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Empowerment of Educational Tourism Pakusari Final Waste Disposal Site, Kertosari Sub-District, Pakusari, Jember District

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Abstract The study focuses on the empowerment of Pakusari TPA educational tourism in Jember Regency, Indonesia. Waste management is a pressing issue worldwide, and the waste reduction process plays a crucial role in minimizing the amount of waste reaching the final disposal site. The research adopts a qualitative approach, utilizing survey techniques, interviews, field observations, and literature reviews to gather data. The findings reveal that the establishment of the Pakusari TPA educational tour was prompted by the increasing amount of waste and the need to educate the public about waste processing. The tour location, adjacent to the landfill, showcases creative waste conversions, such as statues made from discarded materials. Interviews with the TPA management indicate positive responses from local residents, schools sending students for educational visits, and a reduction in daily waste volume. The Pakusari TPA serves as an educational tourist attraction, promoting waste management practices and recycling initiatives. Through recycling, organic waste is converted into methane gas and animal feed, while inorganic waste is repurposed for pavement and artistic displays. Overall, the study highlights the benefits of the Pakusari TPA educational tourism in raising awareness, inspiring waste reduction, and fostering environmental preservation.

Keywords: Empowerment, Educational tourism, Pakusari final waste disposal site, Kertosari sub-district, Pakusari, Jember district

INTRODUCTION

Waste is a problem that cannot be overstated in today's world. The problem of waste is becoming increasingly difficult to address as the population grows, if it is

not founded on public knowledge of a healthy environment. The waste reduction process is a systematic, long-term activity that includes waste reduction and management tasks. The reduction process aims to minimize the quantity of garbage carried and processed at the final processing site, known as the TPA (Final Disposal Site). Meanwhile, handling is an endeavor to control garbage in landfills so that it may be further processed and ultimately used to make valuable items such as paving stones, oil, and methane gas.

Waste management is regulated under Law No. 18 of 2008. The final processing site (TPA) is a location where waste is processed and returned to environmental media in a safe manner for both humans and the environment. Prior to processing, the characteristics, content, and amount or volume of waste are altered. This also occurred in the Jember region, where the TPA was utilized for further waste processing.

The tagline "Jember Terbina" or Jember Orderly, Clean, Beautiful, and Comfortable is believed to be able to develop communities and reorganize metropolitan areas, including waste management systems. A clean environment can be beneficial for society, for example as a tourist area (Istiqomah et al., 2023). TPS (Waste Disposal facilities) and TPA (Final Disposal Sites) are the two types of waste disposal facilities. Tanggul, Kencong, Balung, Ambulu, and Pakusari are among the five landfills in Jember, which are distributed throughout many districts. Pakusari dump, located in Kertosari Village, Pakusari District, is the largest landfill in Jember Regency, covering an area of 6,8 Ha.

This landfill has been in operation since 1992 and is overseen by the Department of the Environment's (DLH) cleaning crew. The Pakusari TPA also has an educational tourism section. Pakusari TPA, a local tourism attraction for Jember inhabitants and its surrounds, offers a range of informative excursions, including waste conversion to methane gas, waste banks, and organic waste processing. Based on the foregoing, the author was prompted to undertake study titled "Empowerment of Pakusari TPA Educational Tourism, Kertosari Village, Pakusari District, Jember Regency".

METHOD

In this study, the survey research technique with a qualitative approach was adopted to address research questions. Researchers employed interview tools, field observations, and a literature review to obtain data. The data for this study came from interviews with TPA Pakusari Jember management, field observations, and a review of the literature. The researcher conducted several stages of data collection, including: a) visiting the research site, namely the Pakusari Jember TPA educational tour, b) conducting interviews with Pakusari Jember TPA management, c) conducting field observations at the Pakusari Jember TPA educational tour, and d) conducting an analysis literature review.

FINDINGS AND DISCUSSION

Mr. Totok, the operator of the Pakusari TPA weighbridge, was interviewed as an informant in principle to gather data on: a) the background of the establishment of the Pakusari TPA tour, which included: the reasons why the Pakusari TPA was established, and who was the originator of the establishment of the Pakusari TPA educational tour, b) the purpose of the establishment of the Pakusari TPA educational tourism, which included: the expected results after the establishment c) The impact of the Pakusari TPA educational tour, which includes a comparison of waste data that entered the TPA previous to the Pakusari TPA educational tour's formation. Following the establishment of the Pakusari TPA, the purpose of this in-depth interview is to answer the following research questions: a) What is the background to the establishment of the Pakusari TPA educational tour? b) What is the response of local residents and the general public to the Pakusari TPA educational tour? c) What was the impact that occurred before and after the establishment of the Pakusari TPA educational tour?

