

The Impact of Deforestation on Sustainable Development Goals Regulations: An Empirical Studies on Tawangmangu



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ABSTRACT

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Deforestation represents a permanent transition from forested to non-forested areas, primarily driven by human activities. Such significant land conversion has occurred along the Tawangmangu alternative road for the development of ecotourism. In 2015, the United Nations officially endorsed the Sustainable Development Goals (SDGs) Agenda, comprising 17 Goals and 169 Targets, expected to be achieved by 2030. In Indonesia, the SDGs were ratified in Presidential Regulation Number 59 of 2017 regarding the Implementation of Achieving SDGs. This research employs a qualitative method, examining the rate of conversion from forest to buildings along the Tawangmangu alternative road and using legal protection theory to understand steps to prevent deforestation. The Tawangmangu District Government should apply both preventive and repressive protections, including socialization about the SDGs and warnings about the importance of a Building Permit (IMB), as well as imposing administrative sanctions against law-violating buildings. Although this study contributes significantly to the SDGs field, its major limitation is the small-scale sample, particularly along the Tawangmangu alternative road. Future research could address this by expanding the sample size and further exploring the benefits of SDGs implementation.

1. INTRODUCTION

Based on the Regulation of the Minister of Forestry of the Republic of Indonesia Number: P.30/Menhut-II /2009 concerning Procedures for Reducing Emissions from Deforestation and Forest Degradation (REDD), Deforestation is a permanent change from forested areas to non-forested areas caused by human activities. The meaning of deforestation raises a situation of loss of forests and the ecosystems in them caused by human activities, such as clearing new land and changing the function of forests for other activities. In other words, these activities reduce the number of living plants in the forest [1].

The causes of deforestation also vary and are mainly the fulfillment of human needs, such as the opening of small-scale plantation land, illegal logging, opening pathways or roads for access, mining areas, settlements, industries whose main ingredients are close to forests, clearing ecotourism in the forest as well as tourism supporting devices such as hotels, villas, coffee shops, stalls, restaurants and souvenir shops around tours for ecotourism development.

The exploitation of forest areas is the main factor causing critical land. Critical land does not function well as a production medium for growing cultivated and other crops. The land is defined as critical land referring to the conditions of land cover, erosion, nutrient cycles, microclimate regulators, and carbon retention. Forestry land exploitation activities will contribute to the reduction of Indonesia's forest cover (deforestation) [2].

In realizing the goals of Regional Spatial Planning in the Karanganyar area, the Karanganyar Regency government

made a policy in which several strategies were set to accelerate its realization. Some of these things, such as the strategy for strengthening protected areas, the strategy for strengthening agricultural areas, the strategy for developing tourism areas, and the strategy for developing industries based on local potential. The use made by the Karanganyar Regency government for the potential for ecotourism in the Tawangmangu area is something that needs to be put to good use. From all aspects, such as the economy, tourism, and of course the environment [3].

According to Zabila Tomy Sanjaya, Edi Kurniawan in Analisis Perubahan Perkebunan dan Hutan Menjadi Tempat Wisata di Kecamatan Ngargoyoso Kabupaten Karanganyar change of land from plantations and forests in Ngargoyoso occurred a significant increase in area in 2010 area of the tourist area of 0.257 hectares, whereas in 2020 the area of the tourist area will be 20,763 hectares, a factor causing the change land based on research results. Factors causing change plantation and forest land use in Ngargoyoso District caused by several factors including factor to develop its tourism potential in the Ngargoyoso sub-district, it can more developed and also impact on community economy, the next factor namely the good natural conditions of Ngargoyoso thereby encouraging the owners of capital to create a tourist spot. This previous study has the same research problem in the same region, but different district with this study. with the large number of land conversions, especially in the Tawangmangu area which clearly damages natural preservation, this research intends to examines the deforestation for ecotourism from the legal protection point of view.

Based on data from the recapitulation table of landslide

disaster events sourced from the Karanganyar Regency Regional Disaster Management Agency (BPBD), in 2019 there was 1 (one) incident with 3 (three) victims affected, while in 2020 there were 7 (seven) incidents with a total of 73 (seventy-three) affected victims. Judging from the data for the second consecutive year, there has been an increase in the number of disasters and victims affected by landslides in the Tawangmangu District.

