

Environmental Legal Protection of Rivers in the Perspective of Sustainable Development

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ABSTRACT

Objective: This research discusses the legal protection of the river environment from the perspective of sustainable development. The concept of sustainable development is especially important in guarding river protection, so it must really be applied.

Methodology: The research method used in this study is normative juridical law research, namely examining legal rules and legal principles.

Finding: Based on the study obtained, that river protection in Indonesia is still weak, as evidenced by the presence of garbage and waste found in several major rivers in Indonesia, in addition to the absence of concrete actions from the government in protecting rivers.

Utility: This research is useful for evaluating protection measures and providing a reference for sanctions for river protection by the concept of sustainable development.

Novelty/Originality: This study provides the idea that river protection can be optimized to reduce the level of pollution and river damage by properly applying the concept of sustainable development by the Environmental Protection and Management Act (UUPPLH) principle.

Keywords: Legal Protection, Rivers, Sustainable Development

PREFACE

Indonesia is an archipelagic country, the land area of 2.01 million km² owned by Indonesia is smaller than the sea area of 3.25 km² (Pratama, 2020). Each archipelago has rivers that stretch and flow towards the sea. The river has an especially significant role for living things that live in the river and for the people living in the river area.

Population growth and large-scale development in every area are important threats to rivers. The latest data on population growth in Indonesia, the Central Bureau of Statistics recorded data on the number of people in Indonesia as of September 2020 as many as 270.2 million people. This number increased by 32.57 million from the total population of Indonesia in 2010 which was only 237.63 million (BPS, 2020). As stated by Osborne “*Prospects for conflict, environmental insecurity, and human displacement loom large*” (Milton Osborne, 2009). Based on Osborne’s statement, the threat of population growth will change the quality of river functions, changes in river functions can make a natural disaster for the community and also damage the river.

River protection requires an awareness and enforcement of the rules that have been set. In development, the principle of sustainability is applied to natural resources and then utilizes these natural resources without damaging the human environment. Therefore, the problem of managing natural resources and the environment is caused by underdevelopment. This is an especially important problem in Indonesia, as well as river protection, because rivers are a source of life and water resources according to Sumarno. He stated *Water is a natural resource for the life of many people so it needs to be protected in order to benefit life and human life and other living creatures* (Ravena & Ruhaeni, 2020).

The statement from Sumarno explained that water is a crucial resource for the future of humans and other living things. Because the damage to the river will have a detrimental impact on the affected communities. Every human being has awareness in certain matters, as well as legal awareness, but according to Achmad Ali, a person’s legal awareness will look bad if he already has legal knowledge, it is not certain that the community has obedience to the law or obeys the rules that have been set (Achmad ali dan Wiwie Heryani, 2013).

The legal basis that regulates the protection of rivers has been determined by the state, but the legal basis is still not optimal in protecting rivers from damage and changes in river functions as they should. Floods, river pollution from waste and industrial waste, utilization of river borders by people who do not have permissions or who already have permissions are some of the factors that cause river damage.

Licensing in Indonesia has new conditions with the omnibus law. The purpose of the omnibus law is simplification of licensing, this can be seen by simplifying the Environmental Impact Analysis rules and changing the name of the Building Permission (IMB) to Building Approval (PBG). Simplification of licensing through the Omnibus Law on Job Creation is a quick response from the government to address the conditions in which the current implementation of business activities uses a license approach without a risk-based approach (Sudarwanto & Kharisma, 2020). Licensing has the aim of controlling the impact of environmental damage caused by development that has the risk of damaging the environment, but in fact existing permissions in Indonesia have not been able to control environmental damage, one of which is river damage.

Sustainable development has also received recognition in Law no. 32 of 2009 concerning the protection and management of the environment, in lieu of Law no. 23 of 1997. Article 2 of Law no. 32 of 2009 states that the principle of environmental protection and management is the principle of sustainability and sustainability, and the principle of justice (Wibisana, 2017a). The concept of sustainable development is not a newly emerged concept, but the concept has been discussed for a long time and is an amalgamation of ideas about environmental protection that are carried out by several people in the world.

