

Implementation of Waste Management Policy in Pekanbaru City from a Public Administration Perspective

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ABSTRACT

The purpose of this study is 1) to determine the form of community participation in waste management in Pekanbaru City, and 2) to determine the factors that influence community participation in waste management in Tuah Madani District, Pekanbaru City. The informants involved in this study are the sub-district head, the head of the neighborhood association (RT), the community, and the Waste Bank Management Coordination. This study uses the concept of Regional Regulation Number 08 of 2014 concerning Waste Management. Data collection techniques use open interviews, observations, and documentation studies in the field. Based on the results of the study, it shows that community participation is categorized as moderate, meaning that the community participates but in its implementation it is still not said to be optimal. Community participation is carried out through mutual cooperation and for transportation is done in the morning and afternoon, done twice a week. And there are several factors that influence it, including the character of residents who do not care and the location of the waste bank is far away.

INTRODUCTION

In today's modern era, with rapid economic growth and urbanization, including in Pekanbaru, there has been a significant increase in waste production and environmental pressure. With these emerging issues, effective and ongoing waste management is crucial for maximizing sustainability in sustainable development.

Waste is a problem that is never separated from the dynamics of development in every city, including Pekanbaru. With high community activities, the volume of waste continues to increase, coupled with low public awareness and support for waste management, and minimal infrastructure and inadequate waste facilities, it is a challenge for the Pekanbaru City Government in realizing sustainable waste management. To address this problem, a waste management system is needed that includes collection, transportation, processing, and final disposal which is an important public service to protect the environment and public health. The problem of waste management is now a real challenge that must be faced by the urban community of Pekanbaru .

Waste management is a complex process that involves many parties, such as local governments, business actors, and the community as waste producers. The goal of waste management is to reduce the amount of waste produced, reuse and recycle whenever possible, and ensure that the final disposal process is carried out safely for the environment. Waste management must be carried out comprehensively and integrated from the waste source to the final processing. This is important because waste has become a national issue, so that real steps are needed to manage waste effectively and sustainably from upstream to downstream in order to be able to reduce negative impacts on the environment. The negative impacts of suboptimal waste management can cause environmental damage, threats to public health, and economic losses, which are contrary to the principles of sustainable development.

Environmental issues related to waste also occur in many regions in Indonesia, and Pekanbaru City is one of them. In this context, Pekanbaru is the focus of this study because it frequently faces problems with waste accumulation and suboptimal waste management. As the capital of Riau Province and a center of economic activity, Pekanbaru should be able to implement a better waste management system in line with the acceleration of development and urbanization.

In Pekanbaru City, waste remains a persistent issue, affecting nearly all areas. The issues that arise are primarily related to the technical aspects of waste management and transportation. This has become a common problem and has not been fully resolved. Furthermore, the volume of waste generated by the community is increasing, while land for Final Processing Sites (TPA) remains limited. Pekanbaru currently relies on the Muara Fajar TPA, but its capacity is increasingly limited, meaning that not all daily waste can be accommodated. According to information from the Pekanbaru City Environment and Sanitation Agency (DLHK), daily waste production can reach more than 800-1,000 tons, but not all of it can be transported and processed at the TPA due to limited capacity and fleet. This situation has led to the emergence of illegal TPS (landfills) in several areas of the city due to unmanaged waste. The waste problem in Pekanbaru is becoming increasingly complex due to the increasing

population each year, which is directly proportional to the increase in waste generation. Data from relevant agencies shows that Pekanbaru's population growth from year to year is accompanied by a significant increase in waste production.

Picture

Amount of Waste Generated in Pekanbaru City from 2019-2024



Source: <https://sipsn.menlhk.go.id/sipsn/>)

From the image above, it can be seen that the amount of waste production in Pekanbaru City increases annually, reaching around 369,019.82 tons in 2024. The average daily waste generation in Pekanbaru City is 800-1,000 tons. And from several research results, it is stated that the above problems are also caused by the limited number of final waste disposal sites, the lack of facilities and infrastructure for waste transportation, and the lack of community participation in disposing of waste, the limited ability of the Regional Government to manage the waste.

