



The Role of the Government in Waste Management in Bahodopi District

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ABSTRACT

In Bahodopi District, rapid population growth and expanding industrial activities have led to a significant accumulation of waste, revealing shortcomings in infrastructure and public awareness despite the existence of regulations. This study aims to examine how the local government addresses waste management by applying two conceptual frameworks, namely the dynamic aspect and the regulatory aspect, along with the facilitator concept by Ryas Rasyid. Using a qualitative method with a descriptive approach, data were collected through interviews and observations involving officials from the Morowali District Government, the Bahodopi Sub-District Government, the village governments of Keurea and Labota, as well as members of the local community, supported by relevant reports and documents. The findings indicate that government actions are often reactive, occurring only during emergencies or periods of increased public attention, while Regional Regulation No. 5 of 2017 has not been implemented effectively. Major obstacles include inadequate waste management facilities, limited transport fleets, and low public awareness. This study is expected to contribute to the literature on waste governance by local governments in mining areas such as Morowali District.



INTRODUCTION

Waste management is one of the essential aspects of governance and sustainable development, as it is directly related to public health, environmental quality, and the aesthetic value of an area (Wance, 2022). In Bahodopi District, the growing population and industrial activities have led to a significant accumulation of waste, reflecting the inadequacy of waste management infrastructure and low public awareness, despite the existence of regulations. Waste was not a major issue when the population was smaller (Affandi et al., 2018). However, as the population grows and community activities evolve, so do lifestyles and consumption habits, resulting in an increasing volume and variety of waste. This can threaten both the environment and human health if not addressed promptly (Pasa & Cahyanti, 2019). Moreover, it is becoming increasingly difficult for local governments to find suitable locations for waste management programs, including final disposal sites (TPA), integrated waste processing sites, and temporary waste storage facilities (TPS), due to population growth and decreasing availability of land (Prihatin, 2020).

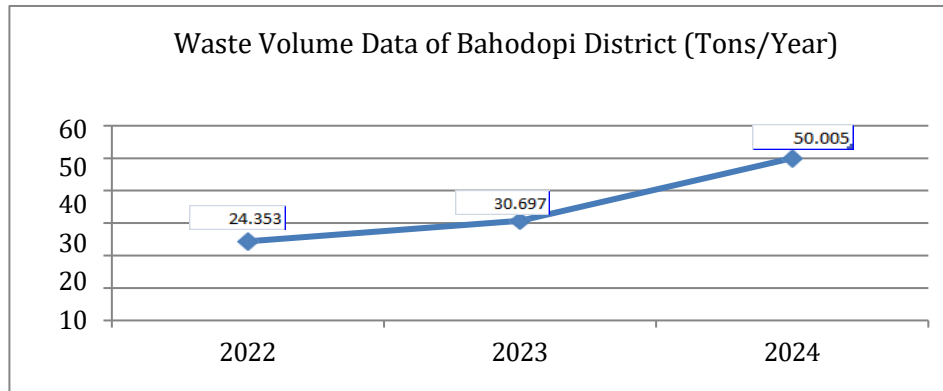
Regency and municipal governments are responsible for planning waste management in accordance with laws, regulations, policies, and guidelines established by the central government (Setiawandari & Kriswibowo, 2023). According to Law Number 18 of 2008 on Waste Management, local governments are required to provide infrastructure and facilities for waste management and assign responsibilities for waste handling and reduction to communities, businesses, and local authorities (Muchsin & Saliro, 2020). Several regions have implemented waste management based on existing regulations such as Minister of Environment Regulation Number 13 of 2012 on the Implementation of Reduce, Reuse, and Recycle (3R) through Waste Banks, and Government Regulation Number 18 of 2009 on Environmental Protection and Management. In addition to these national regulations, each region may have its own local rules such as regent regulations. These regulations are created to govern and monitor specific activities (Arif Waskitha Aji, 2022). Likewise, regulations related to waste management are intended to provide a clear framework, ensure effective implementation, and promote sustainability in waste management (Manurung, 2019). Through such regulations, several key objectives can be achieved, including providing a solid foundation for local governments in managing waste, offering broad opportunities for community involvement in environmental management (Jati, 2018), improving environmental quality and community welfare, and promoting the use of the 3R principles (Reduce, Reuse, Recycle) to transform waste into a resource (Louise Theresia, 2021). With proper implementation of these regulations, waste problems are expected to be addressed more effectively and efficiently.