In 1983, the United Nations General Assembly created an agency tasked with reviewing several prominent issues related to development and the environment, as well as formulating innovative, concrete and realistic steps to address these problems. This institution is called the *World Commission on Environment and Development (WCED)* or often referred to as *the Brundtland Commission* (Wibisana, 2017a). In short, optimization of river protection is a necessary factor to support sustainable development programs. Although in the empirical setting the concept of sustainable development has not been maximized, with the optimization of legal protection for rivers, it is hoped that there will be a cooperation between the concept of sustainable development and environmental conservation which has intra-generational goals.

The recent disasters in Indonesia are a reflection of where natural damage is the main factor, supported by a pattern of development that is not based on the environment. Floods are natural disasters that often occur in Indonesia. This happens because the function of the river does not function according to its main function. River damage caused by human activities and industrial activities is one example of the failure of the concept of sustainable development.

The legal principle that has been stated in Environmental Protection and Management Act is the power of vision that can be used as the basis for implementing sustainable development in every development. However, in practice, many buildings do not implement development that is

not pro-environmental. One of them is about the permission to construct a building that has become one with the Environmental Impact Analysis (AMDAL) or Environmental Management Efforts – Environmental Monitoring Efforts. Environmental Impact Analysis is an instrument that can implement the concept of sustainable development that does not damage the environment. Environmental Impact Analysis is expected to maximize or prevent the impact of environmental damage from a large-scale development, before the building is erected, but, Environmental Impact Analysis is only carried out administratively. As explained by Trias Hernanda:

“The Environmental Impact Analysis is used only to justify the project. The two permits have not been issued, but the construction stage has already begun. The licenses have been granted, but the Environmental Impact Analysis has not been implemented. In government projects, it is often found that the implementation of development has been carried out, but the Environmental Impact Analysis has not been carried out.” (Trias Hernanda, 2020)

In developed countries such as South Korea, there is an activity carried out by the relevant agencies to control river water, as was done in South Korea, *“The water quality is monitored for 24 hours from the water source supply to the tap to secure safety of water, and the data is positively used to raw water monitoring, optimum water purification treatment and safe water distribution control”*(Shin, Song, Choi, & Park, 2009). Shin argued and explained that river protection has a positive impact that can be utilized, so that it can reduce activities that threaten rivers, unfortunately in Indonesia river control activities are only carried out after a disaster and river water utilization is still minimal so that river functions are neglected, so, from this incident the principle of sustainable development has not been optimal.

RESEARCH METHOD

The research method used in this research is normative juridical law research, namely examining legal rules (statutory regulations, jurisprudence, or other customs conventions) and legal principles(Manan, 1999). The data used in this study is a literature study that is based on literature and document observations related to this research.

DISCUSSION

Rivers and its problem

Rivers are a source of life for every living creature, the benefits of rivers are very large for the environment, river protection is very important for intra-generational, as stated by S.

Ventkatramanan et al in their journal *“The water quality from the rivers has a considerable importance for the reason that these water resources are generally used for multiple matters such as: drinking domestic and residential water supplies, agriculture (irrigation), hydroelectric power plants, transportation and infrastructure, tourism, recreation, and other human or economic ways to use water”*(S. Venkatramanan, S. Y. Chung, S. Y. Lee, 2014).

