Resolution Of Forest Land Tenurial Disputes Outside Of Court For Sustainable Investments: A Case Study In Indonesia

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Abstract

The existence of Indigenous Peoples in Indonesia has existed for centuries before the establishment of the Republic of Indonesia. Indigenous Peoples have a bond of cultural unity, customs, and territories that have been recognized for generations. The challenge for the existence of Indigenous Peoples who inhabit a forest, namely the existence of investments that do not take into account the rights of indigenous peoples over their customary territory, so that it becomes a Tenurial Conflict. The method of this research is qualitative legal research using an empirical-normative combined approach based on case studies. The settlement of tenurial disputes must be oriented towards the rights of Indigenous Peoples, the settlement by providing a determination of Customary Forest first, if investment will be carried out, it can use local wisdom, namely "Numpang Karang."

Keywords: investment, sustainable, Indigenous Peoples, tenurial conflict

1. INTRODUCTION

Indonesia is one of the countries with the largest forest areas in the world, with a total area of 125.795.306 hectares (Nurbaya: 2023). As a result, Indonesia is one of the countries that is hailed as the lungs of the world. With this status, many countries in the world expect Indonesia to be able to keep its forests sustainable. The Indonesian government is expected to be able to reduce deforestation rates and is encouraged to implement reforestation policies.

As a developing country, in an effort to improve people's welfare, the Indonesian government is required to continue to increase national economic growth, while economic growth is greatly influenced by investment growth. It is inevitable that the government must strive for investment growth as one of the logical consequences. Towards this goal, the government, both central and regional, invites as many investors as possible to invest their capital. Meanwhile, the consequence of investment is the availability of land. As part of its efforts to attract investment, the government seeks to provide land. Forest land often becomes a practical choice in providing land for investment.

The provision of forest land for investment is suspected to be one of the causes of deforestation. Although the deforestation trend in Indonesia is declining, the high deforestation rate cannot be ignored as one of the causes of climate change. In the period from 2021 to 2022, deforestation reached 119,400 hectares (Nurbaya: 2023). The opening of forest land for investment is the most prominent cause of deforestation and is feared by many parties because of the difficulty in overcoming it. Deforestation is difficult to overcome because it is done legally. When converting forests into plantations and mining, for example, investors are equipped with complete environmental permits/approvals, therefore the government actually provides protection to investors.

Based on facts on the ground that often emerge, it turns out that in the provision of land for investment, it often leads to tenurial disputes. In Indonesia, tenurial disputes occur in several regions, such as Sumatra, Kalimantan, Sulawesi, Java, and Papua. As an example, the government's plan to develop the Sibisa Tourism Area of Lake Toba has resulted in a tenurial dispute between the Lake Toba Development Authority (BOPDT) and the Indigenous Peoples in and around Lake Toba: Pardamaian Sibisa, Motung Indigenous Peoples, Sigapiton Indigenous Peoples, and Ajibata Indigenous Peoples. The conflict began when the government granted a management right of 500 hectares to BOPDT based on Presidential Regulation No. 49 of 2016, but it turned out that after mapping and setting the boundary of authority, in some of the 500 hectares of land there were customary rights of indigenous peoples. On the one hand, BOPDT has formal legality to manage the land, while on the other hand, indigenous peoples have traditionally controlled customary rights for thousands of years (Imamulhadi: 2019).

A tenurial dispute between PT Indo Asiana Lestari (PT IAL) and the Awyu indigenous peoples of Bovel Dogoel Regency, South Papua, where the problem occurred because the government granted a plantation permit on customary forest that has been traditionally controlled by the Awyu tribe for thousands of years (Karos: 2023). Based on the permits held by PT IAL, the Awyu tribe's customary forest is included in the land controlled by PT IAL, which will be used to expand their oil palm plantation.

The establishment of the National Capital (IKN) in Panajam Paser Utara, East Kalimantan, has also led to a tenurial dispute. The existence of IKN requires land for office centers, education, entertainment, residential areas, tourism, trade, and business. A total of 180,000 hectares of land for IKN, of which there are tenurial conflicts with around 13 indigenous communities. Customary forest land has been marked with IKN stakes, as if there were never any indigenous people living there, even though they have existed even before the Republic of Indonesia was established. Based on the IKN Area Delineation Map, there are 51 indigenous peoples with at least 20,000 people who are threatened by their customary forests (Arman: 2023).

It is undeniable that to improve the welfare of the people, the government needs investment, but some of the affected local communities feel that their customary rights have been taken away, and forests as the front line of climate change mitigation are shrinking in number. The government seems to be faced with a dilemma, but it feels that the government's policies in the investment sector are more prioritized. Although there are efforts by the government and industry to embrace local communities, as well as efforts to slow the pace of deforestation with reforestation, these efforts are not yet enough to be a solution.

In the concept of sustainable development, ideally, investment is expected to increase economic growth, increase people's income, create jobs, and create social justice. Investment should not cause environmental quality to degrade. Tenurial disputes between investors and local communities indicate that social sustainability has not been achieved, and the widespread deforestation as an implication of investment indicates that ecological sustainability has not been achieved either. The facts of tenurial disputes as presented above prove that investment is still one of the causes of tenurial disputes. For this reason, careful and in-depth research needs to be carried out that is able to formulate a sustainable resolution. A resolution that can prevent investment activities from causing tenurial disputes and does not have implications for deforestation. Implications of positive investment on the well-being of society and the environment need to be pursued, and a roadmap formulated. Based on these considerations, research on the resolution of forest land tenure disputes for sustainable investment becomes crucial. The key issues to be investigated include whether investment in forest land is sustainable. What is the government's policy in resolving forest land tenure conflicts related to sustainable investment? What is the ideal resolution for resolving forest land tenure disputes for investment based on the concept of sustainable development? The main goal of the research is to formulate an ideal resolution for resolving forest land tenure disputes for sustainable investment, so that the research findings can be used as a guide for implementing

the concept of sustainable development in resolving forest land tenure disputes related to investment.

