

ANALYSIS OF ENVIRONMENTAL IMPACT POLICIES IN THE GOLD MINING IN BULADU VILLAGE EAST SUMALATA DISTRICT)

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INTRODUCTION

Illegal mining is mining or extracting natural resources (SDA) carried out by companies that do not have permits, operational procedures, regulations from the government or good and correct mining principles or often referred to as illegal mining. *Good Mining Practice*. There are 3 sides of the impact caused by illegal mining, namely the economic, environmental and health sides. Illegal mining activities in inappropriate areas cause the soil structure to become unstable, causing landslides. In addition, excavation results that are not in accordance with government regulations cause large holes which are not filled back with soil when it rains resulting in flooding. (Damar et al., 2022) Environmental factors remain a crucial issue that needs intensive monitoring, with activities Nearly unsupervised PETI, one can imagine the environmental damage that has occurred. (Banunaek, 2016) What's more, PETI actors practically do not understand the importance of environmental management, so that even fertile land turns into barren. Mining activities in Indonesia still receive a negative stigma among the public, this is due to illegal mining activities or mining without permits which result in more negative impacts. PETI is an Unlicensed Gold Mining activity carried out by some people and other individuals. (Soprira et al., 2016) PETI (Unlicensed Gold Mining) is mining that does not get a permit from the government as the holder of state control over mining materials. It doesn't matter whether mining is the people who carry out mining activities based on customs, the fate of the mining materials, they still bear the PETI label if they don't get a permit. Buladu Village is one of 10 villages in East Sumalata District, North Gorontalo Regency, where the people have various jobs, including farmers, fishermen and mining. However, from various types of community work in Buladu Village, where the majority of the people work as gold miners. (Soprira et al., 2016) East Sumalata District comes from various areas in the Gorontalo Province region, where they come and settle in the East Sumalata District area to become miners in order to meet their family's economic needs. The Unlicensed Gold Mining (PETI) activity in Buladu Village was carried out by the community based on economic pressure which was increasingly difficult to fulfill, so that the community took shortcuts to find new livelihoods by mining gold illegally and without following the applicable regulations. Even though regulations have been made regarding implementation permits and legal (official) areas in mining areas, due to ignorance and the difficulty of obtaining legal permits, people carry out illegal (unofficial) PETI activities. Meanwhile, the problems that arise with mining activities include: 1). these miners carry out their daily activities

without them realizing that these mining activities cause many environmental problems, such as river water pollution caused by wastewater derived from a chemical known as mercury or we often know as silver water, 2). these chemicals can cause river water to shrink which can cause itching of the skin which is caused by chemical substances originating from the disposal of waste water that flows into the river, and 3). other damage factors are caused by dug holes that are deep enough, so that they can cause environmental damage such as landslides, which are also accompanied by illegal logging activities to be used as material for the gold miners themselves. (Aminah et al., 2022) As for this research aims to determine the Environmental Impact Policy Analysis on Gold Mining in Buladu Village, East Sumalata District. In solving the problem, the researcher used a qualitative descriptive method with a form of analysis that focused on the same thing that happened in the field. To support this research, researchers used the theory of Pressman and Widavsky as quoted by Budi Winarno (2002: 17) defining public policy as a hypothesis containing initial conditions and predictable consequences. Public policy must be distinguished from other forms of policy, for example private policy. This is influenced by the involvement of non-governmental factors. Robert Eyestone as quoted by Leo Agustino (2008: 6) defines public policy as “relationship between government units and their environment”. Many people think that this definition is too broad to understand. (Abdurrahman et al., 2022)

