

# The Role of Government and Community Collaboration in the Implementation of Waste Management Policies in Palu City

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**Abstract.** *Waste management is a crucial issue for the growing city of Palu. Collaboration between the government and the community is the key to effective and sustainable waste management policy implementation. This study aims to describe the collaborative role between the government and the community in the implementation of waste management policies in Palu City. The method used is descriptive, with data collection through observation, in-depth interviews with relevant parties, and analysis of waste management policy documents. The data obtained was analysed qualitatively to provide an overview of the dynamics of collaboration that occurred. The results showed that the Palu City government has played a role in formulating policies, providing waste management facilities and infrastructure, and building a supportive regulatory framework. The government also initiated waste management programmes such as waste banks and temporary disposal sites (TPS)). On the other hand, the role of the community is seen through active participation in these programmes, as well as involvement in waste reduction and recycling activities in their respective neighbourhoods. Nonetheless, challenges are still faced, including the low level of public awareness, the lack of supporting facilities, and inadequate law enforcement. This study concludes that good collaboration between the government and the community is essential in achieving more effective waste management in Palu City. Strengthening collaboration through education, improving facilities, and consistent law enforcement are needed so that waste management policies can be implemented optimally.*

**Keywords:** *Collaboration, Government, Community, Waste management, Palu city*

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## INTRODUCTION

Waste management is one of the main challenges faced by many cities in Indonesia, including Palu City. Like other urban areas, Palu has experienced significant population growth and urban activities, which have directly contributed to the increase in the volume of waste generated daily. Data from the Palu City Environmental Agency 2020 shows that thousands of tons of waste are produced by the residents of Palu each day, yet less than half of this waste is properly managed. This situation leads to various serious environmental issues such as soil, water, and air pollution. The impact of pollution extends beyond environmental degradation, directly affecting public health. With uncontrolled pollution, diseases related to poor sanitation, such as diarrhea and respiratory infections, have become more prevalent, further burdening the city's healthcare system (Shaheen & Konain, 2024).

To address this problem, the Palu City Government has implemented several policies aimed at more effective waste management. These include the provision of temporary waste disposal sites (TPS), designed to provide residents with appropriate locations to dispose of their waste before it is transported to the final disposal site (TPA) (Astawa et al., 2023; Bulu et al., 2023). Additionally, the waste bank program was introduced as a creative solution involving the community in waste management, particularly inorganic waste that still holds economic value. Waste banks allow citizens to exchange waste for economic incentives, helping reduce the amount of waste that ends up in landfills while also providing direct benefits to participating residents. The government also regularly conducts environmental awareness campaigns aimed at increasing public understanding of the importance of household-level waste management (Adekola et al., 2021; Olukanni et al., 2020; Sewak et al., 2021).

However, despite these policies being in place, their effectiveness remains suboptimal. One of the main reasons for this is the low level of community participation in implementing these policies. According to Wardhani (2019), the success of waste management policies heavily depends on active public involvement (Kuang & Lin, 2021; Kiss et al., 2022). While the government plays a crucial role as the policymaker and provider of facilities, the community is the primary actor in field implementation. Without awareness and active participation from the public in sorting and disposing of waste correctly, government efforts will be in vain. Therefore, collaboration between the government and the community is essential to achieving sustainable waste management goals. This collaboration is not only in the form of the public following government policies but also through intensive dialogue and cooperation to find common solutions to waste management problems (Dagilienè et al., 2021).

In the context of waste management, this collaboration involves the role of the government as policy regulator, lawmaker, and facility provider, as well as the role of the community as the primary executor of these policies on the ground. Jotaworn et al. (2021) highlight that without strong collaboration between both parties, waste management policies will not function optimally. As a result, the environmental problems faced will become more complex and harder to resolve. The government may have provided TPS facilities and conducted awareness campaigns, but if the public continues to ignore proper waste sorting or even litter indiscriminately, the issues will persist. Likewise, community initiatives to manage waste independently also require government support in the form of enabling regulations and adequate facilities (Asteria & Herdiansyah, 2022).

