

SUPPORTING SUSTAINABLE ENVIRONMENTAL POLICIES THROUGH GOOD WASTE MANAGEMENT IN WONOGIRI REGENCY

¹Sulatin Baeti Janah,²Jadmiko Anom Husodo

¹Master of Law, Faculty of Law, Universitas Sebelas Maret, Surakarta, Indonesia

²Universitas Sebelas Maret, Surakarta, Indonesia

Author's email:

¹sulatinbaetijanah87@gmail.com; ²jadmikoanom@staff.uns.ac.id

Corresponding author: sulatinbaetijanah87@gmail.com

Abstract. *The problem of waste is one of the global problems that exist throughout the world, including Indonesia. The amount of waste and also the diversity of waste is increasing with the increasing population and increasing consumption patterns in society. This research discusses sustainable development-based waste management in Wonogiri Regency. Reducing the amount of waste is one of the targets to be achieved in point 12 of the sustainable development target indicators (SDGs) regarding responsible consumption and production. The purpose of this paper is to analyze good waste management to support sustainable environmental policies. This research uses normative legal research methods. This method sees the law from the point of view of applicable norms, which of course can be prescriptive. This research uses a statutory approach and a conceptual approach. The statutory approach is used to analyze regulations relating to waste management in Wonogiri Regency. While the conceptual approach is used to analyze legal issues in waste management by linking the concept of sustainable development.*

Keywords: Sustainable Development Goals (SDGs), Sustainable Environmental Policy, Sustainability, Waste Management

1. INTRODUCTION

Waste is not only a national problem but also a global problem. This is related to the increasing population which also has an impact on economic growth and consumption patterns in society. In Indonesia, waste is one of the national problems that has yet to be resolved. The habit of throwing garbage out of place and also the inappropriate waste management system have resulted in the accumulation of uncontrolled waste. (Sukmaniar et al, 2023)

Reducing the amount of waste is one of the targets to be achieved, which refers to point 12 in the sustainable development target indicators or often called SDGs regarding consumption and production carried out with sustainable principles. The impact of human activities is waste generation, so waste will continue to be a problem as long as humans are still doing their activities. (Khofifah Kurnia Amalia Sholihah, 2020)

Regulations that deal with waste issues are contained in Law Number 18 of 2008 concerning Waste Management and its derivatives, as well as Law Number 32 of 2009 concerning Environmental Protection and Management. In establishing the National Policy and Strategy (Jakstranas), the Government through Presidential Regulation No. 97/2017 has targeted waste reduction by 30% and waste handling by 70% by 2025. In addition, the government also targets Zero Waste Zero Emissions in 2050. (BPMI Sekretariat Wakil Presiden, 2024)

Sustainable environmental policy aims to achieve sustainable development. In addition, environmental policy is defined as the part that balances social, economic, and environmental development to run well. Good waste management is one example of a

sustainable environmental policy. This is because waste management is one of the activities that aims to form environmental protection.

Waste management problems also occur in Wonogiri Regency. Based on data from the National Waste Management Information System in 2023, waste generation in Wonogiri Regency reached 127.999 tons/year. Of this amount, waste reduction is 49,798 tons / year or 38.91% and waste handling is 19.178 tons / year or 14,98%. Meanwhile, unmanaged waste amounted to 59.022 tons / year or 46,11%. (Ditjen PSLB3 Kementerian Lingkungan Hidup dan Kehutanan, 2024) In supporting sustainable environmental policies, the Wonogiri Regency Regional Government formed Wonogiri Regency Regional Regulation Number 11 of 2018 concerning waste management. With this regional regulation, it is hoped that it can overcome the complexity of waste problems that occur in Wonogiri Regency.

Based on the description above, the author is interested in examining the environmental policy of sustainable environmental policy through good waste management in Wonogiri Regency.

2. LITERATURE REVIEW

2.1 Public Policy Theory

The term policy is often used interchangeably with the terms goals, programs, decisions, laws, provisions, proposals and designs.(Wahab, 1997) In line with the meaning of the policy put forward by the United Nation above, Fredrick provides an understanding of policy, which is a series of actions proposed by a person, group or government in a certain environment by showing obstacles and opportunities for the implementation of the proposed policy in order to achieve certain goals. (Muadi et al., 2016)

Public policy is a long-term process, because it is a policy cycle. The policy cycle consists of formulation, implementation and evaluation.