In 2015 world leaders who are members of the UN (United Nations) officially endorsed the Sustainable Development Goals Agenda which is expected to be achieved in 2030 by carrying 17 Goals and 169 Targets. Based on human rights and equality, the Universal principle is "NO ONE LEFT BEHIND" which means that no one is left behind. Which was then agreed upon at the UN Session on September 25, 2015. SDGs are a follow-up program of the MDGs or Millennium Development Goals which involve more developed, developing, or less developed countries [4, 5]. The Sustainable Development Goals (SDGs) Program for the period 2016-2030 is an initiative whose efforts advance the agenda and complete unfinished programs [6]. The Sustainable Development Goals (SDGs) are a global effort to maintain the continuity of people's social life from one generation to the next, by increasing social welfare and development that maintains environmental quality.

A comprehensive understanding of the interaction of indicators, objectives, and dimensions within the SDGs framework is expected to optimize efforts to achieve targets in SDGs [7]. The enthusiasm for SDGs is not just expressed by the government, many experts and researchers have also been crying to predict the fate of SDGs. SDGs are fully committed to the implementation of a national development agenda [8].

Deforestation activities that continue to be carried out, especially in Indonesia, will pose various potential threats to environmental ecosystems and humans as implementers of development and controllers of environmental damage. In the goals of the SDGs, discussions on deforestation are grouped under Goal 15 of the SDGs, namely Life on Land.

The purpose of this study is to provide an analysis of the SDGs regulations in Indonesia which have been enacted in Presidential Regulation Number 59 of 2017 concerning the Implementation of Achieving Sustainable Development Goals, which is then updated as stipulated in Presidential Regulation Number 111 of 2022 concerning Implementation of Achieving Sustainable Development Goals. The Presidential Decree mandates that achieving the SDGs targets will be prepared based on 3 (three) planning documents, namely the SDGs Roadmap, SDGs National Action Plan (RAN), and Provincial SDGs Regional Action Plan (RAD).

Based on one of the SDGs constituents is the RAD, so the analysis in this study is also linked to the Central Java Province RAD, namely based on Central Java Governor Regulation Number 62 of 2019 concerning Regional Action Plans for Sustainable Development Goals of Central Java Province 2019-2023. Where this research was conducted in Tawangmangu Karanganyar, Central Java. Do these policies or regulatory regulations fulfill and are in accordance with the goals (goals) and principles in the SDGs agenda, or can these regulations become a potential environmental threat to the sustainability of the Terrestrial Ecosystem in the SDGs agenda when seen from their implementation in the field?

1.1 Formulation of the problem

The formulation of the problem in this study is focused on discussing: How is the analysis of Presidential Regulation Number 111 of 2022 concerning Implementation of Achieving Sustainable Development Goals juncto Presidential Regulation Number 59 of 2017 concerning Implementation of Achieving Sustainable Development Goals on the impact of deforestation in Tawangmangu Karanganyar?

2. METHODOLOGY

This is qualitative research with Empirical Legal method. By observing the rate of deforestation along tawangmangu alternative road and structured interviews with district chief of tawangmangu. The result of the empirical study will be analyzed using The Legal Protection Theory by Philipus M. Hadjon.

Tawangmangu alternative road was chosen as the object of this research because this road is consider as a new road that connects the city of Solo with Tawangmangu which has a high density traffic and also the rapid rate of deforestation into buildings.

Based on data collected from the Central Statistics Agency (CSA) of Karanganyar Regency, Karanganyar is an area in Central Java Province with an area of 80,240.68ha (hectares), with an average altitude of 511 meters above sea level. The division of the Tawangmangu District area based on area and land use from 2012-2021 obtained the following data, having an area of 7003.2ha in a row. Figure 1 below shows a decrease in the use of paddy fields and an increase in clearing land for building.

The decrease in the area of paddy field and an increase in the use of dry landbuilding for ecotourism indicates that fairly high land conversion has taken place in Tawangmangu. The existence of tourism activities is one of the factors causing a fairly rapid change in land use in the Tawangmangu. Changes in land use that occurred in the Tawangmangu area were changes from forest into buildings. With existing tourism activities, land use in the Tawangmangu area has changed from 2012 to 2020, the change in land use aims to build facilities and infrastructure to support tourism activities so that tourism activities in the Tawangmangu area can run well [9].

