

Implementation of environmental law principles in managing household waste in Cirebon City

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Abstract

The household waste problem in Cirebon City continues to increase in line with population growth and increasingly complex consumption patterns. Improper waste management practices have the potential to cause negative impacts on both the environment and public health. This study aims to analyze the implementation of environmental law principles particularly the preventive and participatory principles—in the household waste management system of Cirebon City. The research employs a qualitative descriptive method using literature review and local policy analysis. The findings indicate that the implementation of the preventive principle remains suboptimal due to limited public education and inadequate waste-sorting facilities. Similarly, the participatory principle has not been applied evenly, as a result of insufficient socialization and low levels of community engagement. Strengthening regulations, enhancing public awareness, and fostering synergy between government and society are required to develop a sustainable household waste management system grounded in environmental law principles.

Keywords

Environmental law, Waste House stairs, Principles preventive, Principles participatory, Cirebon City

Introduction

Household waste is one of the main contributors to environmental problems in urban areas, including Cirebon City. Along with population growth and increasingly complex patterns of consumption, the volume of generated waste continues to rise significantly. This poses a major challenge for local governments in providing an adequate and sustainable waste management system. If not properly addressed, this problem may lead to environmental pollution, public health risks, and a decline in the overall quality of community life.

In principle, waste management must be carried out in accordance with the legal framework that regulates the obligations, responsibilities, and rights of both society and the government. Law Number 18 of 2008 concerning Waste Management serves as the

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national legal foundation that promotes environmentally sound and sustainable waste management [1]. At the local level, the Cirebon City Government has also formulated regional policies and regulations to support systematic waste management. However, in practice, many challenges remain, including technical, social, and legal obstacles.

Environmental law incorporates several important principles that must be applied, including the precautionary principle, the preventive principle, the participatory principle, and the principle of accountability [2]. Among these, the preventive and participatory principles are particularly relevant in the context of household waste management, as they emphasize early prevention and active public involvement as key elements [3]. This approach highlights that waste management is not solely the responsibility of the government, but also an integral part of collective public culture and awareness.

As one of the densely populated cities, Cirebon faces highly complex waste management problems. Despite various efforts undertaken, many residents still dispose of waste indiscriminately, fail to sort household waste, and show limited participation in community-based programs such as waste banks or recycling initiatives. This reflects a clear gap between the existing regulatory framework and the actual conditions in the field.

Based on these issues, this paper seeks to analyze the extent to which environmental law principles specifically the preventive and participatory principles—have been implemented in the handling of household waste in Cirebon City. By examining these two principles, the study aims to identify weaknesses as well as opportunities for improvement in developing a sustainable, law-based municipal waste management system.

Method

This research employs a qualitative descriptive method using a literature study and document analysis approach. The data were obtained from various secondary sources, including national laws, regional regulations, reports from the Cirebon City Environmental Service, as well as relevant scientific articles and news sources. The analysis focuses on examining how the preventive and participatory principles are implemented in the policies and practices of household waste management in Cirebon City, as well as identifying the obstacles encountered in the implementation process.

Results and Discussion

Implementation principle preventive in handling garbage in Cirebon City

The preventive principle in environmental law emphasizes a proactive approach to avoiding pollution and environmental degradation before negative impacts occur [4]. In the context of household waste management, this principle requires systematic efforts to reduce waste generation at its source—namely, at the level of households, markets,

schools, and other public activities. The aim of this approach is to establish a system that does not merely respond after pollution has occurred, but actively prevents it through concrete, planned policies and actions.

The implementation of the preventive principle encompasses several strategic steps, such as public education and awareness campaigns on the importance of waste management, the provision of supporting facilities and infrastructure such as waste-sorting bins and *TPS 3R* (Reduce, Reuse, Recycle) facilities, as well as the establishment of transportation systems that support early-stage waste segregation [5]. Furthermore, the licensing system requires business actors to include waste reduction strategies as part of their operations, which also reflects the application of this principle. In other words, the preventive principle encourages both government and society to prioritize preventive measures rather than reactive countermeasures.

In Cirebon City, the local government has demonstrated commitment through various initiatives, such as appeals to reduce plastic use, the introduction of waste-free zones, and the promotion of environmentally conscious communities through educational programs. However, implementation in practice has yet to reach all layers of society effectively. Socialization programs tend to be top-down in nature and fail to address contextual community needs. In densely populated urban areas and suburban settlements, public knowledge of waste segregation remains limited, and the practice of indiscriminate disposal of mixed waste persists as a difficult habit to change.

In addition, the availability of infrastructure to support preventive measures remains inadequate. Waste-sorting facilities are often limited to office buildings or specific public facilities, and are not widely distributed across residential areas. Many *TPS* (temporary disposal sites) in Cirebon City are not yet managed according to proper cleanliness standards or sorting systems. Most function merely as final accumulation sites before waste is transported to the landfill, without prior sorting or initial processing. Consequently, recycling potential that could significantly reduce waste volume is left unutilized, while the accumulation of unmanaged waste leads to odor, disease, and environmental pollution.