A. Location of the Pakusari TPA educational trip

Kertosari Village, Pakusari District, Jember Regency is the location of this Pakusari TPA educational trip. This educational tourism attraction is located next to the Pakusari TPA. When approaching the Pakusari TPA educational tour entrance gate, guests are encouraged to sign the guest book to register their identity.

Because this tourist spot is very clean, far enough away from the Pakusari TPA pile of garbage so that there is no pungent odor in this Pakusari TPA educational tourist spot, there are several results. Among the waste crafts on display are: a) a dinosaur statue built from used tires, b) a replica of a giant motorbike statue (moge) constructed from used tires, and c) a replica of a gorilla statue made from discarded carpet and raffia rope.

B. Interview findings

Mr. Totok, the operator of the Pakusari landfill weighbridge, was interviewed for the results. He explained that the establishment of this educational tour was based on the increasing amount of waste entering the Pakusari TPA on a daily basis, so the Pakusari TPA racked their brains to find a solution how to reduce the amount of incoming waste and the public to gain more knowledge about waste, including: a) how to process waste from home before deciding to dispose of it in a landfill, b) educate that waste is still valuable by processing it, and c) provide some descriptions of waste processing. Totok stated that the impact of the Pakusari TPA teaching trip was that the volume of rubbish arriving each day began to diminish. The community's response was quite positive; in fact, some schools supported it by sending their kids to the Pakusari TPA's educational site as a learning medium. Furthermore, garbage sent to the Pakusari TPA is reprocessed, with some

examples being: a) hospital food waste sent to the Pakusari TPA is processed to be utilized as animal feed, and b) plastic waste is converted into pavement and oil.

C. Discussion

According to observations, the Pakusari Landfill Tourism Destination is the result of more waste processing in the Pakusari Landfill region. Pakusari TPA was founded in 1992 and covers an area of 6.8 hectares. The Pakusari TPA has then taken the initiative to establish the TPA as an educational tour from 2017. So that the ultimate waste disposal site (TPA), which was once deemed nasty, unclean, and stinky, might transform its purpose and become a beloved tourism attraction for the inhabitants. Visitors are not paid to attend this tour (free HTM). Visitors may currently enjoy a range of instructive excursions, including how to convert garbage into methane gas, waste banks, organic waste processing, and enormous replicas of discarded materials. So that visitors can not only enjoy a vacation but can also add insight about waste management. This is because the tourism concept of Pakusari Landfill is not profit-based but education-based tourism to be able to educate visitors about the importance of waste management.

Pakusari TPA has an area of 6.8 hectares. It is divided into an active zone and a passive zone. The active zone includes landfills and green areas. While the passive zone is used as an educational tourist spot. On a daily basis, this TPA can accommodate approximately 650 m3 of waste, of which only 12% or around 75 m3 are managed. However, with the Pakusari TPA educational tour, the volume of waste that enters does not decrease, but the volume of waste is constant and sometimes increases every day. Even though the volume of waste at Pakusari TPA has increased, at least with educational tours Pakusari TPA can make people aware of the importance of managing and recycling waste with the hope that the volume of waste in Jember can be reduced.

One form of waste management is by recycling waste which aims to reduce the use of new raw materials and reduce waste dumped into the environment. The recycling process can be done in various ways, depending on the type of material to be recycled as well as at the Pakusari TPA. Organic materials such as leaves or household waste can be processed into methane gas, oil, and also feed for Manggot caterpillar cultivation, or for making liquid compost (Nasution & Rizka, 2022; Farihah et al., 2021; Sari et al., 2020). Then the leftover food waste from the hospital can be utilized for animal feed. While inorganic waste, such as plastic, used bottles, used tires can be used as a raw material for making paving and as a material for making replica statues in educational tourism areas, for example replicas of dinosaur statues and replicas of big motorbike statues (moge) from used tires, replicas of gorilla statues from used carpets and raffia ropes, as well as plastic bottles for recycle boxes (Conilie et al., 2021).

CONCLUSION

Based on the results of research that has been done on the empowerment of Pakusari TPA educational tourism, it can be concluded that there are several benefits to the establishment of this, namely: 1. The Pakusari TPA educational tour can add insight to the Jember community, especially students and students regarding waste processing. 2. Provide a real example to the people of Jember, especially students, that waste can be recycled into more useful items, such as a replica of a giant statue found at the Pakusari landfill educational tour. 3. Make people aware of the importance of preserving the environment, by recycling waste.

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