From the description above, the river has many functions, so the protection of the river must really be upheld, if there are actions that damage and pollute the river. The responsibility of people or industries that damage and pollute rivers has been stipulated by Law No. 32 of 2009 concerning Management Protection which explains *“Every person in charge of businesses and activities that commits violations of the law in the form of pollution and environmental destruction that causes harm to other people or environment must pay compensation or carry out certain activities.”*¹

The factors that affect river damage in Indonesia are truly diverse, ranging from natural disasters, industrial activities, waste and population growth. In several studies that focus on river water quality in several regions in Indonesia, the results are that large rivers in Indonesia are included in the top 10 polluted rivers in the world as described *“The aquatic environment in Indonesia is under serious threat, especially in the highly populated islands, where almost all major rivers are heavily polluted. Indonesia has the questionable honor of having two sites among the top 10 most polluted places in the world: the Citarum River and the rivers in Kalimantan polluted by mining activities. In addition, Indonesia is one among the top 10 greenhouse gas emitters due to forest clearing and peatland degradation”*(Bank, 2016).

The same thing was also conveyed by Y Martinus et al *“The Sunter River water quality parameters have exceeded the quality standards for BOD, COD, PO4 3- , TDS, and (detergent) surfactant anionic parameters. The dominant pollutants entering the Sunter River are organic waste that may come from residential, traditional market, and chicken slaughtering house”*(Martinus, Astono, & Hendrawan, 2018).

River pollution does not only occur in Jakarta and Kalimantan, several rivers in the area are also polluted by industrial activities and waste, such as Kali Code River in Yogyakarta which is polluted by garbage (Puspitasari, 2009). And the latest is the contamination of Tambak Wedi river in Surabaya which is polluted by phosphate and chlorine(Wilda Fizriyani, 2021).

Based on the description above, human activities, both activities originating from the industrial sector and direct human activities, namely throwing garbage into rivers are the cause

¹ Refer to Article 87 Paragraph 1 of Law Number 32 Year 2009 concerning Environmental Protection and Management

of river pollution in several regions of Indonesia. The activity according to the author is entering into an unlawful act (PMH) because there is an element of intent in violating the law. According to Agustina as quoted by Andri G Wibisana, an act against the law in a broad sense can be interpreted as follows(Wibisana, 2017a):

- a. There must be an action, both in the sense of doing an action or not doing something
- b. This act is against the law
- c. There is a loss
- d. There is a causal relationship between unlawful acts and losses
- e. There is an error (*schuld*)

Acts against the law have a negative impact on environmental protection including the river environment. Acts against the law reflect disobedience to the law or not having a good legal awareness. To anticipate acts against the law, especially for river protection, it is necessary to socialize and enforce the law. As stated by James Alm “*Regulators should apply monitoring and enforcement fairly, promptly, and transparently. Egregious violators should be punished, and amnesty or leniency programs for highly visible violations should be avoided*(Alm & Shimshack, 2014). Based on this opinion, there is a need for harmony between law enforcement and justice in giving decisions on violations of river damage or river pollution.

Setting Sanctions for River Protection in Legislation

River protection requires legal protection, because with legal protection it will be more effective in ensnaring violations that damage or pollute the river. In environmental law, there are 3 sanctions, namely criminal sanctions, civil sanctions and administrative sanctions, as well as the regulation of river protection sanctions which have 3 sanctions that can be set. Protection efforts require law enforcement actions, because to prevent repeated actions that threaten the environment, including threatening the river environment.

Andi Hamzah in Syahrul Mahmud’s book explains that environmental law enforcement includes both preventive (same as compliance) and repressive (starting with investigations, investigations to the application of sanctions both administrative and criminal law)(Syahrul Machmud, 2012). Based on Andi Hamzah’s explanation, the author will discuss the details of criminal sanctions, civil sanctions and also administrative sanctions in terms of river protection, including the following:

Administrative Sanctions

The application of administrative sanctions in river protection can be found in several laws

or Government Regulations and Ministerial Regulations. In general, administrative sanctions are related to licensing and government coercion (*bestuursdwang*). Permission is a stipulation given by the government. Permission in a broad sense according to Bagir Manan means an agreement from the authorities based on statutory regulations to allow certain actions or behaviors that are generally prohibited (Bagir Manan, 1995).