Achieving the ideal collaboration between the government and the public, however, is not easy. One of the main challenges is the lack of environmental awareness among the public. Although the government has made efforts to raise awareness through various campaigns, many people still lack an understanding of the importance of proper waste management (Adekola et al., 2021). Habitual behaviors and a lack of knowledge about the long-term consequences of poor waste management further exacerbate this issue. Additionally, the waste management infrastructure provided by the government, such as TPS and waste transportation services, is often inadequate, especially in densely populated or remote areas. This results in waste accumulation in residential areas, worsening environmental conditions.

Aside from awareness and infrastructure, economic factors also play a crucial role in the success of this collaboration (Wang et al., 2023). For low-income communities, waste management may not be a top priority as they focus on meeting basic needs such as food and shelter. Programs like waste banks that offer economic incentives to participants provide a potential solution to this issue. However, the success of such programs also requires the government's commitment to maintaining their continuity and sustainability (Masuda et al., 2022).

Therefore, this study aims to explore the role of collaboration between the government and the community in the implementation of waste management policies in Palu City. It also seeks to identify the challenges faced in this collaboration, from both the government and the

community's perspectives. A primary focus of the study is on the factors that influence the success of collaboration, including awareness, infrastructure, and economic incentives that can encourage public participation (Othman & Khallaf, 2022).

By analyzing these factors, this research hopes to make a tangible contribution to the development of more effective and sustainable waste management policies. The findings are also expected to provide recommendations for the Palu City Government on improving collaboration with the community, enabling the city to better address the waste issues that have long been a major challenge.

## **METHODS**

This study employs a qualitative descriptive method aimed at analyzing the role of collaboration between the government and the community in the implementation of waste management policies in Palu City. The qualitative descriptive method was chosen because it can provide an in-depth depiction of the existing conditions on the ground, as well as the interactions between the government and the community in managing waste.

The data collection techniques used include in-depth interviews, field observations, and documentary studies. The data is analyzed through qualitative descriptive techniques, by identifying the main themes that emerge from the results of interviews, observations, and documentation. The focus of the analysis is on the patterns of collaboration between the government and the community, as well as the factors that influence the success of the implementation of waste management policies.

## **RESULTS AND DISCUSSION**

The collaboration between the government and the community in the implementation of waste management policies in Palu City is a key factor in creating a clean and healthy environment. The Palu City Government, through the Environmental Agency, has designed various strategic policies to address waste problems, including the provision of supporting facilities such as temporary waste disposal sites (TPS) and waste transport fleets. However, the success of these policies greatly depends on the active participation of the community in utilizing the available facilities and maintaining collective environmental cleanliness.

The government plays a significant role in establishing effective waste management regulations and mechanisms (Lihua et al., 2020). In Palu City, the government has introduced a policy of waste separation at the source, starting at the household level. Through socialization and education, the government seeks to raise public awareness about the importance of separating organic and non-organic waste. Additionally, regulations imposing fines for those who improperly dispose of waste serve as a preventive measure to reduce the amount of unmanaged waste (Bonnet et al., 2023).

Several strategic policies have been designed by the Palu City Government, such as waste separation programs at the source, providing adequate waste disposal facilities, and educational campaigns on the importance of recycling. However, without active public support, these policies often face challenges in implementation. Therefore, it is crucial for the government to involve the community at every stage of policy planning and implementation, ensuring that the solutions offered are aligned with local needs and conditions (Masuda et al., 2022).

On the other hand, the community plays a vital role in supporting these government policies. Active community participation goes beyond merely disposing of waste properly; it also includes independent waste management through the 3R program (Reduce, Reuse, Recycle). Local communities, such as waste banks, form an integral part of this effort. With collective awareness and action, the community can reduce the volume of waste produced and even turn it into an alternative economic source through recycling (Vlachokostas, 2020).

In the context of policy implementation, effective communication between the government and the community is crucial (Imperial, 2021). The Palu City Government has

established community forums and public consultation sessions to gather input and address community concerns. Through these communication channels, the public can provide feedback on existing policies and participate in the formulation of new policies. By listening to and considering community input, the government can adjust its policies to better suit local needs, thereby improving the success of implementation (Glyptis et al., 2020; Ma et al., 2021).

