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Waste Management In Tourist Areas Sabang City In 2023

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ABSTRACT

Community participation is one of the factors in the success of the environmental health program, where the increasing amount of waste among the community can become a threat to humans and the environment. All parties involved must be a good choice. Seeing the potential to utilize waste into creative products and services in the framework of proper waste management. One of the efforts to reduce the negative impact of plastic waste on the environment is to implement the 3R principles in everyday life, namely reduce, reuse and recycle.This study aims to find out how waste management is managed in the Tourism Area of Sabang City in 2023.This type of research is using the observation method with a descriptive study design. The method of collecting primary data is to conduct interviews with employees at the Department of Environment, Sanitation and City Beauty (DLHK) of Sabang City as many as 77 respondents using total sampling technique. The test used is descriptive analysis to find out how waste management is in the Tourism Area of Sabang City in 2023.The results of the study showed that 61.0% of waste generation did not meet the requirements, 100% did not meet the requirements for waste segregation, 97.4% met the requirements for waste collection, 100% met the requirements for waste transportation, 66.2% for waste processing. fulfill the requirements, waste disposal is 100% eligible, and elements of waste management management are 98.7% do not meet the requirements in the tourist area of Sabang City in 2023.
Keywords*: Waste Management,Tourist, Sabang.*

INTRODUCTION

The increase in population and changes in people's consumption patterns have led to an increase in the volume, type, and characteristics of waste, including plastic bags. The community in managing waste still relies on the final approach, where waste is collected, transported, and disposed of to the final waste processing site.(1) The increase in the use of plastic bags is also related to the increase in the world's population. This is reinforced by Lerdy and Anityasari.(1)

Indonesia produces 187.2 million tons of plastic waste that is dumped into the sea, while China reaches 262.9 million tons. The use of plastic from the retail industry in Indonesia is only 26%, while the use of plastic bags in people's markets or traditional markets reaches 74%. It is estimated that Indonesia's total waste in 2019 will reach 68 million tons. As much as 14% of which is plastic waste. The overall waste reduction target nationwide reaches 20% by 2020.

Indonesia is currently the second largest contributor of plastic waste to the oceans. Indonesia's rank in contributing plastic waste to the sea is only beaten by China. This new record certainly makes us concerned and at the same time proves the low awareness of the people and the country of Indonesia in the use and management of plastic waste. It takes wisdom to use plastic equipment. Awareness of plastic waste management awareness must be built and improved.

According to the Minister of Environment and Forestry, the amount of plastic waste in Indonesia is too much. Every year, Indonesians use nearly 10 billion pieces of plastic bags, and 95 percent of them become waste. Therefore, the movement to reduce the use of plastic bags when shopping is considered to have great potential in bringing about change.(2) Therefore, seeing the detrimental impact of plastic waste and the increasing use of plastic bags in Indonesia, the Ministry of

Environment implemented the Non-Free Plastic Bag Policy as one of the ways to limit the circulation of plastic. to limit the circulation of plastic.

Some countries already have and are making efforts to reduce the use of plastic bags by implementing taxes including, Denmark, Hong Kong and Singapore are countries that are able to increase the utilization of the effectiveness rate as much as 72% of plastic waste is properly processed, 20% of plastic waste is managed by recycling while 52% is burned for energy recovery purposes, namely electricity generation or heat power generation.(3) while the Netherlands, Belgium, China and India also apply sanctions and taxes for consumers who use plastic garbage bags. garbage bags.(4)

Several cities in Indonesia have also started to implement a plastic diet, as an effort to reduce the use of plastic bags, namely in Banjarmasin, Balikpapan, Denpasar, DKI Jakarta where DKI Jakarta residents produce 7,250 tons of waste a day, 14% of which comes from plastic bags. Unlike the case with the Bogor City Government related to reducing the use of plastic bags, every modern shopping center, such as supermarkets, malls, retailers, and minimarkets. and minimarkets.(5)