In many large and medium-sized cities in Indonesia, the inability of local governments to manage waste effectively continues to be a major concern (Dunggio, 2022). This is due to several factors, including inconsistent policies, limited infrastructure, growing population and consumption rates, low public awareness, insufficient budgets, and environmental challenges (Rendy Mohammad, 2019). These factors together create significant obstacles to effective waste management (Darmanto, 2018).

The same situation applies to Bahodopi District. Waste problems in this area have emerged as a consequence of population growth and development activities, as the district includes industrial zones. Waste issues in this region have become common knowledge (Rahmawati, 2023). When visiting the area, one's attention is immediately drawn to piles of garbage along the Trans-Sulawesi highway. The sheer amount of waste accumulation in this district has a negative impact on environmental conditions, public health, and urban aesthetics. Waste piles are found along the Trans-Sulawesi highway in villages such as Keurea, Fatufia, Labota, and other areas within Bahodopi District, creating a deeply concerning situation (Arsyad, 2022).



Figure 1.1 Waste Volume Data of Bahodopi District



Source: Waste Generation Data from the Environmental Agency - DLH

Waste management in this area has faced difficulties due to several issues. The first issue is the limited reach of the Environmental Agency (DLH). Currently, the Morowali District Environmental Agency primarily focuses its waste management efforts on Bungku Tengah Sub-district, as the number of garbage collection vehicles remains inadequate, and there is a shortage of personnel for waste transportation. As a result, waste collection schedules in Bahodopi Sub-district are often unpredictable. Additionally, there is a public perception that the government lacks seriousness in addressing waste issues, as efforts are often only visible during “Environment Day” celebrations or when the government is under scrutiny regarding waste management.

The second issue concerns the impact of waste accumulation in Bahodopi Sub-district. Public health has been affected by the large volume of waste along the Trans Sulawesi highway, which emits foul odors—particularly problematic given the presence of numerous street food vendors in the area. Furthermore, the waste piles contribute to environmental pollution. They can contaminate both soil and water, especially when hazardous materials are involved, thus affecting the quality of groundwater and other community water sources. Another impact is the deterioration of the visual landscape, which reduces the aesthetic value of the area and negatively influences tourism and social activities (Redaksi, 2023). The Morowali Regency Government has issued regulations, particularly Article 21 of Regent Regulation No. 26 of 2017, regarding waste management. In order to control pollution, environmental degradation, and hazardous and toxic materials (B3), the waste management division is required to coordinate, guide, supervise, implement policies, evaluate, and report on waste management, sanitation, and environmental pollution control efforts.

Rifani and Jalaluddin (2018) conducted a study on collaborative waste management. Their research in Samarinda City found that public awareness and engagement with government-led waste management and waste reduction initiatives remained low. This is consistent with the current study, which also found a lack of community participation in outreach and social activities. A second study by Muchsin and Saliro (2020) viewed the issue from a regional regulation perspective, revealing that local governments have limited authority over waste management. Insufficient infrastructure and public awareness were also cited as major barriers. A third study by Arlan (2024) showed that waste management by city and regency governments remains very limited. In some districts, waste management coverage is below 10%, while the provincial average is 62%. In certain areas, waste reduction remains low even where waste management levels are relatively high. Targets set by the national (Jakstranas) and regional (Jakstrada Banten) strategic waste management plans which require 100% waste service coverage by 2025 with 30% from reduction initiatives have yet to be met in many regions.



According to the theory used in this study, government functions are divided into four main roles, which must be carried out ideally and comprehensively to foster community self-reliance (Firdaus, 2020). These four roles are:

1. Regulator: The government sets rules that provide direction and balance for development implementation.
2. Dynamic Agent: The government drives and supports regional development dynamics by encouraging multi-stakeholder participation.
3. Facilitator: The government creates enabling conditions for development implementation by providing infrastructure and facilities, either directly or indirectly through subsidies.

