Waste Management in Kurai Taji Market Sub-District South Pariaman, Pariaman City

Hendra Arifin1*, Nurhasan Syah2 and Eri Barlian2

1 Graduate Program of Environmental Science, Universitas Negeri Padang, Indonesia
2 Lecturer of Environmental Science, Universitas Negeri Padang, Indonesia

*hendraarifin38@yahoo.com

Abstract: Waste problems will not be separated from behavioral problem and lifestyle. Increased activity in the market greatly influences the quantity of waste piles in the market environment. This research began from the findings of poor waste management at Kurai Taji Market. Here, Waste management is not in accordance with the standard as according to Cunningham (2004) which is the stage of modern waste management consists of 3R (Reduce, Reuse, Recycle) before being destroyed or destroyed. The purpose of this study is to see how the appropriate form of management and strategies are used in waste management at the Kurai Taji Market. The methodology used is descriptive qualitative. Waste Management in Kurai Taji Market, Pariaman City is as follows; Waste management in the Kurai Taji Market with the concepts of Reduce, Resue, and Recycle (3R) has not been implemented by market managers because the traders as a whole and the communities around the market have not reduced waste generation and reused market waste and they also do not have a habit to care the environment at Kurai Taji market.

1. Introduction
The market based on the Housing Estate Planning Guidelines is a regional shopping center whose main function as an environmental shopping center that sells daily necessities including vegetables, meat, fish, fruits, rice, flour, clothing materials, grocery items, school supplies, other household appliances [1]. Pariaman city runs the economy in the trade sector, followed by the service sector, where there are five traditional markets in this city. Traditional markets are a place where someone conducts buying and selling transactions in the form of goods and services to fulfill their daily needs, especially food and other primary household needs. Traditional markets in Pariaman City are Balai Nareh Market, Padusunan Market, Jati Market, Pariaman Market and Balai Kurai Taji Market.

Management of traditional markets such as Kurai Taji Market must be considered. Not only the management of its development will have an impact on increasing income but also on environmental hygiene management so that the distribution of goods in the market continues to run smoothly.

Kurai Taji Market is classified as a traditional market. Kurai Taji Market has an area of 1 hectare with 200 traders. Kurai Taji market has always seemed to be shabby, dirty, and chaotic. The stigma attached to traditional markets is generally motivated by the behavior of market traders, visitors or buyers and market managers. Kurai Taji market was built by the government and self-help community. Currently Kurai Taji Market is a significant contributor of waste in Pariaman City in daily life-day.
According to [2] "Waste is material that has no value or is not valuable for reprocessing purposes, waste is material that is wasted or disposed of from the results of human activities and natural processes that do not have economic value." Market waste has characteristics that slightly different from residential waste. Market waste composition is predominantly organic waste. Plastic waste on the market is fewer in number than household waste.

Waste problems will not be separated from behavioral problems and lifestyle. Increased activity in the market greatly influences the quantity of waste piles in the market environment. Waste management can be carried out efficiently and directed if functional relationships between waste elements can be clearly identified and understood. In order for the waste management system to be efficient, each element, both individuals and collectively must optimally consider various limitations such as costs, technology, education and community behavior.

At present the community in Pariaman City, especially the people who live around the Kurai Taji Market, still sees waste as a useless waste, not giving value as a resource that needs to be utilized. The community in managing waste still relies on the end-of-pipe approach, garbage is transported and disposed of to the final waste processing site.

Waste management at Kurai Taji Market is not so good. Such as the availability of one garbage truck. Ideally the waste before stacking in the trash can is separated according to the type. In order to facilitate preparation before processing. But the fact is that all market traders dispose of all types of waste in a garbage truck that is available in only one unit. Moreover, residents around the Kurai Taji Market also dispose of household garbage to a shelter truck at Kurai Taji Market along with restaurant merchants as well as dispose of their kitchen waste to the Kurai Taji Market garbage collection. The smell caused by the piles of garbage is very polluting the air around the market area.

This problem really requires serious handling of extras by the manager of the market environment. Market waste alone cannot be fully handled by the market manager, coupled with the addition of waste from the surrounding community. In order for waste management to undergo a better transformation, ideally market managers must educate and guide traders and the public about the obligation to clean up their respective trading areas in order to minimize the slum environment. But in fact this has never been done by market managers. Naturally, if the traders are not so concerned about the garbage around it. Traders only hand over the garbage to five cleaners.

Based on the description of the problems that exist in the Kurai Taji Market, the researchers felt that they needed to carry out research with the title "Waste Management at Kurai Taji Market, Pariaman City."

1.1. Problem Formulation
As for the formulation of the problem in the study of Waste Management in Kurai Taji Market, Pariaman City are as follows;
1. How is the waste management at Kurai Taji Market, Pariaman City?
2. What is the right strategy to deal with the garbage problem in the Kurai Taji Market in Pariaman City?

1.2. Research Purpose
The objectives of this study are:
1. To find out the right waste management at Kurai Taji Market, Pariaman City.
2. Looking for the right strategy to deal with the waste problem in the Kurai Taji Market, Pariaman City.