METHOD

This type of research uses descriptive qualitative analytical methods. Qualitative research relies on a holistic natural background, positions humans as a research tool, performs inductive data analysis, is more concerned with process than the results of research conducted, agreed upon by the researcher and the research subject. While the descriptive method was chosen because the research carried out is related to ongoing events and with regard to current conditions. (Moleong, 2021) In this study the authors used research instruments / data collection using primary data which is direct data and immediately obtained from data sources by researchers for special purposes, this primary data was obtained through interview guides or direct interviews with respondents regarding analysis regarding the environmental impact of gold mining in Buladu Village, East Sumalata District. (Saleh et al., 2019) Where the primary data here is data obtained from direct interviews with Buladu Village Officials, East Sumalata District, North Gorontalo Regency. Secondary data is data that is usually compiled in the form of documents, for example data regarding geographic conditions, office profiles, history of office establishments and others. Secondary data is that which was previously collected by other people outside of the investigation itself, where the resulting data includes data that supports primary data. Data collection is a tool used to collect research data. Therefore the instrument used is Observation which is a way of collecting data by direct observation and systematic recording of the object to be studied. Observations were carried out by researchers by observing and recording the objects studied, then the interviews carried out in this study were carried out either through regular interviews or structured interviews, ordinary interviews were intended to get an overview of Buladu Village, East Sumalata District. While in-depth interviews were conducted with respondents accompanied by a list of questions to obtain qualitative data. The respondents who will be interviewed are Buladu Village Officials, East Sumalata District, totaling 10 people: Head of BPD, Village Head, Village Secretary, Head of General Affairs and Planning, Head of Finance, Head of Government Section, Head of Social Welfare and Services, Kadus Pongoala, Kadus Kiki, Kadus Jamban and the community. This documentation technique is intended to complement data from interviews and observations. The intended documents are

in the form of letters, pictures/photos. Or other notes related to the focus of research. Data analysis in this study according to Miles and Huberman cited by (Ahmad Tanzeh and Suyitno, 2006) said that data analysis consists of three streams of activities that occur simultaneously (interactive) consisting of data reduction, data presentation and drawing conclusions. (Moleong, 2021)

DISCUSSION

Mining in Indonesia still gets a negative stigma among the public, this is due to illegal mining activities or mining without permits which have more negative impacts. Like the gold mining activity without a permit in Buladu Village, it is carried out by the community based on economic pressure which is increasingly difficult to fulfill, so the community takes shortcuts to find a new livelihood by mining gold illegally and without following the applicable regulations. Even though regulations have been made regarding implementation permits and legal (official) areas in mining areas, due to ignorance and the difficulty of obtaining legal permits, the community carries out gold mining activities without permits which are illegal. (Moerad et al., 2016) Therefore, through this research the researcher describes the results of the formulation based on interviews with informants and supported by supporting theories regarding the analysis of environmental impact policies on gold mining in Buladu Village, East Sumalata District, namely as follows:

Environment

Mining activities can cause serious environmental damage in an area or region. These impacts can be seen such as deforestation, river water contamination, changes in soil structure, and others. The main environmental impact of mining is when it is exploited and used for energy (oil, gas and coal). Environmental pollution is a condition that occurs due to unfavorable changes in environmental conditions (soil, air and water) (damages and harms human, animal and plant life) caused by the presence of foreign objects (such as garbage, industrial waste, oil, hazardous metals, and so on).

1. Physical Aspect

Land clearing or land preparation activities will result in the loss of cover crops and trees. Thus, as a result of the loss of cover crops, the soil surface becomes prone to erosion by water and wind, resulting in erosion by surface water and a decrease in soil quality. (Sudiyarti et al., 2021)

As conveyed by Mr. Abdul Hair Kamah as the Head of Buladu Village, there will be many things caused by mining activities on environmental pollution, namely for example soil erosion which has the potential for erosion, many plants and vegetation that will die due to the accumulation of material originating from disposal mining products, as well as a decrease in soil quality which has the potential for denudation of the soil surface, because plants and trees will not survive long enough. So that this is a serious enough problem that is handled by the village government to be able to regulate illegal mining, because apart from being irregular in its activities, the damage that will be caused cannot be accounted for.

"There are many impacts that will be experienced when you are around mining, yes of course it can damage the environment, both soil pollution and water pollution, all of which have an impact on the extinction of living things around it, so that the village government continues to strive to anticipate even greater impacts, at least this mining activity can obtain a permit so that accountability is clear" (Interview: Monday, April 11, 2022, 10.00 WITA).

Based on the results of research through direct interviews in the field, it has been analyzed that there will be many things that will be caused by gold mining activities without a permit to environmental pollution, namely for example soil erosion which has the potential for erosion, many plants or vegetation that will die due to the

accumulation of material originating from disposal. mining products, as well as a decrease in soil quality which has the potential for denudation of the soil surface, because plants and trees will not survive long enough. So this matter must be immediately anticipated by the government so that no more severe environmental damage occurs.

