



## The Influence of Waste Monitoring Officers On The Implementation Of Waste Management In Naimata Village, Kupang City In 2023

Agustina Agustina<sup>1</sup>, Ety Rahmawaty<sup>2</sup>, Debora G. Suluh<sup>3</sup>, Fransiskus Geroda Mado<sup>4</sup>

<sup>1,2,3</sup> Sanitation Study Program, Poltekkes Kemenkes Kupang, Indonesia

<sup>4</sup> Public Health Study Program, Nusa Cendana University, Indonesia

### Abstract

Based on initial research in RT 11 RW 4 Naimata Village, there is so much waste produced every day, but the waste produced is not managed properly but all the waste produced is directly burned. This type of research is descriptive, the variables in this study are Domestic Waste Management in the Naimata Village community. The population in this study was 600 families, the research sample was 381 families, data collection was carried out by survey using the Epicoleck application. Descriptive data analysis. The results of the study showed that the stages of waste management in Naimata Village did not meet the requirements where the waste management components that were measured or assessed were the Containment stage in the good category 56%, the Collection Stage there were 70% in the bad category, the processing category there were 89% in the bad category, and the variable rate of waste generation produced 98% of the waste produced > 2.5% L / O / H. The suggestion given is to try to build a TPSS in Naimata sub-district, so that the community can process waste properly.

**Keywords** : Waste Management, Waste Monitoring Officer, Naimata Village

Corresponding Author : Agustina

Email : [agustinakende12@gmail.com](mailto:agustinakende12@gmail.com)

### 1. Introduction

The World Health Organization (WHO) defines waste as something that is not used, not worn, not liked or something that thrown away Which originate from activity man And No happen with itself. The increasing problem of waste in various cities in





Indonesia No off from rate urbanization Which Enough tall in various region urban areas that are not balanced with the provision of waste infrastructure Which adequate. Rubbish become problem important at this time, especially for cities big Which congested its population. Even rubbish Can become problem crucial, If No handled Serious because the impact Can bother infrastructure city, including vulnerability health public And environment (Fitriana, 2013).

Household (domestic) waste is the remains of goods or objects from results of household activities that do not include feces and specific waste. Management rubbish Already become Wrong One problem Which must faced society in settlements. Can be seen from human activities Which moment This No let go from activity Which produce waste orwaste, both organic and non-organic waste. The main activity from management rubbish that is move rubbish from source or embossment to place disposal rubbish which has set Handling.

This need a system which good because can cause the decline aesthetics environment and threat for health public general. Handling the waste problem is actually not that difficult, but It is also not simple. To deal with the problem of garbage requires a will which strong and both from the government and the community (New, 2021).

Based on an initial survey in RT 11, Naimata sub-district, there were so many a lot of waste is produced every day, but the waste that is the waste produced is not managed properly but rather all the waste that is produced direct burned, matter the of course to describe that in the RT the residents have not yet managed the rubbish Which they produce. Because lots inhabitant in RT 11 the No sorting the waste produced, such as wet waste and dry waste, is combined one time then thrown into the backyard of the house, the river died. Naimat Village does not yet have a TPS to be used as a temporary waste disposal site, so people throw garbage in empty places.

## 2. Research Method

Study nature descriptive. Variables in study this Management Rubbish Domestic in society to rate embossment garbage, container waste, management Rubbish public to collection waste, management Rubbish public to processing waste, management Rubbish





public to disposal waste. Data collection is primary data and secondary with method data collection namely prepare tool and materials needed like checklist, do data collection with method down direct to location research, data collection is carried out with filling checklist for know Management Rubbish public to management rubbish ward Naimata 2023. Data analyzed in a way descriptive.

### 3. Results and Discussions

#### a. Results

The results of the study showed that the stages of waste management in Naimata sub-district did not meet the requirements where the waste management components that were measured or assessed were the storage stage in the good category of 56%, the collection stage in the bad category of 70%, the processing category in the bad category of 89%, and the variable rate of waste generation produced was 98% of the waste produced > 2.5% L/O/H .