Many stakeholders, including those from the public and private sectors, can benefit significantly from this study. For local governments, the findings offer a foundation for developing more effective waste management policies by strengthening their roles as regulators, dynamic agents, and facilitators. This study also highlights the importance of public participation through education, training, and collaborative programs, which can enhance environmental awareness. Furthermore, it provides insights for the private sector to contribute to the provision of environmentally friendly infrastructure and technologies in support of sustainable waste management. The objective of this study is to examine how local governments address waste management. The conceptual framework includes the roles of facilitator, dynamic agent, and regulator as proposed by Rasyid (2000).

METHOD

This study employs a descriptive method with a qualitative research strategy. This approach was chosen because it allows for the characterization and illustration of the features, attributes, and relationships among various activities within contemporary events, whether naturally occurring or human-made (Rahmadi, 2011). The qualitative approach enables the researcher to thoroughly examine and understand the perspectives of multiple stakeholders, such as government officials and community members, regarding waste management through observation, interviews, and documentation.

Data collection was conducted through direct observation at the research sites, namely Keurea Village and Labota Village in Bahodopi District. Additionally, in-depth interviews were carried out with several informants, including the Morowali Regency Environmental Agency, Bahodopi District government, Keurea and Labota village governments, and local residents. The Environmental Agency was selected as an informant due to its responsibility for formulating, implementing, supervising, planning, and coordinating waste management policies. The Bahodopi District government was chosen because it acts as a liaison between regency-level policies and their implementation at the local level. Village governments were involved because they understand the conditions and challenges of waste management at the village level. The community was included as informants since they directly experience the impacts of inadequate waste management.

In qualitative research, the researcher acts as the primary instrument of the study (Saleh, 2017). The data obtained were analyzed using Miles et al.'s (2014) model, which includes four steps: data collection, data reduction (condensation), data display, and conclusion drawing. Field notes were used to record information gathered through observations, interviews, and documentation. Data reduction involves selecting, focusing, simplifying, abstracting, and transforming data from field notes and interview transcripts. Data display aims to organize and present information systematically to thoroughly describe the observed situation (Nugrahani, 2019; Harahap, 2020). The final stage is drawing conclusions, where the researcher carefully interprets the meaning of the data before making any judgments (Rivaldi, 2020).



RESULT

Local Government's Role in Waste Management

Local governments bear significant responsibility in waste management. Waste must be handled properly to prevent harmful impacts. Waste management cannot be separated from development. Waste accumulation tends to increase alongside population growth, expanding development activities, and changing consumption patterns. Waste management is inherently linked to the government's role as a provider of public facilities and, of course, the government's responsibility to maintain cleanliness in Bahodopi District.

a) The Government's Role as Regulator

The government's regulatory function in waste management is crucial in governance. The government is responsible for formulating policies and regulations related to waste management. Law enforcement is a government duty to ensure all parties comply with established regulations. This includes formulating policies and regulations governing waste management, implementing waste management according to technical standards and guidelines, and supervising the enforcement of these policies and regulations.

Regarding waste management, the Morowali Regency Government has enacted one Regional Regulation (Perda) and one Regent Regulation (Perbup), namely Regional Regulation Number 5 of 2017 and Regent Regulation Number 44 of 2023. Both regulations are related to waste management in Bahodopi District. According to Article 4 of Regional Regulation Number 5 of 2017, the local government is authorized to decide waste management strategies, plan waste management, provide guidance and supervision, designate waste management sites, and conduct evaluations every six months. Meanwhile, Regional Regulation Number 5 of 2017 is technically implemented through Regent Regulation Number 44 of 2023. It was also confirmed that the Environmental Agency is currently drafting regulations concerning waste collection fees.

Article 8 of Regional Regulation Number 5 of 2017 on Waste Management states many provisions, including waste reduction and handling, provision of facilities and infrastructure, partnership development, and community participation, have not yet met expectations. Although Article 8 contains a strategic plan to resolve waste issues, in reality, waste piles are still visible along the Trans Sulawesi road. This indicates that the implementation of these regulations is far from satisfactory.

The implementation of Article 8 remains incomplete and has not been fully realized. This is evident from the limited and slow provision of facilities and infrastructure supporting waste management in Bahodopi District. Furthermore, the slow response to these needs has caused the development of facilities such as temporary disposal sites (TPS) in both villages to progress very slowly, almost stagnant. One main obstacle to the inadequate implementation of the policies above is the lack of effective supervision of regulation enforcement. Although the regulation stipulates that evaluations should be conducted every six months, in practice, many parties only act when pressured, such as during visits from the Environmental Agency or when community complaints escalate.