2. RESEARCH METHOD

Basically, this research is a qualitative legal research using a combined empiricalnormative approach based on case studies. Discussion and analysis are based on the exploration of the cases studied. The cases taken are land tenure disputes between investors and local communities in Sumatra, Java, Kalimantan, and Papua. The cases will be inventoried using library research methods and interview methods (primary and secondary data). Data collection through interview techniques is intended as supporting data and as a cross-check on secondary data produced by library research.

To answer the question of whether investment in forest land is a sustainable investment, the researcher will first formulate the definition of sustainable investment and establish sustainable investment indicators. In pursuing both of these things, the researcher will use library data by tracing literature on theories and/or concepts of sustainable investment. As for supporting library data, the researcher will conduct interviews with environmental economists, investors, the Ministry of Environment and Forestry (KLHK), and non-governmental organizations (NGOs). The use of library research and interview methods will also be carried out by the researcher in exploring government policies in resolving land tenure disputes in a sustainable manner. Through library research and interviews, government policies in an effort to resolve disputes will be inventoried, which policies have been implemented will be inventoried, and will be analyzed qualitatively to determine which policies have been successfully resolved the problems.

The formulation of an ideal resolution for resolving land tenure disputes for sustainable investment will be based on the concept of sustainable development, which is then reduced to operational indicators of sustainable development. The operational indicators then become a benchmark for the resolution to be proposed. The resolution proposed is formulated from library data and the results of interviews with the disputing parties or their companions (lawyers, NGOs, or mediators), and the government (KLHK). The researcher will also study the resolution of dispute settlement from each party, from the resolution will be studied which one is successful, its weaknesses and advantages from the perspective of sustainable development. The research data is then analyzed qualitatively legally using the techniques of legal interpretation, and legal construction.

3. RESULTS AND DISCUSSION

a. Tenure Conflicts of Forest Land Related to Investment

Tenure conflicts of forest land related to investment are common in Indonesia, including conflicts between indigenous communities around Lake Toba and the Lake Toba Development Authority (BOPDT), conflicts between the Melayu Rempang indigenous community and the Batam Development Authority, and conflicts between the Dayak indigenous community and the Indonesian government in the New Capital City (IKN). These three conflicts are phenomenal conflicts that have occurred in Indonesia and are national issues.

The tenure conflict between the indigenous communities around Lake Toba and the BOPDT began with the Indonesian government's idea to develop Lake Toba as a world-class tourist destination. Through Presidential Regulation No. 49 of 2016 concerning the Lake Toba Area Management Authority, the BOPDT was given 500 hectares of land. In its implementation in 2017, after measurements and boundary setting were carried out, it was found that within the 500 hectares of land there were sacred forests and customary land of the Pardamean Sibisa indigenous community covering 28 hectares, Raja Bius Motung covering 121 hectares, and sacred forests and customary land of the Butar-Butar Sigapiton indigenous community covering 120 hectares, where the sacred forests and customary land of the indigenous communities have existed for hundreds of years ago (Imamulhadi: 2019).

In addressing the fact of the existence of indigenous communities, the BOPDT still adheres to the presidential regulation as the legal basis for land management rights. The BOPDT and the Indonesian Government believe that sacred forests and customary land have never been registered, so the occupation of land by indigenous communities is considered illegal. The BOPDT and the Indonesian Government offer the option of compensation money as a counter-performance if the indigenous communities voluntarily surrender the land to the BOPDT for the development of the tourist area (construction of airports and hotels). Meanwhile, indigenous communities believe that the land is their right inherited from their ancestors from generation to generation, they prove it with the existence of customary area pillars and the existence of sacred ancestral graves that were built hundreds of years before the birth of the Republic of Indonesia (Imamulhadi: 2019). As of 2023, the tenure conflict between the BOPDT and the indigenous communities around Lake Toba has not been resolved. The indigenous communities are still not willing to be relocated and surrender their sacred forests and customary land.

Resolving through the courts will harm indigenous communities, because based on data from the AMAN (Nusantara Indigenous Peoples Alliance) NGO in 2022, the government has established 105 customary forests with a total area of 148,488 hectares (Pandu: 2023), while the total area of indicative customary forest area is 1,090,755 hectares (Ariyo: 2023). If there is investment in customary forest areas that have not been established by the government, then the position of Indigenous Communities from the legal side will be weak, causing disputes through the courts not to be a solution.

A similar pattern of tenure conflict occurred between the Batam Authority/ Batam Development Authority and the Melayu Rempang indigenous community in connection with the Rempang Eco City Development Plan. Based on Presidential Decree No. 41 of 1973, the Batam Authority was established to develop Batam Island, Rempang Island, and Galang Island as a Free Trade Zone. In 2007, the Batam Authority changed its name to the Batam Development Authority. The Rempang Eco City Development Project is included in the 2023 National Strategic Project (PSN) as an Industrial, Trade, and Tourism Zone, established based on the Regulation of the Coordinating Minister for Economic Affairs No. 7 of 2023 to be implemented by PT Makmur Graha Elok as the investor. The project will stand on an area of 8,142 hectares out of 17,600 hectares of land on Rempang Island. Existing on this land are the Taman Buru conservation forest, protected forests, and around 7,500 people of the Melayu Rempang indigenous community live. The Taman Buru conservation forest and protected forests have been converted into production forest land and will be used for the realization of the Rempang Eco City project (FNN: 2023).

Regarding the realization of the project, the affected indigenous communities will be relocated to the Tanjung Banon or Dapur 3 Sijantung areas. The affected communities will be compensated with new Type 45 residences worth IDR 120 million with a land area of 500 m2. In the relocation area, the investor will construct educational facilities, places of worship, a fisherman's port, and sports facilities. In the Rempang Eco City area, there will be green spaces, blue spaces, mangrove forests, greening areas, and a beach (BP Batam: 2023). Facing this national strategic project, the indigenous community of Melayu Rempang rejects relocation and refuses to surrender their ancestral land. The indigenous community argues that they have rights to ancestral land as an inheritance from their forebears, which they have inhabited for over 200 years (Tasya: 2023). Evidence of the presence of the Melayu Rempang indigenous community is documented in the records of the Dutchman P. Wink, in an article titled "Verslag van een bezoek aan de Orang Darat van Rempang," recounting P. Wink's visit to Rempang Island on February 4, 1930 (Adryamarthanino: 2023). Despite being verifiable, the ancestral land of the Melayu Rempang indigenous community has never been officially registered, leading BP Batam to declare the community's land possession as illegal.