Another factor exacerbating this situation is the high volume of waste generated in Pekanbaru, which remains below the target for waste reduction and management set by the local government. Despite efforts to reduce waste through waste bank programs, 3R waste disposal sites (TPS), and waste management education, waste reduction has not been maximized and targets have not been met. The percentage of waste managed has also not reached the ideal level, according to the expected management targets. Pekanbaru City's waste management strategy in recent years has not achieved optimal results. The management percentage remains in the middle range, indicating that the current system is unable to meet the challenges of a growing population and increasing waste volume. Furthermore, waste transportation facilities and infrastructure, such as truck fleets, are still deemed inadequate to handle the city's enormous daily waste volume.

The Pekanbaru City Government is certainly not standing idly by in addressing this issue. Various efforts are being implemented through regional policies and strategic programs. According to regional regulations on waste management, the

primary goals of waste management are to improve public welfare and environmental quality, utilize waste as a resource, increase the efficiency of raw material use, and encourage changes in community behavior regarding waste management.

Based on the objectives set out in regional policies, the Pekanbaru City Government strives to mobilize public participation in waste reduction and management programs. The processes of sorting, collecting, transporting, managing, and final processing are essential parts of the waste management cycle. Waste reduction encompasses the application of the 3R principle: reduce, reuse, and recycle. The Pekanbaru City Government is expected to develop a waste management system that actively involves the community to better address waste issues.

Considering the above background, it is important to conduct research on waste management in Pekanbaru City because the results will help identify problems in the implementation of policies that have not been running optimally. Therefore, the research questions that want to be answered are how the Pekanbaru City Government implements its policies in resolving waste management issues, What is the Role of DLHK and Community Participation in Supporting Waste Management Policies in Pekanbaru City and what are the supporting and inhibiting factors in the implementation of these policies?

LITERATURE REVIEW

A. Public Policy

Public policy is a broad concept and fundamental to the governance of a country. When the terms "policy" and "public" are combined, their meaning becomes more complex than either term's individual understanding. In the context of Pekanbaru City, a large and continuously developing city, public policy plays a strategic role in guiding city governance so that it is not dominated by the interests of a particular group. As Nugroho (2009) points out, a government without clear public policy will result in the management of shared life favoring only a handful of parties.

Public policy also encompasses governance, which regulates how government interacts with the public. According to Dye (2002) and Anderson (2000), public policy is the government's choice to act or not to act in response to public issues. In Pekanbaru, this is evident in various policies related to public services, particularly in waste management, transportation, and urban environmental management. Public policy not only guides the direction of development but also aims to ensure that these policies provide tangible benefits to the public.

As an instrument of governance, public policy does not merely pursue political or economic interests, but is directed toward achieving the shared interests of the Pekanbaru community, such as fair service delivery, transparency, and the resolution of social problems. This also includes efforts to protect the public from the negative impacts of unscrupulous management practices, while simultaneously opening up opportunities to improve the quality of life for city residents (Handoyo, 2012).

B. Implementation of Public Policy

According to Hill & Hupe (2019), public policy implementation is a crucial phase in the policy process, where government decisions are translated into concrete actions. In the Pekanbaru context, implementing policies such as waste management, parking, and urban planning requires resource organization, inter-agency coordination, public communication, and consistent monitoring and evaluation. Effective implementation is key to ensuring that policy objectives are truly felt by citizens.

Public Policy Implementation Model (Edward III)

In Edward's view, for policies to be effective in areas like Pekanbaru, there are four factors that determine success:

1. Communication

The success of policy implementation depends heavily on the extent to which it is understood by both implementers and the public. In Pekanbaru, policy socialization and information dissemination are often major challenges.

2. Resource

Implementing policies such as urban waste management requires sufficient human resources, supporting facilities such as waste collection fleets, and budget support from the city government.

