

SCAVENGER PARTICIPATION IN WASTE REDUCTION IN WEST SIDOMULYO VILLAGE, PEKANBARU CITY

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Abstract: This article aims to determine the participation of scavengers in reducing waste in West Sidomulyo Village, Pekanbaru City, in 2023. The waste problem in Pekanbaru City was able to be reduced by 18%, as much as 63% was successfully transported to the landfill, and there is still around 19% of waste that cannot be managed. So the problem of inadequate waste management is an opportunity for scavengers to obtain economically valuable waste, increase their income and reduce the amount of waste transported to landfill. This study is qualitative research with a descriptive phenomenological approach. Through the process of observing the research object and interviewing 9 informants, the results of this research are first, the economic participation of scavengers is that the selected waste is waste that can be sold (plastic, iron, paper or for animal feed) to meet the living needs of the scavenger's family. Second, the sociological participation of scavengers means that scavengers participate in reducing the volume of waste thrown away by the community. Third, the participation of scavengers in protecting the environment is less recognized due to their low level of education, preferring to earn a living and not thinking about the impact on the environment and the health of themselves and their families. Fourth, there is still a negative stigma towards scavengers who are suspected of being criminals. Although it has never been proven.

Keywords: Participation, Scavengers

1. Introduction

Population growth, industrialization, urbanization and economic growth have resulted in a significant increase in the amount of urban waste (Prajati, et.al, 2019). This is confirmed by several other studies that the development of urban areas accompanied by an increase in population triggers development problems including waste problems (Hayati, et.al, 2022; Sukholthaman, et.al, 2015).

The increase in population and increasing amount of waste are problems that the city government has not been able to overcome. In Pekanbaru City, waste from people's homes (waste sources) has not yet been separated into inorganic and organic waste, the waste is still mixed and then taken to a temporary holding depot and then taken to the Final Processing Site (Hayati, et.al, 2022).

This waste problem is an opportunity for scavengers to obtain goods of economic value as income and then sell them to used goods collectors. The impact will reduce the amount of waste transported to the final processing site (TPA). However, based on data from the *Proceeding 3rd International Conference on Business & Social Sciences (ICOBUSS) Surabaya, October 28-29th, 2023*

Pekanbaru City Environment and Hygiene Service (DLHK), waste reduction will only reach 17.99% and unmanaged waste will reach 18.95% in 2022.

According to Yukalang and Clarkeer (2017) two factors that hinder waste management are: First, organizational barriers. These obstacles include a lack of planning and strategy, inadequate policies, a lack of practical programs to encourage public participation and poor communication. Second, socio-cultural barriers. These obstacles include: lack of participation from the parties, lack of cooperation, prejudice that the waste problem cannot be resolved. This means that the participation of the parties is an important element in proper waste management.

Waste management in Indonesia is strengthened by laws regarding waste management, namely; UU no. 18 of 2008. Then, it is regulated in detail by Government Regulation Number 81 of 2012 concerning Household Waste Management and Types of Household Waste. This legal regulation is intended to preserve environmental functions and public health. Apart from the government, society and companies must play an active role in environmental management in Indonesia.

Various studies state that scavengers participate in reducing the volume of waste, participate in maintaining a clean environment, participate in providing work independently (Siswidiasari, et.al, 2020; Barakati, K.P, 2021; Putra, et.al, 2022).

In waste management, it cannot be separated from the active role of scavengers in collecting rubbish that can be recycled/reused. In order to increase scavengers' knowledge about good and correct waste management from the aspect of Occupational Safety and Health, the Ministry of Environment and Forestry (KLHK) together with the DKI Jakarta Cleanliness Service conducted training for 100 scavengers in DKI Jakarta and Bekasi City (KLHK, 2022).

However, in reality on the ground, there is a phenomenon found in many residential areas in West Sidomulyo Village: Scavengers are prohibited from entering, they are not allowed to enter housing complexes. Scavengers are suspected of being agents of crime. This is in line with research by Kurniaty, at.al (2016) that many people view scavengers negatively. Like stealing, doing whatever you want, being dirty and dirty, being sick, being rude and being considered to have evil intentions.