#### b. Discussion

##### 1. Waste container

Based on the results of the research that has been conducted, it shows that of the 52 families studied with the level of community waste management towards waste containers, namely 19% have waste management and 81% do not have waste management. As many as 19% of the community manage waste in terms of preparing trash bins outside and inside the house, preparing organic and inorganic trash bins, preparing trash bins that are watertight and have covers. While as many as 81% of the community do not have waste management in terms of waste containers, namely providing inorganic trash bins but not organic trash bins, organic waste is sometimes stored in plastic bags but the water from the leftover food is thrown away, have trash bins but do not have trash covers, some have covers but after use they are not closed again, trash bins are also not lined with plastic.

Waste containers are places to temporarily store waste at the source of waste. While waste containers are activities to temporarily accommodate waste





before the waste is collected, moved, transported, processed, and final waste processing is carried out at the TPA. (Ministerial Regulation, 2013) Waste requirements are watertight, easy to clean, affordable, easy to clean, light and easy to lift, have a cover. (Ministerial Regulation, 2013)

So it needs to be discussed because respondents generally produce a lot of waste but the community in RT 18 mostly do not do this as evidenced by 19% (10 families) who provide organic waste bins and 27% (14 families) who do not provide inorganic waste bins, besides that all of them directly burn the waste collected in the yard. And the trash bins provided, both organic and inorganic, do not have covers and the inorganic trash bins of the RT 18 community use sacks, boxes, plastic and some are directly thrown into the ground.

This needs to be discussed because there are still 81% of RT 18 residents who do not manage waste in collecting waste produced every day. The community chooses to combine all types of waste produced every day and then burn the inorganic waste in the yard, so that there are a lot of piles of waste incineration in the yard, this also if it is used continuously will cause the soil condition to be damaged.

Basically, waste is divided into organic and inorganic waste, the community in RT 18 should not combine all types of waste but rather separate them according to their type and provide trash bins according to their type. So that if you want to throw away waste that is no longer used, immediately throw it away according to its type.

As many as 20% (13 families) provide trash bins in each room and as many as 39 families do not provide trash bins in each room, but all the trash produced from each room is combined in the same container and burned directly and some directly throw it to the TPSS behind the Oepoi GOR, Kupang City. And as many as 40% (21 families) provide trash bins outside the house and as many as 31 families do not provide trash bins outside the house because they feel that it is





not necessary to do so because the trash produced outside the house, if necessary, can be burned directly.

As many as 46% (24 families) who provide waterproof trash bins, namely they use trash bins lined with plastic bags so that water from seepage of trash does not flow anywhere and as many as 28 families who do not prepare waterproof trash bins, namely using sacks and boxes so that water from the trash can seep everywhere. Around 15% (8 families) who have trash bins that have covers so that when throwing trash can close the trash bin so that pests and new waste from the trash do not spread everywhere. And as many as 44 families who have trash bins but do not have covers so that the smell of the collected trash can spread everywhere and allow pests or disease vectors to nest and breed in the trash bin.

As many as 51% (27 families) have prepared waterproof organic waste bins so that water from organic waste such as leftover food, drinks, vegetable scraps, water from the waste does not seep anywhere, but as many as 25 families do not have waterproof organic waste bins such as using used buckets to collect organic waste, but the waste bins are not in good condition or in other words have holes on several sides so that water from the organic waste that is collected can seep everywhere.

As many as 5% (3 families) are aware to always close the trash bin when finished using it so that the trash does not fly everywhere, but as many as 49 families after throwing trash into the trash bin do not close the trash bin again because the trash bin used does not have a lid so it does not need to be closed again. However, as many as 15% (8 families) use trash bins lined with plastic and as many as 44 families do not use this but the community uses plastic bags to hold their trash to be used as trash bins. As many as 34% (18 families) who throw organic waste in inorganic trash bins, namely they use used buckets, used gallons and emebrs matex to hold organic waste.

