

# Implementation of Good Environmental Governance in Handling Waste in Watersheds (DAS)

#### By

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#### **Abstract**

Garbage is a complex problem faced by many regions, including the problem of solid waste disposal and liquid waste in watersheds, hereinafter referred to as watersheds, which cause pollution. Almost all municipal governments have different waste management policies. Nevertheless, these strategies are frequently less effective. All stakeholders, including the government, business organizations, and the community at large, must work together to effectively address this waste problem. Government waste management policies must be enforced in order to effectively address this issue. One is by applying the ideas of environmental governance to waste management. Therefore, the purpose of this study is to examine the implementation of Good Environmental Governance in Watershed Waste Management. This study employs a qualitative, descriptive methodology. According to the findings of the study, waste management in the Citarum River Basin has not been conducted appropriately. This is seen by the lack of private sector and community involvement in the management of the Citarum watershed. Therefore, applying the principles of Good Environmental Governance is the optimal method for managing the environment of the Citarum watershed. These include participation, the rule of law, openness, and cooperation.

**Keywords:** Good Environmental Governance, Garbage, Watershed (DAS), Government, Private, Community

#### A. INTRODUCTION

One of the environmental issues that is frequently brought to people's attention in society is the problem of waste (Novita, 2018). This issue has developed into a significant concern, particularly in large cities, not just in Indonesia but also in other countries throughout



the world. There have been many attempts, from a variety of wealthy countries, to find solutions to these issues; but, they have not had a meaningful influence (Madani, 2011).

As the population grows, technology will also develop. With the development of this technology, there will come an era where various goods can be made synthetically (Simanungkalit et al, 2006). These technological advances will also have an impact on shifting people's lifestyles that tend to be consumptive and use synthetic goods more because they are easier to obtain. When the synthetic goods are no longer used, it will result in the emergence of used goods that cannot be decomposed naturally (Sunarsih, 2018). Thus, we can see that increasing population levels, economic growth, rapid urbanization and rising people's living standards have accelerated the accumulation of waste (Ulum & Ngindana, 2014)

In waste management, waste, mainly household and industrial waste in the form of liquid waste, is simply dumped in watersheds (Nigiana et al, 2015). Every household living in urban areas definitely needs a waste water disposal site. Most households dispose of waste water in rivers, sewers, ditches, or other water bodies (Nafi'ah, 2015). Wastewater contains pollutant compounds that can damage aquatic ecosystems. Wastewater if not managed properly will cause disturbances, both to the environment and to existing life (Pinem, 2015).

Disturbances due to the presence of wastewater are health problems and environmental quality disturbances. Wastewater contains germs that can cause waterborne diseases (Karuniastuti, 2013). In addition, in wastewater there are also hazardous and toxic substances that can cause health problems for living things that consume it (Agustina, 2014). Sometimes, untreated wastewater can also become a breeding ground for disease vectors (eg mosquitoes, flies, cockroaches, etc.). Health problems like this are often found in Indonesia (Al Kholif, 2020).

Not only that, there are still many factories that also throw industrial waste into rivers which can disrupt the ecosystem. To avoid the negative impacts, public awareness of the importance of waste management must be increased (Safitri & Sari, 2021). This can be started from the establishment of government policies on waste management. Therefore, the government needs to provide waste management facilities using new technology so that the waste can be handled and no longer cause environmental pollution that endangers health (Andina, 2019).

In protecting and managing the environment, it is inseparable from the role of the government to make policies related to the creation of a good and healthy environment. In the current era, the problem of environmental damage is becoming a concern of many parties. Because the potential for environmental damage continues to emerge along with the progress of development in all fields (Sumardiyono, 2007). It is undeniable that in the current era of modernization there are many aspects of development that are not preventive to the environment or in other words, do not care about aspects of environmental sustainability (Rahmatullah et al, 2021).

In order to decrease the potential for huge environmental harm and to apply one of the criteria of good governance pertaining to the commitment to environmental protection, a new concept in environmental management, environmental governance, was developed (Lemos & Agrawal, 2006). Environmental governance is a new paradigm in the sphere of the environment and an essential component of establishing effective governance. In addition, the notion of environmental governance is anticipated to make environmental issues the primary driver of economic and social development in Indonesia (Asiyah, 2019).

Environmental governance is a conceptual framework that regulates public and private conduct towards a more ecologically oriented environment (Ulum & Ngindana, 2017). The framework defines reciprocal interactions between communities (global, regional, national, and local) with regards to access and use of environmental products and services and binds them (at any level) to certain environmental ethics (Sukadi et al., 2020). Environmental



Governance as a system comprises of socio-cultural, political, and economic interactions among several civil society players.