Based on the problems above, the aim of the research is to determine the participation of scavengers in reducing waste at the temporary dumping site on Soebrantas street and waste management in West Sidomulyo Village.

2. Literature Review

Waste management

The following is the definition of waste according to the law. Number 18 of 2008 concerning Waste Management, in article 1 paragraph (1) that: "Trash is the remainder of daily human activities and/or solid natural processes". Meanwhile, according to the definition of the World Health Organization (WHO), waste is something that is not used, is not used, is not liked or is something that is thrown away which comes from human activities and does not occur by itself (Chandra.2006).

Meanwhile, the definition of household waste according to Law No. 18 of 2008, which originates from daily activities in the household, does not include certain dirt and waste.

As a result of economic development and population growth, the contemporary world faces a global increase not only in the amount of waste, but also in quality diversity. Poorly managed waste worsens the environment and public health, sometimes causing serious health problems. Sustainable development requires proper handling of waste problems (Ansori, P.B, 2023).

Waste is a solid daily human activity and/or process. Currently, most people still see waste as useless waste, not as a resource that needs to be utilized (UU. No. 18, 2008). Waste management is a systematic, comprehensive and sustainable activity that includes waste reduction and management. The definition of management does not only involve technical aspects, but also includes non-technical aspects, such as how to organize, how to finance and how to involve waste producing communities who are actively or passively involved in handling activities. (Damanhuri, 2010).

The previous waste management approach was the end-of-pipe approach, where waste was collected, transported and disposed of at the Final Processing Site (TPA). Currently, this approach has been abandoned for waste management which reduces waste sources (households, offices and other public facilities) and utilizes waste that has economic value, for example for energy, fertilizer and other industrial raw materials. (Ansori, P.B, 2023). Current waste management involves the community to manage waste independently based on the 3 R's (Reduce, reuse, recycle) which aims to minimize the amount of waste disposed of in final landfills (Muli, 2016)

Waste Transportation and Collection

Routine activities of collecting and transporting waste from the waste source can be carried out in two ways, namely: first, door to door collection. In this method, waste is collected simultaneously, then collected and immediately transported to the final disposal site. Second, community collection or via TPS. In this method, waste is collected at a certain point where containers are provided for sorting so that the waste can be reduced, then sent to the final disposal site. (Damanhuri, 2010).

Temporary Storage Place is a building or place used to move waste from hand carts to platforms, containers or directly to waste transportation areas, divided into several temporary storage areas including: Transfer Station (transfer depot), Large Container (steel container).), place provided by the community (Putra and Setianingrum, 2022)

Scavenger and Participation

According to Ansori PB (2016) Scavenging is the job of collecting used goods at rubbish dumps and also going around villages to obtain used goods in order to meet the family's living needs.

Scavengers are part of the industrial raw material supply chain, because the results of collecting used goods (plastic, iron and paper) are industrial raw materials. However, their activities still require supervision because when they work they are not equipped with "personal protective equipment" which can be detrimental to their safety and health. Scavenger collectors should be trained and coordinated by government agencies so that they can work optimally and healthily. (Putra and Setianingrum, 2022)

Scavengers are people who are willing to grapple with rubbish to look for something that is still valuable to sell to used goods buyers (recycling entrepreneurs), including scrap metal, used bottles, mineral water glasses, cardboard, paper, used plastic (Zuhriya, et .al, 2019)

Other actors who play a role in waste management both formally and informally include private companies and communities involved in waste business.

It was also found that scavengers also participate in managing waste, apart from that, Rukun Tetangga (RT) or Rukun Warga (RW), sub-district and sub-district officials have a role in waste management according to their duties and authority. (Hayati, et.al, 2022).

According to Siswidiasari A, et.al (2020) there are five themes that show the participation of scavengers in protecting the environment, including: First, the contribution of scavengers to reducing the volume of waste in waste landfills. Second, the role of scavengers in maintaining

the waste landfill environment. Third, awareness of scavengers in looking after themselves. Fourth, challenges in scavenging and fifth, economic principles of scavenging.