Therefore, according to the researcher's analysis, the gold mining activity without a permit in Buladu Village is not justified, because it has a large negative impact on environmental damage, so this requires good cooperation between the village government and the community to be able to maintain the existing natural resources. so that further damage does not occur for the sake of mutual survival. (Andhini, 2017)

2. Chemical Aspect

Decrease in the chemical quality of surface water, ground water, air and soil due to the inclusion of chemical elements originating from mining activities that exceed the established quality standards. Supporting facility activities have pollution that has the potential to release liquid, solid or gas waste into the environment with different physical and chemical characteristics. (Astuti et al., 2017)

As conveyed by Mr. Abdul Hair Kamah as the Head of Buladu Village, that this gold mining activity without a permit caused losses to most of the people around the mine, especially the people along the rivers that flowed by water, where water that has been polluted by chemicals or mercury cannot be used again, both for agricultural or plantation needs which need a supply of water, as well as fishermen who make a living in the river can no longer operate because the fish in the river have been polluted by chemicals, so this cannot be consumed or traded.

"The mining activity has a big impact on the environment, especially the quality of the waters caused by chemicals or mercury, which results in polluted water and cannot be used by the people in Buladu Village, both for agricultural land, plantations and the lives of fishermen who look for fish for food. consumed or traded for income. (Interview: Monday, April 11, 2022, 10.00 WITA).

The same thing was conveyed by Mrs. Piwin N. Lajiku as the Head of the Government Section, that illegal gold mining in Buladu Village is actually not justified for activities, because the impact is very large for the environment, moreover the chemicals resulting from the disposal of mining activities have resulted in river water along Buladu Village can no longer be used by the surrounding community, such as farmers who need water for their agricultural land or fishermen who make a living along the river.

"In my opinion, this illegal gold mining activity has had a major impact on the surrounding environment, such as a decrease in the quality of the waters caused by chemicals, which has resulted in polluted river water and cannot be used by the people themselves." (Interview: Tuesday, April 12, 2022, 10.30 WITA).

Based on the results of research through direct interviews in the field, it has been analyzed that this gold mining activity without a permit causes most losses to the community around the mine, especially the people along rivers that flow with water, where water that has been polluted by chemicals or mercury cannot be used anymore. , both for agricultural or plantation needs that need a water supply, or fishermen who make a living by fishing along the river. (Widayat, 2017)

This is in line with the explanation of Mohkaris (2008) that environmental (chemical) pollution can be interpreted as the addition or entry of foreign substances into the environment in a certain amount so that it can cause a threat to human health, disruption of life, disruption of ecosystems and damage to natural resources in an environment. ecosystem.

Therefore, according to the researcher's analysis, the Buladu Village government must immediately find the best solution for the community, because there are not a few people who depend on the mining area for their lives, so this requires good cooperation between the village government and the community, so that the community's economic needs are met. by continuing to pay attention to the condition of the surrounding environment, so that no one feels disadvantaged. (Firdaus & Simangunsong, 2022)

3. Biological Aspects

The existence of land clearing activities on a large scale will reduce the number and types of local plants, and result in extinction, especially species/species endemic to the area. Flora and fauna are very vulnerable to changes in the environment, so efforts to return to normal will be difficult to succeed. (Kurnia, 2015)

As stated by Mr. Abdul Hair Kamah as the Head of Buladu Village, that actually the community is not justified in carrying out gold mining activities without obtaining a permit from the government, because the impact cannot be properly accounted for. where illegal mining does not pay attention to environmental impact analysis (AMDAL), so that it causes a lot of extinction of flora and fauna, and this is very detrimental to most of the surrounding community, both farmers and fishermen.

"The impact can lead to the extinction of flora and fauna which can harm the farmers and fishermen in the location considering that most of the land belongs to the farmers, so this illegal gold mining activity is not justified to operate because it does not have an AMDAL." (Interview: Monday, April 11, 2022, 10.00 WITA).

The same thing was also conveyed by Ms. Delvi Wasami as Head of Finance, that biologically where illegal mining activities have an impact on the extinction of flora and fauna that exist around mining, where chemicals that pollute the environment can result in a decrease in soil quality, so that a lot of land that was originally Fertile land has become barren, as well as agricultural land which has decreased yields and fishermen who are reluctant to go down to look for fish in the river because the fish they catch have been contaminated with chemicals which when consumed will endanger health.