3. Disposition

Policy implementers must have a strong attitude and commitment. In Pekanbaru, the awareness and commitment of officials in implementing policies significantly impact the quality of implementation on the ground.

4. Bureaucratic Structure

The bureaucracy, as the implementer of policies, must be able to coordinate effectively. If Pekanbaru's bureaucratic structure is slow or inefficient, the implementation of policies such as the city's cleanliness policy will be hampered.

C. Community Participation

This study emphasizes community participation in Tuah Madani District. Arnstein's Ladder of Citizen Participation can be used to measure the extent of community involvement (from mere symbolic involvement to community control). Furthermore, Isbandi's theory of development participation is also relevant, emphasizing the role of the community in planning, implementation, and evaluation. (Arnstein, 1969; Isbandi, 2019)

D. Waste Management

According to Slamet (1994), successful waste management, whether in large areas like Pekanbaru City or smaller areas, is largely determined by community participation. In Pekanbaru, households and businesses are the largest waste producers, so their active role is crucial.

In urban areas like Pekanbaru, waste collection is the responsibility of the Environment and Sanitation Agency, supported by community participation, particularly in terms of compliance with waste disposal in designated areas and at

designated times. This participation can include maintaining environmental cleanliness, sorting waste at home, and supporting the waste bank and 3R waste disposal sites (TPS) programs currently being implemented in several sub-districts. If not managed properly, Pekanbaru's waste problem can lead to soil, air, and water pollution, as well as disrupt the city's environmental comfort. Therefore, public awareness of reducing waste volume, disposing of waste according to regulations, and participating in environmental management is urgently needed.

E. Public Administration

Public administration is the process of governing a non-profit government aimed at maximizing public benefit. In the context of Pekanbaru, public administration is evident in how the city government organizes resources to serve community needs, such as sanitation, education, and health services.

According to Chandler and Plano in Keban (2008:4), public administration is the process of organizing and coordinating public resources to formulate and implement policies. This is evident in how the Pekanbaru City Government acts as a regulator and implementer of policies, particularly on strategic issues such as waste management and improving the quality of public services.

From all these views, it can be concluded that public administration is collective work between the government and the community to realize effective and efficient public policies in Pekanbaru City.

RESEARCH METHODS

This study uses a qualitative method with a descriptive approach, because it aims to understand in depth the process of implementing waste management policies in Pekanbaru City from a public administration perspective. This approach was chosen so that researchers can describe and analyze phenomena that occur in the field naturally, by focusing on the meaning, processes, and social interactions that arise during policy implementation. The research location was Pekanbaru City, Riau Province, because this city faces various waste management problems such as increasing waste volume, limited infrastructure, and the effectiveness of local government policies in waste management. The types of data used consist of primary data and secondary data. Primary data were obtained through in-depth interviews and field observations with parties involved in policy implementation, such as officials and staff of the Pekanbaru City Environmental and Sanitation Agency (DLHK), sanitation workers, and the community. Secondary data were obtained from official documents, regional regulations, performance reports, and relevant scientific literature. Informants in this study were determined using purposive sampling, selected based on their relevance to and knowledge of waste management policies. Data collection techniques included in-depth interviews, direct observation, and documentation studies.

The data obtained were then analyzed using the Miles and Huberman interactive model, which includes three stages: data reduction, data presentation, and conclusion drawing. To ensure data validity, source and method triangulation

techniques were used, as well as the application of the principles of credibility, dependability, and confirmability so that the research results are credible and scientifically accountable. With this method, it is hoped that the research will be able to provide a comprehensive picture of the effectiveness, obstacles, and factors influencing the implementation of waste management policies in Pekanbaru City within the framework of public administration.