Based on Bagir Manan's opinion above, the permission is an instrument that can be enforced in terms of applying administrative sanctions against companies or individuals who have businesses that pollute and destroy rivers, for example the Law on Environmental Protection and Management states "Ministers, governors, The regent/mayor applies administrative sanctions to the person in charge of the business or activity if a permission violation is found during supervision,"² further explanation of the form of administrative sanctions is contained in paragraph 2, namely administrative sanctions consisting of:

- a. Written warning
- b. Government coercion
- c. Compaction of environmental permissions, and;
- d. Revocation of environmental permission

Government coercion in article 76 paragraph 2 letter b is further explained in article 80, namely:

- a. Temporary suspension of production activities
- b. Transfer of production facilities
- c. Closure of sewerage or emissions
- d. Demolition
- e. Confiscation of goods or tools that have the potential to cause violations
- f. Temporary suspension of all activities
- g. Other actions aimed at stopping violations and restoring environmental functions

Another regulation that also has administrative sanctions to protect rivers from damage and pollution is Government Regulation Number 101 of 2014 concerning Management of Hazardous and Toxic Waste. There is an article that can be used to provide administrative sanctions, namely Article 250 which explains "every person who carries out dumping (disposal) of B3 Waste who does not fulfill or commits a violation of 175, Article 176 paragraph 1, Article 177 paragraph 2, Article 184 paragraph 2, Article 185 paragraph or paragraph 2, Article 189 and Article 190 paragraph 1 and paragraph 2 are subject to administrative sanctions". The administrative sanctions in the Government Regulation also explain government coercion and revocation of business licenses.

² Refer to Article 76 Paragraph 1 of Law Number 32 Year 2009 concerning Environmental Protection and Management

Administrative sanctions are preventive measures that are considered quite efficient in solving environmental problems, as well as river pollution and river destruction. Furthermore, according to Mas Ahmad Santosa, the enforcement of administrative sanctions has 3 benefits (Santosa, 2001) they are:

- a. Administrative law enforcement in the field of environmental law can be optimized as a preventive tool.
- b. Administrative law enforcement (which is preventive in nature) can be more efficient from a financing point of view compared to civil and criminal law. Funding for administrative law includes costs for routine field supervision and laboratory testing which is cheaper than efforts to collect evidence, field investigations, employing expert witnesses to prove causality in criminal or civil cases.
- c. Administrative law enforcement is more capable of inviting public participation. Community participation is carried out starting from the licensing process, monitoring, structuring/supervising and participation in filing objections and asking state administrative officials to impose administrative sanctions.

Civil Sanctions

Civil sanctions in Environmental Protection and Management Act and other laws related to environmental protection and river protection are not explicitly stated in the Act or Government Regulation. However, in a phrase, it means that every individual/group who is harmed due to environmental pollution and environmental destruction can apply for compensation. This is stated in Environmental Protection and Management Act stating “Control of environmental pollution and/or damage is carried out in the context of preserving environmental functions.”³ Meanwhile, furthermore, “Control of environmental pollution and/or damage” as referred to in paragraph (1) includes: ⁴

- a. Prevention.
- b. Countermeasures and
- c. Recovery

The phrase “remedial” in Article 13 paragraph 2 has similarities with the phrase Article 87 paragraph 1 which states “every person in charge of a business who commits an unlawful act in the form of pollution and/or environmental destruction is responsible for paying compensation and taking certain actions.” Article 87 paragraph 1 in Environmental Protection and Management

³ Refer to Article 13 Paragraph 1 in the Environmental Protection and Management Act

⁴ Refer to Article 13 Paragraph 2 in the Environmental Protection and Management Act

Act is clarified by article 3 of the Regulation of the Minister of the Environment Number 7 of 2014 concerning Environmental Losses Due to Pollution and or Environmental Damage, namely environmental losses include:

- a. Losses due to exceeding the Environmental Quality Standards as a result of not implementing all or part of the obligation to treat wastewater, emissions, and/or waste management of hazardous and toxic materials;
- b. Losses to replace the costs of implementing environmental dispute settlements, including costs for: field verification, laboratory analysis, experts and supervision of the implementation of payments for environmental losses;
- c. Losses to replace the costs of overcoming pollution and/or environmental damage as well as environmental restoration; and/or
- d. Ecosystem loss