Cooperation amongst humans is required for managing and safeguarding the surrounding environment, and humans play a significant role in controlling and protecting the environment in which they reside. Without exception, the government and the community have the same rights and responsibilities in administering and maintaining the environment (Subekti, 2010). Not restricted regardless of domicile. Both rural, isolated, and urban communities play a crucial role in achieving a pleasant and healthy environment. The existence of the community will be highly beneficial if its job is to regulate the current environmental management (Sagama, 2016). Government regulations represent multiple applications of community participation in environmental management. The policy is implemented in a manner that is directly addressed to the community and implemented in the form of activities. This aspect of community engagement reflects government initiatives aimed at the construction of a good and healthy living environment (Kahfi, 2015).

The concept of Good Environmental Governance is about how we manage and interact in the environment conceptually. Environmental Governance focuses on the goal of understanding and managing the interrelationships between ecosystems and social systems. In Law No. 32 of 2004 concerning Regional Government, environmental protection, including the problem of garbage in watersheds, is listed as one of the responsibilities of provincial and district/city governments.

The Citarum River is the lifeblood of the community along and around its watershed. The current condition of the Citarum river is increasingly worrying. The problems that exist in the Citarum river today are flooding, the amount of garbage, the thickness of the sediment, and the amount of waste being dumped into the Citarum river. Activities around the river such as industry will affect the quality of river water, because it results in a concentration of waste that exceeds the assimilation (ability to neutralize) contaminated water bodies (Dawud et al, 2016). The surrounding community will be affected by the Citarum river pollution, either directly or indirectly. Rivers provide a variety of ecosystem functions and services that support biodiversity and human well-being (Rohmat et al, 2019). Management of the Citarum River Watershed (DAS) is expected not only as an ecosystem conservation but also as an effort to maintain water quality for the needs of the people of West Java and Jakarta (Iskandar, 2014).

The Citarum River is included in the national Strategic river area. The government's efforts to control rivers include the issuance of Presidential Decree No. 12 of 2012, which states that rivers are National Strategic Areas. The Governor of West Java issued the Harum Citarum program. The program focuses on improving the condition of the Citarum river. These improvements include damage control, pollution and restoration of the Citarum watershed (Marganingrum & Roosmini, 2013). River pollution is a serious problem for water quality, damaging the ecology and threatening people's livelihoods, especially in urban areas adjacent to industry (Maryono, 2020).

Based on the concept of Good Environmental Governance above, the author tries to carry out research on the implementation of Good Environmental Governance in handling waste in the Citarum watershed in West Java.

#### B. METHOD

This study employs a qualitative, descriptive method (Sugiyono, 2011). Qualitative research is research that aims to understand the phenomena experienced by the subject, such as behavior, perception, motivation, action research, holistically using descriptions in the form of words and language, in context, particularly nature by employing a variety of natural approaches (Gunawan, 2022). Descriptive research attempts to collect information about a topic, symptom, or circumstance in order to gain the fullest understanding of the research object



(Soendari, 2012). Generally, the primary purpose of descriptive research is to correctly and methodically describe the facts and qualities of the object or subject being examined. In this study, the authors utilized both primary and secondary data sources, with the sociology of politics serving as the primary source. And secondary data sources, including social reality data sources that the writers obtained either directly on the field or via print media or debates.

The focus of this research is the implementation of good environmental governance in waste management in watersheds (DAS). The approach used will explore the basics related to the management of the Citarum river watershed in accordance with the formulation of the problem. The current problem is the absence of a clear concept related to integrated management and synergy between stakeholders (Suwitri, 2008). The qualitative research model will bring together issues between stakeholders and will eventually become a bright spot in understanding for watershed management. The results will provide an in-depth and fundamental understanding for model development in the Citarum River watershed.

#### C. RESULTS AND DISCUSSION

#### Good Environmental Governance

The notion of environmental governance, or environmental governance, views the state and society as subjects and objects of environmental conservation efforts. As an entity with control over resources and power, the state has the capacity to drastically alter natural conditions. Consequently, the fate of the environment is primarily determined by the state's capacity to govern its behavior in accordance with ecological principles. This notion of governance defines environmental governance as a framework of state management in the context of environmental management through its relationship with its citizens (Bridge & Perreault, 2009).

Environmental governance must be based on the core idea that social systems and ecosystems engage in unending interactions over time (actions and reactions). State, society, and the private sector have an equal relationship as a result of the interaction between groups that emerged as a result of the notion of governance. Governance is employed in the context of environmental governance to comprehend and manage the interrelationships between societal systems and ecosystems (Bodin, 2017).

