

Analysis of the Impact of Waste Management by PT RAPP on the Community in Pangkalan Kerinci

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ABSTRACT

This study aims to identify the conflict between PT RAPP and the surrounding community as a result of industrial waste management, explain the environmental and social impacts that occur due to alleged waste pollution by PT RAPP and evaluate various resolution steps that have been taken. This study uses a qualitative approach with a library research method from various sources to obtain a comprehensive picture of the responses of the community, government agencies, and the company to the issues studied. The information collected was then analyzed using qualitative content techniques. The results of the study indicate that the environmental conflict that occurred between PT. RAPP and the surrounding community arose due to the lack of transparency in waste management carried out by the company causing environmental pollution in the form of water and odor. Industrial activities carried out by PT RAPP have a negative impact on the community in the form of air, water, and even social pollution. Effective resolution efforts so that these negative impacts can be minimized and community welfare is maintained in the form of good industrial waste management, increasing access to clean water, planting trees and land rehabilitation, education and community involvement.

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1. INTRODUCTION

Land as a vital natural resource plays an important role in human life, both economic, social, and cultural. In its use, land is part of the agrarian concept which includes the management and use of natural resources (SDA), especially in the agricultural and plantation sectors. The concept of agrarian not only focuses on technical aspects, but also includes the relationship between humans and land, including matters related to its ownership, control, and distribution. The term "agrarian" has different meanings depending on the language. In Latin, it comes from agger and agrarius which refers to agricultural land. In Greek, agros means land for farming. In the Netherlands, agger refers to a piece of land, while agrarius is related to a field, rice field, or agricultural activity. This difference in meaning shows that agrarian has a broad scope (Izka *et al.*, 2024). Waste has become a major factor in the problems experienced by many developing countries due to suboptimal management and the high volume of waste produced. Waste is defined as waste or waste material produced from production activities in both the industrial and household sectors. Currently, waste is a serious problem that contributes to ecosystem damage, a decrease in the quality of life, and an increasing number of public health problems. This condition is mainly caused by ineffective and inadequate waste management systems, especially in developing countries and urban areas. This poor waste management is a big challenge, because it not only risks damaging the environment, but also hinders

efforts to improve people's quality of life and achieve sustainable development goals or waste material produced from production activities in both the industrial and household sectors. Currently, waste is a serious problem that contributes to ecosystem damage, a decrease in the quality of life, and an increasing number of public health problems. This condition is mainly caused by ineffective and inadequate waste management systems, especially in developing countries and urban areas. This poor waste management is a big challenge, because it not only risks damaging the environment, but also hinders efforts to improve people's quality of life and achieve sustainable development goals.

Agrarian Law, as stipulated in the Basic Agrarian Law of 1960, stipulates that every individual has a responsibility in preserving the environment related to agrarian land. However, the law does not detail the procedures or mechanisms for the management and preservation of the environment. Article 15 states that "maintaining the land, including increasing its fertility and preventing damage, is the obligation of every person, legal entity, or institution that has a legal relationship with the land, with regard to the protection of economically weak parties."

The environmental conflicts that took place in Pangkalan Kerinci, especially those involving PT Riau Andalan Pulp and Paper (RAPP), illustrate the tension between the needs of large industries and the rights of the community as well as the protection of the environment. This issue can be clearly seen in the case involving PT Riau Andalan Pulp and Paper (RAPP), where waste management and the impact of the strong smell of their industrial activities caused complaints from the surrounding community. These industrial activities that alter the function of the land and affect the quality of the environment exacerbate tensions between companies, the government, and disadvantaged citizens. The agrarian conflicts that arise are not only related to land ownership or control, but also concern the well-being of people who depend on land and the environment for their livelihoods. Based on the background outlined above, the purpose of this research is to identify the conflicts that occur between PT RAPP and the surrounding community as a result of industrial waste management, explain the environmental and social impacts caused by the alleged pollution from PT RAPP's waste; and evaluate the various resolution efforts that have been undertaken by the government, the community, and related parties to address the waste issue.

