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Optimization of the Role of the Parent Waste Bank as a Solution to Handling Household Waste in Palangka Raya

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Abstract:

One of the big problems experienced by cities in Indonesia is waste management. The Reduce, Reuse, Recycle (3R) waste reduction activity still has major obstacles, due to low awareness in waste management. One solution that can be implemented is through efforts to develop a Garbage Bank. The existence of a waste bank in Palangka Raya City has been implemented, but the use and utilization by the community has not been maximized. This community service aims to reveal the role of the main waste bank in handling household waste in Palangka Raya City. This type of community service is descriptive-analytic, with primary and secondary data. The results of the community service show that the existence of a main waste bank is very helpful for the surrounding community in waste management, in addition to waste management, the waste bank also provides the surrounding community as customers of the bank. In optimizing the main waste bank for Palangka Raya City, public awareness and the role of the government are needed in providing adequate equipment in the waste management process at the waste bank.

Keywords: *Optimization; Garbage Bank; Household Waste; Palangka Raya City*

Introduction

One of the big problems experienced by big cities in Indonesia is garbage. Garbage can be interpreted as the result of human activity. It is undeniable that trash will always be there as long as human activity continues. Based on Law Number 18 of 2008 concerning Waste

Management, the definition of waste is the remains of human daily activities and/or natural processes in solid form (Saputro et al., 2015).

Every year it is certain that the volume of waste will always increase in line with the increasing pattern of community consumerism. The Ministry of Environment and Forestry (KLHK) noted that the average Indonesian population produces around 185,753 tons of waste every day produced by 270 million people. Or each resident produces around 0.68 kilograms of waste per day (A. Setiawan, 2021).

One of the biggest contributors to waste in Indonesia is household waste. Household waste is generated from all types of household activities. Examples of household waste are organic waste and inorganic waste. Based on data from the Ministry of Environment and Forestry (KLHK), 37.3% of waste in Indonesia comes from household activities (Rizaty, 2021).

The amount of household waste generated by households can vary depending on factors such as income and lifestyle. There are many ways household waste can be reduced including donating clothing, eliminating single-use plastics, purchasing sustainable options and optimizing landfills such as setting up waste banks in the area.

The community is generally used to using simple methods, namely by burning or collecting waste and then dumping it in a final disposal site (TPA) or often called open dumping. Simple waste management cannot deal with the waste problems that have occurred, but adds to air pollution that comes from the unpleasant smell of garbage and pollution that causes environmental problems. Currently there are still many people who still throw garbage carelessly and not in its place.

Law Number 18 of 2008 concerning Waste Management and Government Regulation Number 81 of 2012 mandate the need for a fundamental paradigm shift in waste management, namely from the collect-transport-waste paradigm, to processing that focuses on waste reduction and waste handling. It is time for the waste management paradigm that relies on the final approach to be abandoned and replaced

with a new paradigm. The paradigm that considers waste as a resource that has economic value and can be utilized, for example, for energy, compost, fertilizer and industrial raw materials (Suryani, 2014).

Waste reduction activities are aimed at all levels of society, including the government, the business world, and the wider community; carry out activities to limit waste generation, recycling and reuse of waste or better known as Reduce, Reuse and Recycle (3R) through smart, efficient and programmed efforts. Nonetheless, the 3R activities still face major obstacles, namely the low level of public awareness to sort waste.

According to Suryani (2014) as one of the solutions to overcome this problem, the Ministry of Environment is making efforts to develop a Garbage Bank. This activity is social engineering in nature which teaches the public how to sort waste, as well as raises public awareness in managing waste wisely. The hope will be able to reduce the amount of waste transported to the TPA. The construction of this waste bank is the initial momentum in fostering the community's collective awareness to start sorting, recycling and utilizing waste. This is important, because waste has a selling value and environmentally sound waste management can become Indonesia's new culture.