Excessive use of plastic bags can have a negative impact on both health and the environment. In terms of health, some plastic bags contain dioxin which is carcinogenic. If burned, it will produce toxic smoke that is harmful to health, namely if the combustion process is not perfect, the plastic will decompose in the air as dioxin and is very dangerous when inhaled by humans. Environmentally, plastic bags have a texture and properties that cannot decompose, do not decompose naturally, cannot absorb water, cannot rust, and ultimately become a problem for the environment. a problem for the environment. When decomposed, plastic particles will pollute the soil and water in the soil. soil and water in the soil. It takes 500-1000 years for plastic waste to be completely degraded by soil microorganisms.(6)

In the case of plastic waste that has accumulated, housewives are also related or directly dealing with the use of plastic, because besides that it is housewives who play a special role in reducing the use of plastic when shopping for home needs, In terms of knowledge from housewives about plastic waste, it varies. There are some housewives whose knowledge is good about plastic waste and there are some housewives whose knowledge is not good and not good about plastic waste.

Based on the results of research conducted on knowledge and attitudes with the actions of fried food sellers in Manado city in reducing plastic bags, that respondents' knowledge about the dangers of using plastic bags has a good level of knowledge, and respondents' attitudes in reducing the use of plastic bags are in the good category, while respondents' actions in reducing the use of plastic bags have bad actions. With that how important it is to know the value of knowledge, attitudes, and actions of the community in the use of plastic. Knowledge or cognitive is a very important domain in shaping a person's actions. One social psychologist, stated that attitude is a readiness or willingness to act, and not an implementation of certain motives. Attitude is not yet an action or activity, but a predisposition to action of a behavior. action of a behavior.(7)

Community participation is one of the factors in the success of environmental health programs, where the use of plastic bags is increasing among the community can be a threat to humans and the environment, all parties must be involved is a good choice. Seeing the potential to utilize plastic waste into creative products and services in order to manage plastic waste properly so that plastic really supports life. One of the efforts to reduce the adverse effects of plastic waste on the environment is to apply the 3 R's principle in everyday life, namely reducing usage (reduce), reusing (reuse), and recycling (recycle). The necessity to participate stems from the direction that the environment is a common property whose maintenance and utilization must be carried out jointly by the government, the business world and the community. All parties must be involved, because each without exception depends on natural resources and the environment as a source of life.(8)

METHOD

The research method uses descriptive research. Descriptive research is research that will describe milkatu, where this type of research studies problems, as well as procedures for activities, views and ongoing processes. This research was conducted in the Sabang City Tourism Area which was carried out in July 2023.

The subjects in this study are all stages of the waste management process in the tourist area of Sabang City starting from the process of storage or generation, sorting, collection, processing, and disposal. storage or generation, sorting, collection, processing, transportation of containers by trucks to the final disposal site (TPA) and sanitation officers at the Department of Environment, Hygiene and (TPA) and sanitation officers at the Department of Environment, Cleanliness and Urban Beauty (DLHK) of Sabang City. The Department of Environment, Cleanliness and Urban Beauty (DLHK) of Sabang City which handles the problem under study as many as 77 respondents.

The data analysis in this study is a univariate analysis, carried out by describing or describing the results of the the results of research related to the waste management system in the Sabang City Tourism Area. Sabang City Tourism which is obtained from a checklist sheet, questionnaire, observation and documentation studies of researchers and then presented in the form of description.

RESULT AND DISCUSSION

Waste management is one of the urban problems that is currently a challenge for the Sabang City Government. Population growth and increased activity in Sabang City have stimulated an increase in waste generation along with its problems. The composition of waste will also fluctuate as a result of changes in lifestyle, the economic level of the community, and the level of tourist visits. However, the infrastructure to manage waste is not developing as fast as the increase in waste volume.