Tenurial conflict between the indigenous community of Paser and the IKN Authority is related to the development of the National Capital City (IKN). The pattern is similar to previous conflict patterns. The government's designated location map for investors in the IKN

development is a Forest Cultivation Area, including indigenous land rights, agricultural land, and community fields (Hidayat: 2022). There are about 21 indigenous community groups with a land area of approximately 30,000 hectares and around 16,800 residents within the IKN region. Although the indigenous community's historical claims to the land can be proven, it has not been officially registered, and thus, the state does not recognize ownership. They manage the ancestral land as a heritage from the Paser Sultanate, which thrived since 1516 (Hidayat: 2022).

In response to the indigenous community's controlled land in Paser, the IKN Authority plans to expropriate the land. The compensation offered by the Authority is based on the assumption that land possession is illegal, and therefore, the value is deemed in adequate by the indigenous community. Additionally, the community is unwilling to surrender their ancestral land.

Several typologies of tenurial disputes in forest areas related to investment exist, such as: Settlement Claims in Forest Areas; Cultivated Land in Forest Areas; Claims of Land Rights in Forest Areas; Claims of Indigenous Community Land Rights; Developed Activities in Forest Areas; and Overlapping Permits. The typology of tenurial conflicts in the above three cases is essentially the same, involving claims to indigenous land rights. This typology is challenging to resolve in Indonesia. Lands that the state has granted to investors for development are partially claimed by indigenous communities as ancestral land acquired over hundreds of years. From the investor's perspective, they claim that the land they control was legally obtained from the government as the state's representative. The government argues that the indigenous community's claimed ancestral land is not legally registered, making it state-owned land that can be granted to investors for management.

Regarding these tenurial conflicts, the government and investors propose relocation as a solution with compensation. However, for the indigenous community, the issue is not the amount of compensation offered. They reject relocation because ancestral land is a trust from their forebears that must be preserved and protected. The indigenous community feels disobedient to their forebears if they cannot safeguard and care for their ancestral land. For the indigenous community, relocation is not a solution, regardless of the compensation amount.

Government, investor, and indigenous communities are all maintaining their positions, as parties that are both upholding the truth. The government, as a manifestation of the state, based on the Constitution of the Republic of Indonesia Article 33 of the 1945 Constitution Amendment IV, has the right to manage and regulate forest areas as state assets to be used for the greatest prosperity of the people. Article 4 of Law No. 41 of 1999 on Forestry claims that all forests located in the territory of the Republic of Indonesia and the natural resources contained therein are controlled by the state. Based on its status, forests controlled by indigenous communities (customary forests) are part of state forests. The state's right to control over forests gives the government the authority to change forest areas into non-forest areas. Regarding the use of forest areas for development by investors, the government first declares them as non-forest areas, so that their regime changes to the land regime. The National Land Agency then establishes land rights. Investors control the land that was once forest based on the right to build, the right to cultivate, the right to use, or the lease right issued by the National Land Agency.

In the tenure conflict in forest areas related to investment, the process as desired by the Constitution and the Forestry Law has been taken. In the three cases mentioned above, investors have controlled land in accordance with the processes and procedures as desired by the legislation. The investor's claim that they control the land for the construction location legally is not disputed. This condition certainly cornered the position of indigenous communities on their claim of customary rights. Based on Article 18B of the Indonesian Constitution, the existence of indigenous communities is recognized and respected. The Forestry Law as its derivative also recognizes as long as the indigenous community exists, but according to the law, indigenous communities are recognized for their existence and rights if they have been

established through regional regulations. If the existence of indigenous communities has not been established through regional regulations, it results in the rights over the customary land they control not being recognized.

In Indonesia, most indigenous communities are not established by regional regulations, even though their physical and material existence can be proven. This condition is the root of the tenure dispute that is difficult to resolve, when the government and investors only adhere to formal normative aspects. For traditional and isolated indigenous communities, the normative obligation to submit recognition of their existence through regional regulations is impossible, except for those who are advocated by NGOs. Of course, their legal awareness of the law is not up to par. The procedure for recognizing indigenous communities through regional regulations is very difficult. Indigenous communities are required to actively collect mapping data, which is felt by indigenous communities as an unfair provision (Indrayani: 2023).

The problem arises when the government issues land rights to investors over customary rights, ignoring the physical-material existence of indigenous communities that can be proven. And the problem becomes more acute when investors also ignore it, executing the investment with physical construction in the field. Investors ignore the religious and cultural aspects by believing that indigenous communities can be relocated with compensation. While indigenous communities ignore the juridical-formal aspects and adhere to religious and cultural values. As a result, investment stalls, conflict becomes anarchy, and investors are at risk of losses. Psychologically, indigenous communities feel that their existence is not recognized as part of the Republic of Indonesia.

b. Sustainable Investment Concept in Achieving SDGs Goals 13

Investment is an essential factor that determines economic growth, where the growth of investment in a country has a positive impact on the increase in economic growth of the country concerned (Harrod: 2021). This positive causal relationship has generally been used as the basis for the policy of a country's government to increase its economic growth. The government certainly makes serious efforts to attract as much investment as possible for the purpose of economic growth, and to achieve this goal, the government usually advertises the wealth of natural resources in its territory. Natural wealth is often a sexy ad to attract investors, as is Indonesia. The wealth of natural resources in the fields of oil, gas, mineral, and coal mining, forestry, plantations, agriculture, and fisheries as well as the availability of vast land become the focus of attracting investment.

A key promise of sustainable investing is that it pressures companies to become more sustainable, and thereby creates a positive impact on the environment and society. For example, shareholders may pressure companies to reduce carbon emissions or address human rights violations in their supply chains (Emilio: 2023). In countries that use the SDGs as a reference for national development, an investment model that integrates environmental, social, and governance (ESG) aspects (Minister of Economic Affairs: 2022) as a harmonious whole is a logical concept to implement.