2. Literature Review

2.1. Waste
According to [3]"waste is a material that has no value or is not valuable for ordinary or primary purposes in fabricating or using damaged or defective goods in manufacturing or over-material or
rejected or discarded material". In Law Number 18 concerning Waste Management stated the definition of waste as human activities and/or natural processes in the form of solids. According to [4] re things that are no longer desired by those who have and are solid. While in the Academic Script Garbage Draft is mentioned that waste is left over a business or activity in the form of solid or semi-solid in the form of organic or an organic matter which can be decomposed or unraveled which is considered to be useless and discarded into the environment.

"Solid waste or waste include objects in the form of plastic, aluminum, iron, cans, glass, etc., while liquid waste is the seepage of liquid from decaying waste, commonly called *lindir* and can contaminate groundwater and rivers" [5] hen according to [2] waste is material that has no value or is not valuable for reprocessing purposes, waste is material that is wasted or disposed of from the results of human activities and natural processes that do not have economic value".

2.2. Market
Market is people who have the desire to be satisfied, for shopping, and packaging to spend it (6) While the same opinion says that the market is people who have the desire to be satisfied, money to shop, and willingness to tax [7].

Traditional markets are places where sellers and buyers meet to conduct transactions, in the case where existing market organizations are still very simple, low levels of efficiency and specialization, dirty physical environment and narrow building patterns [8]. Traditional markets are built and managed by the government, regional government, private sector, State-Owned Enterprises and Regionally-Owned Business Entities.

2.3. Waste management
[9] argues that waste management is an effort to create beauty by processing waste that is carried out harmoniously between the people and managers or the government together. Meanwhile, according to [2] waste management is an activity that includes the collection, transportation, processing, recycling or disposal of waste material. In [10] concerning Waste Management, waste management is a systematic, comprehensive and sustainable activity that includes the reduction and handling of waste that aims to improve public health and environmental quality and make waste as a resource. Management of household waste and household-like waste consists of: (a) waste reduction; and (b) handling waste. Where the reduction of waste in question includes activities: (a) limitation of waste generation; (b) recycling of waste; and / or (c) reuse of waste. According to [11] the stage of modern waste management consists of 3R (Reduce, Reuse, Recycle) before finally being destroyed or destroyed. The following are described in the waste management cycle:

![Diagram of Waste Management Cycle](source: [11])

2.4. Conceptual Framework
Concept Problems related to the above phenomenon occur at Kurai Taji Market, Pariaman City. Researchers felt it was important to evaluate the waste management process through research on Waste Management at the Kurai Taji Market. The following can be described in the conceptual framework in Figure 2:
3. Methodology Research

This study uses a qualitative description research method. Informants in this study were market traders, communities, market managers, and local governments. The researcher used three data collection techniques, namely through observation, interviews and documentation studies. Data collected with various techniques above, then carried out data analysis. [12] explains that in qualitative research there are three stages of analysis, namely data reduction, data presentation and conclusion drawing.

4. Result and Discussion

4.1. Result

4.1.1. Reduce Analysis. Waste is solid waste consisting of organic and inorganic substances which are considered useless anymore and must be managed so as not to endanger the environment and protect development investment. Waste needs to be managed maximally because it has been regulated in the Waste Management Act. waste management efforts can be carried out by reducing efforts first. The point here is that everything is trying to reduce the cause of garbage.

Based on input from traders, the public and market managers described above, it can be concluded that efforts to reduce the amount of waste in the Kurai Taji Market have not been carried out in every layer that has accumulated garbage in the Market. Like traders and the surrounding community, as well as market managers, there has been no program implemented so that the amount of garbage at Kurai Taji Market decreases.

4.1.2. Reuse Analysis. The principle of reuse is done as much as possible to sort out items that can be reused, and also avoid using items that are only disposable. This can extend the time spent on the item before it becomes garbage. the result of the interview with WR regarding the reuse of waste is "wet waste is processed into organic fertilizer and dry waste is made into crafts".

Based on the results of interviews, it can be concluded that a small portion of the community has used wet waste for compost, and dry waste is burned and only a small proportion of traders do this. Market managers only stack wet and dry garbage in one container and transport it to a landfill. The garbage is left buried just like that without being reprocessed.

4.1.3. Recycle Analysis. Waste now continues to be a problem because of the low awareness of traders, communities and market managers in Balai Kurai Taji to process and recycle waste (recycle). Recycling is a process to make used materials into new materials with the aim of preventing the actual waste become something useful, reduce the use of new raw materials, reduce energy use, reduce pollution, land damage and greenhouse gas emissions when compared to making new goods.

Explanations from all community representatives provide information that is not much different from the information given by traders and market managers. It can be concluded that the collected waste in the container is transported to disposal and just piled up without doing something like reprocessed into useful items such as compost and handicrafts.
4.2. Discussion
Waste management along with the development of the city has become the main agenda faced by almost all cities, including in Pariaman City. The problem of waste management will never be resolved if it only relies on the government without any involvement from the community as a source of producing waste itself.