Challenges in collaboration often arise from the public's lack of knowledge and awareness about the importance of proper waste management (Serge Kubanza & Simatele, 2020). To address this, the government needs to intensify educational efforts with more personal and interactive approaches, such as workshops and hands-on training. Involving various stakeholders, including schools, social organizations, and local media, in outreach efforts can broaden the reach of information and improve public understanding (Fletcher et al., 2020).

Incentives are also an important element in encouraging community participation. The Palu City Government could consider providing incentives to communities or individuals actively involved in waste management, such as awards or facility support. These incentives not only motivate the public to engage further but also recognize and appreciate their efforts and contributions to keeping the city clean (Innes & Booher, 2004).

Collaboration between the government and the community is also evident in the form of campaigns and mutual cooperation programs. The government frequently organizes environmental clean-up activities involving communities, schools, and local groups (Hung et al., 2022). These mutual cooperation programs not only aim to clean up the environment but also foster a shared sense of responsibility for maintaining environmental sustainability. Such activities help strengthen the sense of ownership and collective responsibility for the city's cleanliness.

One effective form of collaboration is the formation of community groups or organizations that independently manage waste (Brotosusilo et al., 2020). These groups act as intermediaries between the government and the community, assisting in disseminating information and organizing activities such as cleanliness campaigns and recycling programs. Community involvement in these groups not only increases compliance with policies but also fosters a sense of collective responsibility for the environment.

Additionally, the government needs to ensure open and effective communication channels with the community. Discussion forums, workshops, and public consultation sessions can serve as useful platforms for listening to community feedback and concerns about waste management policies (Geekiyana et al., 2021). In this way, the government can adjust its policies and programs based on the feedback received, thereby enhancing their relevance and effectiveness on the ground.

In conclusion, the collaboration between the government and the community in waste management in Palu City is a key factor in achieving sustainable and effective waste management. The synergy between well-designed policies and active public participation can overcome various challenges and bring positive changes to the city's environment. To achieve optimal results, both parties must continuously work together, support each other, and adapt to the existing dynamics and needs. Strong collaboration between the government and the community is the main pillar of waste management policy implementation in Palu City. Without active public support, the government's efforts to provide facilities and regulations will not be optimal. Similarly, without clear policies and guidance from the government, the public will find it difficult to manage waste effectively. Therefore, the success of waste management depends heavily on the harmonious synergy between both parties in fulfilling their respective roles.

The discussion on the role of collaboration between the government and the community in the implementation of waste management policies in Palu City reveals that the success of these policies is highly dependent on the synergy between both parties. The Palu City Government, as the entity responsible for issuing policies and regulations, plays a crucial role in providing the

necessary infrastructure and facilities for waste management. This includes the provision of temporary waste disposal sites (TPS), waste collection fleets, and advanced waste processing mechanisms. However, these efforts will be futile without the involvement of the community, which plays a fundamental role in managing waste at the grassroots level (Nketsiah-Essuon, 2022).

While the Palu City Government has formulated strategic policies to address waste issues, the challenge lies in their implementation on the ground. The policy of waste separation, for example, is a positive step towards reducing the amount of waste sent to TPS. However, the effectiveness of this policy depends largely on the extent to which the public understands and applies the separation system at home. Although the government has conducted various awareness campaigns, there are still challenges in maintaining consistency at the household level (Lou et al., 2020).

Environmental education plays a vital role in raising public awareness about waste management. The Palu City Government has made efforts to educate the public through campaigns, seminars, and outreach programs in various communities. However, a major challenge is reaching all segments of society, particularly those in remote areas with limited access to information about the importance of waste separation and household waste reduction. The success of waste management policies is greatly influenced by the public's understanding and awareness.

Active public participation is not only needed for waste separation but also in more creative and independent waste management activities (Jomehpour & Behzad, 2020). One successful form of collaboration in Palu is the waste bank program, where the community can exchange sorted waste for economic value. This program not only reduces the volume of waste but also provides economic incentives to residents. In addition, local recycling activities show that community collaboration can be more productive if supported by adequate government policies and facilities.