The concept of sustainable investment is an important instrument for countries that are committed to reducing greenhouse gas emissions. As a derivative of sustainable development, this concept requires that investments to increase economic growth not be at odds with national and global efforts to combat climate change. On the other hand, the enthusiasm for attracting and stimulating investment cannot ignore the limits of tolerance for carbon emissions and the social well-being of local communities.

In some cases, however, investment has actually had a negative impact on environmental sustainability. In Indonesia, research has shown that investment is positively correlated with environmental pollution, both in the long and short term (Diwid: 2019). This fact is of course to be avoided. The concept of sustainable investment requires a negative relationship between investment growth and pollution and environmental damage, especially the increase in carbon concentration. For this reason, an analysis of the impact of investment plans on climate change risks is important to be used as a reference in licensing policies. Will the investment plan increase the amount of carbon? If the consequences of the investment can increase the amount of carbon by a very large amount, so that it endangers efforts to reduce the rate of global warming, then such investments must be classified as rejected investments. Similarly, if the investment plan, based on the results of climate change analysis, has the potential to reduce the environment's ability to absorb carbon locally and globally, it must be a business activity plan that is guaranteed to be rejected for licensing and its existence.

However, it is certainly not possible to simply reject investments solely based on considerations of carbon emissions. It is also important to consider the aspect of social sustainability. The availability of jobs for a decent living for the community, good and clean sanitation, the availability of clean water, and the sufficiency of clothing, food, and shelter for the local community, in the concept of sustainable investment must be a decisive consideration (WCED: 1988). The meeting point between the two is how much carbon emissions can be tolerated if the investment can guarantee social sustainability. If the carbon produced can be absorbed or offset so that the concentration is overall reduced or at least remains the same, then such investment plans do not need to be rejected on the grounds that they are not sustainable.

Investment in the renewable energy sector on forest land by PT Pertamina Geothermal Energy Tbk (PT PGE) is one example of sustainable investment. In the midst of global efforts to reduce carbon emissions and utilize clean energy sources, PT Pertamina Geothermal Energy Tbk (PT PGE) has emerged as a company that is worth emulating. The company, which focuses on the exploration and development of geothermal energy, has demonstrated a strong commitment to sustainable practices and environmental conservation efforts.

PT PGE is a green energy company currently contributing 80% of the total installed capacity of geothermal energy in Indonesia (Geothermal: 2023). PT PGE's commitment to conducting its business sustainably, particularly in the environmental context, is clearly reflected through their Sustainability Policy. The Sustainability Policy is a policy or guideline used by an organization or company to outline their commitment to sustainable practices and principles in various aspects of their operations. This policy is designed to guide the company's actions to align with sustainability goals, including aspects such as environmental protection, social responsibility, and resource efficiency. The Sustainability Policy is an official guide or statement that demonstrates how the company plans to operate considering the long-term social, economic, and environmental impacts (ESG: 2023).

The sustainability policy in its environmental sector is reflected in its ambition to become a global environmentally friendly company in the energy sector and to serve as a role model in implementing environmental management systems throughout its business activities (Geothermal: 2023). This ambition is supported by several commitments applied to all stakeholders. These commitments in the environmental aspect include (Geothermal: 2023):

- 1. Reducing greenhouse gas emissions, non-greenhouse gas emissions, releases, waste, effluents, and addressing broader climate change issues through risk management related to regulations, reputation, and/or market changes from climate change by integrating them into strategies and operations.
- 2. Protecting and preserving the environment, water, natural resources, and energy through an associated environmental management system that will be continuously monitored.
- Managing and mitigating the impacts of projects and activities on biodiversity with a 'Net Positive Impact' commitment, avoiding operational activities in areas with high biodiversity value, and incorporating biodiversity requirements into project planning and operations.
- 4. Rehabilitating land after the closure of operations to restore ecosystems, minimize negative impacts, and maximize benefits, as well as setting aside adequate funds for the closure of operations and rehabilitation.

- 5. Communicating and consulting with stakeholders on environmental issues and with the local/community about development and community involvement to enhance their wellbeing.
- Respecting the rights of indigenous communities in the company's operational areas, including promoting socio-economic development, supporting the fulfillment of social, economic, and cultural rights, protecting cultural sites, and avoiding forced displacement of indigenous community settlements.
- 7. Collaborating with partners and suppliers towards the procurement of environmentally friendly and sustainable goods and services to minimize environmental impacts.

PT PGE's commitment has been materialized through an environmental monitoring and management program documented in the RKL-RPL (Environmental Management Plan - Environmental Monitoring Plan), which is an integral part of PT PGE's Environmental Impact Assessment (AMDAL) document. Therefore, the Sustainability Policy serves as a crucial foundation supported by concrete implementation in the RKL-RPL. With the existence of RKL-RPL, the company not only commits to preserving the environment but also possesses instruments and concrete processes to measure, report, and manage the environmental impacts of their activities. According to PT PGE's RKL-RPL matrix, environmental management and monitoring programs are conducted for various aspects, including waste, biodiversity, air, wastewater generation, water, energy, noise pollution, and brine/condensate discharge.

Regarding waste issues, PT PGE categorizes them into hazardous waste (B3), nonhazardous waste, and domestic waste. For hazardous waste (B3), the management and monitoring program include waste reduction programs, storing hazardous waste in licensed TPS LB3 facilities, and transporting and processing hazardous waste in collaboration with licensed third parties. For non-hazardous waste, the management involves handling drilling mud and drilling powder according to the Minister of Energy and Mineral Resources Regulation No. 21 of 2017 on the Management of Boron Mud and Boron Powder Waste in Geothermal Drilling. As for domestic waste, the programs include separating and sorting waste (organic and non-organic), implementing reduce, reuse, recycle programs, and collaborating with and supporting waste banks with the community (Geothermal: 2023).

In anticipating environmental impacts on biodiversity, PT PGE also implements various management and monitoring programs, such as restricting land clearing, conserving flora and fauna in the working area, such as the conservation of the Javan Hawk Eagle in Kamojang, Saburai Goat Farming in Ulubelu, and Yaki Conservation in Lahendong. Additionally, PT PGE engages in breeding and cultivation of rare and endemic plants while conducting reforestation with rare and endemic plants (Geothermal: 2023).