In [10] it was said that waste problems cover many aspects, therefore management must be carried out comprehensively and integrated with new innovations that are more adequate in terms of all aspects, both social, economic and technical aspects from upstream to downstream in order to provide economic benefits, be healthy for the environment, and can change people's behavior, meaning that waste handling needs to be done from the source. Community-based waste management with the 3R concept aims to reduce waste from the source, reduce environmental pollution, provide benefits to the community, and can change people's behavior towards waste. The 3R concept is actually very simple and easy to implement, but difficult to implement. Because the success of the 3R concept is largely determined by community participation by changing its behavior which is generally influenced by the socio-cultural character and socio-economic character that characterizes people's lives.

4.2.1. Reduce. Limitation of waste generation or waste reduction (reduce) is interpreted as an activity to reduce usage or behavior patterns that can reduce waste production and not make excessive consumption patterns. Based on the data analysis conducted, it was found that efforts to reduce the amount of waste in Kurai Taji Market had not been carried out by every layer of individuals who disposed of garbage in the market such as traders and surrounding communities. Also, with the market manager, no program has been implemented to reduce the amount of waste at Kurai Taji Market.

The sources of waste are based on observations of not only traders, surrounding communities, and visitors. But also, seasonal street vendors who sell when Monday at the peak of the market crowd or called "hall". As a result, the garbage will never decrease, on the contrary there will be more garbage accumulation in the container. If the market is in a hall on Monday, a pile of garbage exceeds one container collected.

The problem above can be found a solution starting from each officer, both from the market manager and from the Pariaman City Environmental Agency, must coordinate together in terms of waste management, so that the garbage problems that arise will be resolved immediately. The absence of waste reduction efforts can be overcome by involving every element of society, traders, and managers. This is in line with the opinion [13] "The involvement of all elements in waste management is one of the key factors in overcoming waste."collected in a forum. Then given direction so that public awareness, especially the traders to always maintain the cleanliness of the market, including disposing of garbage in containers that have been provided. For market managers, it is best to provide a dump/garbage container that meets established health criteria as well as make slogans in every corner of the market that contains an appeal to maintain the cleanliness of the market environment.

4.2.2. Reuse. Reuse of waste according to the Explanation of Article 11 Paragraph (1) letter c Government Regulation [10] concerning Household Waste Management and a Kind of Household Waste is an attempt to reuse waste in accordance with the same function or different function and / or reuse parts of garbage that are still useful without going through a processing process first. Reuse is the activity of reusing materials or materials that are still suitable for use, for example by using hand over paper towels, using used mineral bottles for flower pots or using used bottles for cooking oil containers. Another example that can be done is to wear back clothes such as used clothes to orphans. But the closest thing is to giving clothes that are too small to younger siblings or relatives in need.

Based on the results of the study, some people use wet waste for compost, and dry waste is burned. Only a small number of traders do this. Market managers only stack wet and dry garbage in one container and transport it to a landfill. The garbage is left buried just like that without being reprocessed.
From the results of the study, the resulting market waste has economic potential that is feasible to be processed, especially in terms of composting. So, in this case, given a solution so that the waste is reduced and more beneficial for the market owner or the manager can open opportunities for investors who want to do processing in that market.

4.2.3. Recycle. Garbage is an item not useful for ordinary or primary purposes in the use of damaged goods in manufacturing or overloaded or rejected materials. Waste is divided into two organic and organic waste. Organic waste is made up of plants and animals that are taken from nature or produced from agricultural, fishery or other activities. This garbage is easily described in natural processes. The rest of the market results in the form of flour, vegetables, fruit skin etc. are classified into organic waste. Furthermore, inorganic waste, which comes from natural resources cannot be renewed such as minerals and petroleum, or from industrial processes.

The two types of waste above can be recycled or often called recycle. Recycle according to the Explanation of Article 11 Paragraph (1) letter b Government Regulation [13] 81 of 2012 concerning Waste Management is an effort to use waste to become useful items after going through a management process first. The results of the research on recycle garbage in the Kurai Taji Market are garbage collected in containers transported to dumps and piled up without doing anything like reprocessed into useful items such as compost and handicrafts. The point here is that there is no recycling process of waste carried out at the Kurai Taji Market.

Related to the results of the above research, it can be indicated that things that become obstacles or obstacles in the waste management process in the Market are the importance of maintaining the cleanliness and health of the environment around the market by minimizing the remaining waste which the reduce method uses. Then there is still an assumption in the community that garbage is material / goods that have no economic value anymore. Furthermore, there is still no workforce who is willing to assist in carrying out the activities of implementing the 3R (Reduce, Resue and Recycle).

5. Conclusion
The research findings obtained through interviews, observation and documentation have obtained the, then conclusions can be drawn regarding Waste Management in Kurai Taji Market, Pariaman City as follows; Market management in the Kurai Taji Market with the 3R concept has not been implemented by the market manager. The traders as a whole and the people around the market have not yet made a reduction in waste generation, and the use of market waste again.

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