# **PROCEEDING**

1<sup>st</sup> International Conference of Health Polytechnic of Jambi icon@poltekkesjambi.ac.id http://journal.poltekkesjambi.ac.id/index.php/ICoHPJ

ISSN **2988-7356** 

### MARKET WASTE MANAGEMENT TOWARDS A HEALTHY MARKET

### Sukmal Fahri 1,2, Krisdyanta1,2, Mbulan Dewi Kartika1

<sup>1</sup>Department of Environmental Health, Politeknik Kesehatan Kementerian Kesehatan Jambi <sup>2</sup>PUI-PK, Politeknik Kesehatan Kementerian Kesehatan Jambi *Corresponding author: sukmalfahri46@gmail.com* 

#### **ABSTRACT**

Garbage is a serious problem that must be considered. The amount of waste is increasing along with the population. One of the most common waste problems is market waste. Increased activity in the market dramatically affects the number of market waste piles. To overcome this, serious waste management is needed. Waste management starts with waste collection, transportation, temporary waste disposal, and the role of cleaners and traders. This study aims to find out how the Waste Management System at the Kersik Tuo Market works.

This type of research is descriptive, using observation and interviews. The samples used were 85 traders and five janitors. The results of this study are that the Kersik Tuo Market is categorized as unhealthy where waste collection is 21 (24.7%), waste transportation is 21 (24%), availability of waste storage facilities is 21 (24%), and the role of traders is 37 (43.5%) not following provisions Permenkes No 17 of 2020 concerning Organizing Healthy Markets and the Role of Poor Traders in Waste Management. In conclusion, it is necessary to implement Government Regulation No. 17 of 2020 concerning Organizing Healthy Markets so that Kersik Tuo Market waste management can improve and make the Kersik Tuo market become a healthy market. To realize this, the participation of traders in market waste management.

Keywords: market waste; transportation; the role of officers

#### **BACKGROUND**

Garbage is a common problem in all regions because almost all human activities can generate waste (Tamba, 2021, Ali &Christiawan, 2019). Human activities make the amount of waste increase along with population growth. An increase also follows an increase in population in the number of activities and productivity of the people, inseparable from the accumulation of waste and causing problems that are never resolved (Arifan H, 2018).

The market is one of the economic containers for most people. Activities in the market between traders and buyers indirectly cause piles of garbage every day. This causes the problem of market waste to

become a severe problem. In addition, the amount of market waste is also relatively large, so the problem of market waste is a problem that must be considered. To overcome this, serious waste handling is needed. Waste handling can be done by doing waste management.

Many traders in the Sukaramai market do not care about maintaining cleanliness around the market. Many traders still throw garbage carelessly, causing a lot of waste to be scattered (Sipangkar, D., 2018). Research by Sitio, J. M. T. (2017) also found that waste management at the Berastagi Fruit Market needed to meet the requirements. Research by Tri and Widodo (2013) also found that waste management at Merdeka Market,

Samarinda City, could have been better. The study results from Lestari Sinta (2016) also found that waste management at Bandar Jaya Plaza, Central Lampung, could have been better.

Kersik Tuo Market, Kerinci Regency. Trash was found scattered around the market environment, the trader's stalls, and the market road. This waste comes from the waste of traders and the surrounding community. The traders who sell at the Kersik Tuo Market consist of traders of vegetables, fish, meat, shoes, groceries, cosmetics, clothes, food/drinks, cloth, agricultural equipment, and foot traders. Five, so the waste found was in the form of vegetable waste, fish waste, plastic waste, food waste, fruit waste, and others.

Garbage is also found scattered on the side of the road. In addition, based on the results of interviews conducted with the people who live around the market, they said that garbage collection is sometimes only done once a week. This is one of the causes of the discovery of piles of garbage around the KersikTuo Market. This waste pile is very disturbing merchants sell it to locals and tourists who visit Kerinci because this market is a tourist destination in Kerinci. In addition, this waste can become a nesting site for disease-causing vectors. These vectors can disrupt health such as diarrhea, dysentery, cholera, typhoid, and garbage. They can also interfere with the aesthetics of beautiful markets and can pollute the air. This research is to find out "About Waste Management at KersikTuo Market, Kerinci Regency.

#### RESEARCH METHOD

This research is descriptive qualitative research. aims to determine the value of the independent variable without making a comparison or linking it with other variables. The observational approach and population interviews refer to the research concept (Sugiyono, 2008). The population in this study were 578 traders and 7 cleaners at KersikTuo Market. KayuAro District. The sample for this study used a technique purposive based on the researcher's consideration of which samples were most appropriate, using the Slovin formula, namely:

$$n = \frac{N}{1 + N (d)^2}$$

Keterangan:

n: number of samples N: population size

d: significant level (p), d=0,1

In the Slovin formula there are several provisions, namely: Value of d = 0.1(10%) for a large population. Value of d = 0.2 (20%) for a small population

Then the calculations used in this study were as many as 85 traders and 5 cleaners at the Kersik Tuo Market, Kayu Aro District.