For air quality, measures taken to address pollution, including emissions, ambient air, and odor, involve managing and monitoring emissions and air based on Government Regulation No. 41 of 1999 concerning Air Pollution Control, complying with emission quality standards and calculating emission loads according to the Minister of Environment and Forestry Regulation No. 15 of 2019 concerning Thermal Power Plant Emission Quality Standards, using vehicles according to the company's operational standards, regularly maintaining production wells, geothermal power plants, and supporting facilities, releasing residual geothermal vapor through the cooling tower fan outlet for gas dispersal, and installing gas detectors in areas potentially emitting hazardous gases (Geothermal: 2023).

Meanwhile, for wastewater generation, environmental management and monitoring involve managing wastewater referring to Government Regulation No. 22 of 2021 concerning Environmental Protection and Management, monitoring the quality of domestic wastewater based on the Minister of Environment and Forestry Regulation No. 68 of 2016 concerning Domestic Wastewater Quality Standards, monitoring drainage wastewater according to the Minister of Environment Regulation No. 19 of 2010 concerning Wastewater Quality Standards for Oil and Gas and Geothermal Businesses and/or Activities. Regarding wastewater issues, PT PGE conducts inspections, management, and monitoring of WWTP conditions (pH and flow

rate) and monitoring wells, collaborates with licensed domestic liquid waste managers, and implements programs to reduce water pollutant loads in operational activities, offices, and other supporting activities (Geothermal: 2023).

In managing the impact of activities on water, PT PGE consistently ensures compliance with regulations, such as having a SIPPA (Surface Water Utilization and Utilization Permit), recording and monitoring water usage, implementing water usage efficiency programs in operational activities, utilizing produced water, both brine and condensate, in drilling and well work-over activities to reduce surface water consumption. They also conduct audits of water during operational and office activities every three years to enhance water usage efficiency (Geothermal: 2023). PT PGE's program to address the impact of its operational activities on noise pollution includes minimizing venting on the PLTP rock muffler, periodic monitoring of noise, and using rock mufflers and silencers as noise suppressors during production testing and vapor release activities (Geothermal: 2023).

In facing environmental challenges and striving for sustainable operation, written promises by companies are often measured by tangible achievements. In this regard, PT PGE not only considers their commitments in the Sustainability Policy and RKL-RPL as mere promises but has provided concrete evidence that they are not just talking about sustainability but are also implementing it in daily practice. An outstanding achievement of PT PGE is receiving the PROPER Gold award 13 times from the Ministry of Environment and Forestry (KLHK) (Geothermal: 2023). This achievement not only illustrates the company's commitment to environmental sustainability but also proves that these commitments have been translated into significant concrete actions.

The Public Disclosure Program for Environmental Compliance (PROPER) is fundamentally not an environmental compliance or law enforcement instrument. PROPER is a complementary program that synergizes with other environmental compliance instruments, aiming to encourage companies with significant environmental impacts to effectively and efficiently improve environmental quality. On the other hand, PROPER also represents transparency and democratization in environmental management in Indonesia (Geothermal: 2023). The 13 PROPER Gold awards earned by PT PGE are truly remarkable and show that PT PGE is worthy of being a model for sustainable investment in Indonesia. PROPER itself has implemented very complex and comprehensive assessment criteria, viewed in two categories: compliance assessment and assessment beyond regulatory requirements (beyond compliance). In the compliance assessment criteria, the basis is several regulations in the field of environmental protection, such as (Proper: 2023):

- 1. Environmental document requirements and reporting, where a company is considered to meet this criterion if all its operational activities are covered by an AMDAL, UKL-UPL, or related document and report as regulated in the AMDAL and UKL-UPL.
- 2. Water pollution control, compliance is assessed based on whether all wastewater discharges to the environment are permitted or not. Additionally, wastewater released to the environment must pass through control points, where wastewater quality standards allowed for discharge into the environment apply.
- Air pollution control, assessment is guided by the principle that all emission sources must be identified and monitored to ensure emissions released into the environment do not exceed quality standards.
- 4. B3 waste management, assessment begins with the inventory of types and volumes of waste, followed by management with the required B3 waste management permit.
- Coastal water pollution control, compliance is assessed based on the completeness of wastewater discharge permits and compliance with discharge provisions in the relevant permits.
- 6. Land damage potential, this assessment is only conducted for mining activities as an implementation of best mining practices.

Meanwhile, the criteria beyond compliance are more dynamic, adapting to technological advancements, the implementation of best environmental management

practices, and global issues. Aspects assessed beyond compliance criteria include the implementation of environmental management systems, efforts for energy efficiency, emission reduction initiatives, implementation of the 3R (reduce, reuse, recycle) for non-B3 solid waste, water conservation, reduction of wastewater pollution loads, biodiversity protection, and community development programs (Proper: 2023). PROPER Gold is the highest level in the PROPER award system, and corporations designated as PROPER Gold recipients are acknowledged to have managed the environment far better than what is required by regulations, along with sustained efforts in community development through CSR (Corporate Social Responsibility) programs.

Companies that use the concept of CSR try to behave in such a way that they take into account not only the needs of their internal environment, but also the external environment of the company. They strive to contribute to sustainable development and the overall improvement of the condition of society. CSR is a concept of contemporary entrepreneurship that understands entrepreneurship from a broader perspective and is based on three basic pillars, or on the so-called triple-bottom-line: economic (Profit), social (People), and environmental (Planet) (Kocmanová: 2020)

Examining the above-mentioned PROPER criteria, the 13-time receipt of the PROPER Gold award is an extraordinary acknowledgment of PT PGE's efforts in preserving and managing the environment responsibly. This reflects the company's deep commitment to achieving the highest standards in environmental management. Therefore, it can be further assessed how PT PGE has integrated best practices into their operations and the positive impacts they have generated in the pursuit of creating more sustainable investments.