The implementation of the aforementioned Perda and Perbup is still far from ideal. The piles of waste along the Trans Sulawesi road in Bahodopi District are clear indicators that the waste management system is not functioning properly. This reflects the lack of effectiveness in waste management governance that should have been regulated by the Perda. Based on the researcher's findings, a major factor hindering the enforcement of these regulations is insufficient resources. Without adequate resources, waste management efforts will clearly fall short of expectations.

Other constraints include poor infrastructure. It is well understood that good facilities are crucial to support various programs, including waste management. Without proper disposal sites or adequate equipment, it is difficult to achieve the intended goals. Additionally, public awareness is another challenge that cannot be overlooked. Many people may not fully understand the importance of proper waste management for our environment. Regulations on waste management should be



supported by sufficient resources and infrastructure to ensure the implementation aligns with policy objectives.

In terms of waste management regulations in Keurea and Labota villages, the researcher found that no village regulations (Perdes) exist yet in these two villages. It was discovered that the Perdes planned by the government will not only address waste management but also include waste collection fees for residents in Labota Village. However, this regulation seems to apply only to Labota Village. In Keurea Village, no Perdes related to waste management or collection fees has been established. Currently, Keurea Village does not appear to have plans to discuss a village regulation on waste management.

The following table illustrates the differences in waste management regulations between the district government and the two villages in Bahodopi District.

Morowali District Government	Village Government Keurea	Village Government Labota
Perda No. 5 tahun 2017	-	-
Perbup No.. 44 Tahun 2023		

This is quite surprising, considering that Keurea village is not just any ordinary village. It is actually one of the industrial centers in Bahodopi Subdistrict. Ideally, in a village with such potential, there should be clear regulations regarding waste management. Just imagine, amid rapid industrial development, waste issues become an increasingly prominent concern. The local residents surely feel the impact, especially when they see piles of garbage disrupting the scenery, the environment, and daily community activities. There should be concrete steps taken to address this problem. Perhaps by establishing clear regulations on waste management, everything could be more orderly. With a proper management system in place, residents could live more comfortably, the environment would be cleaner, and Keurea village could become a positive example for other villages.

b) The Role of the Government as a Dynamizer

As a dynamic force in waste management, the government’s role is to inspire, encourage, and mobilize, aligning the relationships among various parties including government agencies, the community, and the private sector to actively participate in waste management. Coordination is a crucial part of this role because it ensures that policies and programs designed can run as intended with the support of all involved parties. In waste management, the government also plays a role by providing guidance, socialization, and outreach. So far, the community in Bahodopi Subdistrict has conducted socialization related to waste, but it has not run effectively.

To improve public knowledge about waste management, the Morowali Regency Environmental Service is always open to invitations to conduct outreach or education activities on waste management. The Environmental Service also has a program to carry out outreach and social service every six months involving the Bahodopi Subdistrict government and PT IMIP. However, the researcher found a different reality, where outreach and social service activities only take place when environmental conditions in Bahodopi Subdistrict go viral on social media and waste conditions become a public concern. When waste piles start to gain attention on social platforms, various parties rush to take action. Although positive actions are taken this way, many feel this strategy is less effective. Ideally, with better planning, outreach and social service activities could be conducted regularly and on schedule.



Socialization or education programs to raise public awareness are also carried out by Labota village and Keurea village. These two villages have different approaches to conducting or delivering education related to waste issues. The Labota village government truly demonstrates its commitment to increasing public awareness of waste management. They plan to conduct socialization every month, which sounds very promising. Additionally, they also use public service moments to provide education daily, especially if residents need more information about waste management. This is a positive step towards fostering greater community concern. However, upon closer observation, there is a different fact on the ground. It turns out the expected monthly socialization is only conducted once a year. Similarly, in Keurea village, which has a unique approach to this issue, the plan is to conduct education every week, even reaching boarding house areas, so that all residents, including those living in boarding houses, can be involved. Unfortunately, in reality, socialization or education in Keurea village also only happens once a year and never directly reaches the boarding house areas.

