

Empowering Women as Waste Bank Activists in South Tangerang City

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ABSTRACT

Garbage is one of the problems in the city of South Tangerang (Tangsel). Tangsel produces approximately 880 tons of waste every day. The increase in population has an impact on increasing the volume of waste from households. One of the methods used by the Tangsel city government to reduce waste is through the waste bank program since 2012 a total of 208 Waste Banks have been formed, however, only 50 percent are active. By looking at these conditions, there needs to be efforts to empower women in reactivating waste banks in Tangsel City. One of the newly developed waste banks is the "yes" waste bank. This waste bank is located in RW 10, Cipayung Village, Ciputat District, South Tangerang. The purpose of this activity is to increase independence by empowering the potential of RW 10. The target of this PKM program is to form community awareness to sort waste, train the attitudes of RW 10 residents to have a conscious behavior in sorting waste in supporting independent waste management, developing economic skills. The method that will be applied to achieve the goals / targets of the PKM program is a combination of several approaches, namely through counseling, training, mentoring. The main outputs of this activity are: Independent waste management module, handicraft made from garbage
Keywords: Women activists of waste banks, Waste management; economic skill, handicraft, behavior in sorti

INTRODUCTION

Waste handling in Indonesia has not been resolved and is a challenge, especially in urban areas. The City of South Tangerang currently produces approximately 880 tons of waste every day (detik.com; 2018). The city, which has an area of 147.19 km², based on BPS Banten province, has a population of 1,696,308 people in 2018 with a population density of 11,525 people per km² (BPS Banten; 2018). The increase in population has an impact on increasing the volume of waste from households. In a written statement from the South Tangerang City Government's Environmental Agency, Yepi Suherman, Head of the Garbage Division of the South Tangerang City Government Environmental Service, is working hard to tackle waste through the waste bank program. This movement encourages people to sort and utilize waste (Moore, 2008).

The waste bank movement in the South Tangerang city environment began in 2012. Until now, the number of waste banks that have been formed and active is 202 waste banks. The number of waste bank customers in South Tangerang is approximately 4,000 people. The Mayor of South Tangerang said that there are still many obstacles hindering the waste management program in this city of 1.4 million people. These challenges range from the awareness of the public who do not understand how to manage waste properly, the difficulty in obtaining sophisticated and precise waste processing technology to the limited land for the Cipeancang TPA (Tangerang Selatan, 2020).

Mayor Airin Rachmi Diany and the ranks of the City Government of Tangsel have tried to deal with waste in South Tangerang City, but obstacles in the field are still blocking (Tempo; 2015). One solution that has been implemented by the South Tangerang City Government is through the waste bank program. The South Tangerang City Government Environmental Service has initiated the waste bank program for the community as a social movement which is expected to become a forum for social movements and environmental movements (Cheng & Urpelainen, 2015).

208 waste banks have been built in 7 districts. This waste bank is expected to be a way to reduce waste in the city of South Tangerang. However, the existence of a waste bank does not mean that the waste problem has been resolved. After running for 6 years, of the 208 Waste Banks that have been formed, only 50 percent are active. This needs evaluation to improve the steps that have been taken by the City Government.

One of the waste banks that has begun to be developed is the “yes” waste bank. This waste bank is located in RW 10, Cipayung Village, Ciputat District, South Tangerang. Not all of these RW neighborhoods are members of the garbage bank. Only 28 members of the waste bank are actively participating in the program. Waste bank management by the Waste Bank Team in collaboration with collectors. Garbage collected is valued in the form of money which is collected once a year.

New breakthroughs have also been developed by waste bank activists by partnering with pawnshops as partners through gold savings. However, there are still some non-organic waste that cannot be accepted by collectors, such as steroids, aluminum-coated plastics and other cheap-priced materials. This is homework for waste bank activists to optimize the non-organic waste owned by residents. The non-optimal management of non-organic waste encourages residents to return to being apathetic and not sorting their waste properly. Garbage that should be optimized and has economic value cannot be accommodated by collectors. The purpose of this activity is to assist and empower urban women as waste bank activists in RW 10

METHOD

To realize the problem-solving solutions offered, this Community Partnership Program (PKM) activity will be carried out through five stages of activity (Tvedten & Candiracci, 2018). The method to be applied to achieve the PKM program goals / targets is a combination of several approaches, namely through; (1) Counseling and training, (2) Survey of Citizen Interest in becoming a member of a Garbage Bank by compiling a questionnaire through Google Form and distributing it to residents. (3) Socialization of Waste Bank Conducting socialization on the importance of sorting waste through flyers or leaflets, social media and (4) creating a simple module with the following module contents (Eisenstein & Iyer, 2008): Junk knowledge, Procedures for members of a waste bank, Innovation in the use of organic and non-organic waste, Waste management network (from being transported by the TPA process), Junk bank data, Waste bank network data (collectors, garbage collectors - government and private) (Shahreza, 2010). Make an announcement of the registration of new members of the waste bank through Media social. (5) Training on non-organic waste utilization. Training for residents who are interested in increasing creativity with economic value by utilizing non-organic waste.