In addition to the commitment to environmental sustainability, an equally strong commitment should also be directed towards the socio-economic aspects of the community. According to PT PGE's Sustainability Policy, one of the ambitions is to become a Globally Responsible Energy Company, supported by a commitment to being a driving force for social development to promote social and economic development within communities (Geothermal: 2023). This commitment is evident in the publication of PT PGE's Environmental Social Responsibility (TJSL) program in 2022, where PT PGE continuously implements TJSL programs in its 6 operating areas, including Kamojang, Ulubelu, Lahendong, Karaha, Lumut Balai, and Sibanyak. TJSL is based on 5 pillars, namely improving the quality of education, environmental care, community economic empowerment, improving health quality, and infrastructure and social development, following ISO 26000 guidelines. In 2021, the CSR funds successfully realized by PT PGE amounted to IDR 12.875 billion, with a Community Satisfaction Index (CSI) of 83.9 out of 100 (Geothermal: 2023).

PT PGE's TJSL program is adapted to the conditions of the local areas. In the Kamojang area, for example, challenging geography with limited internet and transportation access results in a lack of job opportunities. However, PGE's presence involves local youth and mobilizes the community for self-reliance and empowerment. In the digitalization context, PT PGE introduced digital innovations like KANG DEDI (Kamojang Digital Village), an eco-friendly digital village program, and KANG ELIE (Kamojang Green Living Ecosystem). KANG ELIE includes three outstanding innovations: Rangers App (local youth motorcycle taxi service), Online Waste Bank, and Our Signal. Rangers App addresses transportation challenges in the potential tourist village of Kamojang, promoting environmental sustainability with the Rangers Pay top-up feature allowing digital balance recharge using waste. This app also implements online motorcycle taxi services using electric motorcycles (Geothermal: 2023). Rangers App provides internet access payable with waste, plants trees in blank spot areas, empowering the local community and increasing income through environmentally friendly innovation. By 2021, the total Rangers Pay top-up successfully reduced community waste by 5.22 tons (Geothermal: 2023).

In the education pillar, PT PGE's Kamojang area has several partner institutions, such as the An-Nur Ibun Community Learning Center Foundation, established since 2004 to provide

free education to the less privileged. There is also the Green School, offering education on the environment, disaster response, and waste-based proper goods management. Meanwhile, for women's empowerment, the Local Hero Women's School provides character education and develops the local potential of mothers (Geothermal: 2023).

For the pillar of improving the quality of community health, PT PGE's Kamojang area has implemented programs such as Beyond Sehati: Eduplay Therapy, an innovation providing therapy for special needs children and offering specially processed additional food from nutritious local ingredients, Beyond Sehati: Vovavid, a continuation of Beyond Sehati: Eduplay Therapy realized through vocational assessment for special needs children, and the Supplementary Food Distribution (PMT) program to improve health and nutritional quality for toddlers and the elderly (Geothermal: 2023).

The economic impact of the TJSL program in the Kamojang area, based on available data, can be considered to significantly improve the economic standard of the surrounding community. The Rangers App has facilitated online sales for Micro, Small, and Medium Enterprises (MSMEs), consisting of 52 resilient businesses, 10 homestays, and 2 tourist attractions. Empowering the community through Rangers App has provided employment opportunities for unemployed individuals as administrators or drivers with an average income of around IDR 2,037,000 per month. MSME players are also assisted with the Rangers App sales platform, increasing turnover to IDR 7,291,667 per month. Furthermore, there are cost savings in transportation and service fees of up to IDR 550,000 per month for the general public. Rangers App, together with the community, has successfully managed an integrated digital waste bank worth an average of IDR 1,155,556 per month. Additionally, the Women Empowerment program, known as "Wanita Mandiri Ibun," has empowered up to 50 individuals through entrepreneurship activities and marketing of local products such as Ibun's distinctive sarong, snacks, catering, recycled crafts, and various types of clothing. These products have been showcased in 29 national and international exhibitions. This program has fostered economic independence, with an average monthly turnover of up to IDR 4,900,000 per member (Geothermal: 2023). Moreover, from the "Anak Punk Wani Robah" program, PT PGE in the Kamojang area has successfully empowered punk and street children in Majalaya by providing skills training, such as musical instrument skills, allowing beneficiaries to perform in local events and earn approximately IDR 1,500,000 per month (Geothermal: 2023).

The various CSR programs implemented by PT PGE, both in the Kamojang area and in the other five areas, are fundamentally integrated with each other so that they can have a real impact such as providing jobs and improving the economic level of the surrounding community. The improvement of the economic level of the surrounding community has a significant impact on the overall economic sustainability. When per capita income increases in a region, this is not only beneficial to the individuals in it, but also contributes to the overall regional and national economic growth. In the context of taxation and retribution, the increase in economic activity around companies like PT PGE will generate additional revenue for the State Treasury through taxes and retribution paid by companies and individuals. This revenue can be used to support various government programs and projects which in turn can improve the welfare of the community at large.

In addition, the growth of PT PGE's partner companies will create new jobs and increase the demand for local goods and services. PT PGE workers who earn additional income will also shop at supermarkets, markets, stalls, and even choose to live near the company, such as in boarding houses or rented houses. This will give an extra boost to local businesses, including hotels that will grow due to the need for accommodation for workers or visiting guests. Thus, the overall economic cycle generated by the improvement of the economic level of the surrounding community, including tax revenue, company growth, and increased local business activity, plays an important role in ensuring positive economic sustainability. With a good approach, this can generate long-term benefits for all parties and promote sustainable national economic growth.

In terms of governance, PT PGE is committed to improving business ethics, cyber security, and GCG (Good Corporate Governance). In terms of business ethics, PT PGE implements an anti-bribery management system and a Whistleblowing System (WBS). The anti-bribery management system aims to identify and prevent bribery by internalizing it in every element of the company. Both internal parties of PT PGE and all stakeholders are required to apply the principles of no bribery (rejecting bribery), no kickback (rejecting commissions), no gift (rejecting gifts or gratification), and no luxurious hospitality (rejecting excessive hospitality). The WBS or violation reporting system is carried out centrally through the Pertamina Clean WBS and managed by an internationally oriented independent consultant. Reports of fraud and irregularities are carried out in a confidential, anonymous, and independent manner, so that the reporter is guaranteed protection. Complaints submitted to the Pertamina Clean WBS include corruption, gratification, embezzlement, misuse of assets, financial statement fraud, violations of laws and company regulations, harassment, etc. (Geothermal: 2023).