RESULTS AND DISCUSSION

Reasons Why the Implementation of Waste Management Policy in Pekanbaru City is Ineffective

The Pekanbaru City Environment and Sanitation Agency (DLHK) plays a crucial role in achieving clean and healthy environmental governance through the implementation of waste management fees. However, several obstacles remain in its implementation, impacting the program's effectiveness. These obstacles can be observed in human resources, oversight functions, and community involvement. These three aspects are interrelated and determine the local government's success in optimizing levy revenue while improving the quality of public services in the sanitation sector.

The limited number of field personnel is a prominent obstacle in the provision of sanitation services. The reality on the ground shows that the available manpower is not commensurate with the area covered. As a result, operational activities such as waste collection, monitoring of disposal points, and maintenance of sanitation facilities often fail to run optimally. This situation not only leads to waste accumulation in several locations but also raises public dissatisfaction with the quality of services provided. In the context of public administration, this limited human resources indicates a gap between organizational capacity and the workload. Therefore, local governments need to consider adding casual or contract workers to strengthen policy implementation. Furthermore, training and competency improvement are also crucial to enable the existing workforce to work more effectively and professionally.

The next problem lies in the weak oversight function carried out by the Environment and Forestry Agency (DLHK). Oversight should be the primary instrument in ensuring that public policies are implemented according to established regulations and objectives. However, in practice, the oversight function of waste levy collection remains suboptimal, both internally and in coordination with other relevant parties. For example, the control mechanism for budget utilization has not been optimally implemented, thus opening up opportunities for irregularities at the implementing and management levels. Furthermore, oversight of levy payers remains weak, evident in the lack of firm action against members of the public or business owners who default on their payment obligations. Enforcement procedures, such as issuing warning letters, imposing administrative sanctions, and imposing fines, have not been implemented consistently. This situation has implications for low levels of public compliance, which ultimately hinders the optimization of regional levy revenue. Therefore, strengthening internal and external oversight functions is a strategic step to increase accountability and prevent potential irregularities.

In addition to resources and oversight, public participation also plays a crucial role in supporting the implementation of the sanitation levy policy. A high level of public participation will drive the policy's success, as levy revenue is highly dependent on compliance with levy obligations. However, on the ground, public participation in Pekanbaru City remains relatively low. Many businesses and households choose to manage their own waste or dispose of it in temporary landfills without paying the levy. This low participation is closely linked to negative perceptions of the quality of government services. Some residents feel that waste collection services are irregular, that sanitation fleets do not cover all areas, or that officers do not always arrive on schedule. These conditions create reluctance and distrust in paying the levy. In other words, poor service quality is a key factor hindering the growth of public participation.

From a public administration perspective, low public participation indicates that the retribution policy has not fully met the principles of effectiveness and responsiveness. Public policy should not only contain formal regulations but also consider the needs and satisfaction of the public as service users. Therefore, a strategy to increase participation needs to be implemented through two approaches. First, improving the quality of sanitation services by improving the transportation system, expanding service coverage, and providing adequate facilities. Second, strengthening public outreach and education regarding the importance of paying retribution as a contribution to creating a clean and healthy environment. If these two approaches are implemented consistently, it is hoped that public trust and compliance will increase.

Overall, the obstacles faced by the Pekanbaru City Environment and Forestry Agency (DLHK) in implementing the waste service levy policy cannot be viewed as isolated issues. These include limited human resources, weak oversight, and low participation. Community participation is an interconnected issue. Therefore, a comprehensive strategy is needed that goes beyond increasing personnel or improving oversight, but also builds collective public awareness. These efforts must be supported by the local government's commitment to providing adequate budgets, facilities, and infrastructure. This way, the sanitation levy policy can be implemented more effectively, transparently, and sustainably, while also bringing tangible benefits to improving environmental quality in Pekanbaru City. (Ulfa Amalia, 2022).