The researcher also found that the local government, through the Environmental Service and the Subdistrict government, only conducts social service activities on certain days, such as during environmental awareness events. We can imagine that every year, approaching these special days, many people take to the streets to clean up garbage, as if everyone suddenly becomes concerned. But after the celebration ends, social service activities seem to disappear from the government's agenda. Everything returns to normal, and awareness about the importance of protecting the environment gradually fades. This fact is also confirmed through a literature study conducted by the researcher from the article on caamputo.com. From this, it appears that although there is good intention and planned programs, their implementation is inconsistent.

In Bahodopi Subdistrict, there is coordination between the government, businesses, and the community regarding waste management, but unfortunately, it is still not optimal. The government, through its role as a dynamizer, should be the main driving force uniting all parties, including government agencies, the community, and companies, to jointly address the waste problem. However, the reality on the ground shows that good intentions have not been fully followed by consistent and focused actions.

For example, the Environmental Service has programs for outreach and social service to raise public awareness. They also collaborate with PT IMIP in cleanliness activities. However, these activities are often only conducted when waste issues in Bahodopi Subdistrict go viral on social media or during special commemorations such as Environment Day. When the issue is not in the public spotlight, such activities seem to be forgotten.

At the village level, such as in Labota and Keurea villages, there is a commitment to conduct socialization about waste management. The Head of Labota village even announced a monthly program for educating residents. However, the reality on the ground shows that this socialization only happens once a year. It is clear that coordination between the government, companies, and the community still needs improvement. Although there are good intentions from all parties, program implementation and communication are often not synchronized. To truly solve the waste problem, concrete, scheduled steps involving all parties are needed, not just relying on certain moments. If all parties government, companies, and the community consistently work together, Bahodopi Subdistrict would more easily achieve a hygienic and safe environment.

c) The Role of the Government as a Facilitator

The government's function as a facilitator is to create conducive conditions for development implementation by integrating various community interests through the provision of infrastructure, both physical facilities and direct subsidies. As the responsible party, the government must provide adequate facilities such as temporary disposal sites and recycling facilities. The local government, through the Environmental Service, has provided waste management facilities to the Bahodopi



Subdistrict government, including nine amrol units, eight garbage trucks, twenty-six three-wheeled vehicles, and thirty-four containers to assist. This assistance was given on June 30, 2024. In addition, budget support was also provided, covering the salaries of sanitation workers and fuel needs.

It is also confirmed that the government will provide assistance for the construction of 11 TPS 3R (reduce, reuse, recycle waste processing sites) and 1 TPST (waste processing site). Currently, the construction process of waste management facilities in Bahodopi Subdistrict, such as Waste Processing Sites based on the principles of Reduce, Reuse, Recycle (3R) and one Integrated Waste Processing Site, still faces many challenges. This project is very important to address the increasing waste problem in the area, but various obstacles have prevented the construction from fully commencing. One of the main issues for building the 11 TPS 3R is the availability of land. The village governments in Bahodopi Subdistrict still need to secure suitable locations for these waste processing sites. According to findings, Keurea Village has actually taken a step forward by preparing land for the TPS construction. However, a different situation occurs in Labota Village, where no land has yet been allocated. This certainly delays the much-anticipated construction process by the community.

Meanwhile, the construction of the Integrated Waste Processing Site (TPST), planned to be built on a 20-hectare plot, has also not progressed as expected. This project is a collaboration between the Morowali Regency Environmental Service and PT IMIP, a significant initiative that shows a real commitment to tackling waste problems in the region. However, a major obstacle comes from the land status to be used. The land is currently classified as Conversion Production Forest (HPK), which requires a status change to Land Management Rights (HPL). The process of changing the land status is not straightforward and requires time as well as intensive coordination between the local government and relevant agencies. This is the main bottleneck hindering the TPST construction. In fact, this facility is designed to be a central waste processing center capable of handling waste from across Bahodopi Subdistrict.

This highlights the importance of more intensive coordination between the local government, villages, and other related parties. All stakeholders must come together, find solutions, and accelerate the ongoing processes. Villages that have not yet prepared land need to act promptly, while the local government must work harder to expedite the land status change for the TPST. Otherwise, the construction of this very important facility will remain just a plan without real execution. This situation also serves as a reminder that waste management issues are not only about facilities but also about the seriousness of taking concrete steps. Good coordination, strong commitment, and close cooperation are key to overcoming the existing obstacles. If everything goes well, it is possible that the people of Bahodopi Subdistrict will soon benefit from the planned facilities. But for now, hard work is still very much needed to make this dream come true.