Meanwhile, for cyber security, PT PGE consistently increases worker awareness of cyber security. The digital security referred to includes systems, data, networks, and penetration testing on all applications used in the company environment (Geothermal: 2023).

The GCG principles applied by PT PGE are the same as the GCG principles that generally apply, namely transparency, accountability, responsibility, independence, and fairness (Geothermal: 2023). PT PGE's commitment to implementing GCG has obtained ISO 37001:2016 certification for the SMAP (Anti-Bribery Management System) from PT Business Standards Institutions (BSI) Group Indonesia. ISO 37001:2016 SMAP itself is a form of recognition from an international certification body. PT PGE's GCG assessment in 2020 even received a very good rating with a score of 94.90. In addition to SMAP, a number of PT PGE's management systems have also been internationally certified, such as the Kamojang Quality Testing Laboratory (ISO 17025:2017), Quality Management System (ISO 9001:2015), Environmental Management System (ISO 14001:2015), and Safety and Health Management System (ISO 45001:2018).

With all the steps and governance policies that PT PGE has, it has proven its seriousness and commitment to running a business responsibly, ethically, and sustainably in the long term. This is not only beneficial to the company itself, but also creates trust from the community, stakeholders, and the market, which in turn can contribute to greater social, economic, and environmental sustainability.

c. Ideal Resolution for Tenurial Conflict Resolution Outside the Court

Two crucial aspects to consider in resolving tenurial conflicts around investment-related forests are that the resolution should not result in the relocation of indigenous communities without their consent, and investment-related development should not lead to a decrease in the quality of the environment but, on the contrary, should enhance its quality. Investment-related development must acknowledge the existence of indigenous communities that can be materially proven. The forced relocation of indigenous communities is a tangible form of violation against Article 18B of the 1945 Constitution, Fourth Amendment. The Constitution of the Republic of Indonesia demands respect and recognition of indigenous communities as long as they still exist, with proof available both formally and materially. The confirmation of the existence of indigenous communities in the denial of the materially proven existence of these communities, contradicts the spirit of the constitution.

Formally, Article 98 of Law No. 6 of 2014 concerning Villages and Minister of Home Affairs Regulation No. 52 of 2014 stipulate that Customary Villages are determined based on regional regulations. However, this does not mean that the existence of indigenous communities, whose presence is only proven materially, can be disregarded. The intention and spirit of Article 18B of the 1945 Constitution, Fourth Amendment, certainly do not desire indigenous communities that still exist materially but have not been determined by regional regulations to be ignored. Based on this spirit, the government is obligated to actively assist indigenous communities throughout the territory of the Republic of Indonesia in obtaining

recognition. The government, as the embodiment of the state in governance, must act wisely when faced with such situations. At the very least, establishing a status quo is necessary for development located in areas where indigenous communities with materially proven existence are present.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDHRIP), of which Indonesia is a signatory, prohibits the forced relocation of indigenous communities related to development. This prohibition exists because forced relocation constitutes a violation of human rights. UNDHRIP does not endorse relocation as a solution to tenurial conflicts related to development unless it is a conscious and voluntary agreement without violating the human rights of the concerned indigenous community. UNDHRIP provides alternative solutions if such conflicts arise. However, fundamentally, the relocation of indigenous communities is a policy that cannot be pursued if the indigenous community rejects it. Indigenous communities cannot be forcibly moved from their land or territory. There is no relocation without their voluntary consent. Indigenous communities are guaranteed their rights to practice their customs, including the right to preserve, protect, and develop the manifestations of their past, present, and future cultures. Under the UNDHRIP, indigenous communities have the right to practice, develop traditions, spirituality and religion, as well as customs. UNDHRIP obliges participating countries to take effective measures to ensure that indigenous communities have access to their traditional rights (Imamulhadi: 2011).

In the concept of sustainable development, the pillars of ecological, economic, and social sustainability are inseparable and equally important. Achieving economic sustainability must be accompanied by the achievement of ecological and social sustainability, and vice versa. Especially in the concept of sustainable investment, investments should not only aim to improve economic growth and enhance community welfare but also increase the quality of the environment. The chosen development location in the environment must have a better environmental quality. Therefore, development must be directed within the framework of environmental planning towards a higher quality. Achieving sustainable development requires environmentally and developmentally wise policies that integrate ecological, economic, and social aspects, including (WCED: 1988):

- Economic Growth. Poverty directly impacts natural resources, as impoverished individuals tend to exploit natural resources unsustainably. Poverty increases pressure on the environment (WCED: 1988). Therefore, poverty must be combated. One effort to combat poverty is by enhancing national economic growth. Theoretically, economic growth will improve the well-being of the population. Economic growth indicators include an increase in national income, a rise in per capita income, a surplus of labor compared to unemployment, and a reduction in the poverty rate. Quality economic growth is achieved when income distribution is equitable, and poverty and unemployment are alleviated (Prasetyo: 2008).
- 2. Changing the Quality of Economic Growth. The economic development process should be based more on the reality of supporting capital, and environmental restoration costs should be considered. Economic development must fully account for the restoration of the damage to the availability of natural resources when measuring its growth (internalization of environmental costs into economic expenses).
- 3. Fulfillment of Essential Needs: Water; Food; Energy; Sanitation; Employment. Meeting human needs and aspirations is the goal of development. The most essential human needs include water, food, energy, sanitation, and employment. A community is considered absolutely poor if it cannot meet these basic needs, and poverty drives people to excessively use natural resources to meet their fundamental needs. Another important essential need is decent housing and healthcare maintenance. Sustainable development requires fulfilling the essential needs of humanity.
- 4. Sustainable Population Size. Sustainable development is closely related to the dynamics of population growth, which is easier to achieve when the population remains stable at a level consistent with the productive capacity of the ecosystem. A population

with high material and energy consumption imposes a heavier burden on natural resources (Prasetyo: 2008). Large population growth affects the continued existence and quality of natural resources in supporting the fulfillment of human needs and aspirations. Achieving sustainable development requires stable and controlled population growth, including its distribution. Therefore, the development of smaller urban centers is needed to reduce the pressure on large cities, where population pressure creates problems of water scarcity, sanitation, health, housing, and job opportunities.