The waste bank is a collective (gotong royong) dry waste management system that encourages the community assistant to take an active role in it (Wijayanti et al., 2020). Waste banks can be a solution through purchasing waste bins with collective awareness. This condition shows more measurable behavior with the hope that after providing assistance it can function as a commercial waste collection and recycling system. The waste bank will collect, sort and distribute waste with economic value to the market (collectors/lapak) so that people get economic benefits from saving waste. Trash deposited by customers should ideally have been segregated into general categories. Such as paper, glass, metal, and plastic. The categorization of waste must be adjusted to the ability and willingness of the community who are customers. If the community wants, even more detailed waste

categorization can be made, such as: plastic bottles, plastic cups, white paper, opaque paper and so on. Each category of waste has its own price. With the above method, people will want to sort waste and it will become a new culture in society.

The role of the Waste Bank became important with the issuance of Government Regulation (PP) Number 81 of 2012 concerning Management of Household Waste and Household-like Waste. The PP regulates the obligation of producers to carry out 3R activities (Reduce, Reuse and Recycle) by producing products that use packaging that is easily broken down by natural processes; which creates as little waste as possible; use production raw materials that can be recycled and reused; and/or recall waste from products and product packaging for recycling and reuse. With the existence of a Garbage Bank, producers can work together with existing Garbage Banks so that they can process the waste from the products they produce in accordance with the PP's mandate.

Optimization of the waste bank itself in some areas has not been implemented properly, especially in the city of Palangka Raya, where the waste bank itself is rarely found and not many people even know where the existence of the waste bank itself is in the city of Palangka Raya. The low level of public awareness of further waste management also adds to the challenges of waste banks in maintaining their sustainability. Not infrequently, the waste bank itself usually goes out to the community to collect rubbish that can still be used. Therefore, this study will describe how to optimize the role of waste banks in handling family waste.

Research Method

The method used in this study is a descriptive-analytical community service. The community service approach with Participatory Action Research (PAR) is an approach whose process aims at learning in overcoming problems and meeting the practical needs of society, as well as the production of knowledge (Suwendi et al., 2022). This research will reveal the purpose through case studies (Sholikhah,

2016). Because, bringing up a new incident that occurred in Palangka Raya related to the use of a waste bank which is a solution for handling household waste for the surrounding community.

The type of research used is with primary (Saputra et al., 2021; Saputra & Rahmatia, 2021). Primary data was obtained directly through interviews, observation, and direct documentation with the management of the Waste Bank located in the Mendawai area, Jalan Arut, Palangka Village, Jekan Raya District. The way this community service works starts from initial mapping, building community relationships, participatory mapping, formulating humanitarian problems, developing movement strategies, and community organizing (Suwendi et al., 2022).

Result

1. Profile of the Palangka Raya City Main Garbage Bank

Based on the results of an interview with the director of the Palangka Raya City main waste bank, this main waste bank was established in 2018 after obtaining permission from the environmental service to operate as the main waste bank in Palangka Raya City. The beginning of the establishment of this main waste bank was a form of change from the unit waste bank which was established in 2012. Based on information from informants, the main waste bank was established because in 2012 there was still no main waste bank in Palangka Raya City. He also added that ideally each district or city should have one master waste bank so that it becomes the center or reference for each unit waste bank. Therefore, he collaborated with the environmental service for the city of Palangka Raya to build a main waste bank located in the Mendawai area, Palangka sub-district, Jekan Raya sub-district.

The purpose of establishing this main waste bank is to help the community, especially the regional government of Palangka Raya City, in handling waste. The informant also explained that the existence of a waste bank could encourage the growth of people's intention to manage waste properly by sorting and processing waste. So that it fosters a sense of love and care for the environment. In addition, the existence of a

waste bank can also help the community's economy. This is because waste banks provide job opportunities and provide additional income. He also added that the management of the main waste bank is the local community. So that the existence of this waste bank can empower the surrounding community, especially residents of the Mendawai area in Palangka Raya City.

2. The Role of the Main Garbage Bank as a Solution for Handling Household Waste in the City of Palangka Raya

Waste in environmental health sciences (refuse) is actually only a part of objects or things that are deemed not to be used, not used, not liked or must be disposed of, in such a way that it does not interfere with survival. According to SK SNI T-13-1990 F, what is meant by waste is solid waste consisting of organic and inorganic substances. According to Wintoko (2020), based on its location, waste can be classified into two, namely: urban (urban) waste, namely waste collected in big cities and regional waste, namely waste collected in areas outside urban areas, for example in villages, in residential areas and on the coast. Apart from that, village potential mapping can be maximized (Nugraha, 2022).