#### RESULTS AND DISCUSSION

**Table 1.** Waste Collection

Num	Activity	Frequency (f)	Percent (%)
Collection			
1	Good	21	24,7
2	Not Good	64	75,3
	Amount	85	100
Freight			
1	Good	21	24,7
2	Not Good	64	75,3
	Amount	85	100
Garbage collection			
1	Good	34	40,2
2	Not Good	51	59,8
	Amount	85	100
Merchant roles			
1	Good	34	40,2
2	Not Good	51	59,8
	Amount	85	100%
Role of janitor			
1	Good	3	66,7
2	Not Good	2	33,3
	Amount	5	100

Based on the results of the research that has been done, waste collection at the KersikTuo Market is categorized as not good 64(75.3%). In The results of interviews conducted with traders, as many

as 64 (75.3%) said that garbage was collected once a week. In addition to interviews conducted with cleaners, garbage collection was carried out four times a week, namely Sunday, Monday, Tuesday, and Friday.

The process of transporting waste at KersikTuo Market begins with collecting waste from market stalls/courtyards by cleaners and then transporting it to the landfill using a DumpTruc without any sorting process for organic waste and non-organic waste. This also occurs in research (Arifan H, 2018) which says that waste is not separated according to type before being transported and that the smell generated by piles of garbage significantly pollutes the air around the market area.

The transportation process is carried out manually by moving the waste in the TPS using sacks and putting it in the dump truck. The dump trucks used are still in good condition, but they are not waterproof and are not equipped with nets or covers, so the garbage transported is scattered when it exceeds the load. This also happened in research from Tamba and Brayan Lisbeth (2021), which said that the transportation equipment used at the Sidikalang Market did not meet the requirements because the transportation equipment did not have a cover during the transportation process, waste would be scattered and caused an odor.

The waste storage facilities used at KersikTuo Market cannot categorized as good. This is because many tools and facilities still need to be following the RI Ministry of Health No. 519 of 2008. This is following research conducted at the Tasikmalaya Traditional Market, which found results that the waste management system at the market does not yet have an appropriate management system, one of which is because the facilities provided are only in the form of temporary waste storage places whose conditions seem to be just as long as they are there.

At the Kersik Tuo Market, it was found that as much as 64% of there was no temporary waste storage space at the traders' stalls. This storage area should be used by traders to temporarily store the waste left over from sales before the cleaning staff collects it. The place is a container used by traders, such as sacks, plastic, and baskets made of rattan (Susane, 2018). Based on the results of the interviews, it was found that the cleaners or the market manager should have provided this waste storage area so only traders with high awareness had it. Andriani and Tiara (2018), who says that at Ciputat Market, the market manager and cleaners have yet to provide particular trash bins for traders, so the traders provide their own.

There are no garbage storage facilities at KersikTuo Market. Market waste is only accommodated in the market yard or open space without being given a container such as arm rolls or containers. This is not followed with Tamba's research (2021), which found that at the Sidikalang Market, where the garbage collection was held, they met the technical criteria, namely using arm rolls.

There are also no facilities or tools available for garbage collection to separate waste based on its type so that the waste piles up as one (Kahfi, 2017; Mahyudin, 2016). This proves that the waste collection facility at the KersikTuo Market cannot be categorized as good because it follows the RI Ministry of Health No. 519 of 2008, which states that TPS must be solid and waterproof, easy to clean, provide containers to separate waste according to its type and TPS must be sufficient to accommodate debris.

This means that improvement is still needed in completing the waste collection facilities at the KersikTuo Market. This is similar to research (Madani, 2011) which says that significant improvements are required to waste facilities in Makassar City, so that market waste management can be handled properly.

The interviews also found that only 24 (28.2%) traders swept and collected the waste left over from selling, and 61 (71.8%) traders did not clean and did not collect the waste left over from selling. These traders said that when they were finished selling, they immediately left the stall or courtyard, and the cleaners would work to clean it. This means that more than 50% of traders do not play a role in cleaning up the remaining sales waste. This is supported by research conducted at the Teluk Kuantan Modern Market, which found that most traders needed to be made aware of the importance of trader participation in market waste management. In addition, the majority of traders do not know how to sort and manage waste properly, so counseling is needed for traders about this.

Most traders at the KersikTuo Market also do not play an active role in waste sorting. As many as 69 (81.2%) traders did not separate waste based on type, and only 16 (18.8%) traders separated waste based on type. This is followed by research (Rahmadani, 2013) which found that 69.1% of traders did not separate waste in trash cans. Whereas in waste management, the thing that needs to get attention is the waste selection process.

Identification of the type of waste produced will significantly affect the subsequent management process. This means that it is essential to be aware of traders and cleaning staff in sorting organic and organic waste (Andriyani, D. A. O and Posmaningsih, 2019).

Market traders at the KersikTuo Market also do not play an active role in the discipline of implementing hygiene regulations. Only 22 (25.9%) traders are disciplined in implementing hygiene regulations. This affects the market waste management system because most traders need to be more disciplined in carrying out hygiene regulations, and market waste management is not optimal. This study's results align with research (Andriani and Tiara, 2018), which says that the

regulations in the Ciputat Market have not run optimally.