From the description above, the legal basis for protecting the river in a civil manner is clear, that any activity that causes an impact on the river, the aggrieved party will be able to get compensation in a civil manner, even though through lawsuits both individually and in groups. Theoretically explained by Rosa Agustina in In his book, Andri G Wibisana, losses (damage/losses) can be divided into two major groups, namely losses that can be directly calculated with money (pecuniary losses) and those that cannot be directly calculated with money (non-pecuniary losses). Examples of pecuniary losses include loss of income and medical expenses, while examples of non-pecuniary losses include loss of enjoyment of life (loss of amenity) and suffering (pain and suffering) (Wibisana, 2017b).

Losses imposed on business owners are a consequence of being responsible for activities that damage the environment. Civil sanctions are closely related to unlawful acts (PMH). Environmental protection especially rivers need special attention, therefore civil sanctions in environmental cases are needed, because they can be used as restoration (restoration) both for the environment itself and for the affected community.

Criminal sanctions

Criminal sanctions to protect the environment and can be used for river protection already exist and are listed in several laws and regulations. As in Environmental Protection and Management Act Articles 97 to Article 120. And, in Law Number 17 of 2019 concerning Water Articles 68 to 73. Although the Law on water does not explain in detail the phrase "River" but it is described as a resource water, it can be set into the protection of the river.

Criminal law sanctions in environmental protection and river protection are one of the sanctions that can be used to ensnare perpetrators of law violators against environmental

destruction and pollution as well as violations of river pollution and river destruction, criminal sanctions can be applied if they meet several requirements as conveyed by Syahrul Mahfud as follows:

- a. Administrative law sanctions, civil law sanctions, alternative dispute resolution efforts through negotiations/mediation/deliberations conducted outside the court after efforts have been made ineffective
- b. If the perpetrator's error rate is relatively heavy
- c. If the consequences of his actions are relatively large, and/or
- d. If his actions cause unrest in society
- e. Criminal sanctions are indeed interpreted as a last resort.

The excerpt above explains that criminal law sanctions are generally applied to violations of river pollution if the settlement of environmental disputes through administrative and civil law methods is not able to provide a solution or deterrent effect against the perpetrators. Criminal law sanctions in environmental law are interpreted as the *ultimum remedium* principle, previously in previous environmental protection laws using the principle of subsidiarity.

The *ultimum remedium* principle is found in point 6 of the general explanation in Environmental Protection and Management Act:

“Environmental criminal law enforcement continues to pay attention to the *ultimum remedium* principle which requires the application of criminal law enforcement as a last resort after the implementation of administrative law enforcement is deemed unsuccessful. The application of the *ultimum remedium* principle only applies to certain formal criminal acts, namely punishment of violations of waste water quality standards, emissions, and disturbances.”

The use of the *ultimum remedium* principle in criminal law sanctions does have the aim of overcoming weaknesses in administrative legal sanctions which in the applicative order often do not work effectively, but if you look at the general explanation of point 6 in Environmental Protection and Management Act, the *ultimum remedium* principle also has weaknesses, namely the unclear phrase, multi-interpretation and limiting formal offenses according to the explanation in point 6 of the general explanation, so that if applied universally it will also have an impact and debate.

The Concept of Sustainable Development in Protecting Rivers

The concept of sustainable development has been adopted in several laws, one of which is Environmental Protection and Management Act, which is contained in the Environmental Protection and Management Act principle of “sustainability and continuity”, and environmental

protection and management aims to “realize sustainable development”.⁵

The concept of sustainable development has been integrated into regional development and environmental management protection policies, plans and programs known as the concept of strategic environmental studies (KLHS), this strategic environmental study is contained in article 15 paragraph a in the Environmental Protection and Management Act, namely strategic environmental studies compiled by the government and local governments into the following preparation and evaluation:

- a. Regional spatial plans (RTRW) and their detailed plans, long-term development plans, provincial and district national mid-term development plans.
- b. Policies, plans and programs that have the potential to cause environmental impacts and risks.