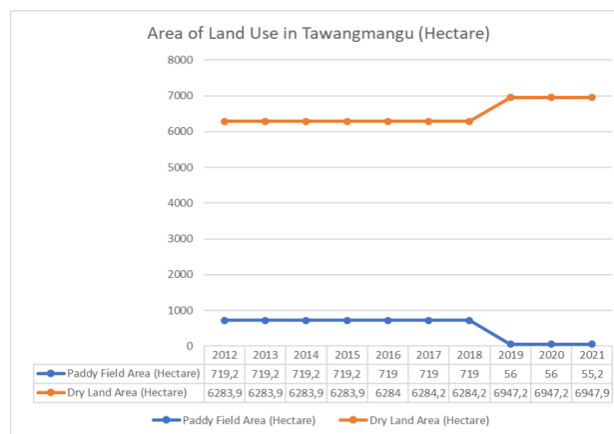


Figure 1. Land use area (hectares) 2012-2021
Source: Central Bureau of Statistics for Karanganyar Regency

3. RESULT AND DISCUSSION

3.1 Sustainable development target policy

Determination of Presidential Regulation No. 59 of 2017 concerning the Implementation of Achieving Sustainable Development Goals which was later updated with the stipulation of Presidential Decree No. 111 of 2022 concerning the Implementation of the Achievement of Sustainable Development Goals, is a concrete embodiment and fulfillment of commitments from the central government in implementing the global agenda known as SDGs 2030. The stipulation of the presidential regulation is aligned with the National Long-Term Development Plan (RPJPN) and the National Medium-Term Development Plan (RPJMN) to determine the direction of the National Action Plan (RAN) and Regional Action Plan (RAD), which are implementing documents for various activities to support the achievement of SDGs in Indonesia in accordance with national and regional scale development targets.

Then the realization of SDGs in the regions, especially for the Central Java region, as stipulated in Central Java Governor Regulation Number 62 of 2019 concerning the Regional Action Plan for Sustainable Development Goals of Central Java Province for 2019-2023, which was adjusted/aligned with Nawacita, RPJMN 2019-2024, RPJMD 2018-2023, and the SDGs agenda. This Governor Regulation is established as the basis for preparing regional action plans for sustainable development which contain targets (goals), policy directions, and strategies.

The targets and goals of the SDGs are explicitly intended to achieve development results that illustrate progress as reflected in the 4 (four) pillars of the SDGs. In general, the pillars, targets, and objectives of the SDGs are also relevant to national development goals and also regional development goals [10].

To implement SDGs, Central Java implements the principle of inclusiveness by involving 4 participation platforms consisting of the government and parliament, academics and experts, philanthropy and business actors, community organizations, and the media. So that realizing SDGs 2030 is a joint effort and responsibility that must be carried out by all levels of society.

In implementing the SDGs program in the regions, the Regional Planning and Development Agency (Bappeda) has an important role to plan, communicate and carry out these activities [11]. The initial phase is directed at developing and implementing a communication strategy to increase internal and external stakeholders' awareness of the SDGs [12].

Development Pillar, especially on reflecting on the Sustainable Development Goals (SDGs) which try to bring the mission of balance to the economic, social, and environmental dimensions, environmental utilization for economic purposes that are expected to improve social welfare needs to be carried out in a careful and prudent manner. It is done with aim of avoiding a dominant relationship between environmental needs and human needs [13].

3.2 Current status of mainland ecosystem

The current condition of the Mainland Ecosystem which is the subject of this research is that Central Java has an area of 651,214.02ha of state forest and 597,890ha of community forest so the total area of forest area is 1,249,104.02ha. Related to this, the use and preservation of forests tend to decrease in

the development of forest land area. Some of the main causes are due to critical land and forest damage caused by, among others, the highest cases of tree theft occurred in 2016 with an area of 31.38ha and the largest case of forest fires occurred in 2015 with an area of 6140.49 ha.

Based on field research by observation and structured interviews that have been conducted, the following analysis is found. It is known that Tawangmangu, Karanganyar is a sub-district under the administrative area of Central Java. With an increase in the opening of new land in the area, such as the existence of land that is used as a tourist destination, one of the mainstays here is ecotourism. Where, ecotourism is an environmentally sound tourism activity as a form of responsibility for environmental preservation (natural area) and can provide economic, social, and cultural benefits to local communities. So with an increase in the opening of new land in the area, it certainly shows an increase in the rate of deforestation, although it is not seen to be significant and massive.

3.3 The importance of building permit

Building Permit is a legal product that contains approvals or permits issued by the Head of the Local Region (district/city government) and must be owned/managed by building owners who wish to build, demolish, increase/decrease area, or renovate. Building Permits provides legal recognition and protection to the property owner's land and buildings. Because building permit is one of the building administrative requirements based on Article 7 and Article 8 of Law Number 28 of 2002 concerning Buildings.