As discussed previously, good environmental governance is described as governance that is concerned with environmental sustainability and sustainability. The importance of good governance, because good governance will determine the extent to which the objectives of the government can be achieved. Governments that have been able to realize good governance do not necessarily have a concern for the sustainability aspects of the ecosystem. As promoted by environmentalism (Budiati, 2012). Therefore, the government that has made efforts to actualize the principles of Good Governance still requires additional requirements, namely linking all development policies with the principles of ecological sustainability. so that it can be said as good environmental governance. According to Siahaan (2004) the principles of good state governance in managing the environment with the principle of resource sustainability are called the principles of Good Environmental Governance (GEG).

According to the World Bank, Good Environmental Governance entails a set of practices aimed at ensuring the long-term viability of a country's natural resource infrastructure while also protecting and enhancing environmental quality. This requires system transparency in environmental institutions, community involvement in shaping policies and implementing programs (Jasanoff & Martello, 2004). In addition, Nopiyandri (2014) also argues that Good Environmental Governance is a state management framework derived from the relationship with the people in managing the environment. Thus, it can be concluded that Good Environmental Governance is a variety of activities organized by the government while still



paying attention to the sustainability and preservation of the environment, especially natural resources by involving all members of the community.

Good governance and environmental management are intertwined, as Sonny Keraf (2006) pointed out. Good environmental management is a reflection of the quality of governance because it is influenced and determined by good governance. Strictly speaking, it is difficult to expect good environmental management in the absence of competent governance.

According to Holey et al. (2013), good governance is intertwined with the application of environmental management's fundamental principles. Holey (2013) identifies 13 (thirteen) general principles of good governance, including the principles of legal certainty, balance, not mixing authority, justice and fairness, responding to expectations raised, and the principle of administering the public interest, all of which pertain to environmental affairs.

The relationship between good governance and environmental management issues is also stated by Santosa (2008) who takes examples of various environmental damage that occurred during the New Order government, which according to Santosa (2008) was caused by the government not having good governance. However, the absence of government political will is not the only constraint factor in realizing good governance, especially in matters of environmental management. Weak implementation of good governance so far, especially during the New Order government, in addition to the absence of strong political will from the government, the weakness of environmental activists in the bureaucracy, NGOs and universities that link good governance as a basic prerequisite for effective environmental management with environmental issues that being advocated is also an obstacle in realizing good governance.

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Considering the length of the Citarum river, the breadth of the watershed that affects the Citarum river water, the many and varied villages in the Citarum, of course, the work of improving the water quality of the Citarum river is not an easy and instant job. However, this pollution management strategy activity needs to be carried out in a limited place/location as a pilot study. The results are expected to be a row model on how to carry out environmental management on the basis of good environmental governance. As a result, the quality of the Citarum River's water can be helped if comparable initiatives are expanded to cover a larger geographical area.

In managing waste which is a source of pollution in the Citarum watershed, researchers describe good environmental governance. If the government, the corporate sector, and the community work together to manage the Citarum watershed, good environmental governance will be achieved. The following are examples of strong environmental governance that were applied in this research:

#### 1. Participation

When people have an active role in shaping the creation, execution, and evaluation of policies that have an impact on their daily lives, this is known as "participation" (Dwiyanto, 2005). Community members' participation can also be understood as their endorsement of and accountability for decisions made in the public interest. The study's findings suggest that stakeholders in the management of the Citarum River watershed are not coordinating their efforts with one another.

Improvements in participation can be achieved by collaborative effort between several parties. Bandung Regency and Bandung City's stakeholders' level of involvement in assessing the state of the Citarum watershed was determined by the study's findings: the central



government solely supervises through the Environmental Agency of each local government (Bernauer & Betzold, 2012).

As for the private sector, the participation is still low, especially the private sector which has a business in the home industry and factories that dispose of their waste into the river. Due to the conflict of interest between the government and the private sector, the government is trying to protect the environment, while the private sector in this case is the company that owns the factories. For the community along the Citarum watershed, participation is still low because it is influenced by several things, namely the low level of education, knowledge, awareness and lack of socialization of local governments to maintain the cleanliness of the Citarum watershed water.

#### 2. Rule of law

The rule of law is a framework for the enforcement and observance of the law or legislation (Putri et al., 2011). Plans for the management of the Citarum River watershed must conform to the Watershed Management Plan, which is theoretically outlined in the Governor of West Java Regulation No. 5 of 2019 on the Acceleration of Pollution and Damage Control of the Citarum River Basin. This regulation was drafted to establish guidelines for the management or use of the territory along the portion of the Citarum River. So that the efforts made become a legal shield for any infractions committed by communities or businesses near the Citarum river."