The national strategy for waste handling policy through the 3R program is: reducing waste, handling waste, utilizing waste, increasing management capacity, and developing cooperation (Setyawan, 2021). While Law no. 18 of 2008 concerning Waste Management states that household waste management consists of reducing waste and handling waste. Waste reduction in question includes: limiting waste generation, waste recycling and waste reuse.

In Indonesia, around 60-70% of the volume of waste generated is wet waste with a moisture content of between 65-75%. Most sources of waste come from traditional markets and settlements. Trash from traditional markets, such as side dishes and vegetable markets, disposes of nearly 95% of organic waste. Meanwhile, the waste in residential areas is much more diverse. However, at least 75% of the total waste

includes organic waste and the rest is inorganic waste. In principle, waste is divided into solid waste, liquid waste and waste in gaseous form (fume, smoke) (Wahyuni, 2019).

In the Law of the Republic of Indonesia Number 18 of 2008 concerning Waste Management, it is stated that waste management is carried out based on the principle of responsibility, the principle of sustainability, the principle of benefit, the principle of justice, the principle of awareness, the principle of togetherness, the principle of safety, the principle of security and the principle of economic value. This condition is also based on E. Setiawan & Jannah (2021) who states the need for family economic synergy in society. Apart from that, optimizing public education can be maximized (Makhrus et al., 2021). Waste management aims to improve public health and environmental quality and turn waste into a resource. Apart from that, optimization of teaching materials based on local wisdom can be maximized (Imron & Shobirin, 2021). The waste management mechanism is as follows:

a. Waste reduction Activities to overcome the generation of waste from waste producers (households, markets and others) recycle waste at the source or at the processing site.
b. Waste handling Is a series of waste handling activities that include sorting (grouping and segregating waste according to type and nature), collection (moving waste from the waste source to TPS or integrated waste processing site), collection (activities of moving waste from TPS sources or integrated waste processing sites processing of the final product (changing the shape, composition, characteristics and amount of waste so that it is further processed, utilized or returned to nature.

In general, waste management in urban areas is carried out through three stages of activity, namely: collection, transportation, and final disposal or processing. At the final disposal or processing stage, waste will undergo processing, both physically, chemically and biologically. Various alternative processing and waste management needs to be done to deal with the waste problem as a whole. Adult Waste

Banks are an alternative solution for the government and society in sustainable waste management.

The Garbage Bank in its implementation can reduce the high amount of waste in the community and in landfills (TPA). As a result, the volume of waste in the community and TPA can be reduced. The management of the Waste Bank also follows the principles contained in Law Number 18 of 2008 concerning Waste Management, which has the 3R principle. The independent waste management program through container, collection, transfer and transportation is the task of DKP.

The establishment of a waste bank has several benefits for humans and the environment, such as making the environment cleaner, making people aware of the importance of cleanliness, and turning waste into an economic good. Another benefit of the Garbage Bank for the community is that it can increase knowledge and skills people's income because when they exchange waste they will get a reward in the form of money collected in the account they have. This condition is also based on Wijayanti et al. (2020) who states the importance of assistance to the community. The results of this study strengthen research by Astuti (2020) that empowerment can upgrade knowledge and skills.

The Palangka Raya City Environmental Service is working with the surrounding community to build an innovation that is presented to manage waste in the City of Palangka Raya. The establishment of the main waste bank in Palangka Raya City in 2018 on Jalan Anoi, Pahandut Subdistrict, Palangka Subdistrict is expected to be able to reduce waste accumulation and also empower the people of Palangka Raya city in an economic sense.