RESULTS

There are several stages in empowering urban women as waste bank activists, including; Community empowerment partnership program to form awareness of sorting waste and initiating business units to develop souvenir products or handicrafts derived from waste. The implementation is divided into three phases of activities, each of which involves a core group of activating the waste bank from each RT in RW 10, Cipayung Village, Ciputat District, South Tangerang. This aims to facilitate the implementation of activities. The three stages of the program will empower the community to manage waste independently as a form of awareness of waste management. Initiated a business to manufacture handicraft products from recycled waste.

DISCUSSION

The residents and program proponents are very confident about the prospect of empowering independent waste management as well as souvenir businesses from recycled waste materials (Disusun et al., 2006). The stages of these activities include: **First**, when viewed from the aspect of education and knowledge of relatively educated residents, it will make it easier to empower waste management independently. Although life in urban communities requires persistence in continuous assistance and socialization, with the condition that the majority of residents have a high enough education, the majority of graduates are undergraduate, it will be easier to establish communication and equalize perceptions in terms of independent waste management towards citizens who are aware of waste management. The awareness of residents to manage waste independently is also hampered by the absence of facilities such as trash cans that sort organic and non-organic waste in public facilities as well as trash chopping machines. This is an effort to reduce both organic and inorganic household waste.

Second, to initiate the manufacture of souvenirs from recyclable waste raw materials such as styrofoam and mica plastic. When viewed from the availability of raw materials, the waste that cannot be recycled and which is not accepted by collectors is quite large and varied, so that it can be used as raw material for making souvenirs, for example for delivery. **Third**, when viewed from the availability of time for business, each member of the residents of this activity has sufficient free time to work on the business that is being offered. The residents have quite a lot of free time between daily activities. Some of this free time is used for other activities such as recitation, business and others, but there is still enough time to do this offered business. When viewed from the aspect of human resources, community members actually have basic knowledge to make souvenirs. The residents had never previously received counseling on food waste processing. In 2017 which is used for souvenirs.

The results of interviews with residents showed that the main problems that prevented them from empowering residents to sort waste and manage waste independently were related to habituation, knowledge and awareness of waste management. In addition, the absence of separate trash cans for organic and non-organic waste in public places and a trash chopper makes residents unable to carry out waste management independently (Vijaynaidu & Dhikhi, 2016).

The second problem is related to recycling waste that cannot be accepted by collectors. Residents have difficulty accommodating and utilizing waste such as plastic mica, stereofom and other waste that collectors do not accept. So that there is still a lot of waste that cannot be recycled and finally comes in and is mixed with trash that can be recycled. This condition causes the independent waste management program to not be properly achieved.

For this reason, an initiation is needed to utilize non-organic waste that cannot be accepted by collectors to become goods of economic value. These items can be turned into souvenirs for delivery and other decorations. In this regard, residents have not received training and counseling on non-organic waste users that collectors do not accept. Even so, there has been one resident who has tried to use these recycled items for delivery decoration. Residents try themselves using makeshift production equipment. Basically, the brief counseling was given to stimulate the enthusiasm and creativity of the community to empower recycled waste. However, it seems that the community needs continuous training and mentoring to escort them to become citizens who are aware of waste management by carrying out independent waste management. This is due to the problem of the lack of facilities that support the benefits of waste management such as chopping machines as well as training and development of awareness about waste.

When viewed from the management aspect, residents do not understand how to manage waste independently and also initiate souvenir businesses using recycled materials. An effort starts from socialization, provision of independent waste management facilities, the process of

developing souvenir production from recycled waste materials, promotion and marketing. Residents also do not know how to manage the activities and finances of a business unit to ensure the sustainability and development of the business.

When viewed from their daily routine as urban residents, they actually have management skills even though they are still at the most basic level. For example, residents have been able to manage the money they generate from waste banks by saving in pawnshop gold savings. Residents have also collaborated with pawnshops as residents. This ability was of course initiated by several administrators who were aware of the importance of using and managing waste independently. Based on the problems faced, the residents really hope for the assistance of a garbage chopper, trash cans, capital as well as continuous training and mentoring that will escort them so that they can develop a business unit for souvenir products from recycled waste and manage waste independently.

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The solutions offered to solve problems faced by residents must be in accordance with the priority of the problems faced. Based on the analysis of the previous problem situation, the solution offered is to carry out the following activities (Mahyudin, 2017): [1] Provision of waste chopper equipment and the expected results. Residents can have adequate waste chopping tools. [2] Training on the production and packaging of souvenirs made from recycled waste. The expected result: residents can produce various kinds of souvenirs made from recycled waste

that are worth selling. Souvenir packaging technique training and expected results: Unique and attractive packaging. Citizens are capable and skilled at packaging products with attractive brands and displays. [3] Counseling and training on waste management towards citizens who are aware of waste management. Expected result: Residents have deep insight and knowledge about proper waste management. By looking at the condition of the urban community, what is done in the empowerment process is:

Conducting a survey of Citizen Interests About Waste Bank.