2. METHOD

This research uses a descriptive qualitative approach, which aims to describe and analyze the phenomenon of alleged environmental pollution by PT Riau Andalan Pulp and Paper (PT RAPP) as reported by online mass media. This approach is used because researchers do not conduct direct observations or interviews, but rather analyze publicly available information through documents and online news. According to Moleong (2017), a qualitative approach allows researchers to understand social reality holistically based on the existing context. The method used is library research using secondary data. This secondary data was obtained from publicly available written sources, such as online news articles, organizational reports, and digital documents related to the alleged environmental pollution by PT Riau Andalan Pulp and Paper (PT RAPP). These sources were selected to gain an in-depth picture of the community's response to the alleged environmental pollution. Zed (2004) states that literature study is a scientific method that prioritizes the examination of library materials in answering research problems critically and systematically. In this context, researchers utilized news from local media such as *Pelalawan Pos*, *Catatan Riau*, *Amanah News*, and *Lensa Kita* to obtain information on the responses of the community, government agencies, and companies to environmental pollution issues.

The data analysis used is a qualitative content analysis technique. This technique is used to find the main themes that appear in the news. This analysis is used to trace the dominant narrative, the actors involved, and the point of view built in the media discourse. Kriyantono (2014) explains that qualitative content analysis is useful in revealing the hidden meaning behind text and media messages, especially in social and environmental issues. The researcher carefully read all the news articles collected, then grouped them into thematic categories such as "citizen complaints", "government action", and "company response". To improve the validity of the data, researchers triangulated the sources by comparing information from different media to ensure consistency and reliability. In addition, researchers also considered the credibility of the media, the validity of the narrative, and the presence of direct quotes from important actors such as the Indonesian Parliament, the Ministry of Environment and Forestry, environmental NGOs, and community leaders.

3. RESULTS AND DISCUSSIONS

Conflict Analysis

The environmental conflict in Pangkalan Kerinci, particularly involving PT Riau Andalan Pulp and Paper (RAPP), reflects the tension between the interests of big industry and community rights and environmental sustainability. In recent months, PT Riau Andalan Pulp and Paper (RAPP) has faced intense scrutiny for its alleged poor waste management and environmental impacts. Reports and visits from members of the House of Representatives and relevant agencies show that the company has created problems for local communities. Conflicts between industry and communities often relate to control of natural resources and their impact on the environment. In Pangkalan Kerinci, this conflict intensified when PT RAPP allegedly committed violations in waste management, impacting environmental quality and community health.

The inspection by seven members of Commission XII of the House of Representatives did not go smoothly, as the group was blocked by the company's security guards. This shows RAPP's resistance to transparency and public scrutiny. During the inspection, there were indications that waste was polluting the environment, including the Kampar River in Sering Village, which changed color and emitted a foul odor, causing the death of thousands of fish. The local community reacted by collecting fish carcasses as evidence of the pollution. The company's refusal to provide an official statement deepened the community's suspicion of substandard waste management practices. Information and power imbalances between communities and large corporations like RAPP are a major source of this conflict, as well as the company's alleged use of subsidized fuel and lack of accountability in environmental management.

The agrarian conflict in this case is characterized by unequal power relations between corporations and communities. RAPP, as a large-scale land concession holder, has strong legal legitimacy through licenses from the state. However, in practice, the company's land and resource management often ignores the principles of ecological and social justice. When communities face negative impacts from industrial activities, such as river pollution and loss of livelihoods, they experience limitations in demanding structural accountability. This conflict is a result of capital's dominance over land and natural resources that should belong to the commons. The indirect deprivation of living space through pollution is a form of ecological *dispossession* or loss of community agrarian rights. This means that the community does not physically lose the land, but loses the ecological and economic functions of the land and surrounding resources. In addition, non-transparent waste management practices, company resistance to public scrutiny, and the alleged use of subsidized fuel add to the complexity of this conflict as part of the agrarian governance crisis in Indonesia. The state, in this case, has not been fully present as a fair arbiter between corporate interests and community rights.

Conflict Impact Analysis

Industrial activities certainly play a very significant role, especially for the community. However, these industrial activities also have negative impacts. The negative impacts of PT Andalan Pulp and Paper (RAPP) industrial activities are air, water, and even social pollution. This air pollution refers to the unpleasant odor felt by the community around PT RAPP, where the odor produced is very pungent. One of the water pollution caused is along the Kampar River, Sering Village, Pelalawan District, there are thousands of dead fish floating. In addition, the surrounding community often throws the carcasses of dead wild animals along this river to avoid the unpleasant odor.