The formation of a main waste bank acts as a waste manager and a reference for unit waste banks as well as helping the economy of the surrounding community as customers of the bank. This is corroborated by the findings by Hardi et al. (2017). People can take money from their savings at any time when they have accumulated a lot of savings. Of course this has a positive impact on the environment and society

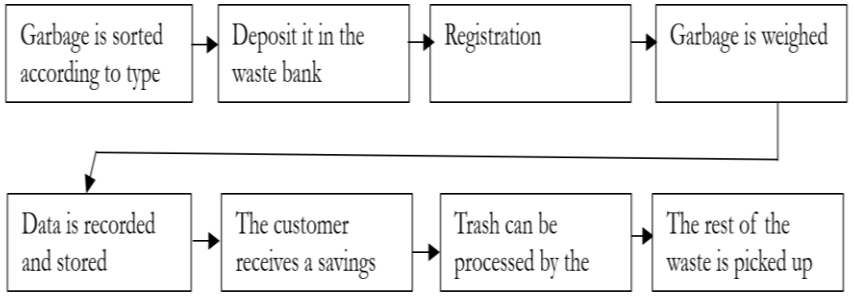
because there is reciprocity in the form of money as payment for the waste collected.

In the main Garbage bank of Palangka Raya City, waste is divided into several types, for example: organic waste, such as vegetable scraps or cooking leftovers; and non-organic such as plastic, iron, and others. The Garbage Bank determines the purchase price for each type of waste. Waste that can still be recycled, such as organic matter, can be used for compost or biogas. The main waste bank also works with collectors who routinely collect waste with economic value for recycling.

The workflow of the main Garbage Bank in Palangka Raya City can be seen in the following figure 1:

Figure 1:

Waste Bank Workflow



Source: *Authors' analysis (2022)*

The waste receiving system carried out by the main waste bank besides the community directly depositing it into the waste bank, they also implement a ball pick-up system. This is done by the waste bank by taking large amounts of waste directly to people's homes and to offices. The director of the waste bank explained that this method is expected to make it easier for the community to deposit waste on a large scale. He added that most people do not have means of transportation to transport the waste.

Based on the results of interviews with the local community, namely the head of RT 05 RW 04, that the existence of this main waste

bank is very helpful for the people of Palangka Raya City, especially local residents in managing waste. He also added that this waste bank helps the community in the economy, because the collected waste can be sold and used as income.

The following is the waste that is managed and received by the Palangka Raya City main waste bank.

Table 1.

List of Goods in Waste Management

TYPE	NO	CODE	ITEM NAME	EXAMPLE	CRITERIA	UNIT
PLASTIC	1	P1	Clear Plastic Bottle	Aqua Bottles Big, Responsibly, Small	Clean	Kg
					Dirty	Kg
	2	P2	Color Plastic Bottles	Sprite, Maizone, Wind Oil	Clean	Kg
	3	P3	Mineral Water Glass	Aqua Kaca, Vit Dsj	Clean	Kg
					Dirty	
	4	P4	Color Plastic Cups	Mountea, Ale-ale, The Kaca Dsj	Clean	Kg
					Dirty	
	5	P5	Plastic bottles / blowing	Plastic bottles (shampoo, hand body soap, oil bottles, water hoses, infusions, plastic tanks) Etc		Kg
	6	P6	Mixed Plastic Bottles	Soy Sauce, Sauce, Mixed Bucket	Mix	Kg
	7	P7		Special mineral water cap	–	Kg
	8	P8	Bottle cap		_	Kg
	9	P9	Burr glass		_	Kg
	10	P10	Crackle bag		_	Kg
GLASS BOTTLE	11	Bk1	Straws / pipettes	Complete bottles and caps	–	Unit
	12	Bk2	Tilt Cap Bottle	Beer, Bintang, Malaga, Haunted	_	Unit
	13	Bk3	Beer Bottle	Sauce and soy sauce	Clean	Unit