Based on the understanding of policy and public policy described above, Islamy suggests several important elements of public policy, namely:

- a. That State policy is in its first form in the form of determining government actions.
- b. State policy is not sufficiently stated but implemented in real form.
- c. Policies to do or not do something need to be based on certain goals and objectives.
- d. State policy must be aimed at the interests of society. (Islamy, 2002)

2.2 Sustainable Development

Since the promulgation of the concept of sustainable development by the Bruntland Commission under the leadership of Norwegian Prime Minister Gro Harlem Brundtland, the concept has become popular. Gro Harlem Brundtland worked from 1984 to 1987 and created the book "Our Common Furture" published by the World Commission on Environment and Development (WECD) in 1987. WECD defines sustainable development as a form of meeting the needs of the current generation without sacrificing the fulfillment of the needs of future generations.(Tanguay et al., 2010)

Furthermore, the concept of development is better known as a concept based on three dimensions or balanced sustainable pillars, namely ecology, social, and economy. The conditions for sustainable development can be achieved if:(Sudirman & Phradiansah, 2019)

- a. Ecological sustainability is the protection of environmental quality needed for economic activity and quality of life (environmental protection, reducing pollutant emissions, rational use of resources, and so on).
- b. Social sustainability related to the preservation of community and cultural identity respecting cultural, racial and religious diversity, the preservation of social values, rules, norms, protection of human rights and so on.
- c. Economic sustainability takes into account natural, social and human aspects.

Furthermore, in 2015 the concept of sustainable development was reviewed by the UN Conference on Sustainable Development in New York discussing the 2030 Agenda for Sustainable Development with 17 new Millennium Development Goals that aim to be achieved by 2030 which emphasize the direction of sustainable development based on human rights and equality to encourage social, economic and environmental development.

Law No. 32/2009 on Environmental Protection and Management defines Sustainable Development as a conscious and planned effort that integrates environmental, social, and economic aspects into development strategies, with the aim of ensuring environmental sustainability as well as the safety, capability, welfare, and quality of life of not only current generations, but also future generations.

3. RESEARCH METHODS

This research uses normative legal research. This research looks at the law from the point of view of the applicable norms, which are certainly prescriptive in nature. This research uses a statutory approach and a conceptual approach. The statutory approach is used to analyze regulations relating to waste management in Wonogiri Regency. While the conceptual approach is used to analyze legal issues in waste management by linking the concept of sustainable development. The legal materials used are primary legal materials such as Law Number 18 of 2008 concerning Waste Management, Law Number 32 of 2009 concerning Environmental Protection and Management, Wonogiri Regency Regional Regulation Number 11 of 2018 concerning Waste Management and other regulations related to the object under study. The secondary legal materials used in this research include books, journals, papers, research reports, the internet and so on.

4. RESULTS AND DISCUSSION

Based on its geographical location, Wonogiri Regency is located in the southeastern part of Central Java Province. The area of Wonogiri Regency is approximately 182.236,02 hectares. The population of Wonogiri Regency based on population projections in 2023 is 1.051.085 people consisting of 524.500 men and 526.585 women.

Based on data from the National Waste Management Information System in 2023, waste generation in Wonogiri Regency reached 127.999 tons/year. Of this amount, waste reduction is 49.798 tons/year or 38,91% and waste handling is 19.178 tons/year or 14,98%. Meanwhile, unmanaged waste amounted to 59.022 tons/year or 46,11%. (Ditjen PSLB3 Kementerian Lingkungan Hidup dan Kehutanan, 2024)

Quoted from Solopos.com, the Wonogiri Regency Environmental Service said that there are 4 sub-districts in Wonogiri Regency that have not been touched by waste management services at all. The four sub-districts are Paranggupito, Batuwarno, Karangtengah, and Manyaran. The existence of sub-districts that have not been touched by waste management services has caused waste to be poorly managed. (Praditia, 2024)