The Role of DLHK and Community Participation in Supporting Waste Management Policies in Pekanbaru City

Waste management in Indonesia has a strong legal basis, as stipulated in Law Number 18 of 2008 concerning Waste Management. This law explains that waste management is a series of activities carried out systematically, comprehensively, and continuously. These activities encompass two main aspects: waste reduction efforts and the management of waste that has been generated. The main objectives of this policy are to maintain public health, reduce the negative impacts of waste, and improve environmental quality to maintain a livable environment. Through this regulation, the government emphasizes that waste is a critical issue that must be managed in a planned manner and is an integral part of sustainable development.

Responsibility for waste management lies not solely with the central government but also with local governments. Local governments play a strategic role in developing policies that encourage active community involvement. In Pekanbaru City, the Department of Environment and Sanitation (DLHK) plays a crucial role in implementing waste management policies. The DLHK not only carries out technical operational tasks but also actively engages in outreach and environmental education for the community. These activities aim to raise awareness of the importance of properly disposing of and sorting waste, as well as fostering community behavior that is more concerned with cleanliness and environmental sustainability. With increased collective awareness, it is hoped that a new, more environmentally friendly culture will emerge within the community.

In addition to education and outreach, the provision of facilities and infrastructure is also a crucial aspect in supporting successful waste management. This includes the availability of suitable Temporary Storage Sites (TPS), adequate waste collection fleets, and environmentally friendly Final Processing Sites (TPA). The Pekanbaru City Government has issued Regional Regulation No. 08 of 2014 concerning Waste Management as the legal basis and guidelines for providing these facilities. This regulation emphasizes the need for collaboration between the government, the private sector, and the community to create an effective waste management system. With strong regulatory support and adequate facilities, it is hoped that community participation will increase so that the waste problem can be addressed comprehensively.

Community participation in environmental management is also regulated in Article 70 of Law Number 32 of 2009 concerning Environmental Protection and Management, which provides equal rights and opportunities for the community to participate in environmental protection. The main objective of this provision is to foster a sense of collective responsibility for environmental sustainability. Through community involvement, waste management problems can be significantly reduced. This participation can take the form of mutual cooperation activities for cleaning, sorting household waste, and support for government programs such as waste banks. The higher the level of community awareness and involvement, the greater the opportunity to reduce the volume of waste that continues to increase every day.

According to Sugih (2012), community participation is a form of active citizen involvement through contributions of labor, ideas, and funds, which is a key factor in successful development. In the context of waste management, participation is not merely about participating in cleaning activities, but also reflects the growth of social responsibility that arises from individual awareness. When the community actively participates, government programs are easier to implement because they receive real support from the community at the grassroots level.

Furthermore, according to Isbandi in Syamsudin (2019), community participation encompasses several important stages such as problem identification, mapping community potential, selecting solutions, implementing programs, and evaluating results. Therefore, participation means not only being present at activities but also participating in the decision-making process and assessing changes. In waste

management, this can be seen through community involvement in designing waste bank programs, determining sorting methods, and assessing the effectiveness of waste reduction in the surrounding environment. This active involvement demonstrates that the success of sustainable waste management can only be achieved if the community is positioned as the primary subject, not merely the object of government policy (Putri Fadilah Aisyah, 2023).

Factors That Support and Inhibit Waste Management in Pekanbaru City

Supporting factors

The success of waste management in Pekanbaru City is greatly influenced by the level of community participation. This is because the primary source of waste comes from human activities, whether at home, school, office, or business. Individual awareness of sorting and managing waste at its source is a key factor in creating a clean and healthy environment. When the community commits to active involvement, waste management will be more effective and foster a sustainable, clean lifestyle.

One tangible form of community support is the practice of separating organic and inorganic waste. Organic waste can be used as compost, while inorganic waste, such as plastic and paper, can be recycled, preventing it from ending up in landfills. This simple step not only reduces waste volume but also creates economic opportunities through the sale of recycled materials.

Furthermore, self-help groups or environmental communities have emerged that play an active role in waste management. They typically organize activities such as outreach, community service clean-up efforts, and even the establishment of waste banks. The existence of waste banks has been proven to have a dual impact—in addition to reducing waste generation, they also improve community well-being through economic benefits. Thus, waste management activities not only benefit the environment but also have social and economic value.