	14		Can	Milk, Sardines, Comet Dsj	Mix	Kg
	15		Drum		Clean	Kg
	16		Zinc		Clean	Kg
	17		Pipe		Plastic	Kg
	18		Battery (Accu)		All Ampere	Unit
	19		Washing machine		Whole (complete)	Unit
	20		Used Ac (0.5 PK) etc		Whole (complete)	Kg
	21		Small Fan		_	Unit
	22		Responsible Fan		_	Unit
METAL	23		Big Fan		_	Unit
	24		Dispensers		_	Kg
	25		Refrigerator		_	Unit
	26		Computer		_	Unit
	27		Printers		_	Kg
	28		Nails, bolts, bicycle frame		Mix	Kg
	29		Aluminum	Pots, Pistons, Frying Pans, Dsj	–	Kg
	30		Copper	Cable in Dsj	_	Kg
	31	B1	Iron A	Kato, Has	Super Iron	Kg
	32	B2	B iron	Cast iron, Dragon iron, Hitas	–	Kg
	33	K1	HVS/white paper/book		–	Kg
PAPER	34	K2	Package book/paper mixed with newspapers/opaque paper	Book cover, stopmam, rice box, milk, the Dsj	Mix	Kg
	35	K3	Duplex		_	Kg
	36	K4	Newspaper		_	Kg
	37	K5	Cardboard box		_	Kg
	38	K6	Tabak Telur		_	Unit

Source: *Secondary data managed by the author (2022)*

3. Optimizing the Role of the Main Garbage Bank in Palangka Raya City

The application of the 3R concept in the City of Palangka Raya is going quite well, the community as customers does waste sorting for inorganic waste and makes compost from organic waste. The same thing was stated in research by Wahyuni (2019) regarding the 3R concept. The Palangka Raya City Main Waste Bank gets a form of

participation in taking benefits. Where the community gets the results of implementing the waste bank program with the 3R concept implemented by the Palangka Raya City Main waste bank. From a series of waste bank program plans, making strategies and preparing committees and budgets for an activity. Palangka Raya people can already feel the benefits. Namely from an economic perspective where the community gets additional economic benefits from the waste that is sorted and saved to the waste bank. In addition, from an environmental point of view, the community also gets a positive impact because their environment is getting cleaner. Of course, this benefit is a positive impact of the waste bank program with the 3R concept organized by the Palangka Raya City Environment Service and the main waste bank.

Discussion

1. Waste Management System

According to Agustin et al. (2022) waste is something that is no longer used, that cannot be used anymore, that is disliked and must be disposed of, so of course waste must be managed as well as possible, in such a way that negative things for life do not happen. Azwar (2012) defines waste as solid or semi-solid waste or waste, which is a by-product of urban activities or the life cycle of humans, animals and plants. Waste in environmental health sciences (refuse) is actually only a part of objects or things that are deemed not to be used, not used, not liked or must be disposed of, in such a way that it does not interfere with the survival.

According to SK SNI T-13-1990 F, what is meant by waste is solid waste consisting of organic and inorganic substances. According to Hadiwiyoto (2012), based on its location, waste can be classified into two, namely: urban (urban) waste, namely waste collected in big cities and regional waste, namely waste collected in areas outside urban areas, for example in villages, in residential areas and on the beach.

Waste management according to Government Regulation Number 81 of 2012 is a systematic, comprehensive and continuous

activity which includes waste reduction and handling. Waste management is an arrangement relating to the control of waste generation, storage, collection, transfer and transportation, treatment and disposal of waste on the basis of public health, economics, engineering, conservation, aesthetics and other environmental considerations as well as responsiveness to behavior. mass.

Waste management is often defined as control over waste generation starting from the process of container, collection, transfer, transportation, processing and final disposal of waste. The waste management system basically has several very basic objectives, namely improving environmental and public health, protecting natural resources (water), protecting socio-economic facilities and supporting strategic sector development.

Waste management also aims not to overdo it in terms of wasting things that are still useful. The verses of the Qur'an that are in accordance with the objectives of management are Surah Al Isra' verse 27.

إِنَّ ٱلْمُبَذِّرِينَ كَانُوٓاْ إِخْوَٰنَ ٱلشَّيَٰطِينِۖ وَكَانَ ٱلشَّيْطَٰنُ لِرَبِّهِۦ كَفُورًا ٢٧

"Surely the wasteful are the brothers of satan and the devil is very ungrateful to God."

The success rate of waste management depends on several aspects, namely technical and non-technical aspects. Aspects of waste management in accordance with Law Number 18 of 2008 consists of 5 sub-system components, namely:

Table 2.