When viewed from this fact, it is very necessary to have a comprehensive form of waste management starting from the transportation process to the final disposal site. This makes a question of how the waste management procedure should be in overcoming the waste problem in Wonogiri Regency considering that the community also has rights related to waste management as stated in article 11 paragraph (1) of Law Number 18 of 2008 concerning Waste Management which reads:

- (1) Everyone has the right:
 - a. Get services in waste management in a good and environmentally sound manner from the Government, local government, and / or other parties given responsibility for it;
 - b. Participate in the decision-making process, implementation, and supervision in the field of waste management;

- c. Obtain correct, accurate, and timely information regarding the implementation of waste management;
- d. Obtain protection and compensation due to the negative impact of waste final processing site activities; and
- e. Obtain guidance in order to carry out waste management in a good and environmentally sound manner.

4.1 Waste Management in Wonogiri Regency

The definition of Waste Management according to Wonogiri Regency Regional Regulation Number 11 of 2018 is a systematic, comprehensive, and sustainable activity that includes waste reduction and handling. Waste grouping is divided into three, namely household waste, similar household waste and specific waste.

Waste reduction is carried out by limiting waste generation, recycling waste, and reusing waste. Waste reduction is carried out by:

- a. Using materials that can be reused, materials that can be recycled, and / or materials that are easily decomposed by nature; and / or
- b. Collecting and handing back waste from products and/or packaging that have been used.

The Regional Government carries out waste reduction activities by:

- a. Setting waste reduction targets in stages;
- b. Conducting socialization and/or facilitating the application of environmentally friendly technology; and
- c. Conducting socialization and/or facilitating reuse and recycling activities.

Waste handling is carried out by:

a. Segregation. Waste segregation is carried out by every person at the source; managers of residential areas, commercial areas, industrial areas, special areas, public facilities, social facilities, and other facilities; and the Regional Government. The sorting referred to here is carried out by providing facilities for organic, inorganic, and specific waste bins.

b. Collection. Collection is carried out through waste collection and action activities from:

- 1) Households and/or TPS 3R (Reduce, Reuse, Recycle Waste Disposal Sites) to TPS (Waste Disposal Sites) are carried out by waste management institutions formed by RT / RW and / or community groups;
- 2) Residential areas, commercial areas, industrial areas, and special areas and/or TPS 3R (Reduce, Reuse, Recycle) areas to TPS (Waste Disposal Sites) are the responsibility of the area manager and/or community groups; and
- 3) Public facilities, social facilities, and other facilities and/or TPS 3R (Reduce, Reuse, Recycle Waste Disposal Sites) in these facilities to TPS (Waste Disposal Sites) are carried out by the manager of the facility or community groups.

c. Transportation. Transportation is carried out from TPS (Waste Disposal Site) and/or TPST (Integrated Waste Disposal Site) to TPA (Final Disposal Site) by OPD (Regional Apparatus Organization) which organizes environmental affairs and/or other designated parties. The Local Government is responsible for transportation in the form of carrying residual waste from TPS (Waste Disposal Sites) and/or TPST (Integrated Waste Disposal Sites) to the TPA.

d. Processing. Management is carried out by changing the characteristics, composition and amount of waste carried out at the source at TPS 3R (Reduce, Reuse, Recycle Waste Disposal Site), TPST (Integrated Waste Disposal Site), and/or TPA (Final Disposal Site). Waste management utilizes technological advances that are environmentally friendly with the Reuse, Reduce, and Recycle (3R) method.

e. Final waste processing. Final waste processing is carried out by returning residual waste from processing to environmental media safely. This is carried out in a landfill (Final Disposal Site) carried out by the Regional Government and / or Business Actors who have a license. Final waste processing must be in accordance with the regional spatial plan.

4.2 Challenges of Waste Management Policy in Wonogiri Regency

In sustainable waste management activities, it should involve all aspects of stakeholders from prevention, recycling and also restoring pollution caused by waste. (Mardianto Haholongan Napitupulu & Ali Muhyidin, 2021) There are several challenges in implementing waste management policies in Wonogiri Regency, namely:

a. Low level of public awareness

The culture of throwing garbage out of place is one of the factors that makes it difficult for the government to manage waste in Wonogiri Regency. Such as throwing garbage in the river or burning garbage that is not in accordance with existing procedures.