- 5. Preserving Sustainability and Enhancing Resources. If needs are to be met sustainably, natural resources must be preserved and enhanced. Conservation efforts should not be solely based on development goals but should be grounded in our moral obligation to other living beings and future generations. Conservation does not mean rejecting development; the use of natural resources must be within ecological limits and minimize pressure on them. Pressure on resources increases when humans lack alternatives. Development policies must expand human choices for sustainable alternative livelihoods. Sustainable development requires a clear focus on preserving and efficiently using natural resources (Prasetyo: 2008).
- 6. Technology Reorientation and Risk Management. Sustainable development requires a reorientation of technology that more effectively addresses the challenges of sustainable development and gives greater attention to environmental issues. Achieving sustainable development requires technology that is environmentally friendly and produces social goods such as better air quality or products that are more durable or can anticipate the costs of pollution recovery. The development of environmentally friendly friendly technology is closely related to risk management issues, involving sophisticated analysis of vulnerabilities and failures in technology design, where failure or accidents will not result in disasters. Technology capable of analyzing and minimizing risks due to failure.
- 7. Integration of Economic and Environmental Aspects in Decision-Making. Ecological and economic considerations do not always conflict; in sustainable development, it is necessary to integrate ecological and economic considerations in policies and decisions because they are closely interconnected. The rigidity of barriers between sectors must be eliminated, as the interconnection between sectors is crucial. The integration of ecological and economic factors into laws and decision-making systems must be implemented by the state (Prasetyo: 2008).

Building on the two crucial points mentioned above, the resolution of tenure conflicts in forest areas related to investments should be directed in such a way as to be free from relocation options and environmental destruction. Conflict resolution must consider crucial guidelines for the protection of indigenous communities as follows:

- 1. Acknowledging the existence of indigenous communities, their rights, and cultural practices, even if their existence can only be substantiated materially based on ancestral heritage and other historical evidence.
- 2. No relocation.
- 3. Empowering indigenous communities.

Regarding sustainability aspects, conflict resolution must consider crucial guidelines as follows:

 Pillar of Economic Sustainability. Achieving economic sustainability requires policies and investments that do not have a negative impact on the increase in national income, rising per capita income, surplus labor, and efforts to reduce the poverty rate. Economic growth must take into account environmental costs in production expenses. However, the government and investors must reject support for the use of natural resources beyond basic needs, exceeding ecological consumption standards. The government should refuse support for the production of non-essential goods, and not everyone can reasonably aspire to them. 2. Pillar of Ecological Sustainability. Achieving ecological sustainability involves the conservation of natural resources, requiring attention to ecological capacity limits in supporting economic growth. The government must enforce rules regarding ecological recovery capacity (standards for quality and damage), as violations indicate damage to natural resources. If legal norm violations result in damage to the recovery capacity of natural resources, the perpetrators must be held legally accountable for restoration, compensation, and ensuring that violations do not recur in the future. The government must ensure that investors comply with all regulations governing ecological tolerance limits. Additionally, the government needs to encourage all parties to improve the quality and capacity of the environment in supporting economic growth.

In relation to the pillar of ecological sustainability, the government directs parties involved in development to create and use alternative technologies oriented toward preservation. For example, by rewarding users of environmentally friendly technology and users of technology capable of analyzing and minimizing risks due to failure.

The government should not compromise on negative-impact development, both directly and indirectly on climate change. The government must minimize the production of fossil-based and non-renewable materials unless effective technologies to eliminate the impact or alternatives are available and used. This includes a ban on compromising practices that reduce the ideal forest area in maintaining sustainability. For this purpose, the government must support all parties that respect and strive for the ideal forest area for the sustainability of the earth. However, this does not mean the government must always prohibit forest utilization, as long as the ideal forest area for earth sustainability is not disturbed. Sustainable and optimal utilization is part of integrating economic development with environmental issues.

3. Pillar of Social Sustainability. As a form of social sustainability implementation, while considering environmental support and capacity, the government needs to support every effort to ensure the availability of energy, clean water, food, proper sanitation, quality housing, and employment. Government policies should not disrupt efforts to meet the needs of energy, clean water, food, proper sanitation, and the provision of quality housing for development and society. Government policies should not directly or indirectly increase the unemployment rate. Conversely, mass labor-based activities should be one of the considerations.

The population size affects environmental support, so, in certain and relevant cases, the government should influence the balance between population growth and the availability rate of natural resources, including their distribution. Development, as a stimulus for the ideal population spread in addressing pressure on large cities, should receive support.

Government and investors should encourage the realization of local community participation in the decision-making processes of development policies, especially for affected communities, so that they can express and achieve their common interests. This includes the individual right to access information about the state of the environment and natural resources that affect their existence, the right to be consulted, the right to treatment, and the right to compensation.

Governments and investors must respect and protect indigenous communities that have wisdom in the sustainable management of natural resources. Their access to traditionally embedded management areas and cultural linkages must not be sacrificed, as their participation is a form of responsibility in the effort to conserve natural resources. The government must prevent formal development from entering into tropical rainforests that have the potential to damage or sacrifice the existence of indigenous wisdom in environmental protection.

4. CONCLUSION

The ideal resolution of tenurial conflict around forests related to investment should pay attention to the following guidelines:

- A. Protection of Indigenous Communities
 - Recognize the existence of indigenous communities, their rights, and their customary cultures, even if their existence can only be proven materially based on ancestral relics and other historical evidence.
 - 2) No relocation.
 - 3) Empowerment of indigenous communities.
- B. Dispute Resolution If the dispute is resolved through the courts, indigenous communities will certainly be on the weak side because they have not been recognized by the government and therefore do not have legal status. Based on research, the best solution with local wisdom is "Numpang Karang", in which the forest land remains the property of the indigenous community and the benefits of the investment will be sustainable, because the indigenous community can enjoy them economically.

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