Aspects of waste management

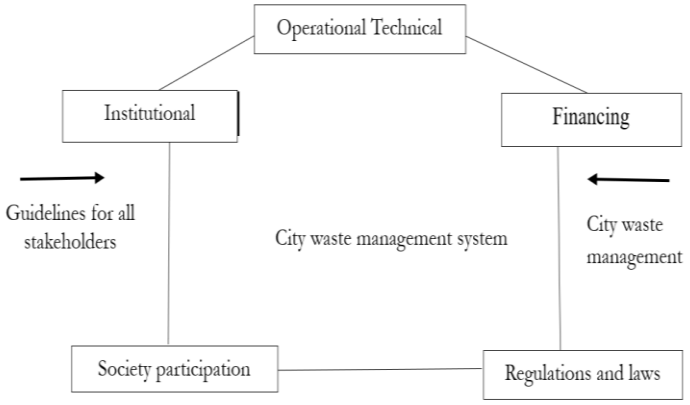
Aspect	Main role	Information
Regulatory or legal aspects	Move, enable and direct system	Consist of: - Institutional forms and patterns - Management system (planning, implementing and controlling for strategic, technical and operational levels)
Institutional and organizational aspects	A component source in the sense that system has performance the good one	Financing structure consists of: - budget - alternative sources of funding
Operational technical aspects	Guarding component agar system pattern/dynamics can hit the target effectively.	The function of the rules: - As a basis for the establishment of management agencies (Dinas, Regional Companies and others) - As the basis for the application of the tariff structure - As a basis for public order (community) in waste management
Financial and Financing Aspects	Components that don't subsystem but tightly bound as provision of work capacity and funding.	Forms of community participation in: - Operational technical waste collection from source to final disposal - Funding
Community Participation Aspect	Most components close to the object waste management	Consists of facilities, infrastructure, planning, and technical procedures operational waste management for activities: - Container and Collection - Transportation and final disposal

Source: *Secondary data managed by the authors (2022)*

These components are related to one another as shown in the following figure 2.

Figure 2.

Waste management system



Source: *Secondary data analyzed by the authors (2022)*

2. Analysis of Waste Management Aspects

Palangka Raya is a beautiful city with a variety of cultures and natural beauty, a city that flows in the middle of a beautiful river (Kahayan River) with typical tropical views as a means of economic wheels and people's activities. The city of Palangka Raya is the capital city of Central Kalimantan, one of the important cities that is often predicted to replace Jakarta as the capital city of Indonesia. The stretch of development and tourism development began to emerge from this city, a city that was almost forgotten as an attractive tourist destination. The city of Palangka Raya has now improved and is preparing to become one of the challengers as a tourist destination in Indonesia. On the other hand, developments taking place in the city of Palangka Raya must also be balanced with aspects of waste management and management. Thus, it will bring up a positive stigma that the city of Palangka Raya is an environmentally friendly tourist destination.

a. Regulatory or legal aspects

This aspect is related to legal strengthening such as operating permits because it makes the process of developing and cooperating with outsiders difficult. One of them is by activating the Garbage Bank, the city of Palangka Raya already has an operating permit in the form of a Decree and regional regulation no. 1 of 2017 and mayoral regulation no. 43 of 2017 concerning waste management and cleanliness (Ombudsman, 2019).

Its implementation is monitored directly by the Palangka Raya City Environmental Service through the whatsapp group application to inform and socialize regarding waste bank management. In addition, based on the results of the interviews, the management also submitted a report regarding the waste reduction that had been carried out. Based on this, the Garbage Bank can be said to be an official institution from the government so that it can work together and coordinate with the government or other parties that can support the programs being carried out. So, the Garbage Bank has responsibilities that must be carried out for people's lives according to the position they have. The

management should continue to work together with many parties so that the benefits are increasingly felt by the wider community.

b. Institutional and organizational aspects

This aspect includes clear division of task management and organizational structure among the management of the Garbage Bank in the city of Palangka Raya. Based on the data obtained by the researchers, the administrators already have a clear management division of tasks and organizational structure, where this has been written in the Decree of the Head of the Palangka Raya City Environmental Service.