Table 1. Area of Hygiene Services in Sabang City

No	Name of village	Area (Ha)
	Suka Jaya Sub-District	
1	Paya	1.444,64
2	Keunekai	568,96
3	Beurawang	465,32
4	Jaboi	490,14
5	Balohan	772,41
6	Cot Abeuk	357,18
7	Cot Ba'U	531,09
8	Ie Meulee	306,89
	Total	**7939,63**
	Sukakarya Sub-District	
1	Iboih	2.731,16
2	Batee Shok	1.129,51
3	Paya Seunara	564,23
4	Krueng Raya	959,27
5	Aneuk Laot	449,67
6	Kuta Timu	157,11
7	Kuta Barat	88,86
8	Kuta Ateuh	52,04
	Total	**9134,87**

The population of Sabang City continues to grow from year to year. in 2022, 42,066 people experienced a growth of 2.82% compared to 2020. Population growth in Sukajaya District was 3.28% or 22,153 people and Sukakarya District was 2.32% or 19,913 people.

Research Results

This research was conducted in July 2023 against 77 respondents at the Department of Environment, Cleanliness and Beauty of Sabang City in 2023. The research results can be seen in the table below:

1. Respondent Characteristics

The frequency distribution of respondents' characteristics, including age, gender, and education, is presented below:

Table 2. Frequency Distribution of Respondents' Characteristics at the Department of Environment, Cleanliness and City Beauty Sabang City 2023

No.	Respondent Characteristics	Frequency	%
1	**Age**		
	Early Adult (26-35 years old)	4	5,2
	Late Adult (36-45 years old)	43	55,8
	Early old age (46-55 years old)	30	39,0
2	**Gender**		
	Male	39	50,6
	Female	38	49,4
3	**Mother's education**		
	Colleges	55	71,4
	High School (SMP/SMA)	22	26,6
	Total	**77**	**100**

Based on Table 2., it shows that out of 77 respondents, 55.8% of respondents were in the late adult category (36-45 years), 50.6% of respondents were male, 71.4% of respondents had undergraduate and diploma degrees.

2. Descriptive Research

Descriptive test using frequency distribution on variables of waste generation, waste sorting, waste collection, waste transportation, waste processing, waste disposal, elements of waste management, is presented as follows:

a. Waste Generation

Table 3. Frequency Distribution of Waste Generation in the Tourism Area of Sabang City in 2023

No.	Waste Generation	Frequency	%
1	Qualified	30	39,0
2	Not Eligible	47	61,0
	Total	**77**	**100**

Source: Primary data (processed in 2023)

Based on Table 3. it shows that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 61.0% of the waste generation in the tourist area of Sabang City in 2023 did not meet the requirements compared to 39.0% of the waste generation in the tourist area of Sabang City in 2023 met the requirements. The amount of waste generated per day in Sabang City is 17.49 tons / day, with the largest amount of waste coming from household waste 0.78 Kg / person / day.

b. Waste Segregation

Table 4.Frequency Distribution of Waste Sorting in the Sabang City Tourism Area in 2023

No.	Waste Generation	Frequency	%
1	Qualified	0	0
2	Not Eligible	77	100
	Jumlah	**77**	**100**

Source: Primary data (processed in 2023)

Based on Table 4. shows that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 100% of the sorting of waste in the tourist area of Sabang City in 2023 did not meet the requirements compared to 0% of the sorting of waste in the tourist area of Sabang City in 2023 met the requirements.

c. Waste Collection

Table 5. Frequency Distribution of Waste Collection in the Tourism Area of Sabang City in 2023

No.	Waste Generation	Frequency	%
1	Qualified	75	97,4
2	Not Eligible	2	2,6
Jumlah		**77**	**100**

Source: Primary data (processed in 2023)

Based on Table 5. shows that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 97.4% of waste collection in the tourist area of Sabang City in 2023 met the requirements compared to 2.6% of waste collection in the tourist area of Sabang City in 2023 did not meet the requirements.

d. Waste Transportation

Table 6. Frequency Distribution of Waste Transportation in the Sabang City Tourism Area in 2023

No.	Waste Generation	Frequency	%
1	Qualified	77	100
2	Not Eligible	0	00
Jumlah		**77**	**100**

Source: Primary data (processed in 2023)

Based on Table 6. it shows that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 100% of the transportation of waste in the tourist area of Sabang City in 2023 met the requirements compared to 0% of the transportation of waste in the tourist area of Sabang City in 2023 did not meet the requirements.

