people around here in the mining area."

The turmoil of community rejection was increasingly felt because the miners did not carry out outreach to the affected communities. Suddenly the miners lowered their heavy equipment and started mining, explained by Mr. Iswantoro, a resident of Jomboran who was interviewed on 22 October 2023 as follows.

"Until now, we do not know what the official permit is like because it is all an acknowledgment from the company that he already has a permit. Officially, the company does not want to show it to the public, but we tried to find it and we found it. The socialization should be in other hamlets, not in our place. The socialization should be for affected residents who want to mine, but it should be outside the hamlet or in other places."

The residents' disappointment deepened after the miners did not carry out their obligations, namely environmental restoration or reclamation. This was explained by Mr. Sutrisno as a resident of Pundak Wetan who was interviewed on 29 October 2023 as follows.

"For the last company (Limited Company (PT)) reclamation, reclamation should be the restoration of the mining environment, he said, those who took part in the socialization, the PT set aside funds from the PT to the relevant agencies later for reclamation costs, land restoration, but if it was land restoration, it might be something like If to prevent landslides, we plant something that is strong enough to withstand landslides and erosion. Now, if it is just a pile of land which is said to be God's creation, it can slide, what is more, if it is just a machine-made pile, if it is hit by the current of a river, it will still landslide. The first is that it erodes little by little and then collapses. In my opinion, the PT did not carry out full reclamation, only if I asked the PT, the reclamation was like that. Put it this way, now the land filling is said to be reclamation and not yet 100% finished. Now it's a pile of soil and stones where grass is planted, the grass's roots grow as long as they can't hold the soil."

CONCLUSION

Based on the results of interviews and observations conducted by researchers, the community's perception of sand and stone mining activities in the Progo River resulted in the following conclusions. Firstly, residents of Jomboran, Pundak Wetan and Wiyu live close to the sand and stone mining area on the Progo River, an average distance of 100 meters to 500 meters. And sand and stone mining activities in the Progo River affect their daily lives, namely pollution and noise problems as well as the drying up of spring wells. Secondly, mining operations in the Jomboran, Pundak Wetan and Wiyu areas do not receive full support from the local community. There are several residents who are pro-mining, but only a few, between 2 and 5 people. There are Village Heads and Hamlet Heads who support mining activities. But almost all residents reject the existence of sand and stone mining activities in the Progo River. Thirdly, according to information from the people of Jomboran, Pundak Wetan and Wiyu, the process of obtaining mining permits did not comply with procedures because there was no outreach to affected residents and there were legal and administrative defects regarding mining permits. Fourthly, according to statements from Jomboran residents, Pundak Wetan and Wiyu, they felt disturbed by the mining activities. They feel that air pollution is caused by dust from mining activities, air pollution from the noise of heavy equipment machines and dump trucks and the shrinking of water sources in residents' wells which makes it difficult for residents to obtain clean water. Lastly, according to a statement from the people of Jomboran, Pundak Wetan and Wiyu hope that mining activities will not resume in their area. They want to be free from mining activities, which according to them, mining activities change the natural environment around them and the social environment between them, which triggers conflicts for and against mining between them.

Based on data obtained from research related to community perceptions of sand and stone mining activities in the Progo River, the suggestions were as follows.

Revoke All Mining Business Permit Areas (WIUP) that Use Heavy Equipment Along the Progo River

This decision was taken by considering important aspects related to environmental preservation and the balance of the river ecosystem. This withdrawal aims to protect and maintain water quality, flora, fauna, and the sustainability of river ecosystems which have a strategic role in maintaining environmental balance.

Revise the Spatial and Regional Planning (RTRW) Policy so that the Progo River is Excluded from Areas that Can Be Mined Using Heavy Equipment

This revision is based on in-depth considerations regarding environmental impacts, hydrological sustainability, and biodiversity conservation directly related to the Progo River. This exception aims to ensure that the Progo River area remains protected from mining activities that could harm its natural integrity.

Ask the Sleman Regency Government to Provide Recommendations that Support the Struggle of Residents Who Benefit from the Source of the Progo River

By providing positive recommendations, the Sleman Regency Government has effectively expressed its support for the community's efforts to protect and utilize the Progo River Source in a sustainable manner and in accordance with environmental conservation principles. This can include sustainable water management, natural resource conservation, and environmental monitoring to ensure that human activities do not harm river ecosystems and their benefits to society.

LIMITATION

In conducting research on the Development of Strategic Management and Application of Accounting on Community Perceptions of the Progo River Sand and Stone Mining Activities in Yogyakarta (Study in the Community of Sendangagung Village, Minggir, Sleman Yogyakarta), there were limitations faced by researchers regarding access to information, especially information on mining company data which is difficult to obtain becomes an obstacle in accurately describing the implementation of strategic management and accounting practices of mining companies because mining companies are not willing to provide data.

ACKNOWLEDGMENT

The researchers would like to express my deepest gratitude to the lecturers at UPN Veteran Yogyakarta. DIY Regional Police Tipider Investigators and their staff, WALHI DIY Province, the Yogyakarta Legal Aid Institute (LBH) and the Sendangagung Village Community, especially the residents of Jomboran, Pundak Wetan and Wiyu, agreed to be interviewed.

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interest.

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