The significance of the legislation (rule of law) in relation to the management of the Citarum river watershed and Presidential Decree No. 15 of 2018 regarding the acceleration of pollution control and damage to watersheds must be documented. Obviously, the regulations must be modified in accordance with the challenges posed by the arrangement of conservation zones in accordance with the legal laws of the indigenous culture's conventional knowledge (social institutions).

The rule of law as a social institution that has its own social structure and is rooted in its own culture. The legal rules owned by the local government regarding the Ciatrum Watershed prior to the Governor's Regulation number 5 of 2019 are still unclear because there is no Bandung Regency or Bandung City regional policy which in writing regulates the management of the Citarum Watershed, so how can the private sector and the community comply with the rules themselves. In the absence of clear rules regarding the management of the Citarum watershed, it results in water pollution, landslides and so on.

#### 3. Transparency

Transparency is the existence of an open policy for supervision. Such as the disclosure of government policy information that can be reached by the public (Triyanto, 2017). With the disclosure of information, it is hoped that the Citarum watershed management policy can be implemented appropriately based on the network method (government, private sector, NGO, community).

The use of data in watershed management is quite a lot and seems to have their respective interests between institutions or agencies. The role of the government in addressing this matter must unite them. The form taken to find out how the distribution of watershed management data needs to be disseminated among stakeholders so that understanding of problems in watershed management is able to synergize.

In principle, stakeholders in carrying out land rehabilitation and reclamation programs are only in certain areas according to their duties and functions in areas in the watershed. While each private party or company has its obligations in land reclamation. So it can be seen that there is no program transparency. So far there has been no open effort by the government,



agencies, private sector and community in the design of the program for watershed management.

Based on the results of interviews and research observations, the government has not implemented transparency in the management of the Citarum watershed, where the results of the water sample obtained by the local government BLH cannot be accessed openly by the public (community, private sector, NGOs and other government agencies), so that it has an impact on attitudes as if even though the community, private sector and NGOs are apathetic about the management of the Citarum watershed. The government as the top manager should be more transparent about the state of the Citarum watershed, with transparency it is hoped that it can inspire the public's enthusiasm to contribute ideas and energy regarding the formulation, implementation and evaluation of Citarum watershed management policies (Yasminingrum, 2017).

#### 4. Collaboration between Government, Private and Community Parties

Regional governments, both provincial and district/city as the highest institution in the management of the Citarum river basin, have the authority to regulate or control synergistic and collaborative environmental management. In the management of the Citarum watershed, it is not enough for the government to do it without involving other stakeholders, therefore collaboration is needed between the government, the private sector and the community in managing the Citarum watershed.

Based on the results of the analysis, the involvement of the private sector, community and other stakeholders in managing the Citarum watershed is still low, therefore its management is not optimal. From the results of the study, it was found that the era of regional autonomy changed the mindset among stakeholders whose performance patterns were centered on the district government and only made accountability reports to the provincial government. Natural resource management is a priority in exploring it and weak in that there is no supervision. The role of the provincial government has begun to decrease, while the role of the district government is very large. So that it has an unfavorable impact on the licensing of natural resources management. Then it results in low supervision in sustainable watershed management.

Regional autonomy causes the government to still use the top down method instead of bottom up, even though in this watershed management a bottom up method is needed because with this method the government can involve the community, the private sector, NGOs in carrying out watershed management so that with the stakeholder network the results will be maximized. (Astuti &Widayati, 2014).

The form of collaboration between the government, the private sector and the community, there must be a sustainability program in the management of the Citarum River watershed management. The government has the authority to regulate or control synergistic and collaborative environmental management. In the management of the Citarum watershed, it is not enough just to be done by the government without involving other stakeholders.

#### D. CONCLUSION

The idea of good governance serves as the foundation for the development of good environmental governance as a strategy for the preservation and administration of the natural environment, that the administration and protection of the environment should adhere to the idea of good environmental governance, which states that good governance should be the primary focus. There are three different aspects to consider here. To begin, there is public governance, which refers to the institutions of the government. The second topic is corporate governance, which is a term used to describe the realm of private industry. Third, the community at large or members of civil society. In an ideal situation, the interaction between



these three elements should be in a state that is balanced, synergistic, and mutually controlling of one another. According to the principles that were used in the implementation of GEG in waste management in the Citarum watershed, there is still a lack of private and public participation in waste management in the watershed. This is due to the fact that there is still a lack of government transparency, despite the fact that it already has clear legal rules in the form of governor's regulation number 5 of 2019. The community has the impression that this transparency is inadequate because it is challenging for them to have access to information regarding the Citarum watershed.

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