However, apart from the position and duties held at the waste bank, the management also has other main duties in the field of cleanliness. In accordance with Mr H's statement, the obstacles faced in this aspect are when the administrators are busy because they are carrying out their main tasks and are forced to temporarily leave their duties at the waste bank so that other administrators who are not busy will replace their duties. Apart from that, flexibility is also required in leading (Kusumawati & Saputra, 2023). So, administrators apply the principle of gotong royong to help each other when problems occur.

c. Operational technical aspects

The operational aspect is related to the facilities and infrastructure owned for the continuity of the waste bank activities. According to the results of the interviews, obstacles to the operational aspect, namely when the weather was raining, caused the implementation of the program to be delayed. Then, transportation vehicles can sometimes have problems causing garbage collection to member locations to be canceled or postponed.

While the results of the observations of researchers, the facilities and infrastructure owned by the Garbage Bank can be said to be quite adequate for the activities and operations of the programs being carried out. However, the storage area for recyclable waste deposited by members is still not wide enough because it is adjacent to the waste transfer depot behind the UPT office or the waste bank workspace. In

addition, the storage space for cocofeat products is also inadequate so that the management cannot stock up a lot and make it if there is an order or customer request.

d. Financial and Financing Aspects

This aspect includes the value of profits and is also related to the number of customers who join. In connection with the management's statement that the income earned each month varies or fluctuates depending on the amount of waste deposited by members. The greater the amount of waste deposited by members to the waste bank, the greater the value of the profits obtained by the management.

However, the management of the Waste Bank does not make much profit because their main goal is not to maximize profit but to reduce the volume of waste. The profit earned is only for operational and other important costs. The number of members who have joined is quite a lot, but only some are active in saving and some are less active in saving because there is not much waste from households that can be recycled, so waste collection takes quite a long time.

e. Community Participation Aspect.

Based on the observations of Kaza et al. (2018) in environmental management divides participation into (1) Participation in decision making or participation in decision making, related to ideas or ideas that concern common interests. The form of participation in decision-making includes contributing ideas or thoughts, attending meetings, discussions and responding or rejecting the programs offered. (2) Participation in implementation and benefits. Participation in the implementation is a continuation of the plans that have been initiated before, both related to planning, implementation and goals. Participation in taking benefits cannot be separated from the implementation results that have been achieved both in terms of quality and quantity. (3) Participation in evaluation or participation in evaluation: Participation in this evaluation aims to determine the achievement of the previously planned program.

Community participation is the most important factor. This is because the waste bank itself is community-based and aims to change people's behavior in managing waste. So, this aspect can be said to be a determining factor in the success of the waste bank program. The more people who participate to join as members of the waste bank, the more awareness and concern for the community in managing waste. Social media as a means of public education (Rohma et al., 2020). Based on the results of interviews with researchers, the administrators stated that in the meantime, if the administrators were not picking up trash from the members, only a few members took the recyclables they owned to the garbage bank. In addition, sometimes people are still embarrassed in sorting waste and are considered scavengers by the people around them. Therefore, researchers consider this factor to be a quite difficult obstacle for administrators to increase community participation.

As for the aspect of community participation, the Waste Bank invites the public to participate in waste management. The objectives and programs implemented are good enough. However, researchers' observations in the field related to outreach by administrators to introduce the waste bank program to the community are still lacking. Socialization is very necessary so that the existence of a waste bank is known by the wider community. Socialization can be started from notifications on how to register to become a member, basic procedures and mechanisms for a waste bank, a price list and types of waste that can be saved, as well as the benefits of being a member. Thus, the Garbage Bank not only provides benefits to members, but also benefits the community and can increase community participation to join as members.

In addition, the success rate component for the management of the main waste bank in Palangka Raya City has not been fully maximized in community-based waste management. Because the system implemented only accommodates waste from the community and is sold to collectors without being processed into other goods that are more productive and have high selling value. There are several factors

that make this main waste bank less than optimal in its operation, namely:

a. Lack of socialization to the wider community

Socialization is defined as a process of an individual learning habits which include ways of life, values, and social norms contained in society so that they can be accepted by the community. According to Soekanto "Socialization is a social process where an individual gets the formation of an attitude to behave in accordance with the behavior of the people around him".

