

Implementation Of Medan Mayor Regulation Number 18 Of 2021 On The Delegation
Of Partial Waste Management Authority To Sub-District Heads Within The Medan City
Government In Medan Helvetia Sub-District

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Received: 10/08/2024 Revised: 19/10/ 2024 Accepted: 05/12/2024	Medan Mayor Regulation Number 18 of 2021 provides a legal basis for delegating partial waste management authority to sub-district heads within the Medan City Government. The purpose of this regulation is to enhance the effectiveness of waste management at the sub-district level by empowering sub-districts as waste managers who are closer to the community. The implementation of this regulation in Medan Helvetia Sub-District faces various supporting and inhibiting factors. The supporting factors identified include the proximity between the sub-district and the community, participatory programs involving the community in cleanliness activities, and close coordination between the village heads and the sub-district administration. Participatory programs such as communal work (gotong royong) and waste management education have proven effective in raising public awareness about the importance of environmental cleanliness. However, several challenges hinder the implementation of this policy, including overlapping responsibilities between the sub-district and the Medan City Environmental Agency, budget and facility constraints, and the lack of an effective coordination mechanism among stakeholders. To overcome these obstacles, it is necessary to improve coordination between the sub-district and the Environmental Agency, develop more innovative cleanliness programs, and optimize existing resources. Additionally, active community participation is crucial to ensuring the successful implementation of this policy. By optimizing all involved elements, the implementation of Medan Mayor Regulation Number 18 of 2021 in Medan Helvetia Sub-District is expected to create a cleaner and healthier environment and serve as a model for other sub-districts in Medan City.
Keywords: Waste Management, Medan Mayor Regulation, Participatory Program, Government Coordination, Medan Helvetia Sub-District.	

I. Introduction

Waste is a major challenge in almost all major cities worldwide. This challenge serves as one of the key indicators in determining whether a city is suitable for development. Waste management issues continue to be discussed globally, including in Indonesia. This is due to the close relationship between waste and human daily activities as well as societal culture. Waste is a byproduct of human activities in daily life, including the production, consumption, and disposal of goods. Culture and public behavior also play a crucial role in waste generation. For instance, the widespread use of single-use plastics or the lack of awareness in waste segregation and management (Dongoran et al., 2018).

Waste refers to materials discarded or generated from human activities or natural processes that hold no economic value if not properly processed. The waste problem arises due to an annual waste volume increase of approximately 2-4%, which is not matched by adequate facilities. Waste management is a significant portion of waste removal, which plays a crucial role in waste management. Currently, society still lacks understanding of how to manage and utilize waste for the common good or benefit. To this day, waste management remains one of Indonesia's major challenges. The limited availability of facilities and resources exacerbates the problem. The reliance on informal waste management is a significant obstacle to effective waste management.

The demand for effective waste management is increasing. The difficulty of measuring the amount of waste generated is a major challenge. Based on research data collected, each individual produces an average of approximately 0.5 kg of waste per day. In general, waste management is a complex task which consequently requires a deep understanding of the problem. It is important to understand the causes of the problem, not only in terms of visibility but also in terms of the underlying causes. Collective efforts are needed to change habits and behavior, such as reducing the use of single-use plastics, properly sorting waste, and increasing awareness.

According to the data from the Badan Pusat Statistik (BPS) in 2020, the amount of waste generated in Medan is 5,710 m³ per day. It is estimated that approximately 37.6% of the waste is burned, 4.9% is recycled, and the rest is landfilled. According to estimates from the National Urban Development Strategy (NUDS) in 2003, each individual generates approximately 0.5–0.6 kg of waste per day. As the capital of North Sumatra Province, Medan produces a community-generated waste volume of approximately 5,710 m³ per day (Bahri et al., 2019).

The city of Medan, as one of the largest metropolitan cities in Indonesia, faces serious challenges in waste management. Rapid population growth, high urbanization, and a consumerist lifestyle have significantly increased the volume of waste in the city. Although several efforts have been made to address waste-related issues, there are still some aspects that require further attention. Therefore, this study aims to examine waste management

issues in Medan, particularly in the Medan Helvetia District, and to identify sustainable solutions (Auliani, 2020).

Medan experiences a high population growth rate each year, which directly impacts the increasing volume of waste—more residents generate more waste. Therefore, it is crucial to analyze the impact of population growth on the city's waste management system. The Medan City Government continues to improve waste management by developing better infrastructure, promoting waste sorting programs, enhancing waste processing, and raising public awareness and participation. However, several challenges remain, such as the development of adequate infrastructure, sufficient funding, and increased community participation (Khair et al., 2018).

According to the Medan City Environmental Agency, waste management in the city, which generates a total volume of 2,000 tons per day, is severely constrained by the availability of l-type container bins). This limitation, which has negative environmental impacts, and inefficiencies in waste collection and transportation. The Medan City Government has sought to address these issues throughout the city. Waste from residential areas is collected and deposited into designated collection sites (TPS) and, ultimately, to Final Disposal Sites (TPA). The current waste transportation facilities consist mainly of garbage trucks, which still lack adequate sanitation facilities.