In Labota Village, the village government has actually tried to take on the role of facilitator to help manage the accumulating waste. Collaboration with management is one of the actions taken by PT IMIP to transport waste along the Trans Sulawesi road. In addition, Labota Village also has one garbage truck relied upon to reach the alleys of residential areas. Similarly, Keurea Village also operates one garbage truck daily. However, when we look at the reality on the ground, the situation is not as ideal as expected. Although it is stated that the garbage trucks operate every day, the reality is different from what is hoped for. With such a large volume of waste and relying on only one truck per village, the task of waste collection is challenging. Garbage trucks often cannot reach all locations, including the small alleys within residential neighborhoods.



Figure 1. Condition of waste in Bahodopi District



Source: Author's Documentation

Just imagine, in a single hamlet, the piles of garbage are already quite large. With limited time and manpower, the sanitation workers cannot complete waste collection in one hamlet and then immediately move to another location on the same day. As a result, waste collection in each hamlet is limited to two or three times per week. This, of course, impacts the environment. Garbage that is not collected regularly accumulates, produces unpleasant odors, and becomes an unsightly problem for the community. In fact, the lack of vehicles and personnel is the main issue in waste management in both villages. Despite good intentions and efforts from the village governments, the reality on the ground shows that the available facilities are still far from adequate to handle the daily increasing volume of waste. Consequently, although there are efforts, waste management has not been fully effective. This task needs to be resolved immediately so that Labota Village and Keurea Village can become cleaner and more comfortable environments for their residents.

The problem above actually has a solution in the form of assistance with garbage trucks. The Head of Labota Village stated that this aid is sufficient to address the waste problem. The same was expressed by the Deputy Head of Keurea Village. However, based on the researcher's findings, the facilities provided by the Regional Government have not yet been put into operation in these two villages. Both villages still plan to hold meetings before using the provided facilities. While the village governments are still in the planning and discussion stages, the volume of waste continues to increase daily. This, of course, makes the situation more urgent. Just imagine, every day new waste keeps piling up, while the old waste has not yet been collected or properly managed. If left unattended, the garbage piles will not only be an aesthetic problem but will also negatively affect public health. The slow response from these two villages clearly does not align with the existing conditions. Ideally, the village governments should promptly conclude their meetings or internal discussions and focus on how to immediately operate these facilities. The sooner these facilities become operational, the greater the positive impact on the environment.



DISCUSSION

The findings of this study indicate that the government functions in Bahodopi District in waste management still face various challenges, such as a lack of supporting facilities, low public awareness, and limited sustainable government efforts. This research found that the government's roles as regulator, dynamic actor, and facilitator have not been fully optimized, resulting in waste management often being reactive to public scrutiny or emergency situations. Regulations such as Regional Regulation No. 5 of 2017 and Regent Regulation No. 44 of 2023 already exist, but their implementation remains far from adequate.

A comparison with previous studies, such as those by Rifani and Jalaluddin (2018), shows that while the government's role as regulator is relatively strong, its implementation in the field is often hindered by weak law enforcement and limited effective sanctions. In the context of Bahodopi, although regulations have been issued, the lack of routine supervision and evaluation makes these regulations more of a formality, differing from Hamdan's findings that emphasize the importance of consistent enforcement. The research by Muchsin & Saliro (2020) highlights that the main obstacles in waste management are the scarcity of infrastructure and low community participation. These findings align with the conditions in Bahodopi District, where the number of waste disposal sites (TPS) is insufficient, and the limited waste collection fleet is a major barrier. However, this study adds the importance of collaboration between the public and commercial sectors to develop more sustainable solutions.

Meanwhile, Arlan (2024) notes that waste management remains inadequate in many regions of Indonesia, with average waste service coverage only reaching 62%. In Bahodopi, this is reflected in the mismatch between waste management efforts and the volume of waste generated daily. A significant difference in this study is the emphasis on the need for a participatory approach, where the community must be actively involved in waste management efforts.