Based on the research results, it is recommended that families who already have Waste Management continue to improve it, while families who do not have





Waste Management provide separate trash bins for organic and inorganic waste, line the trash bins with plastic bags, use trash bins that are waterproof and have covers so that there are no pests or disease vectors that breed in the trash bins at home.

## 2. Garbage collection

Based on the results of the research that has been conducted, it shows that of the 52 families studied with the level of community waste management towards waste collection, namely 60% waste management and 40% no waste management. This needs to be discussed because respondents who generally produce and collect waste in large quantities every day, but in reality the people of RT 18 do not really care about waste, which in essence there is waste just put in sacks or plastic and some are immediately thrown away and others also choose to burn it directly in the yard, this is done because in RT 18 there is no TPSS so that people if they want to throw away their waste immediately throw it near the Oepoi Kupang GOR.

Collection rubbish is method process taking rubbish from the garbage collection point to the landfill temporary. Pattern collection rubbish on basically grouped in 2 (two) that is pattern individual And pattern communal (SNI 19-2454-2002). Waste collection is a method or taking of waste from the collection point to the temporary disposal site. (National Standardization Agency, 2002)

Of the 52 families studied about waste collection, 29% (15 families) separated waste according to type between organic and inorganic waste, while 37 families preferred to combine all types of waste produced, and the waste produced every day for 28 families did not produce much waste every day. As many as 27% (14 families) always use a trash can at home, while 38 families rarely use a trash can at home because the waste produced is immediately thrown into the yard around. As many as 69% (36 families) produce waste and the waste produced is collected to a waste collection site so that the waste does not pile up at home and does not interfere with the aesthetics of the house and interfere with the comfort at





home and as many as 16 families do not do this because the waste produced is directly burned in the yard around the house because it is easier than having to throw it to the TPSS which is too far from their homes, also the lack of Waste Management of family members in collecting waste in the house.

As many as 63% (33 families) collect garbage every day, this is done so that garbage does not pile up at home and 19 families do not do this on the grounds of waiting until the garbage produced is full before collecting it, while those who do not collect garbage but leave it until it is a lot and then throw it away or burn it in the yard, another thing that influences this is the lack of Waste Management from everyone at home to help reduce waste production at home and the lack of initiative to collect garbage every day at home or around the house so that the garbage produced is just left there.

As many as 75% (39 families) whose family members all manage waste in collecting waste at home so that each family member has the responsibility to collect waste, and as many as 13 families who do not do this or some of their family members do not manage waste in terms of collecting waste, so in terms of collecting waste, it is prioritized to parents or older children. Other family members also do not take the initiative to collect waste or reduce waste production at home, waste is collected if the waste is left alone when it is full, it is collected but not collected every day, the time to collect it is also not fixed depending on who wants to collect waste at home.

There are 50 (26 families) who always collect garbage from each room and bedrooms every day, this is done so that garbage does not pile up every day in each room, after being collected, all the garbage is collected in one container to be disposed of at the TPSS. And as many as 26 families do not do this, on the grounds that they do not provide trash cans in their rooms or other rooms, but all the garbage from each room is collected in one container in one room, usually in the kitchen or outside the room. And 65% (34 families) collect garbage from each room and collect it in one container or trash place outside the house and 18





families do not collect garbage from each room but all the garbage is collected directly in one container outside the house.

Based on the research results, it is recommended that families who have already managed waste be improved, while families who have not managed waste are advised to improve their waste management in terms of collecting waste so that the waste produced every day is not scattered everywhere, and also to train each family member to always manage waste in collecting waste.

### 3. Waste processing

Based on the results of the research that has been conducted, it shows that of the 52 families studied with the level of community waste management towards waste processing, namely 4% waste management and 96% no waste management. So this needs to be discussed because the level of community participation is very low in the existing waste processing, even though the waste produced is a lot, only about 4% of the community is aware and willing to process the waste they produce every day. There are several types of community handicrafts such as tissue boxes and lanterns.