The city government is leaving 32% of the waste management system is the prevalence of less waste issues promptly at the district level from the Medan City Environmental Agency. The waste management issue is due to the limited number of transportation fleets. While the volume of waste continues to rise—especially in the Medan Helvetia District—increasing industrial activity, the problem persists (Nasir et al., 2022).

The Medan City Government issued Regulation No. 2021 to regulate waste management in the city. This regulation aims to clarify the roles, duties, and functions between the city government and district heads in managing waste, including better waste management practices, aesthetics, and sanitation in the city. The Mayor of Medan explained that the delegation of some authority to the district level is a response to public complaints regarding previously ineffective waste collection and management. In this context, district heads and their staff are considered the frontline service providers due to their direct engagement with the community (Novianti, 2018).

The Mayor of Medan also emphasized that he frequently monitors waste collection and Temporary Disposal Sites (TPS) in various districts through the responsible district heads. Therefore, waste management is not merely a problem for district officials but a duty that must be carried out effectively. With this delegation of authority, the Medan City Government

is expected to improve its performance in urban waste management in the future. All district heads and their staff are also expected to be more responsive to public complaints, particularly regarding waste issues. The implementation of this policy will be closely monitored, especially in Medan Helvetia District, to ensure that waste management meets public expectations (Toruan & Kristiam P.M, 2022).

2. Research Method

The research method used in this study is a qualitative descriptive approach. This study aims to describe and analyze the implementation of Medan Mayor Regulation No. 18 of 2021 regarding the delegation of partial waste management authority to district heads, with a focus on Medan Helvetia District. The data used consists of both primary and secondary data. Primary data is obtained through in-depth interviews with relevant stakeholders, including the district head, waste management officers, and local community members (Sugiyono, 2017). Meanwhile, secondary data is obtained from official documents, reports, and policies. This study is expected to provide a comprehensive depiction of policy implementation, including the challenges and opportunities. Data collection is carried out through observation, interviews, and document analysis. The study aims to directly examine the implementation of the policy in the field, while semi-structured interviews are used to obtain additional information aligned with the research focus. Document analysis is used to complement the data obtained from observation and interviews. The study uses a thematic analysis method, which is a qualitative data analysis method, which involves identifying themes or patterns in the data. This method is used to provide insights into the policy's effectiveness, the challenges faced, and recommendations for improving waste management.

3. Theoretic Implementation

Public administration is a process of managing public affairs, established by the government to achieve public objectives. This process involves the allocation of resources, coordination of activities, and the implementation of policies. Challenges in policy implementation may arise in the form of administrative, political, financial, or technical constraints. In public administration theory, public policies can be classified into primary and derivative policies. According to Van Meter and Van Horn, policy implementation is a series of actions that transform decisions into operational reality. Meanwhile, Ripley and Franklin emphasize that implementation takes place after legislation has been enacted (Kadji, 2015).

George C. Edwards III identifies four key factors that influence the success of policy implementation: communication, resources, disposition, and bureaucratic structure. Effective communication ensures that policy implementers clearly understand the policy, while adequate resources—both human and financial—support smooth implementation. The disposition of policy implementers, including their attitude, commitment, and integrity, also affects policy outcomes. A well-structured bureaucracy, with clear standard operating

procedures (SOPs) and minimal fragmentation, can enhance the efficiency of policy execution. Additionally, Merilee S. Grindle’s perspective emphasizes that successful policy implementation depends on considerations related to the interests of target groups and environmental factors that may influence execution (Febriyansyah, 2022).

The availability of resources such as workforce, funding, and information also plays a crucial role in policy success. A well-trained and motivated workforce is essential for effective policy implementation. Moreover, access to accurate and transparent information regarding procedures and compliance significantly impacts implementation effectiveness. Financial constraints often arise when policy programs are initiated by the legislature but the responsibility for funding falls on the executive branch. Therefore, coordination between policymakers and stakeholders is essential to ensure that policy implementation runs smoothly and achieves its intended objectives (Purwanto & Sulistyastuti, 2012).

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Waste management in Medan City faces various challenges, with the primary sources of waste coming from households, street cleaning areas, markets, hotels, and restaurants. Several supporting factors contribute to efficient waste management, such as the use of appropriate equipment, including automatic waste collection trucks, compacting trucks for waste compaction, and road haul container trucks for transporting large volumes of waste. The Medan City Government, under the leadership of Mayor Bobby Nasution, has taken significant steps in waste management, including delegating some waste management responsibilities to district heads through Mayor Regulation No. 18/2021 and implementing Alfimer technology at the Terjun Final Disposal Site (TPA) to process waste into useful

Mayor Bobby Nasution has also established six waste-free pilot areas in various districts and markets to promote cleanliness at the local level. Support for this initiative comes from various parties, including Kristian Redison Simarmata, who appreciates the waste management program and emphasizes the importance of ongoing education to change the public's mindset regarding waste disposal. Additionally, implementing waste management programs in schools is suggested to foster awareness of clean living from an early age. With collaboration from various stakeholders, these efforts are expected to create a cleaner and more sustainable Medan City (Siregar, 2023).