The results of this study have important implications for future government practices and policies. By understanding their roles as regulator, dynamist, and facilitator, the government can develop more effective data-driven policies. The implementation of waste management policies in Bahodopi requires evaluation and adjustment of existing regulations to be more adaptive to local challenges, including ensuring sustainability through multi-stakeholder collaboration.

With these findings, it is expected that the government can improve the waste management system through concrete steps such as accelerating the development of waste disposal sites, increasing the capacity of waste collection fleets, and providing education and training to the community. This can also encourage greater environmental awareness at the community level, thus creating a more efficient, sustainable waste management system with positive impacts on public health and environmental quality in Bahodopi District.

CONCLUSION

This study focuses on waste management in Bahodopi District, which faces significant challenges due to population growth and industrial activities. The study aims to investigate how the government can address waste issues in its roles as regulator, facilitator, and dynamist. The findings show that although regulations such as Regional Regulation No. 5 of 2017 and Regent Regulation No. 44 of 2023 have been issued, their implementation remains suboptimal. The government often responds reactively to public scrutiny, and the lack of facilities, waste collection fleets, and public awareness are major obstacles. Furthermore, coordination among the local government, community, and private sector has not been effective, resulting in inefficient waste management. The contribution of this study includes providing insights to formulate more effective data-driven policies and promoting community involvement in waste management. These findings can also be used to strengthen synergy among stakeholders in building a more sustainable waste management system, which will ultimately improve the environmental quality and the welfare of the people in Bahodopi District.



REFERENCES

- Adlini, M. N., Dinda, A. H., Yulinda, S., Chotimah, O., & Merliyana, S. J. (2022). Metode Penelitian Kualitatif Studi Pustaka. *Edumaspul: Jurnal Pendidikan*, 6(1), 974–980. <https://doi.org/10.33487/EDUMASPUL.V6I1.3394>
- Akbar, T., & Alfian, F. (2018). Kampung Tematik Sebagai Bentuk Partisipasi Masyarakat Dalam Permasalahan Permukiman Kumuh di Kota Malang. *WAHANA*, 70(2), 37–48. <https://jurnal.unipasby.ac.id/index.php/whn/article/view/1741/1576>
- Assadiqie, J. G. (2019). *Implementasi Kebijakan Pengembangan Kampung Tematik Bambu Mewek Kelurahan Tunjungsekar Kota Malang*. Skripsi. Universitas Muhammadiyah Malang.
- Barenlitbang Kota Malang. (2017). *Laporan Akhir Penyusunan Permasalahan/Isu Strategis dan Prioritas Kebijakan Pembangunan Daerah Bidang Pembangunan Manusia, Masyarakat, Sosial, dan Budaya Kota Malang Tahun Anggaran 2017*.
- BPS. (2018). *Jumlah Penduduk Menurut Kecamatan dan Jenis Kelamin di Kota Malang*. Badan Pusat Statistik Kota Malang. Diakses pada Desember 2024 dari <https://malangkota.bps.go.id/indicator/12/48/2/jumlah-penduduk-menurut-kecamatan-dan-jenis-kelamin-di-kota-malang.html>
- Hamka, H., & Afdholy, A. R. (2022). Konsep arsitektur tepi air pada Permukiman Tepian Sungai Kampung Biru Arema, Tridi dan Warna-Warni Jodipan Kota Malang. *JURNAL ARSITEKTUR PENDAPA*, 5(1), 20–28. <https://doi.org/10.37631/PENDAPA.V5I1.590>
- Kolawole, A., William, A., & Wasuu, A. (2018). Ecological Determinants and Challenges of Public Policy Formulation and Implementation in Nigeria. *Journal of Social Science for Policy Implications*, 6(1), 1–9. <https://doi.org/10.15640/JSSPI.V6N1A1>
- Malangkota. (2016). *Lomba Kampung Tematik 'Festival Rancang Malang.'* Pemerintah Kota Malang. Diakses pada Desember 2024 dari <https://malangkota.go.id/2016/08/11/lomba-kampung-tematik-festival-rancang-malang/>
- Malangkota. (2022). *Bank Dunia Puji Penanganan Kawasan Kumuh Kota Malang*. Pemerintah Kota Malang. Diakses pada Desember 2024 dari <https://malangkota.go.id/2022/06/17/bank-dunia-puji-penanganan-kawasan-kumuh-kota-malang/>
- Pradana, A. H. (2019). Pilar-Pilar Eksistensi Dan Keberlanjutan Kampung Kramat: Kampung Tematik Di TPU Kasin Kota Malang. *Jurnal Planoeath*, 4(2), 58–67. <https://doi.org/10.31764/JPE.V4I2.947>
- Pratama, R. K. (2022). *Pemkot Malang Suntik Dana Rp650 Juta untuk 13 Kampung Tematik*. TIMES Malang. Diakses pada Desember 2024 dari <https://malang.times.co.id/news/berita/23d928nk0v/Pemkot-Malang-Suntik-Dana-Rp650-Juta-untuk-13-Kampung-Tematik>
- Qin, M., Sun, M., & Li, J. (2021). Impact of environmental regulation policy on ecological efficiency in four major urban agglomerations in eastern China. *Ecological Indicators*, 130, 1–13. <https://doi.org/10.1016/j.ECOLIND.2021.108002>
- Rahma, S. (2021). *Pemkot Malang Buka 22 Kampung Tematik, Wajib PeduliLindungi*. Radar Malang Online. Diakses pada Desember 2024 dari <https://radarmalang.jawapos.com/wisata-malang/04/10/2021/pemkot-malang-buka-22-kampung-tematik-wajib-pedulilindungi/>
- Ratri, N., & Helmy, Y. (2018). *Barenlitbang Kota Malang Petakan Enam Masalah Besar Metropolitan, Apa Saja?* Malang Times. Diakses pada Desember 2024 dari <https://www.malangtimes.com/baca/26975/20180426/150348/barenlitbang-kota-malang-petakan-enam-masalah-besar-metropolitan-apa-saja>
- Ryo. (2021). *BPS: SP2020 Jumlah Penduduk Kota Malang 843.810 Jiwa*. Dinas Komunikasi Dan Informatika Provinsi Jawa Timur. Diakses pada Desember 2024 dari <https://kominfo.jatimprov.go.id/read/umum/bps-sp2020-jumlah-penduduk-kota-malang-843-810-jiwa>
- Sakdiyah, C., & Rahmawati, D. (2021). Strategi Penanganan Permukiman Kumuh Kawasan DAS Metro Kota Malang Berdasarkan Prinsip Sustainable Development Goals (SDGs). *Jurnal Teknik ITS*, 9(2), 223–230. <https://doi.org/10.12962/j23373539.v9i2.56280>