Waste management aims to improve public health and environmental quality and make waste a resource. From an environmental health perspective, waste management is considered good if the waste does not become a breeding ground for disease germs and the waste does not (Pratiwi & Cahyono, 2020).

There are around 17% (9 families) who process waste such as processing organic waste into compost and there are also those who say that they often pile up leaves around flowers to become natural fertilizer for flowers, also process compost from leftover vegetable cuttings, while around 43 other families sometimes throw away the organic waste they produce and some give it to other people to be used as animal feed.

Around 2% (1 family) made crafts from waste materials, examples of crafts made are lanterns from used cloth, plastic and aqua glasses, and the second craft is a tissue box made from used cardboard, used cloth, and ribbon, while 51





other families did not make crafts from waste materials because they did not have time and preferred to buy crafts in stores at affordable prices and better than having to use waste materials. There are 17% (9 families) who use water bottles when going to campus, school and work. The remaining 43 families do not do this but often buy bottled drinking water that is sold to be taken to school, the office or campus, so that this can also cause more waste if every day they only buy drinking water outside compared to bringing it from home.

Around 46% (24 families) use napkins to wipe plates and other cutlery compared to using tissue, this is also the 3R principle to reduce waste by using napkins compared to disposable tissues. And around 28 families of RT 18 do not use napkins to wipe plates or cutlery in other words after the furniture is washed or the cutlery is washed and then dried, it is used without having to wipe using napkins one by one, adding more work.

And 4% (2 families) who use used cloth to wipe their feet, while 50 families do not do this but the used cloth is not used to wipe their feet, the used cloth is bought in a shop without having to use used cloth, other used cloth is used more to wipe the table so that the remaining cloth is not wasted. As many as 26% (14 families) who use used plastic bags to fill the trash, around 38 families who do not do this, some prefer to use sacks because they are bigger and some use boxes to fill the trash, used plastic bags are used for other things, some use them as a replacement for shopping bags when going to the market rather than having to accept new plastic bags.

About 2% (1 family) made flower pots from used tires while 51 other families did not do this but used flower pots bought in stores with the reason that they were better for beautifying the house, but some houses also used buckets, paint cans, jerry cans to be used as flower pots, this right was also done to reduce waste in the house so that items that could still be used were reused to be used as flower pots even though they did not beautify the condition of the house. And only 2% (1 family) used used buckets to fill leftover food.





Based on the research results, it is recommended that families who have Waste Management to further improve it, while families who have not yet managed Waste Management should make better use of the results of the collected waste to make handicrafts so that some of the waste that can be processed into handicrafts is not wasted at the TPSS.

#### 4. Waste disposal

Based on the results of the research that has been conducted, it shows that of the 52 families studied, 33% have Waste Management and 67% do not have Waste Management. So this needs to be discussed because the level of community Waste Management in disposing of waste because the level of community Waste Management is low for waste disposal. As many as 67% of people in RT 18 do not dispose of waste properly, only about 33% are aware of disposing of waste at the nearest TPSS.

Waste disposal is place Which provided For dispose of waste from all waste collection results for processing more carry on. Principle waster end rubbish is to destroy rubbish domestic in a location disposal end. So it needs to be discussed because about 53% (27 families) do not throw garbage in the yard because they have provided a place at home so that the garbage produced at home is not thrown carelessly because if it is thrown carelessly it will make the yard dirty, the remaining 25 families throw their garbage in the yard, the reason is that the garbage thrown in the yard is sometimes burned directly, while leaf garbage is deliberately placed under trees to be used as fertilizer for plants, if burned in the yard around the house, it will damage the condition of the soil such as making plants around the place where the garbage is burned no longer fertile.