A concrete example of this collaboration is the waste bank program that engages the community in collecting and recycling waste. Citizens collect non-organic waste such as plastics and bottles, which they can exchange for monetary value. This program not only reduces the volume of waste sent to TPS but also provides economic benefits to the community. While the program has been successful in some areas, many regions still show low participation due to a lack of outreach and supporting facilities.

In addition to policies, this collaboration is also reflected in various environmental campaigns and programs initiated jointly by the government and local communities. Periodic communal clean-up efforts, for example, are a tangible form of joint participation. These programs not only serve to maintain city cleanliness but also strengthen social bonds among residents and between the government and the public (Harnik, 2012). Through such programs, citizens feel more directly involved in maintaining cleanliness and waste management, thus fostering strong collective awareness.

Despite the existing collaboration between the government and the community, several challenges continue to hinder the success of waste management policy implementation. One of the primary challenges is inadequate infrastructure, such as an insufficient number of TPS and limited waste collection fleets. Additionally, public attitudes, particularly in peripheral areas, where there is still a lack of concern for proper waste management, present significant obstacles. Effective collaboration requires support from all elements of society and government.

Social and cultural factors also influence the community's behavior regarding waste management (Concari et al., 2020). Some residents are still accustomed to littering due to entrenched habits that are difficult to change. Furthermore, the belief that waste management is entirely the government's responsibility is another barrier to actively involving the public.



Therefore, a more personalized and community-based approach is needed to foster a shared sense of responsibility for maintaining a clean environment.

Technology can offer solutions to improve waste management efficiency and strengthen collaboration between the government and the public. Several major cities in Indonesia have adopted digital technologies to monitor waste management, such as apps that allow residents to report waste accumulation or full TPS locations. In Palu, similar technological developments could help monitor waste distribution and expedite the government's response to waste management issues on the ground.

The government needs to conduct regular evaluations of the effectiveness of waste management programs. These evaluations can involve the community directly, through satisfaction surveys or public discussions about existing programs (Walker et al., 2021). Monitoring is also crucial to ensure that government policies are well-implemented and public participation continues to grow. This evaluation process must be transparent and inclusive, allowing the community to provide input for future improvements.

To enhance collaboration, the Palu City Government must strengthen programs that encourage public participation, such as increasing the number of TPS, adding more waste collection fleets, and providing recycling facilities at strategic points. Additionally, the government should increase the frequency of environmental awareness campaigns and involve civil society organizations in the dissemination of waste management policies. Collaborating with schools and educational institutions is also essential to instill environmental awareness from an early age (Chawla & Chawla, 2007).

Effective collaboration between the government and the community is critical in addressing waste management issues in Palu City. The government plays a role in formulating policies, providing facilities, and overseeing implementation, while the community is responsible for executing these policies at the local level. Although collaboration has already begun, there are still several challenges to overcome, such as inadequate infrastructure and low public awareness in some areas. With a more inclusive approach, increased education, and the utilization of technology, Palu City has the opportunity to improve its waste management system and create a cleaner, healthier environment.

This collaboration can also be seen as a form of sustainable environmental management that cannot be done unilaterally. The government and the community play complementary roles, with the government acting as a facilitator and regulator, while the community acts as the executor in the field. The success of waste management in Palu City will be more easily achieved if both parties continue to coordinate and innovate to create appropriate and sustainable solutions. This collaboration will not only result in a cleaner environment but also foster a more environmentally conscious society.

## CONCLUSION

This study discusses the importance of collaboration between the government and the community in the implementation of waste management policies in Palu City. The findings show that although there are several government initiatives, such as waste banks and recycling programs, the effectiveness of these policies is greatly influenced by the level of community participation. Good collaboration can enhance environmental awareness, reduce the volume of waste generated, and optimize the waste management process, including recycling and waste separation. However, some challenges identified in the implementation of waste management policies in Palu City include the lack of effective coordination between the government and the community, as well as variations in community participation levels. Factors such as education, policy outreach, and infrastructure support from the government also affect the success of this collaboration. Additionally, the study emphasizes that better communication, transparency, and increased active participation from the community are key to improving the effectiveness of waste management policies in Palu City.

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