- Sakti, L. P. (2022). *Kampung Tematik Kota Malang kini Sudah Mulai Usang dan Hilang*. Wearearemania. Diakses pada Desember 2024 dari <https://www.wearemania.net/ngalam/kampung-tematik-kota-malang-kini-sudah-mulai-usang-dan-hilang/17545>
- Setyono, D. A. (2018). Analisa Tingkat Kesiapan Pengembangan Kampung Tematik di Kota Malang. *Prosiding Seminar Nasional Asosiasi Sekolah Perencanaan Indonesia (ASPI)*, 605–611.
- Sinkule, B. J., & Ortolano, L. (1995). *Implementing environmental policy in China*. Praeger Publishers.
- Sugiyono. (2015). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R&D* (21st ed.). Alfabeta. <http://inislite.uin-suska.ac.id/opac/detail-opac?id=20670>
- Sukowati, R. T. (2022). Perubahan Ruang Kampung Kota menjadi Destinasi Wisata melalui Program Kampung Tematik. *Jurnal Sosiologi Pendidikan Humanis*, 7(1), 27–43. <https://doi.org/10.17977/UM021V711P27-43>
- Syafi'i, I. (2016). *Kampung Bamboo Mewek Juara I Lomba Kampung Tematik Festival Rancang Malang*. Malang TIMES. Diakses pada Desember 2024 dari <https://www.malangtimes.com/baca/15374/20161113/060703/kampung-bamboo-mewek-juara-i-lomba-kampung-tematik-festival-rancang-malang>
- Widyarthara, A., & Rizqi Afdholy, A. (2022). Karakteristik Permukiman Kampung Tematik di Kota Malang. *PAWON: Jurnal Arsitektur*, 6(1), 95–108.