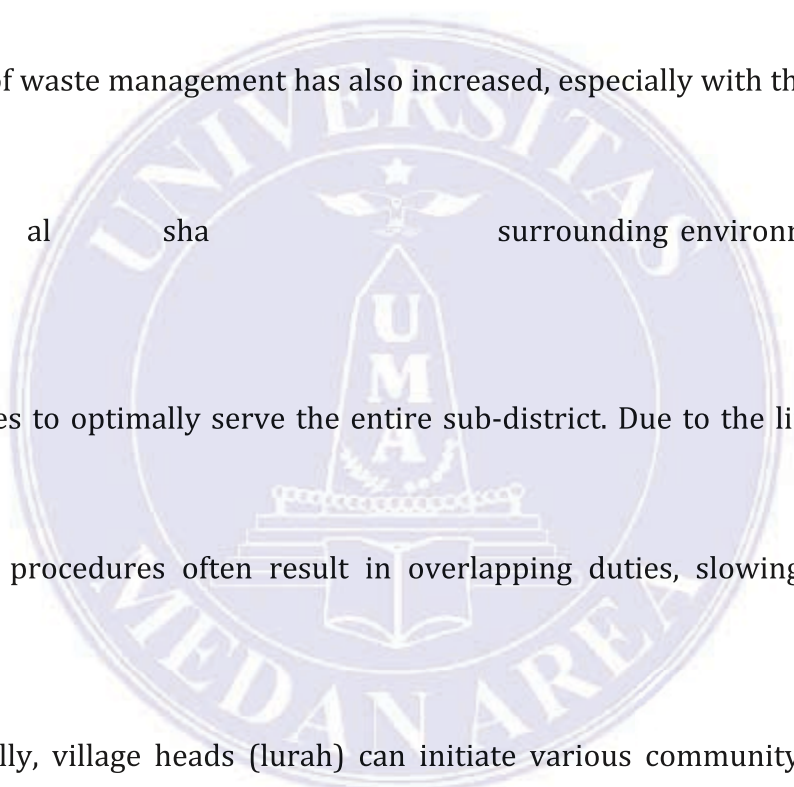
Implementation of Medan Mayor Regulation No. 18 of 2021 on the Delegation of Waste Management[†] Authority in Medan Helvetia Sub-District

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Additionally, village heads (lurah) can initiate various community-based activities involving local residents, such as environmental education programs. By fostering synergy between the community and local government, environmental cleanliness can be more structured and sustainable. Activities such as neighborhood cleanliness competitions, the establishment of waste banks, and recycling training can be effective steps in instilling environmental awareness from an early age (Auliani, 2020).

The local government must also ensure the availability of incentives for residents actively participating in waste management, such as reward programs or point-based compensation that can be exchanged for daily necessities. This approach can significantly increase public awareness of the importance of waste reduction and resource utilization. Additionally, digital technology can be leveraged to facilitate reporting and coordination processes, such as through a dedicated application that allows residents to report waste pile

The success of the waste management program in Medan Helvetia Sub-district can serve as a model for other regions to adopt similar initiatives. Regular evaluations and regulatory reinforcement must continue to ensure the program remains effective. With full government support, active community participation, and innovations in waste management systems, urban environments can become cleaner, healthier, and more livable.

On the other hand, addressing budget constraints in waste management. One viable approach is encouraging private sector participation through public-private partnerships (PPP) programs. By collaborating with private waste management facilities such as Temporary Incineration Plants (TIPs), the government can ensure that they are supported. Additionally, implementing an incentive-based collection system where residents who sort the waste receive rewards can enhance waste management efficiency.

The app is an innovative solution to identified issues. Digital applications that enable residents to report waste accumulation points in real time, along with a GPS-based waste production patterns across the city, can help authorities and the environment allocate resources, and evaluating overall waste management policies.

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remain unaware of the policy—likely due to a lack of information or indifference. In terms of
resources, th
funding for acquiring heavy duty cleaning equipment, which remains under the authority of
the Medan City Environmental Agency. The subdistrict's fleet of trucks is very limited, with
many in poor condition, affecting the efficiency of waste management services. Although
policy implementation has been adjusted to comply with existing regulations and available
human resources, the absence of specific incentives for sanitation workers has led to daily
allowances for contract workers serving as an alternative to incentive funds. Moreover, the
bureaucratic structure has not yet been fully optimized, as the limited number of sanitation
personnel and frequent breakdowns of waste transport vehicles hinder the enforcement of
Standard Operating Procedures (SOPs). On the other hand, waste management in this
subdistrict benefits from the close interaction between the local government and residents,

participatory program initiatives, and strong coordination between the village heads (Lurah) and subdistrict authorities. This facilitates quicker responses to public complaints, increases community involvement in collective clean-up efforts, and strengthens resident participation in sanitation programs. However, challenges remain, particularly in overlapping responsibilities between the subdistrict and the Environmental Agency, budget and facility constraints, ineffective coordination, and a lack of resources at the village level. To address these issues, solutions should include clearer task distribution, increased budget and infrastructure allocation, the use of technology for coordination and waste monitoring, and collaboration with both the community and private sector. These efforts will help establish a more effective and sustainable waste management system.

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