Discussion

1. Waste Generation

The results showed that respondents at the Sabang City Environment, Cleanliness and City Beauty Office (DLHK) in 2023 said that 61.0% of the waste generation in the Sabang City tourism area in 2023 did not meet the requirements compared to 39.0% of the waste generation in the Sabang City tourism area in 2023 met the requirements. The amount of waste generated per day in Sabang City is 17.49 tons / day, with the largest amount of waste coming from household waste 0.78 kg / person / day.

The results of this study are in line with research conducted by Dewi (2021) showing that 37.0% of waste generation does not meet the requirements at the Rawa Jombor Tourism Site, Bayat District, Klaten Regency.

The results of this study are supported by the theory that the high volume of plastic waste needs to be a special concern not only for the government, but also for all parties. Both the tourism industry, Pakraman villages and households. It is feared that this high plastic waste will leave problems for future generations.

2. Waste Sorting

The results showed that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 100% of the waste segregation of the tourist area of Sabang City in 2023 did not meet the requirements compared to 0% of the waste segregation of the tourist area of Sabang City in 2023 met the requirements. The bins provided are only garbage cans or containers at tourist attractions in Sabang City.

The results of this study are in line with research conducted by Dewi (2021) which shows that 86.0% of waste sorting does not meet the requirements at the Rawa Jombor Tourism Site, Bayat District, Klaten Regency.

The results of this study are supported by the theory that it is necessary to provide a sorting place at each point of the trash can, at least two types, namely special organic and special inorganic

waste. If possible, there are three types of waste sorting, namely organic special waste, inorganic special waste (plastic, styrofoam, glass) and inorganic used electronics (used batteries, cables, etc.). This is to facilitate the achievement of better waste management (Ronim, 2019).

3. Waste Collection

The results showed that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 97.4% of waste collection in tourist areas of Sabang City in 2023 met the requirements compared to 2.6% of waste collection in tourist areas of Sabang City in 2023 did not meet the requirements. The unqualified waste collection is due to the fact that the waste collection site does not have a lid, the waste is left open so that it is easily infested with disease vectors, and the waste collection site does not have ventilation holes, covered with wire mesh to prevent flies from entering.

The results of this study are in line with research conducted by Dewi (2021) which shows that 76.0% of waste collection meets the requirements at the Rawa Jombor Tourism Site, Bayat District, Klaten Regency.

4. Waste Transportation

The results showed that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 100% of the waste transportation in the tourist area of Sabang City in 2023 met the requirements compared to 0% of the waste transportation in the tourist area of Sabang City in 2023 did not meet the requirements. The results of this study are in line with research conducted by Dewi (2021) which shows that 86.9% of waste transportation meets the requirements at the Rawa Jombor Tourism Site, Bayat District, Klaten Regency.

The results of this study are supported by the theory that in the transportation phase, waste will be transported by cleaners using carts and trucks. When transporting waste, the carts/trucks are closed, so that the waste does not scatter, the waste will be transported to the landfill once a day. Good waste transportation is closed waste transportation, no scattered waste when transporting, the frequency of transportation is once every 1 day (Suparlan, 2015).

5. Waste Management

The results showed that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 66.2% of the waste processing of the Sabang City tourism area in 2023 met the requirements compared to 33.8% of waste processing in the tourist area of Sabang City in 2023 does not meet the requirements. In processing waste, Lhok Batee Landfill has 3R facilities such as semi-permanent waste disposal buildings, sorting conveyers, input conveyer belts, organic waste chopping machines, compost sifters and plastic chopping machines. However, the implementation of waste management is still less than optimal because the waste management model at the Lhok Batee landfill is controlled landfill, where waste that has been buried and compacted in the burial area is covered with soil at least every 7 days. However, its implementation needs a lot of improvement. Landfill backfilling can currently only be done once a month. Lhok Batee Landfill is in dire need of revitalization.