Not only that, there is sand waste caused by PT RAPP. This sand waste causes road access and ditches around the housing complex to be blocked. Roads covered in sand have caused several residents to have accidents. The presence of this sand waste also causes water to become blocked, which can cause flooding. This blocked water flow is a source of Malaria because it is a breeding ground for mosquito larvae. In addition, this sand waste also covers the doors of PT RAPP that are not cleaned, so the community hopes that PT RAPP can be responsible for the waste caused.

Analysis Of Conflict Resolution Efforts

The presence of PT Riau Andalan Pulp and Paper (RAPP) in Pangkalan Kerinci, Kampar Regency, Riau, has brought significant impacts to the surrounding community, such as increased income and educational facilities. However, this industrial activity has also caused several environmental problems, including air pollution and limited access to clean water. Therefore, effective resolution efforts are needed to minimize these negative impacts while maintaining the community's welfare. Some simple steps can be taken to address these issues:

1. Improved Industrial Waste Management

Waste from the pulp and paper industry, if not properly managed, can cause air, soil, and water pollution. Solid waste disposed of openly has the potential to contaminate soil and surface water around the factory, while untreated liquid waste can pollute rivers and community water sources. Therefore, PT RAPP needs to improve its waste treatment system by using environmentally friendly technologies that can safely process waste before disposal. For example, phytoremediation technology, which uses certain plants to absorb heavy metals from solid waste, has proven effective and environmentally friendly. Additionally, local government should regularly conduct environmental monitoring and audits to ensure the company complies with waste management standards and prevents pollution that harms the community (Hardiani, 2008).

2. Improving Access to Clean Water

The large-scale pulp and paper industry activities can disrupt the availability of clean water for the surrounding community due to intensive water use and potential contamination of water sources. Community complaints about water shortages must be taken seriously. As a solution, PT RAPP can build water storage and treatment facilities specifically to meet the needs of local residents. Moreover, the company should cooperate with village governments to expand the clean water distribution network so that all community members can access healthy and adequate water. This is important to prevent reliance on contaminated or hard-to-reach water sources (Situmorang and Purwanti, 2024).

3. Tree Planting and Land Rehabilitation

The pulp and paper industry often reduces green cover due to land clearing for industrial plantation forests (HTI) and production activities. This reduction in green cover affects air quality, biodiversity, and ecosystem balance. Therefore, regular tree planting around industrial areas and settlements is necessary to restore environmental functions, improve air quality, and maintain ecosystem balance. Additionally, land rehabilitation programs for former industrial sites must be implemented to restore soil and vegetation conditions so that the environment remains lush and healthy. Rehabilitation can also use methods like phytoremediation, which utilizes plants to clean contaminants in the soil (Iskandar et al., 2006).

4. Education and Community Involvement

Lack of community knowledge about the importance of environmental preservation often results in low participation in protecting the surrounding environment. Therefore, PT RAPP should collaborate with the government and civil society organizations (NGOs) to conduct training and socialization on waste management, the importance of maintaining water and air quality, and ways to participate in environmental programs. Actively involving the community in greening programs and environmental monitoring will also increase their sense of ownership and responsibility toward the environment, thereby minimizing negative impacts collectively (PT RAPP, 2024).

4. CONCLUSION

Based on the explanation that has been presented, the following conclusions can be obtained: Land and resource management carried out by PT RAPP often ignores ecological and social conditions that can affect the community's economy, while the Government has not been fully present as a fair mediator, Industrial activities carried out by PT RAPP have a negative impact on the community in the form of air, water, and even social pollution. Effective resolution efforts so that these negative impacts can be minimized and community welfare is maintained in the form of good industrial waste management, increasing access to clean water, planting trees and land rehabilitation, education and community involvement.

RECOMMENDATION

Based on this explanation, there are several suggestions that are expected to be implemented as follows: 1. The government is expected to pay more attention to community conditions and ensure that industrial activities do not endanger the health and environment of the surrounding community, 2. PT RAPP needs to improve the waste management system by using environmentally friendly technology that is able to process waste to be safe before disposal.

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