The presence of Building permits is very important, because it aims to create a safe building layout and in accordance with land use. With the permit, the allotment of land for green land and water absorption will not be able to construct buildings. The problem that occurs at the Tawangmangu alternative road is that many buildings are standing without permits, because the area should be a green area to prevent landslides in the Tawangmangu area.

Land clearing is carried out in order to increase ecotourism which involves local communities in economic activities to achieve sustainable development. In order to achieve sustainable development, one of which is driven by economic activity, namely the rapid development of culinary tourism destinations along the Tawangmangu road. This is indicated by the phenomenon of rooftop cafes in the Tawangmangu area which offer culinary sensations with views of the mountains. Based on the data obtained during the research, the construction of cafe buildings in this area has not yet obtained a Building Permit. This was confirmed by the source who was an official from the Tawangmangu District. The owners of cafe buildings have been advised by the local government, but until now they have not applied for a permit.

So far the rooftop cafes along the Tawangmangu road have been given support and encouragement by the Karanganyar Regency Youth and Sports Tourism Office from the tourism sector which is utilized and maximized for economic recovery. The construction is in developing the infrastructure and facilities for which the Spatial Plan is allowed because it is included in the leading sector in driving economic growth, referring to Article 58 of the Karanganyar Regency Regional Regulation Number 19 of 2019. As long as it pays attention to the area's conservation function and disaster risk reduction in general provisions zoning regulations for tourism areas refer

to Article 57 point (12). Furthermore, in Article 60, these development activities must obtain a Space Utilization Permit from the Regent. Where the Space Utilization Permit is one of the requirements in applying for a Building Permit.

Based on Article 113 of Law no. 36 of 2005, owners and/or users who have violated the provisions may be subject to administrative sanctions, ranging from written warnings to building demolition orders. However, the Tawangmangu District Government does not have authority regarding this matter but must come directly from the regional head.

3.4 Legal protection concerning SDGs in Tawangmangu alternative road

Legal protection has an important role related to the existence of rights and obligations that humans have to be able to protect against arbitrariness that is not in accordance with the rule of law from the authorities.

According to Muchsin, legal protection is something that protects legal subjects through applicable laws and regulations and is enforced by a sanction. Legal protection can be divided into two, namely [14]:

a) Preventive legal protection

Protection provided by the government with the aim of preventing violations before they occur. This is contained in laws and regulations with the intention of preventing a violation and providing signs or limitations in carrying out an obligation.

b) Repressive legal protection

Repressive legal protection is the final protection in the form of sanctions such as fines, imprisonment, and additional penalties given when a dispute has occurred or an offense has been committed [15].

According to Philipus M. Hadjon, there are two kinds of legal protection facilities, namely:

a) Preventive legal protection facility

In this preventive legal protection, legal subjects are given the opportunity to submit objections or opinions before a government decision gets a definitive form. The goal is to prevent disputes from occurring. Preventive legal protection is very significant for government actions based on freedom of action because, with the existence of preventive legal protection, the government is encouraged to be careful in making decisions based on discretion. In Indonesia, there is no specific regulation regarding preventive legal protection.

b) Repressive legal protection facility

Protection Repressive legal protection aims to resolve disputes. The handling of legal protection by the General Courts and Administrative Courts in Indonesia is included in this category of legal protection. The principle of legal protection against government actions is based on and originates from the concept of recognition and protection of human rights because according to history from the west, the concept of recognition was born and the protection of human rights is directed at limitations and placing the obligations of society and the government. The second principle that underlies legal protection against acts of government is the rule of law principle. Associated with the recognition and protection of human rights, the recognition and protection of human rights takes the

main place and can be linked to the goals of a rule of law [16].

Based on the research that has been collected, the preventive protection that has been carried out by the Tawangmangu District Government is by socializing the SDGs and warning that the importance of building permits is for every building that has been erected along Translucent Tawangmangu. Meanwhile, based on repressive protection, so far there has been no further action because no disputes over development have occurred. And then in making decisions on buildings that do not comply with the law and if proven to have violated regulations, they should receive administrative sanctions up to sanctions against the demolition of buildings. However, this is not the authority of the Tawangmangu District Government, but the Karanganyar Regency Government. So that the legal protection that can be provided by the Tawangmangu District Government is in the form of preventive legal protection by conducting gradual outreach to business actors to comply with applicable regulations.

