

# Waste Management in Kediri District

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## ABSTRACT

This Waste Management Research in Kediri Regency aims to examine the technical operational aspects, policies and regulations, financing, institutions, community participation, and obstacles in waste management in Kediri Regency. This research is descriptive qualitative. From the results of this study, conclusions can be drawn. Technical operational aspects, the percentage of waste handling in Kediri Regency is 12%. Policy and regulatory aspects are considered still low. Financing aspects, the budget is still low. The institutional aspects that are running are only focused on the "Reduce, Reuse, Recycle" Waste Processing Place (TPS3R). The aspect of community participation, namely the large number of people who feel they do not need collective waste management. The results of this study are recommended by adding "Integrated Waste Processing Places (TPST) for locations far from TPA, especially for the construction of Integrated Waste Disposal Sites (TPST) Integrated Waste Processing Places (TPST), increasing entrepreneurship (TPS3R), the existence of policies at the regent level or regional regulations for institutions, and Socialization of 3 R (Reuse, Reduce, Recycle).

**Keywords:** problems of waste management system in kediri regency, suggestions for improvement, waste management in kediri regency

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## BACKGROUND

Waste is a serious problem that needs to be addressed, due to the relatively rapid rate of population growth and various incidents that occur, Local residents often leave behind something that is considered useless, namely garbage and scrap. Garbage is a form of solid waste that can reduce the aesthetic value of water, spread disease, drain natural resources, pollute the environment, clog water channels, and cause various other negative impacts. Garbage is the remains of human activities.

Activities that cause other negative impacts. Waste is the remains of human activities that cause negative impacts, namely reduced environmental capacity, pollution, and various other negative impacts. (Deny Ardiansah P, 2021).

According to the Ministry of Environment and Forestry (KLHK), the type of waste that is most often disposed of in landfills in Indonesia is household waste with a figure reaching 32.5% (KLHK, 2020). Java Island is the largest contributor of waste in Indonesia because it contains large cities. Factors that produce waste can be influenced by population density, socio-economic level, physical environmental characteristics, and the behavior and culture of the community itself. Therefore, waste management is very important to reduce the amount of waste collected. This is very important to reduce the amount of waste accumulation and environmental pollution (Perbadi, et al., 2021).

Kediri Regency is one of the regencies in East Java Province with an area of 1,523.92 km<sup>2</sup>. Based on data from the Central Statistics Agency (BPS), in 2021 the population of Kediri Regency was 1,673,158 people with a population density of 1,217.28 people/km<sup>2</sup>, with an average growth of 0.74%. This condition has an impact that the increase in population must be balanced with an adequate level of public services, especially in various sectors related to fulfilling community activities, one of which is the waste sector. Based on SIPS data in 2021, waste generation in Kediri Regency was 195,845 tons/year or an increase of 9,177 tons compared to 2020.

Various efforts have been made but still often experience obstacles, both in terms of waste management patterns, institutional systems, regulations, financing, and community participation. Therefore, this study aims to explore the system as an effort to improve waste management in Kediri Regency to be better.

## METHODS

The research method used is descriptive qualitative research, namely a problem-solving procedure that is investigated by describing the current state of the subject/object of research based on the facts that appear. About the background, nature and character of the case being studied (Sugiyono, 2022). The data used are primary data and secondary data. Data collection techniques include direct interviews with waste managers, observation and documentation. While the survey stages carried out are pre-eliminier surveys, namely stakeholder FGDs used to determine samples, secondary surveys, namely data synchronization with policies, primary surveys with surveys and waste management analysis.

## RESULTS

### Technical Operational Aspects

Waste generation is grouped based on priority area divisions, namely agropolitan areas, fast-growing economic strategy areas, fast-growing areas and transportation strategy areas and development priorities. Each area has three categories of waste generation sources, namely waste sources in rural residential areas, waste sources in urban residential areas, and waste sources in urban residential areas (according to spatial land use division). From the calculation results for the entire area, the waste generation value is 0.47 kg/OH with a density of 159 kg/M<sup>3</sup>. The composition of household waste in each area is dominated by plastic

waste and organic waste. In existing conditions, according to SIPSN 2022 data, Kediri Regency has 42 waste banks, and can reduce the potential for waste to enter the TPA by 208,500 kg/year or 571.2 kg/day. Meanwhile, TPS3R is able to reduce waste entering the TPA because TPS3R manages waste with the 3R principle (Reuse, Reduce, Recycle). Meanwhile, Sekoto TPA is the only TPA in Kediri Regency. From secondary data, it is known that the incoming waste is 80,833 kg/day, so that the service volume is 12%.

### **Institutional Aspects**

There are 3 (three) types of community-based waste management institutions, namely institutions at the waste source, waste processing sites (TPS3R) and Final Waste Processing Sites (TPA). In the waste source institutions, informants explained that in agropolitan and fast-growing economic areas, the composition of waste is dominated by organic waste, garden waste and plastic waste. While for fast-growing areas, the most types of waste are organic waste, diaper waste, and paper waste. Agropolitan areas have the highest percentage of institutions (50%). And in the Strategic Transportation and Priority Development Areas, household waste is dominated by plastic waste, organic waste and construction waste/building residue. For waste processing institutions, waste collection to TPS is carried out by DLH personnel and independent personnel and is carried out directly and indirectly. Waste collection at waste banks is re-managed for those that are still suitable for sale. In the TPA institution, the source of waste entering the TPA comes from TPS where the waste is still mixed so that it needs to be sorted to reduce the load, TPS3R waste only consists of residue and public facilities.

## **DISCUSSION**

### **Regulatory and Financing Policy Aspects**

Kediri Regency already has policies that are both conventional and normative and innovative. Conventional policies that have been issued are in the form of regent/regional regulations, but the diverse regional conditions are an obstacle to regulations in regulating waste levies. The aspects of policy or regulation and financing are currently still relatively low. In terms of regulations governing levies, we also still have obstacles, namely that this regulation regulates the waste retribution system comprehensively so that the community can be more aware and responsible in managing waste and maintaining environmental cleanliness. In innovative policies, TPS3R has been formed, but there is no technique to regulate, make plans and technical instructions in implementing the program as a clear legal basis.

### **Community Participation Aspects**

The Agropolitan area has the highest percentage (80%) of no household waste collection by the community in their respective homes, this shows that there is no collective waste transportation system and the community in the Agropolitan area tends to still manage waste independently. Likewise in rural areas with a percentage of 75% there is no household waste collection by the community in their respective homes, which can then be concluded that villages in rural areas still manage waste independently.

## **SUGGESTION**

The reduction of TPS3R is not optimal so it needs to be optimized in all TPS3R. For areas far from TPA, it is necessary to add TPS. in the community environment, the preparation and determination of SOPs for TPS3R institutions including KSM, KPP, Waste Bank and TPST, 3R socialization, regulation of incentive and disincentive mechanisms and increasing reduction from waste banks.

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