Based on the quotations and explanations from several articles of the Environmental Protection and Management Act above which have adopted the principle of sustainable development, the importance of environmental protection and also river protection already has a place in the constitution in this country, it is proven that it has also been included in the 4th amendment to Article 33 of the 1945 Constitution, in fact it has been must be implemented and integrated up to the regional and district levels. The affirmation of the legal basis related to sustainable development has also been firmly regulated in Presidential Regulation No. 56 of 2017 concerning the Implementation of Achieving Sustainable Development Goals (Ahmad Redi, 2014).

The concept of sustainable development provides future guarantees for the environment including the protection of rivers, sustainable development has a vision that directs the concept of pro-environmental development and the positive impact of future development, it is undeniable that Indonesia needs development, to reduce disparities between regions, then applying the principle of sustainable development is the solution.

River damage and pollution that occurs in Indonesia in general have the same problems as the problem of environmental damage in general, starting with poor environmental awareness and development that is not pro-environmental resulting in environmental damage problems can be reduced if the order of criminal, civil and administrative laws are strictly enforced and socialization of regulations is also needed to reduce the burden on law enforcement officers. One of the regulations that are rarely understood by the public is environmental permission.

The role of environmental permissions is very vital to reduce damage and pollution of rivers because environmental permissions are the initial means to estimate the impact of a development. This is said in Government regulations No. 27 of 2012 concerning environmental

⁵ Refer to Article 3 Paragraph 1 in the Environmental Protection and Management Act

permissions that environmental permissions are allowing given to everyone who conducts businesses and or activities that require the Environmental Impact Analysis and environmental management efforts and environmental monitoring efforts in the context of protecting and environmental management as a prerequisite for obtaining business and/or activity permission.⁶

The correlation between sustainable development and environmental permissions are remarkably close because they both have the goal of protecting rivers and the environment from the very rapid developments in this country. Sustainable development has a goal for mutual welfare, both human welfare and the welfare of rivers and the environment. A welfare should be enjoyed by all generations, both present and future generations.

According to Marong's opinion, in the realization of sustainable development there are legal principles including, namely, the principle of justice within one or between generations (intra and inter-generational equity), the principle of sovereignty and state responsibility, the principle of different responsibility for common problems, precautionary principle, the principle of environmental impact assessment, and the principle of public participation in decision-making.(Marong, 2003)

Applying the principles of sustainable development in order to protect rivers is one way to treat and protect rivers from several threats of pollution and destruction. Unfortunately, nowadays, the principle of sustainable development can only be understood by a few groups of people, even those who already understand the importance of sustainable development do not seem to consider the benefits of sustainable development principles in protecting rivers and the environment. This is proven by the fact that several large rivers in Indonesia are still polluted, both polluted from the impact of industrial activities and from human behavior that still disposes of garbage in rivers.

CONCLUSION

Indonesia is a country that has extraordinary natural wealth, in order to maintain natural wealth so that it can be enjoyed by future generations, a cooperation between the principles of sustainable development and legal protection is needed. Legal protection for rivers will not be optimal if there are no supporting principles. Sustainable development is a possibility that can be used as a support for protecting rivers. The function of the river is very vital for the environment and for the community. Sanctions for environmental violations, especially rivers, should be strictly enforced. Sanctions have also been included in the law and other regulations. The problem of river pollution and river destruction occurs because of the lack of legal awareness

⁶ Refer to Article 1 Paragraph 1 Government Regulation No. 27 of 2012 concerning environmental permission

and lack of firm action against individuals who violate or companies that pollute rivers. This problem can be overcome if all elements really understand the principles of sustainable development without having to accept the impact of pollution and river damage.

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