Lack of socialization results in a lack of marketing and the number of customers in the waste bank. The director of the waste bank stated that outreach to the wider community was still lacking due to limited members and a lack of media and funds in advertising and notifying the existence of the waste bank.

b. Lack of Means of Transportation

Based on the results of interviews with the director of the waste bank, this waste bank lacks means of transportation in marketing goods to leave the region. This lack of transport or means of transportation causes a slow process of selling waste, because only a few collectors can be reached. The head of the local RT as a participant in the waste bank also stated that the waste bank lacked means of transportation to transport garbage from the community. To transport waste, the waste bank has to borrow a pick-up or other transportation from the local community. Of course, this is a serious problem so that waste management at the main bank in Palangka Raya City is not optimal.

c. Does not have supporting equipment

The main waste bank management system only accommodates waste from the public or customers and then sells it back to collectors. One tool that this main waste bank does not have is a press machine. In selling, the waste bank does not have a press, so the price tends to be low and takes up a lot of space. Press Machine is a tool for pressing used paper, cardboard, cans or plastic that is ready to be sent to a

recycling processing plant. The existence of this press machine is very important, considering that the volume of these materials is very large. So the press results of the machine can reduce volume so that when shipping it will make it easier both in terms of costs and technical delivery.

d. The marketing is only for collectors

Until now, the main waste bank only manages waste on a buy-and-resell basis. Garbage that is purchased is not used as a productive material with a higher selling value. The waste obtained is only sold to collectors and the results are based on this sale. This kind of thing makes the main waste bank not operational optimally, because it has not been able to produce useful products from recycled waste such as chairs, and bags.

Therefore, the government's role is very important in supporting the main waste bank management system in Palangka Raya City. Starting from socializing on a regular basis to the public, providing funds in procuring the tools needed in the recycling process, to providing transportation equipment so that marketing becomes widespread and the Palangka Raya City main waste bank runs optimally. Based on the obstacle factors for the component of the success rate of waste management at the Palangka Raya City Garbage Bank which have been described above, the researcher considers that the most influential obstacles include two aspects, namely the institutional aspect and the community participation aspect. On the institutional aspect, the obstacle faced is the management's time constraints due to their busyness in carrying out their main duties outside the waste bank so that the weighing process for members who wish to save waste will be temporarily postponed. These problems can actually be overcome by notifying members via social media or making bulletin boards to inform them that the waste deposit and weighing process is being postponed.

Conclusion and Suggestion

Waste handling is a series of waste handling activities which includes sorting by means (grouping and segregating waste according to type and nature), whereby this waste collection is by means of (moving waste from the source of waste to TPS or integrated waste processing sites), lifting (activities of moving waste from TPS sources or integrated waste processing sites processing the final product (changing the shape, composition, characteristics and amount of waste so that it is further processed, used or returned to nature.

There are several factors that make this main waste bank less than optimal in its operation, namely firstly the lack of socialization to The wider community, lack of means of transportation, Does not have supporting equipment, the main waste bank only manages waste on the basis of buying and then reselling it. Garbage that is purchased is not used as productive materials with higher selling value. The waste obtained is only sold to collectors and the results is based on those sales.

This kind of thing makes the main waste bank not optimal in its operation. The most influential obstacles include institutional aspects and community participation aspects. On the institutional aspect, the obstacle faced is the management's time constraints due to their busyness in carrying out their main duties outside the waste bank so that the weighing process for members who wish to save waste will be temporarily postponed.

However, as the general public, we can also help reduce the increasing amount of waste by disposing of waste in a segregated manner and not throwing it carelessly. Therefore, the government's role is very important in supporting the main waste bank management system in Palangka Raya City. Starting from socializing on a regular basis to the public, providing funds in procuring the tools needed in the recycling process, to providing transportation equipment so that marketing becomes widespread and the Palangka Raya City main waste bank runs optimally. Therefore, by optimizing the role of the main waste bank in Palangka Raya City, it will increase the artistic value of

handicrafts made from waste so that they become objects of high value that are environmentally friendly.

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