3. Method

This study is qualitative research with a descriptive phenomenological approach. According to Noor (2018; 33-34), qualitative research is a research and understanding process based on a methodology that investigates a social phenomenon and human problem. Qualitative, descriptive research is research that attempts to describe a symptom, event, incident that is happening now. In essence, the researcher observes an object and then explains what he observed. (Noor, 2018; Morissan, 2019). In this context, this research attempts to directly describe the phenomenon of scavenger participation in waste management in West Sidomulyo Village, Tuah Madani District, Pekanbaru City. The informants for this research were 6 scavengers who carry out routine activities in West Sidomulyo sub-district and 3 heads of neighborhood associations (RT), using a purposive sampling technique to determine the sample. Determining the sample was based on certain considerations, so in this study it was people who knew for sure about waste sorting activities and scavenger activities.

Analysis of this research data began with observation and throughout the research process from initial interviews to re-interviews as confirmation. The data is then grouped according to type and supplemented with supporting information in explaining the research results. So based on the explanation above, it can be explained that the analysis technique used by the author in this research is descriptive qualitative, that is, the data will be examined or explained as it is so that an understanding will be gained. Data collection methods used in this research include interview and observation methods.

4. Result and Discussion

The general description of the research location is that the population of West Sidomulyo Village, Pekanbaru City is 52,030 people or 12,805 heads of families. Based on the results of observations, household waste management in West Sidomulyo Village, Pekanbaru City is divided into two management methods:

First, communities or households participate in waste contributions. Garbage is collected in front of people's houses and 3 times a week it is transported by a garbage truck with a monthly garbage fee payment system of between Rp. 15,000 to Rp. 30,000 per house. Next, the waste is taken to the final disposal site and previously the "members" of the waste transportation vehicle select and separate the waste that can be sold as used goods (paper, iron, cans and plastic). For homes that participate in this waste fee; The opportunity for scavengers to "get used goods" is only when the rubbish has been placed in the rubbish bin before being transported by the rubbish transport van. The amount of community waste fees reaches 80 percent of the number of houses in one housing complex.

Example; Purwodadi Indah Permai Housing, Perum Griya Cemara Asri, Palam Regency, Villa Purwodadi, Puri Cemara, Teratai Indah Housing.

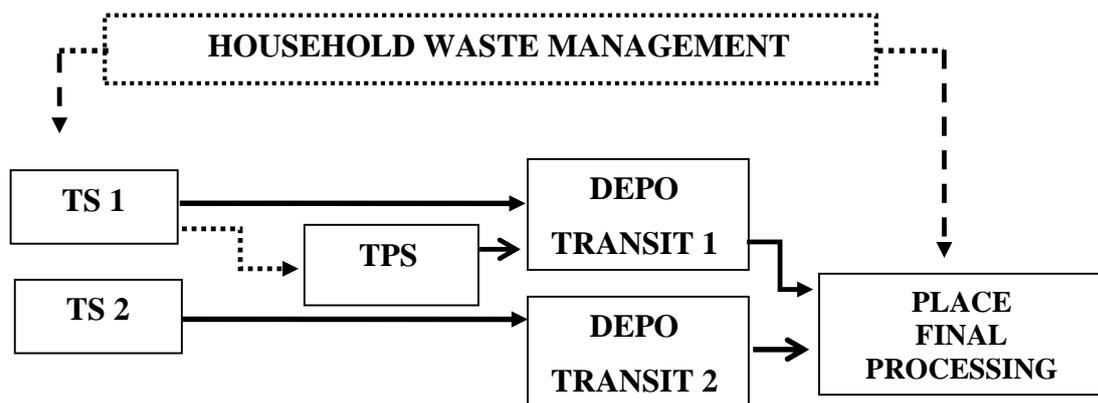
Second, communities or households manage waste independently and do not participate in monthly waste fees. Household waste will be transported by people who do not pay waste fees to the Temporary Disposal Site (TPS) Putri Tujuh Jalan Soebrantas and the TPS in front of Riau Pos every day from 19.00 WIB to 05.00 WIB. The number of people who manage waste independently is only around 20% of the number of houses in the housing complex. The rubbish of people who do not participate in this fee will be taken by scavengers who hang out

at the Temporary Disposal Site (TPS), which we conclude is around 3-4 scavengers using motorized becak.