Social and cultural factors also play a crucial role. A community accustomed to clean living fosters a collective awareness of cleanliness. Strong social norms can discourage littering and foster more disciplined citizen behavior. Therefore, synergy between the community and the government is essential. Without active citizen support, government programs will struggle to achieve optimal results. Conversely, if government facilities are inadequate, community participation will also be ineffective.

Inhibiting factors

Despite various supporting factors, waste management in Pekanbaru still faces several obstacles, particularly in terms of facilities and infrastructure. One major problem is the lack of Temporary *Disposal Sites (TPS)*. The limited number of TPS makes it difficult for residents to dispose of waste in the proper locations, so many dispose of it in unofficial locations such as vacant lots, roadsides, or rivers. Even some TPS that do exist are in inadequate condition, both in terms of capacity and cleanliness, often causing unpleasant odors and excessive piles of waste.

The limited number of trucks available for waste collection is also a significant issue. The annual increase in waste volume is not matched by the number of available

trucks. As a result, much waste is not collected on time, causing piles of garbage in various parts of the city. Besides damaging the aesthetics of the environment, this situation also increases the risk of disease transmission by creating breeding grounds for animals and insects.

Another ongoing issue is the decreasing capacity of *landfills (TPA)* . Currently, Pekanbaru City only has one main landfill that accommodates all of the city's waste. As population and economic activity grow, the capacity of this landfill is becoming increasingly limited. Plans to build a new landfill have been in place since 2016, but have not yet been fully realized, resulting in the existing landfill being overloaded and creating new environmental impacts. In addition to limited facilities, low public awareness is also a major obstacle. Many residents are still unaccustomed to sorting their waste, are reluctant to pay sanitation fees, and leave all waste management to the government. This passive attitude makes it difficult to implement participatory waste management.

Overall, the main challenges to waste management in Pekanbaru include limited facilities and infrastructure, a shortage of collection vehicles, insufficient landfill capacity, and low public awareness. If these issues are not addressed promptly, the impacts could lead to environmental pollution, flooding due to piles of waste, and public health problems. Therefore, comprehensive improvements are needed through improved facilities, public education, and more sustainable management policies.

Based on interviews with the Department of Environment and Sanitation (DLHK), it was discovered that the biggest obstacle to waste management in the cutting area was not a lack of operational vehicles, but rather the dense traffic around the site. The interviewee explained that the high volume of vehicles on the main road often forced the cleaning process on the shoulders and sides of the road to be temporarily halted. Cleaning crews had to wait until traffic had cleared to work safely. This situation caused delays in the cleaning process, as work hours had to be adjusted to the situation on the ground.

Besides heavy traffic, weather is also a significant obstacle. During the rainy season, roads become slippery and muddy, making it difficult for officers to sweep and transport waste. Standing water also often slows down the cleaning process, resulting in temporary buildup, which creates unpleasant odors and a dirty environment.

The current management system implemented by the Environment and Forestry Agency (DLHK) is still conventional. According to informants, waste from slaughtering and slaughtering activities is first collected at the location before being transported by a waste collection vehicle to the BPS (*Waste Management Agency*). This means that the current system still focuses on collection and transportation, not on processing stages such as sorting or recycling at the source. From the interview results, it can be concluded that the two main obstacles faced by the DLHK in waste management in the slaughtering area are the dense traffic flow that disrupts the cleaning process and unpredictable weather conditions. To improve management effectiveness, innovation and cross-sector coordination are needed, such as scheduling cleaning times outside of peak traffic hours, providing special equipment during the rainy season, and implementing a more environmentally friendly waste processing

system. With these steps, it is hoped that waste management in the DLHK work area can be more efficient, clean, and sustainable.

Comparison with Previous Research

The research results indicate that the implementation of waste management policies in Pekanbaru City still faces several obstacles, particularly in terms of community participation, effective oversight, and limited infrastructure. To strengthen these findings, the following discussion links the research findings to various previous studies in Indonesia.