Knowledge of waste management is still minimal among rural communities. Population growth should also be accompanied by increased public awareness of the responsibility of waste management.

b. Limited facilities and technology

Waste management must be supported by adequate infrastructure. In Indonesia itself, waste management infrastructure is still lacking, especially in rural areas. The facilities referred to here are such as tools for recycling and also landfills that are safe and far from the community environment. (Defitri, 2023)

Quoted from Solopos.com, the Wonogiri Regency Environmental Service said that there are 4 sub-districts in Wonogiri Regency that are completely untouched by waste management services. The four sub-districts are Paranggupito, Batuwarno, Karangtengah, and Manyaran. The existence of sub-districts that have not been touched by waste management services has caused waste to be poorly managed. (Praditia, 2024)

c. Limited Human Resources

Human Resources are needed in every waste management process from collection, sorting, to recycling. Although the availability of human resources in Wonogiri Regency is abundant, the low level of awareness of environmental pollution due to waste is a challenge for the local government.

4.3 Waste Management Based On Sustainable Environmental Policy

Waste management based on sustainable environmental policy is an activity that aims to reduce and process waste efficiently, so as not to cause environmental pollution. The ultimate goal of sustainable environmental policy is to achieve sustainable development. In addition, environmental policy can also be understood as a form of balancing between social, economic and environmental development so that it can run stimulantly.

Conceptually, policies in Indonesia are good enough to overcome various problems, but the realization in the field still often encounters obstacles, such as lack of resources and gaps between regulations and practices. Such is the case regarding the sustainable waste management policy in Wonogiri district. Waste management is intended so that waste does not endanger human health and does not pollute the environment. In addition, waste management is also carried out to obtain benefits for welfare. Because it cannot be denied that waste is a resource that can still be utilized and even has economic value.

Waste management in Wonogiri Regency has not been implemented in an integrated manner. Waste that comes from the source is directly transported to the TPS without going through the process of sorting and handling first. From the TPS, the waste is transported to the TPS to be landfilled.

For this reason, the local government together with the community carry out waste reduction and handling so that waste generation can be reduced before it reaches the landfill. The community in carrying out waste reduction and handling is carried out by Reduce, reuse, and recycle.

In addition, waste management does not only require aspects of active community participation, but also regulatory aspects as a legal basis, operational technical aspects, organizational and management aspects, and financing aspects. The five aspects are in one comprehensive and integrated waste management system, so legal certainty, clarity of responsibilities and authorities of the Regional Government, Rights and Obligations of the Community and business actors are needed so that waste management can run proportionally, effectively and efficiently.

The existence of the Waste Bank in Wonogiri Regency is not only an effort to reduce the amount of waste that is loaded into the landfill. However, the existence of waste banks also helps the economy of the community where the proceeds from the sale of waste are stored in the form of savings in the waste bank, the community deposits waste then weighed and calculated its economic value, this value will be the balance in the bank. The management of waste banks in Wonogiri Regency involves all groups, from the local government that provides regulations and infrastructure support, the community that plays an active role in sorting and managing waste, to associations or organizations that provide assistance, education, and innovation in sustainable waste management.

CONCLUSION

Waste management based on sustainable environmental policy is a strategic step to realize a greener future. The success of this approach requires the commitment of all parties ranging from the central government, local governments, businesses, to individuals, to implement policies and practices that support responsible and innovative waste management.

There are several things that become challenges in implementing waste management policies in Wonogiri Regency, namely the low level of public awareness, limited facilities and technology, limited human resources. In addition, waste management in Wonogiri Regency has not been implemented in an integrated manner. Waste that comes from the source is directly transported to the TPS without going through the process of sorting and handling first. From the TPS, the waste is transported to the TPS to be landfilled.

Despite the challenges, the local government and the community are reducing and handling waste so that waste generation can be reduced before it reaches the landfill. The community in carrying out waste reduction and handling is carried out by Reduce, reuse, and recycle. This is evidenced by the existence of waste banks in Wonogiri Regency.

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