This means that the role of traders is not following Law No. 18 of 2008 which states that the role of traders in waste management is to sort waste, have trash cans, dispose of garbage in its place and maintain cleanliness ("Peraturan Menteri Kesehatan Republik Indonesia Nomor 17 Tahun 2020; Peraturan Menteri Dalam Negeri Nomor 33 Tahun 2010)

The role of the cleaning staff at the KersikTuo Market could have been better, namely, 33.4% said it was not good, namely regarding the garbage transportation carried by cleaning workers. Garbage out transportation was only done once a week, after 3 or 4 days after market day. As a result, it smells so motorists pass by. This is inadequate facilities due to infrastructure for 1x24 hour transportation. Research (Tri, Widodo, 2013) says that waste management in the market is highly on conditions dependent the availability of supporting equipment. However, more funds and attention from related parties still need to be addressed. This means that supporting facilities are needed so that the role of cleaning staff becomes more optimal.

## CONCLUSION AND RECOMENDATIONS

The KersikTuo Market is categorized as unhealthy where garbage collection, waste transportation, and the availability of waste storage facilities are not following with the provisions of the Minister of Health Regulation No. 17 of 2020 concerning Organizing Healthy Markets and the Role of Traders Not Good in Waste Management.

The Regional Government of the KersikTuo Market to be able to full fill the facilities at the KersikTuo market and make policies in the form of imposing sanctions on traders who dispose of waste in the wrong place so that it can provide a

deterrent effect for the perpetrators and reward both traders who heed the rules.

#### REFERENCES

- Andriani, Tiara, 2018. Peran Pedagang Pasar Dalam Pengelolaan Sampah Di Lingkungan Pasar Ciputat. Skripsi Fak. Ilmu Tarb. Dan Kegur. Univ. Islam Negri Syarif Hidayatullah Jkt.
- Andriyani, D. A. O, Posmaningsih, 2019. Studi Pengetahuan, Sikap dan Tindakan Pedagang Tentang Pengelolaan Sampah di Pasar Umum Ubud Kecamatan Ubud Kabupaten Gianyar Tahun 2017. J. Kesehat. Lingkung. J. Enviromental Heal.
- Arifan H, 2018. Pengelolaan Sampah Pasar Kuraitaji Kecamatan Pariaman Selatan Kota Pariaman. Menara Ilmu 12(8), 61–68.
- Peraturan Mentri Dalam Negeri Nomor 33 Tahun 2010 Tentang Pedoman Pengelolaan Sampah, 2010.
- Kahfi, A., 2017. Tinjauan Terhadap Pengolaan Sampah. Jurisprud. Jur. Ilmu Huk. Fak. Syariah Dan Huk. 4, 12–25.
  - https://doi.org/10.24252/jurisprudent ie.v4i1.3661
- Lestari Sinta, 2016. Prilaku Pedagang dalam Membuang Sampah: Studi di Kawasan Bandar Jaya Plaza di Kelurahan Bandarjaya Timur Kecamatan Terbanggi Besar Kabupaten Lampung Tengah. Skripsi S1 Fak. Ilmu Sos. Dan Ilmu Polit. Univ. Lampung Bandar Lampung 2016.
- Mahyudin, R.P., 2016. Strategi Pengelolaan Sampah Berkelanjutan. Enviro Scienteae 10, 33–40. https://doi.org/10.20527/es.v10i1.19
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 17 Tahun 2020 Tentang Penyelenggaraan Pasar Sehat., 2020.
- Rahmadani, R., 2013. Kandungan senyawa aktif pada Holothuria coluber asal

- Perairan Lampung Selatan yang Berpotensi Sebagai Antibakteri dan Antioksidan. Skripsi Univ. Padjajaran Bdg.
- Sipangkar, D., 2018. Pengelolaan Sampah Pasar Tradisional Studi Deskriptif Pasar Tradisional Sukaramai. 1–102.
- Sitio, J. M. T., 2017. Sistem Pengelolaan Sampah Pasar Buah Berastagi Kecamatan Berastagi Kabupaten Karo Tahun 2017. http://180.250.18.58/jspui/retrieve/ff 590bc1-9d6c-4673-95f2-b8236df05367/1523422921715\_Kar ya Tulis Ilmiah.pdF.
- Sugiyono, 2008. Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D). Alfabeta.
- Tamba, Brayan Lisbeth, 2021. Sistem Pengelolaan Sampah Pasar Tradisional Sidikalang Kabupaten Dairi. Karya Tulis Ilm. Diploma III Politek. Kesehat. Medan Jur. Kesehat. Lingkung.
- Tri, Widodo, 2013. Studi Tentang Peranan Unit Pasar dalam Pengelolaan Sampah di Pasar Merdeka Kota Samarinda. Ejurnal Adm. Negara Volume 1, Nomer 1, (2013: 1-11):h.28.