1. Community Participation

This study notes that the level of community participation in Pekanbaru City is still in the moderate category, as only a portion of residents participate in cleaning and waste bank activities, but have not yet been able to play an active role in a sustainable manner. This result is in line with the findings of Prissando & Ambulanto (2015), who explained that community participation in waste management in Kediri City is still low due to minimal socialization and economic incentives provided by the government to the community. A similar condition was also evident in the study of Yuliana & Haswindy (2017) from Tungkal Ilir District, which reported that only 19% of residents have high participation and the rest tend to be passive in environmental management activities.

Comparing these results, it can be concluded that low public participation in waste management is a common phenomenon in many mid-sized cities in Indonesia. However, this study broadens the context by highlighting the contribution of the Pekanbaru Environment and Forestry Agency (DLHK) in facilitating the creation of waste collection institutions at the village level as a new effort to increase citizen participation.

2. Effectiveness of Implementation and Monitoring

In addition to participation, this study also found that the Pekanbaru DLHK bureaucracy's oversight function and performance were suboptimal. Internal oversight of the implementation of waste collection and sorting was still weak, and coordination between officers was often hampered by limited human resources and operational facilities. These findings align with those of Widyarsana & Zafira (2015), who studied waste management in Tangerang Regency. They concluded that low oversight effectiveness resulted in the emergence of illegal waste disposal sites (TPS) and low waste transport rates to landfills (TPA). Similar findings were also presented by Muhamram et al. (2015) in Bogor Regency, who highlighted weak coordination between the local government and the community as a contributing factor to the low effectiveness of the implementation of Regional Regulation No. 2 of 2014 concerning Waste Management.

This comparison also strengthens the argument that weak oversight and implementation systems are not unique to Pekanbaru but represent a classic challenge for regional public administration. Therefore, this study adds that strengthening

bureaucratic capacity and performance-based evaluation systems are crucial steps in improving the effectiveness of waste management policies.

3. Innovation Systems and Management

This study also found that the management system in Pekanbaru still tends to be conventional, with a primary emphasis on waste collection and transportation to the landfill. This has resulted in a continued increase in waste volume at the Muara Fajar landfill, with no circular economy-based or zero-waste management yet. This contrasts with research conducted by Rivaldy et al. (2020) in Tenggarong, which found that implementing 3R-based waste management through a waste bank can reduce household waste generation by up to 25%. A comparison suggests that an integrated participatory approach encompassing social and economic aspects can improve the effectiveness of waste management policies.

CONCLUSION

Waste management in Pekanbaru City is an important problem that requires serious attention because it concerns environmental quality and health, community, and the sustainability of urban life. Every day, Pekanbaru city produces hundreds of tons of waste, but not all of it can be optimally managed due to limited fleets, uneven infrastructure, and low public awareness of sorting and disposing of waste properly. Furthermore, weak supervision and enforcement of regulations lead to the practice of indiscriminate waste disposal, exacerbating environmental pollution. This condition not only impacts city cleanliness but also the social and economic aspects of the community, especially in densely populated areas and centers of economic activity. Therefore, waste management must be a shared priority through increased coordination between parties, the provision of adequate infrastructure, and strengthening education and active participation of residents in maintaining cleanliness.

SUGGESTION

Based on the research conducted and the problems identified, the researcher offers suggestions that are expected to provide constructive input and considerations for waste management in Pekanbaru City. The following suggestions are as follows:

1. The government must immediately maximize waste management by implementing the latest waste management paradigm to reduce the amount of existing waste.
2. One approach to assisting the government's cleanliness program is to encourage the public to adopt behaviors consistent with the program's goals. This includes:
 - a) How to change public perception of management
 - b) orderly and organized garbage
 - c) Local social, structural and cultural factors
 - d) Habits in waste management so far.