To find out the extent to which public awareness in managing waste independently is also constrained by the absence of facilities such as trash cans that sort organic and non-organic waste in public facilities as well as trash chopping machines (Kementerian PUPR, 2018). This is an effort to reduce both organic and inorganic household waste. From the results of the survey conducted, the results obtained:

Of the respondents who filled out the survey distributed to residents of South Tangerang, the results obtained were 82.5% women and 17.5% men with a total of 40 respondents. From the age of the respondent; 55% are aged 41-55 years, 25% are 25-40 years old, 15% are 55-65 years old, 5% are 18-25 years old. Judging from the composition of the respondent's occupation, it is known that as many as 46.2% as housewives, 23.1% as private employees, 17.9% as civil servants, 10.3% as entrepreneurs, 2.6% as students. The area where the respondents lived was 47.5% in the Ciputat sub-district, 20% in the East Ciputat sub-district, 2.5% in the Pondok Aren sub-district, 2.5% in the Setu sub-district, 2.5% in the Serpong sub-district. From the respondents, it is known that the pattern of waste management is carried out in various kinds (Cheng & Urpelainen, 2015).

As for the highest, as much as 77.5%, it was done with a pattern taken by an officer appointed by the residents and with a scheduled time. As much as 10% is done by means of self-management by the residents through the waste bank program. 7.5% was carried out with a pattern taken by officials from the City Government of Tangsel, 2.5% was carried out with the pattern of being disposed of independently to the TPS provided by the City Government of Tangsel, 2.5% was thrown into empty land (BPS Tangerang Selatan, n.d.).

From this condition, it can be seen that the community still does not fully understand waste management properly (Mohd Yusof, Jidin, & Rahim, 2017). for this reason, it is necessary to carry out massive outreach on independent waste management. From the respondent's data, 64.1% did not get socialization about waste management, especially related to waste banks. And as much as 35.9% of the community has received socialization about waste management and waste banks. Community efforts to sort waste are still invisible or lacking (Harjanti & Anggraini, 2020), this can be seen from the answers of respondents where 38.5% of respondents still sometimes take action to sort waste, 25.6% do not sort waste and only 35.9% do waste sorting.

From the respondent's information, 60.5% of the people still do not have a waste bank, 36.8% own a waste bank, and 2.6% are still in the process of establishing a waste bank. Of the respondents who filled out the survey, 65.4% were not members of the waste bank, but supported the activities of the waste bank. As many as 19.2% are members of the waste bank and 15.4% are members of the waste bank. As for the activities of waste banks, 68.4% carried out weighing of waste banks, 36.8% conducted socialization on the importance of sorting organic and non-organic waste, 15.8% conducted waste utilization training and 2.6% used savings to save the results from the waste bank.

Socialization of Waste Sorting to the Community.

Socialization is done by making flyers that are shared through social media. Social media is one of the important instruments in socializing the community, especially in the conditions of the Covid-19 pandemic.

Training on Utilization of Non-Organic Waste.

Women who are activists of waste banks in RW 10, through social gathering activities, are trying to make use of non-organic waste by making souvenirs such as stereoform and plastic mica. This is a strategy to extend the use of plastic waste that cannot be recycled and is not accepted by collectors (Purwaningrum, 2016). Making delivery souvenirs is one solution to reduce plastic waste that is disposed of in landfills. It is also hoped that these souvenirs can have economic value and indirectly provide income for mothers and women who are activists of waste banks.

CONCLUSIONS AND RECOMMENDATIONS

From the pattern of community empowerment by looking at the movement of urban women who are activists of waste banks, it can be seen that: 1). From the survey results, it was found that the community still does not have awareness of sorting waste and managing waste independently, 2) conducting socialization by making flyers that are shared through social media. 3). Women activists of waste banks in RW 10 through social gathering activities, women try to carry out activities to utilize non-organic waste by making souvenirs such as stereoforms and also plastic mica. 4). New breakthroughs made by waste bank activists, namely; collaborating with pawnshops, initiating RW 06, RT.03 in forming a waste bank and encouraging the millennial movement at RW 10 to socialize the importance of waste banks and waste selection through making short films.

ACKNOWLEDGMENTS

We express our gratitude to Allah Subhanahu Wa Ta'ala, because for the facilities provided so that this Community Service can run smoothly. This community service can be carried out well with the support of (1) Head of Universitas Muhammadiyah Jakarta (2) Head of LPPM Universitas Muhammadiyah Jakarta (3) Head of FISIP Universitas Muhammadiyah Jakarta (4) Head of Bank Sampah 'Yes' Tangerang Selatan. May Allah Subhanahu Wa Ta'ala reward you with the good you deserve. Amen.

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ATTACHMENT



Figure 1. Weighing activities at the Waste Bank



Figure 2 . Waste sorting socialization



Figure 3. Creativity in utilizing non-organic waste