Apart from these two methods of waste management, in West Sidomulyo Village there is also luxury housing which is managed in an integrated manner and all houses are required to participate in waste management managed by the housing manager. These housing developments include: Citra Garden and Melur Indah Housing Complex. This research will not be explained in more detail because scavengers are prohibited from entering housing complexes, so there is no opportunity for scavengers to look for rubbish.

Scavengers who carry out routine activities in West Sidomulyo Village can be divided into two, namely: Scavengers who go from house to house and scavengers who only pick up rubbish at Temporary Disposal Sites (TPS). Scavengers who go from house to house carry out their activities in the morning until 10 am and in the afternoon before evening. After 10 until the afternoon, these scavengers will clean up the results of their work so that the goods are ready to be sold. Meanwhile, the scavengers who hang out at the Temporary Disposal Site (TPS), during the day they go around to restaurants to pick up food waste every day and after that they stay at the TPS until evening at 22.30 WIB.

Figure 1



Based on the household waste management picture above, it can be explained:

- 1. TS1 (Waste generation One)**, means that the source of waste is a household that lives in a housing complex that has people participating in waste transportation services whose payment is every month and the amount reaches 80%, the remaining 20% of people who manage their own waste and do not participate in official transportation, usually throw their waste at the disposal site. Temporarily or strongly suspected of throwing away carelessly. Community waste that participates in waste transportation services will be taken to the transit depot to be separated from economically valuable waste and then sent to the final processing site.
- 2. TS 2 (Waste generation Two)**, means the source of waste living in luxury housing which is established with an integrated system of environmental cleanliness, community waste and security and the residents of the complex are willing to pay a certain amount of money for this (environmental cleanliness, household waste and security). Scavengers are prohibited from entering, so there is no chance of getting rubbish. Next, the waste is taken directly to the Final Processing Site.

The results of interviews with six scavengers and three heads of Rukun Tetangga in West Sidomulyo Village during the 14 days of research were arranged based on economic, sociological and ecological (environmental) participation. Next, organize it into:

First, Economic Participation. The scavengers who went from house to house who were interviewed stated that the rubbish they produced was in the form of plastic bottles, plastic cups, plastic buckets/household utensils, cans, iron, cardboard and paper books (HVS and newspapers). The work output of this type of scavenger is estimated at around IDR 50,000 to IDR 100,000. Apart from that, they also regularly receive alms from the community in the form of cakes, packaged rice and are sometimes given money. Usually the kindness of citizens is related to Fridays, Saturdays and Sundays due to work holidays, or during the month of Ramadan and currently also coincides with the socialization period during elections. Meanwhile, the scavengers who hang out at the TPS usually already have restaurant subscriptions where food waste is given away for free and then from 18.00 to 22.00 these scavengers will hang out at the Putri Tujuh Temporary Disposal Site (TPS) and the TPS in front of Riau Pos, these scavengers are more focus on collecting food waste for pig feed. Apart from that, they also collect plastic, cans, iron, cardboard and paper waste. These scavengers also often receive assistance in the form of packaged rice, rice, sugar and cooking oil from kind and generous people. The income from their work every day is around Rp. 100,000 to Rp. 150,000. Details of the price of 1 container/bucket measuring 25 kg of rice food waste purchased by pig farms for Rp. 15,000 and for rice waste mixed with vegetables purchased at Rp. 10,000. Every day, scavengers get a minimum of 7 containers/buckets from restaurant waste which they subscribe to for free and the results of their work hang out at TPS Putri 7 or in front of Riau Pos.

