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# Municipal Waste Management Policy: Kebumen Regency

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**Abstract** - Waste management is carried out to utilize the value that is still contained in the waste itself, namely through the process of composting, recycle / recycling, combustion (incineration), and others. Managing waste comes in the five most challenging aspects of managing a city, but strangely this sector receives less attention than other urban issues. The quality of waste services is one indicator of good city governance. Therefore, waste management is still a big challenge for the cities in Indonesia. These challenges include public awareness that is still relatively low, especially those selling in the market, the lack of waste collection facilities, and the limited number of sanitation extension workers so that the intensity of counseling is still low. Every region in Indonesia has its own regional regulations regarding waste management. Policies related to waste management in Kebumen Regency are regulated in the Regional Regulation of Kebumen Regency No. 34 of 2011. The regulation contains a reduction in the volume of waste, statements related to fees, compensation, partnerships, dispute resolution, investigations, and criminal provisions. The Kebumen Regency Public Works Office can manage 840 m³s of garbage every day, but only 320 m³s of garbage can be transported by sanitation workers to Semali TPA and Kaligending TPA. Specifically in the case of specific waste treatment, PKU Muhammadiyah Sruweng Hospital has used 20 closed tube containers with yellow plastic coated 60 liter and replaced every day for medical waste produced. The success of waste management policies in an area is seen from the factors of human resources, communication, facilities and infrastructure, and law.

**Keywords** – Municipal waste, waste management, kebumen regency

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#### 1. Introduction

Waste is solid waste consisting of organic and inorganic materials which are considered to be no longer useful and must be managed so as not to endanger the environment and protect development investment. Problems that occur in each city in general include increasing the volume of waste generation, but not in line with management funds, management systems, and public awareness of waste management (Baso et al, 2017). Waste management is carried out to utilize the value that is still contained in the waste itself, namely through the process of composting, recycle / recycling, combustion (incineration), and others.

Managing waste comes in the five most challenging aspects of managing a city, but strangely this sector receives less attention than other urban issues. The quality of waste services is one indicator of good city governance. Therefore, waste management is still a big challenge for the cities in Indonesia. These challenges include public awareness that is still relatively low, especially those selling in the market, the lack of waste collection facilities, and the limited number of sanitation extension workers so that the intensity of counseling is still low (Faisal, 2014).

Every region in Indonesia has its own regional regulations regarding waste management, one of which is Kebumen Regency. This Regency is located in Central Java Province, consisting of 26 Regencys with an area of 128,111.50 hectares. Policies related to waste management in Kebumen Regency are regulated in the Regional Regulation of Kebumen Regency No. 34 of 2011. The regulation contains a reduction in the volume of waste including limitation of waste generation including compartment and sorting, collection, transportation, processing, and final processing.

In this article, based on literature review techniques, it will be explained 1. What are the descriptions of the contents of Kebumen Regency Regulation No. 34 of 2011, 2. How is the implementation of Regional Regulation No. 34 of 2011 related to waste management in Kebumen Regency, and 3. What factors influence the implementation of the policy in Kebumen Regency.

### 2. Discussion

# 2.1 Description of Regional Regulation of Kebumen Regency No. 34 of 2011

According to the Regional Regulation of Kebumen Regency No. 34 of 2011, waste management is a systematic, comprehensive and sustainable activity that includes the reduction and handling of waste. It aims to improve public health and the quality of the environment and make waste a resource. The scope of waste managed in this Perda is household waste, household-like waste, and specific waste. Waste management is done by reducing waste and handling waste. Waste reduction is carried out by limiting waste generation, waste recycling, and / or reuse of waste, while handling waste is done by sorting, collecting, transporting, processing and final processing. This regulation also states that the source of waste generation must provide a closed waste bin, sort out the garbage, and collect the garbage into a landfill. Statements related to retribution, compensation, partnerships, dispute resolution, investigations, and criminal provisions are also listed in this regulation. Further elaboration regarding regional policies and strategies for managing household waste and the like is regulated in Kebumen Regent Regulation No. 46 of 2018, while related to cleaning service fees is regulated in Perda No. 6 of 2012.