With the development along the Tawangmangu alternative road, many water catchment areas have changed their function. It is known that the Tawangmangu alternative road area is a landslide-prone area. This is indicated by a decrease in the use of paddy fields in dry land. A decrease in land use that switches functions can cause an imbalance in the ecosystem so that it can cause natural disasters due to human activities (Figures 2-4).

This is in line with the 2019 Central Java Province SDGs Achievement Report, where there are still a number of challenges that must be faced in preserving terrestrial ecosystems, one of which is the ongoing disasters of floods, landslides, forest fires, and drought which increase the area of critical land.

Based on data from the recapitulation table of landslide disaster events sourced from the Karanganyar Regency Regional Disaster Management Agency (BPBD), in 2019 there was 1 (one) incident with 3 (three) victims affected, while in 2020 there were 7 (seven) incidents with a total of 73 (seventy-three) affected victims. Judging from the data for the second consecutive year, there has been an increase in the number of disasters and victims affected by landslides in the Tawangmangu District.

On March 12, 2021, there was an overflow of water which resulted in flooding in the Kalisoro Village which was triggered by heavy rain so that the culverts could not accommodate the overflow of water discharge [17]. Then on February 6, 2022, based on news data obtained, there was a landslide was triggered by heavy rain on Jalan Tembus Tawangmangu, Gondosuli Village. The cliff soil material closed part of the roads, resulting in the road closure and vehicles having to make a U-turn and look for an alternative route. Based on the data obtained, the area that is the center is the Tawangmangu tourist road area.

In the Central Java SDGs Regional Action Plan for 2019-2023, efforts to realize Goal 15 through strategies include (1) Environmental conservation through forest and land rehabilitation; (2) Environmental restoration through licensing improvement and environmental monitoring and law enforcement; and (3) optimizing the potential utilization of timber and non-timber forest resources.

The SDGs Agenda ensures that all human beings can fulfill their potential in dignity, equality, and a healthy environment. It takes political will from the state to strive to create a sustainable environment [18]. The success of sustainable

development really needs support from power holders in order to implement sustainable development so as to achieve equitable welfare. Sustainable development can be carried out by increasing and optimizing the participation of all parties, including government, companies, and the community [19]. In order for the results of the SDGs to be optimal and for the benefits can be felt by all elements of society, all elements of the state, including the government, the people, the Third Sector including NGOs, and all observers and practitioners of National Resilience must be present to understand and participate and contribute to the success of this long-term program [20, 21].



Figure 2. Translucent Tawangmangu road area



Figure 3. Tawangmangu alternative road area



Figure 4. Tawangmangu alternative road area
Source: Research observation

4. CONCLUSIONS

Land development in the Tawangmangu area for Ecotourism development is a form of sustainable development. Which is supported by the Karanganyar Regency Youth and Sports Tourism Office. However, based on the data obtained during the research, many of the construction of rooftop coffee shops in this area has not yet obtained a Building Permit. This was confirmed by the source who is an official from the Tawangmangu District. The cafe building owners have been advised by the local government to apply for permit, but until now they have not applied for an building permit. The preventive protection that has been carried out by the Tawangmangu District Government, is by socializing about the SDGs and warning that the importance of a permit for every building that has been built along Tawangmangu alternative road. Meanwhile, based on repressive protection by imposing administrative sanctions to such as fine and dismantle sanctions against buildings that violate the law is the authority of the Karanganyar Regency Government.

The role of the Tawangmangu District government in the process of achieving SDGs 2030 in the Tawangmangu area has socialized the SDGs activities to the community so that they can be carried out properly from the center to the regions. However, it was acknowledged by the local Tawangmangu District government officer that the implementation of SDGs in the field was not appropriate and had not been optimally implemented due to various factors that occurred, one of the main factors being deforestation, which has been analyzed based on data and facts in the field, which still leaves various problems ranging from decreased land use, environmental degradation, building permits to disasters caused by human activities. Considering the importance of permits being carried out in order to have legal certainty in determining the rights, obligations, and responsibilities of business actors and stakeholders. And also, is one of the keys to the successful implementation of the SDGs that are applied in people's lives.

To be able to enforce the law properly, cooperation between parties is needed so that the SDGs can work well. Besides that, to prevent forest destruction, the local government needs to enforce the law more strictly. if there are buildings that do not have a building permit, sanctions in the form of fines and construction that cannot be continued need to be enforced properly so as to provide a deterrent effect on violators of these rules.

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