From these conditions, it can be concluded that the application of the preventive principle in household waste management in Cirebon City remains far from optimal. Existing regulations have not been fully translated into large-scale, practical actions at the community level. Concrete measures are required, including continuous community-based education, the provision of incentives for households that sort waste, the expansion of the *TPS 3R* network, and the establishment of synergy between government, society, and the private sector. Only through a strong and consistent preventive approach can Cirebon City's waste management challenges be addressed sustainably and in accordance with environmental law principles.

Implementation principle participatory in management waste by the community

The participatory principle in environmental law serves as a fundamental pillar that emphasizes the active involvement of the community in every stage of environmental governance, including decision-making, implementation, and policy evaluation related to environmental management and protection. This principle ensures that waste management is not treated solely as a governmental responsibility but rather as a collaborative effort that requires the contribution of all stakeholders—citizens, community organizations, and the private sector. By promoting inclusivity and shared responsibility, the participatory principle strengthens the legitimacy of policies, increases public compliance, and fosters a culture of environmental awareness at the grassroots level [5]. Participation is not merely a form of voluntary contribution but also constitutes both a right and a responsibility of citizens toward the sustainability of the environment in which they live [6]. In the context of household waste management, community participation is particularly crucial since the majority of waste originates from household activities. Therefore, active involvement of residents—from waste sorting and reduction at the source to processing and recycling—becomes the key determinant for the success of a sustainable waste management system.

In Cirebon City, several community-based participation programs have been introduced and implemented by the Environmental Service in collaboration with various community groups. Initiatives such as waste banks, household composting training, environmental service activities, and the “Clean Cirebon” campaign represent early efforts to foster awareness and citizen involvement. Waste banks, for instance, provide an incentive mechanism by allowing residents to save money through the collection of inorganic waste. Nevertheless, these programs remain sporadic and have not yet reached all districts or sub-districts in Cirebon City. Participation is also largely concentrated within specific groups, such as PKK women’s associations, schools, or youth organizations, while a significant portion of residents remain uninvolved.

Several factors contribute to the low level of community participation in waste management. First, the lack of continuous and well-targeted socialization results in many residents being unaware of the benefits and methods of participating in environmental programs. Socialization efforts are often ceremonial in nature, limited to one-off meetings, and rarely followed by concrete actions or monitoring. Second, the absence of adequate incentives makes participation appear as an additional burden rather than a shared necessity. Third, the limited availability of open communication forums between the municipal government and citizens—such as regular public consultations on environmental issues—means that government policies do not always reflect the aspirations and needs of the community.

In reality, active community participation can be a powerful force in fostering behavioral change and cultivating a culture of environmental cleanliness. When citizens are directly involved, they develop not only moral and social responsibility toward their surroundings but also a sense of ownership over government programs. Such involvement can strengthen solidarity among residents and create more effective social oversight than reliance on government officials alone. Moreover, citizen engagement in waste management can open new economic opportunities, particularly through the development of micro, small, and medium enterprises (MSMEs) based on recycling and environmentally friendly product innovation.

To enhance the implementation of the participatory principle in Cirebon City, local government needs to expand community-based programs systematically to the neighborhood (RT/RW) level. Regular training on waste sorting, recycling, and organic waste management should be conducted periodically, involving diverse social groups such as housewives, youth, religious leaders, and business actors. Furthermore, the government should establish strong partnerships with schools, religious institutions, and the private sector to ensure that community participation is not merely a temporary movement but becomes an embedded and ongoing social system. Both material and non-material incentives could be considered, such as environmental awards for the cleanest neighborhood associations (RW), reductions in waste collection fees, or the provision of sanitation facilities to active communities. Through such a holistic and sustainable approach, the participatory principle in household waste management can be implemented effectively and meaningfully in Cirebon City.

Conclusion

The implementation of environmental law principles in household waste management in Cirebon City—particularly the preventive and participatory principles—has not yet been fully optimized. This is evident from the persistently low level of public awareness in sorting and managing waste at its source, the limited provision of periodic legal and environmental education, and the inadequacy of supporting infrastructure such as standardized waste-sorting facilities. Furthermore, various environmental programs that involve community participation have not yet been systematically supported in a way that enables citizens to participate actively and consistently, both at the community and institutional levels.

Therefore, concrete measures are required, including the strengthening of local regulations aligned with environmental law principles, especially in the areas of prevention and public involvement. The local government must expand and enhance community-based outreach programs, promote cross-sector collaboration with civil society organizations and the business sector, and provide adequate facilities and infrastructure to foster environmentally friendly practices. In this way, household waste management will not remain solely the responsibility of the government, but will evolve

into a collective movement toward sustainable waste management founded on the principles of environmental law in Cirebon City.

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