# 2.2 Implementation of Regional Regulation No. 34 of 2011 concerning Waste Management in Kebumen Regency

In 2013, Kebumen had 160 cleaning staff divided into 130 people in Kebumen city and 30 people in the Gombong area. They have 12 dumptruck and 8 amrol. However, according to the results of Hartanto's analysis (2006), ideally Kebumen requires 63 garbage collection workers, 32 transportation personnel, 63 garbage collection equipment, 4 transportation equipment, 12 containers, and 4 dumptruck only to serve 7,995 houses in the city of Gombong, not including the area another kebumen.

According to Puspa, et al. (2016), the Government of Kebumen Regency through the Kebumen Regency Public Works Agency can manage 840 m³s of garbage every day, but only 320 m³s of garbage can be transported by sanitation officers to the two TPAs in Kebumen, namely the Semali TPA and the Kaligending TPA. Kebumen Regency has a Regional Technical Implementation Unit (UPTD) whose task is to assist the Public Works Agency to manage waste every day. According to the Acting Regent of Kebumen, in one day 26 sub-Regencys in Kebumen produced 638 tons of waste at the end of 2017 and only 45.97% could be transported to the landfill site.

Specifically in the case of specific waste management, PKU Muhammadiyah Sruweng Hospital has used a special trash bin for medical waste produced (Nugroho and Hilal, 2015). They used 20 closed 60 liter volume tube containers which were coated in yellow plastic and replaced every day. The container is made of strong, rustproof, leak-proof and waterproof material. Especially for sharps medical waste

(syringes, surgical razors) put in a safety box. The collection of medical waste is carried out every day then transported twice a day with a push trolley, then processing and culling it using an incinerator with a capacity of 60 kg with a temperature of  $1000\,^\circ$  C.

# 2.3 Factors That Influence the Implementation of the Policy in Kebumen Regency

The success of waste management policies in an area is seen from several factors that are mutually sustainable. These factors are factors of human resources, communication, facilities and infrastructure, and law.

## a. Human Resource Factors (HR)

In this case, the human resources in question are the people who lack understanding of waste management and the number of cleaning staff that is not balanced with the number of residents to be served. If the community better understand good waste management, then they can participate and help cleaners in sorting waste in their homes.

## **b.** Communication Factor

To provide an understanding of waste management in accordance with regulations, the government must be able to convey it to the public. Through outreach and field activities, the community will more easily comply with and implement the policy.

## c. Facilities and Infrastructure Factors

Initially, the community only used brick masonry TPS to collect temporary waste in an area. However, because the times are growing, the use of container systems is more profitable than brick masonry TPS. This is due to the lack of time efficiency for dump truck to collect waste from each polling station. At present the number of containers does not meet the needs of garbage collection in Kebumen Regency. Similarly, in terms of garbage collection equipment and other waste transportation equipment.

## d. Legal Factors

The next factor is the legal factor. The legal instrument for waste management in Kebumen Regency is Kebumen Regency Regulation No. 34 of 2011. However, if you look at events on the ground, there is still a lot of rubbish that is not transported to landfill, garbage disposal is out of place, and much more. This shows that law enforcement is still weak against violators.

### 3. Conclusion

Waste is solid waste that is considered no longer useful and must be managed so as not to endanger the environment and protect development investment. Problems that occur in each city in general include increasing the volume of waste generation, but not in line with waste management. Policies related to waste management in Kebumen Regency are regulated in Kebumen Regency Regulation No. 34 of 2011. The regulation contains a reduction in the volume of waste, statements related to fees, compensation, partnerships, dispute resolution, investigations, and criminal provisions.

The Kebumen government has provided 160 clean workers, 12 dumptrucks and 8 amrol for the needs of garbage collection. The Kebumen Regency Public Works Office can manage 840 m³s of garbage every day, but only 320 m³s of garbage can be transported by sanitation workers to Semali TPA and Kaligending TPA. Specifically in the case of specific waste treatment, PKU Muhammadiyah Sruweng Hospital has used 20 closed tube containers with yellow plastic coated 60 liter and replaced every day for medical waste produced. The success of waste management policies in an area is seen from the factors of human resources, communication, facilities and infrastructure, and law.

# 4. Suggestions

Kebumen Regency Government should re-trace the implementation of Perda No. 34 of 2011. There should be an increase in human resources, communication (outreach and field action), as well as infrastructure facilities to optimize the application of this policy. Violators are also expected to get more educative sanctions in addition to fines to have a deterrent effect on them.

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