The leachate collection and treatment system is not functioning, so liquid waste arising from the ingress of external water into the waste fill or heap, which then dissolves and rinses dissolved matter, cannot be drained and treated in the leachate pond. This will affect the environmental quality around the Lhok Batee landfill. Another thing that needs attention is that methane gas control is not functioning and there are no fire fighting facilities so that the handling of emergency response to fire hazards will be constrained and landslides.

The results of this study are in line with research conducted by Dewi (2021) which shows that 66.0% of waste processing meets the requirements in tourist attractions. that meet the requirements at the Rawa Jombor Tourism Site, Bayat District, Klaten Regency.

6. Garbage Disposal

The results showed that respondents at the Department of Environment, Cleanliness and City Beauty (DLHK) of Sabang City in 2023 said that 100% of the waste disposal of tourist areas of Sabang City in 2023 met the requirements compared to 0% of the waste disposal of tourist areas of Sabang City in 2023 did not meet the requirements. The main activity of waste disposal at the Lhok Batee landfill is Controlled landfill. In this method, the waste that arrives every day is leveled and compacted with western equipment. Then, the compacted waste is covered with soil every month.

This is done to reduce odor, reduce fly breeding, and reduce the release of methane gas. In addition, drainage channels are also made to control the flow of rainwater, and leachate collection channels.

Currently, the management of the Lhok Batee Landfill is an important priority in waste management in Sabang City from many other environmental problems that must be resolved immediately in Sabang City. The Sabang City Government, through the Department of Environment and Hygiene, realizes that the existence of a landfill is not a complete answer to the waste problem in Sabang City. The results of this study are in line with research conducted by Dewi (2021) which shows that 96.0% of waste disposal meets the requirements in tourist attractions. that meets the requirements at Rawa Jombor Tourist Attraction, Bayat District, Klaten Regency.

The results of this study are supported by the theory that the components that meet the requirements include no garbage scattered in tourist sites, bins made of strong materials, not rusty, watertight, smooth and flat inner surfaces, have lids that are easy to open / close without dirtying hands, the volume of garbage does not appear to exceed the capacity of the trash can, the trash can is easy to fill and empty, the garbage from each block is transported / emptied every day, the transportation of garbage is closed, there is no garbage scattered during transportation, the landfill is far from residential areas > 500 meters, the landfill is far from water sources > 500 meters, garbage is transported every day (Chandra, 2015).

CONCLUSION

From the research results it can be concluded that: The waste generation of the Sabang City tourism area in 2023 of 61.0% does not meet the requirements, this is because there is no separate temporary waste storage area between organic waste and inorganic waste and there are no temporary waste bins (TPS) available at each trader's stall.

Waste segregation in the tourist area of Sabang City in 2023 at 100% does not meet the requirements, this is because there is no availability of segregated waste bins / bins so that the segregated waste bin / container is not used properly and the waste is mixed.

Waste collection in the tourist area of Sabang City in 2023 at 97.4% meets the requirements, because the waste collection place is easily accessible, both by the people who will use it and by transport vehicles so that it does not become a place for flies and rats.

Waste transportation in the tourist area of Sabang City in 2023 is 100% eligible because waste transportation is equipped with garbage water safety (not leaking / seeping, and the capacity of the garbage container is in accordance with the road traveled.

The waste management of the Sabang City tourism area in 2023 of 66.2% meets the requirements because the community utilizes waste as composting, waste that can be recycled such as plastic waste used as beverages so as to reduce uncontrolled waste generation.

Disposal of waste in the tourist area of Sabang City in 2023 by 100% meets the requirements because landfills are not built near sources of drinking water or clean water and the final treatment method is in accordance with government regulations.

The waste management element of the Sabang City tourism area in 2023 is 98.7% unqualified because there is no sorting of waste so that the waste is mixed, there are no tools or facilities for recycling waste in tourist public places and there is also no waste management technology available.

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