"The biological impact of mining activities is that it can lead to the extinction of living things or flora and fauna, namely illegal mining which is not carried out according to environmental protection standards, so that it can damage soil vegetation, where previously fertile soil can turn dry and barren. If fish in rivers that are contaminated with mercury are not consumed by humans because it can endanger health and even cause death" (Interview: Monday, April 11, 2022, 09.30 WITA).

Based on the results of research through direct interviews in the field, it has been analyzed that biologically where illegal mining activities have an impact on the extinction of flora and fauna around mining, where illegal mining does not pay attention to environmental impact analysis (AMDAL), where chemicals that pollute the environment can result in in the declining quality of the soil, so that a lot of land that was originally fertile became barren, and this is very detrimental for most of the surrounding community, both farmers and fishermen.

This is in line with Heryando Palar's explanation in (Zulfikar, 2009) that an environmental order can be polluted or damaged due to many things. The main of the many causes of contamination of an environmental order is waste. Based on the source, waste is grouped into household waste or domestic waste and industrial waste. (Deliza Eryani, 2020)

Socio-Economic Community

One source of the country's foreign exchange is technology-intensive and capital-intensive mining activities. The economic turnover that occurs when the project is underway will stimulate the growth of the economic sector in the area. And the opening of employment opportunities for local communities to assist mining activities. As stated by Mr. Abdul Hair Kamah as the Head of Buladu Village, that in fact this illegal gold mining activity is socio-economically a job opportunity while at the same time helping the community's income, but the community also needs to consider the negative impact on the environment, especially not all farmers and fishermen in Buladu Village becomes a miner, so this is very detrimental to farmers and other fishermen who are around the mining area, so good cooperation between parties is needed so that no one is harmed.

"In my opinion, the impact of the existence of this illegal gold mine has social and economic impacts on the community, where this can become a job opportunity for unemployed people, because it can increase people's economic income considering that most of the residents of Buladu Village work as miners. But on the other hand, miners must also see the negative impact on farmers whose land becomes a mining area in that location, so that no one feels disadvantaged. (Interview: Monday, April 11, 2022, 10.00 WITA).

The same thing was also conveyed by Mr. Herman Katili as the Head of the Service and Welfare Section, that the socio-economic impacts of the community on illegal gold mining activities do exist, such as opening up employment opportunities for the community as well as being able to increase the income and level of welfare of the mining community itself. However, besides being able to create jobs, it can also close agricultural businesses because the mining activity has damaged the surrounding agricultural land.

"The socio-economic impact of the community on illegal gold mining activities does exist, but on the one hand it can be a job opportunity because the opening of jobs can also increase people's income and welfare, on the one hand it can also close agricultural businesses because mining activities can damage community agricultural land. those around him." (Interview: Tuesday, April 12, 2022, 09.00 WITA).

Based on the results of research through direct interviews in the field, it has been analyzed that this illegal gold mining activity is socio-economically a job opportunity while at the same time helping the income of the people of Buladu Village. However, besides being able to create jobs, it can also close agricultural businesses because the mining activity has damaged the surrounding agricultural land. Thus, the community also needs to consider the negative impact on the environment, especially not all farmers and fishermen in Buladu Village work as miners. (Haridison, 2003)

This is in line with the opinion of Spengler and Harington in (Zulfikar, 2009), that every development activity will affect the socio-economic community, including mining activities carried out by the community. Therefore, according to the researcher's analysis, the government of Buladu Village must immediately find the best solution for the community, because this illegal gold mining activity does not only benefit some people, but can also cause harm to most of the people in the mining area, especially farmers. and fishermen who both earn a living to meet family needs. (Damar et al., 2022)

CONCLUSION

Based on field research, it can be concluded that the environmental impact policy on gold mining without a permit in Buladu Village is very large, this can be seen from several aspects, namely:

1. Environmental aspects such as: a). physical damage (erosion due to soil erosion and the death of plants above the soil surface due to decreased soil quality), b).

pollution of the environment and air due to chemicals resulting from the disposal of mercury, and c) biological damage (can lead to the extinction of flora and fauna in the vicinity of the mine).

2. Socio-economic aspects of the community, namely: a) can create jobs for the community, b) can also close agricultural businesses because the mining activity has damaged the surrounding agricultural land.

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