And around 19% (10 families) of the community do not burn garbage, while as many as 42 families do not do this, namely because there is no nearest TPSS in RT 18 and if they want to throw away garbage, they must find the nearest TPSS to RT 18, but there are some people who choose to throw away garbage near the Oepoi Sports Hall and also choose to burn garbage directly in the yard





around the house. If this continues to happen and there is no initiative from the community or the RT Head to build a TPSS in RT 18 to facilitate access to throw away garbage for its residents, then the RT 18 community will continue to do their habits of throwing away garbage and burning garbage in the yard and continue to throw garbage near the Oepoi Sports Hall. At least from now on, a TPSS should be held or created in RT 18, Naimata Village.

There are 25% (13 families) who do not pile up garbage at home, they prefer to throw it directly at the TPSS rather than having to pile it up at home because we know that there will always be garbage every day and it is always full, the remaining 39 families do not do this, but like to pile up garbage at home but not inside the house but outside the house if it is full it smells when thrown away, this also causes the garbage to smell if it is piled up for a long time, this behavior should be changed from now on so that it does not become a habit to pile up garbage at home.

As many as 19% (10 families) who routinely throw garbage to TPSS every week and have also prepared a schedule to throw away the rest of the garbage, as many as 42 families actually do not do this, do not have a schedule to throw away garbage and do not routinely throw garbage to TPSS but wait until there is a lot of garbage before throwing it to TPSS. In addition, there are also those who choose not to throw it to TPSS on the grounds that the distance is too far so they choose to burn garbage in the yard and during the rainy season sometimes it piles up in one area and sometimes it is also transported and thrown to TPSS.

And as many as 25% (13 families) who dispose of waste use plastic bags that have been tied while as many as 39 families (75%) dispose of waste using sacks and cardboard boxes, not only that, people also when they want to dispose of waste to the TPSS they use garbage bags then tie them so that the waste does not scatter everywhere and does not cause problems, this is done to make it easier for garbage officers to transport waste at the TPSS to the TPA.





As many as 67% (35 families) prefer to throw their waste to TPSS rather than having to throw their waste on empty land owned by other people, as many as 17 families do not do this if the waste is not burned then the waste is just thrown away and can also throw the waste on empty land. 82% (43 families) of the community Waste Management not to throw waste indiscriminately because they realize that the waste should not be thrown carelessly because the waste should be thrown in TPSS, while 9 other families are not aware of this but often throw waste indiscriminately, which in essence throws waste even though they have to throw waste indiscriminately or on land owned by other people, this shows that the community is not yet aware that the waste should not be thrown indiscriminately but must be in TPSS.

As many as 27% (14 families) do not throw inorganic waste in random places but rather throw it in the organic waste bin provided at home, because organic waste can be composted or used as animal feed, and as many as 38 families throw organic waste carelessly, namely vegetable scraps and fruit skins are thrown away in the yard, leftover rice is thrown away in the yard to be used as chicken feed, leftover water from washing vegetables, meat and fish is thrown away freely in the yard.

As many as 21% (11 families) do not throw garbage in the river/drain, because they realize that throwing garbage in the gutter or river can cause flooding during the rainy season, namely it can clog the gutter, but some people (41 families) who do not do this, namely if there is an opportunity, throw their garbage in the river/drain, at this point the garbage has been thrown away even though it is not in the TPSS, behavior like that will cause the gutter to become clogged during the rainy season. This behavior must be changed so that people no longer throw garbage in the gutter.

Based on the research results, it is recommended that families who already have Waste Management improve it, while families who do not have Waste





Management always dispose of waste at TPSS so that the waste that has been collected does not pile up at home.

#### 4. Conclusion

It can be concluded that

- a. Level of community waste management waste storage by 19%.
- b. Waste management society towards waste collection by 60%.
- c. Community waste management towards processing waste by 4%.
- d. Waste management society towards waste disposal by 33%.

The suggestion given is to try to build a TPSS in RT 18 so that people no longer throw their trash near the Oepoi sports arena (GOR) or burn trash, groups can also be formed to process trash into handicrafts.

#### 5. Compliance with ethical standards

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This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

##### Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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