Second, Sociological Participation. Scavengers also participate in reducing the volume of household waste produced by the community in the Sidomulyo Barat sub-district, Pekanbaru City. They work routinely according to the community waste disposal times. For residential communities, the scavengers will come to the houses around 6 am to 10 am and then they will go around again after 16.00 in the afternoon. Meanwhile, for food waste scavengers, they will visit restaurants starting at 14.00 then continue to hang out at the TPS until 22.00. The results of reducing waste are not that much, because only waste that is of economic value is taken. This was stated by the informant when he was met while touring the housing complex: "I go around regularly every day from morning until 10 o'clock, then I clean the waste at home and rest. Yes, in the afternoon I went again, every day I got plastic cups, aluminum drink cans, metal ones, sardine cans, milk cans, cardboard, paper and drink bottles. If you are diligent, you can get 40 kg in the morning and evening, at least 30 kg of plastic and paper. We dig through trash cans in front of people's houses."

Even though the reduction is not too much, scavengers are an element of society whose role is to reduce waste before it is transported to the final disposal site (TPA). This is also in line with research by Haryani, et.al (2013) which states that scavengers have participation in reducing the volume of waste thrown away by the community, whether in homes, TPS or at final disposal sites (TPA). The same meaningful results were also carried out by Siswidiyanti A, et.al (2020) who found that scavengers contributed to reducing waste in final disposal sites (TPA), although in a volume that was not very significant because the waste collected by scavengers was only rubbish that had an appropriate selling value. with hard work collecting.

Third, environmental (ecological) participation. Apart from scavengers' participation in reducing the volume of waste, scavengers also focus more on plastic, mica, cans and paper, so without realizing it, scavengers are taking part in protecting the environment. According to the informant, "we who scavenge at the TPS don't understand about protecting the environment. We only look for rubbish that can be sold to scrap dealers. Haha. maybe our work is protecting the environment." This explanation emphasizes that scavengers do not understand the meaning of protecting the environment, what they understand is that they get trash that can be sold and that means they take care of their families day by day.

These results confirm the research of Balenguru N.C and Triwahyuni Palupi (2016) that the lack of awareness of the contribution of scavengers to maintaining cleanliness and protecting the environment is caused by low levels of education, scavengers work to earn a living, do not care about environmental cleanliness and many scavengers are lazy.

Another result was found through the RT Head Informant's statement regarding their housing which read "Scavengers Prohibited from Entering", because there were still incidents of lost items when some of the complex residents were working during the day. Based on residents' monitoring, the outsiders coming in and out were scavengers and motorbike rickshaws looking for used goods. However, in fact, to date there has never been an incident of scavengers being caught stealing. This negative view is difficult to eradicate from society. Although this negative stigma was tried to be removed through a letter from the Public Relations of the Ministry of the Environment, namely SP. 126a /HUMAS/PP/HMS.3/11/2016 states that waste management cannot be separated from the active role of scavengers in collecting waste that can be recycled/reused. In order to increase scavengers' knowledge about good and correct waste management from the aspect of Occupational Safety and Health.

5. Conclusions

After conducting research, several conclusions can be drawn that: *First*, the economic participation of scavengers is that the selected waste is waste that can be sold (plastic, iron, paper or for animal feed) to meet the living needs of the scavenger's family. *Second*, the sociological participation of scavengers means that scavengers participate in reducing the volume of waste thrown away by the community. *Third*, the participation of scavengers in protecting the environment is less recognized due to their low level of education, preferring to earn a living and not thinking about the impact on the environment and the health of themselves and their families. *Fourth*, there is still a negative stigma towards scavengers who are suspected of being criminals. Although it has never been proven.

It is hoped that the results of this research can be input for the Pekanbaru City Environment and Hygiene Service (DLHK) to provide guidance to scavengers about environmental health and self-protection when carrying out scavenging activities. And this research can increase knowledge and serve as a reference in future research, especially the contribution of scavengers in protecting the environment and the economic aspects of waste thrown away by the community.

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