3. The Pekanbaru City Government, in this case the Pekanbaru City Environmental and Sanitation Service, is expected to provide the necessary facilities and infrastructure to support waste management needs in Pekanbaru City.

REFERENCE

Aisyah, PF (2023). The role of DLHK and community participation in supporting urban waste management. *Journal of Government Science and Public Policy*, 8(1), 72–84.

Amalia, U. (2022). Effectiveness of waste service levy policy implementation by Pekanbaru City DLHK. *Journal of Public Administration*, 10(2), 45–58.

Anderson, J. (2000). *Public policy-making: An introduction* (4th ed.). Boston: Houghton Mifflin Company.

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), 216–224.

Dye, RT (2002). *Public policy theory and process*. Jakarta: Bumi Aksara.

Handoyo, E. (2012). *Public policy*. Semarang: Widya Karya. Retrieved from [https://www.academia.edu/download/64319504/Kebijakan%20Publik%20by%20Eko%20Handoyo%20\(z-lib.org\).pdf](https://www.academia.edu/download/64319504/Kebijakan%20Publik%20by%20Eko%20Handoyo%20(z-lib.org).pdf)

Hidayah, F., & Fernanda, F. (2022). Analysis of the role of the community in household waste management in Tuah Madani District, Pekanbaru City. *Journal of Public Administration and Policy*, 7(2), 135–147.

Hill, M., & Hupe, P. (2019). *Implementing public policy: An introduction to the study of operational governance*. London: Sage Publications.

Irienda, R. (2018). Supporting and inhibiting factors for waste management in Pekanbaru City. *Jurnal Rielasi: Riau Environmental Studies*, 4(2), 99–108.

Keban, JT (2008). *Six strategic dimensions of public administration: Concepts, theories, and issues*. Yogyakarta: Gava Media.

Muharam, MF, Hakim, AL, & Aminulloh, M. (2015). Optimizing Waste Management in Bogor Regency Based on Regional Regulation No. 2 of 2014. *Karimahtauhid Journal*, 4(1), 32–41. <https://ojs.unida.ac.id/karimahtauhid/article/view/17359>

Nugroho, R. (2009). *Public policy theory*. Yogyakarta: Media Presindo.

Prissando, FA, & Ambulanto, T. (2015). Community Participation in Waste Management in Kediri City. *Media Sosian: Journal of Social Sciences*, 5(1), 44–54. <https://ojs.unik-kediri.ac.id/index.php/mediasosian/article/view/1696>

Putri, MD, & Syamsudin, M. (2020). The influence of public awareness and participation on the effectiveness of urban waste management. *Journal of Environmental Management and Sustainable Development*, 5(1), 56–68.

Rahmawati, N., & Susanto, A. (2021). Community participation in urban waste management: A case study in Pekanbaru. *Journal of Public Policy and Public Administration*, 6(3), 211–224.

Rivaldy, MR, Yusri, Y., & Sari, NCW (2020). The Influence of Community Participation on Waste Management in Baru Village, Tenggarong District. *Mahakam Journal*, 5(2), 118–130. <https://ejurnal.unikarta.ac.id/index.php/mahakam/article/view/987>

Sari, DM, & Ridiani, DJ (2022). Implementation of regional policy Number 08 of 2014 concerning waste management in Pekanbaru City. *Publicness: Journal of Public Administration Studies*, 1(2), 103–116. <https://doi.org/10.24036/publicness.v1i2.16>

Widyarsana, IMW, & Zafira, AD (2015). Study of Waste Management System Development in Tangerang Regency. *ITB Environmental Engineering Journal*, 21(1), 51–60. <https://journals.itb.ac.id/index.php/jtl/article/view/8984>

Yuliana, F., & Haswindy, S. (2017). Community Participation in Residential Waste Management in Tungkal Ilir District. *UNDIP Journal of Environmental Sciences*, 15(2), 96–111. <https://ejournal.undip.ac.id/index.php/ilmulingkungan/article/download/14956/pdf>