

Implementation Of Garbage Bank As a Means Of Increasing Community Creativity In Meranti Pandak Village

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Abstract.

The aim of carrying out this activity is to manage and reduce plastic waste so that it does not cause damage to the surrounding environment. Apart from that, it can also increase the creativity of local residents so that plastic waste can be recycled and can become a source of income for the community. The methods used are observation, interviews and documentation. The results show that waste bank management can reduce the amount of waste so that it does not pollute the environment. By recycling plastic waste, you can certainly create a sustainable waste management system and can involve local residents in making creativity from plastic waste in order to increase income in the area. The conclusion of this research is that surrounding plastic waste can reduce damage to the environment and can provide benefits and positive impacts on the Meranti Pandak Village Community.

Keywords: Waste Bank, Economic Value, Creativity, Community Participation, Empowerment

I. INTRODUCTION

The plastic problem in Indonesia is a significant and complex environmental issue. Plastic, especially single-use plastic, has become one of the main causes of environmental pollution in the country. Waste that is not managed properly can interfere

with daily activities by causing unpleasant odors, triggering disease, becoming a breeding ground for dirty animals, and creating a slum impression in the surrounding environment.

Based on data from the Ministry of Environment and Forestry (KLHK), Indonesia produced 67.8 million tons of waste in 2020 (Rahayu et al, 2022; Saputra & Fauzi, 2022; Sudrajat & Marpaung, 2022). The total waste is (1) 37.3% comes from household activities, (2) 16.4% from traditional markets, (3) 15.9% from areas, (4) 14.6% from other sources, (5) 7.29% from commerce, (6) 5.25% from public facilities, and (7) 3.26% from offices. Based on its type, the composition of waste is: (1) 39.8% food waste, (2) 17% plastic, (3) 14.01% wood or branches, (4) 12.02% paper or cardboard, (5) 6.94% other types, (6) 3.34% metal, (7) 2.69% cloth, (8) 2.29% glass, and (9) 1.91% rubber or leather. Of these, 55.87% of the waste was manageable a year ago, while 44.13% was still unmanageable. Although plastic waste only ranks second after food waste in terms of quantity, plastic requires special attention because it cannot decompose like organic waste that can be used as fertilizer.

The volume of plastic waste in Indonesia is huge, with data from the Central Statistics Agency (BPS) showing that it amounts to 64 million tons per year, of which 3.2 million tons are dumped into the ocean (Efriawan & Riyantini, 2019; Arjal & Rafidah, 2020). In addition, around 10 billion pieces of plastic bags, or about 85,000 tons, are wasted into the environment every year (Utami et al, 2020; Rahmi & Selvi, 2021).

To solve the waste problem, there needs to be a change in the way waste is viewed, namely by seeing it as a resource that has economic value and can be utilized. The approach that previously only involved collecting, transporting, and disposing of waste to landfills must shift to waste management by applying the 3 R principles (Reduce, Reuse, Recycle). Currently, there are twelve villages in Boalemo District that are included in zone 1, which is a waste management area that will be handled with a direct system in the short term. One of these villages is Meranti Pandak Sub-district.

Handling this problem is focused on effective waste management, so that the local government budget can be allocated to waste management through the construction of a

3 R Waste Management Site in Meranti Pandak Village. This is part of the government's effort to socialize the concept of zero waste to create a healthy area.

In order to address the impacts and problems caused by the accumulation of household waste, we invite the community to launch a waste bank program. The program covers a wide range of activities, including outreach, education, training, and implementation. Effective waste management requires a community that is creative, innovative and entrepreneurial in spirit. If management is not done well, the risk of negative impacts and disasters will increase.

This research aims to assess and describe the handling and management of waste through the waste bank program in Meranti Pandak Village, with an emphasis on social, environmental, and economic aspects.

II. METHOD

This article uses a descriptive research method with a case study on the Waste Bank in Meranti Pandak Village. According to Sukmadinata, the descriptive method aims to describe and explain various aspects such as conditions, relationships, opinions, processes, impacts, or existing trends, using scientific procedures to answer actual problems. The descriptive method used in this research is descriptive qualitative, which involves collecting data in the form of words, observation notes, documents, and verbal statements from interviews or questionnaires. This qualitative data aims to expand on existing information, with a focus on the quality or process of achieving activities.

Data were collected through observation, interviews, and documentation. Data analysis was conducted qualitatively by following Milles and Hubberman's interactive model, which includes three stages: data reduction, data analysis or testing, and conclusion drawing and verification.

III. RESEARCH FINDINGS

Household waste management should be a major concern of all parties. Waste is a significant problem that requires special handling. If household waste is not managed properly, it can cause negative impacts and disasters in the surrounding environment. Waste management habits are generally limited to simple actions such as throwing, moving, and burning waste (Safiah et al., 2017). If waste accumulates and is not managed properly, it can reduce environmental aesthetics, cause unpleasant odors, and

spread disease. Environmental problems caused by waste are often caused by improper handling, such as throwing waste into waterways, rivers, or burning it, which can cause pollution. Domestic waste comes from household activities (Sudirman, 2005).

The impact of waste can be categorized into three aspects: health, environment, and socioeconomic (Gelbert, 1996: 29-31 in Irwanto, 2019). Of these three aspects, the socioeconomic impact can be positive if waste management is done well. Waste management, both organic and inorganic, such as plastic, can provide added value if processed into craft products that can increase the economic income of the community. The process of making crafts from waste starts with waste separation, followed by shredding, fermentation, drying, crushing, mixing, and pelletizing (Bestari, 2011).

Educating the public about waste accumulation is very important to raise awareness in handling it. This awareness is influenced by mindset and behavior towards the environment. Community participation is key in waste management. Efforts to protect the environment must start from the individual with small actions such as not littering. This habit can spread within families and communities. To reduce waste, the transformation of people's mindset about household waste utilization is essential, including participation in activities such as waste banks (Singhirunnusorn et al., 2012).

Waste Bank socialization was carried out in accordance with the program plan that had been prepared, and its implementation in Meranti Pandak Village has reached 100%. This activity aims to increase community awareness, especially for those who have been littering without understanding its impact. The students, PKK mothers, wirit mothers, and the local community showed high enthusiasm during the socialization event. This shows their interest in deepening their knowledge about the different types of waste, both organic and inorganic. Organic waste, which is easy to decompose, includes paper, dry leaves, sawdust, fruit peels, and stale food waste, while inorganic waste, which is difficult to decompose, includes broken glass, used plastic bottles, sterofom, and old tires.

In addition, the socialization of the Waste Bank in Meranti Pandak Village also provides knowledge on how to manage waste so that it can have economic value. Waste that is usually considered dirty and causes unpleasant odors, if managed properly, can have economic value. This is what the Waste Bank in Meranti Pandak Village does.

The implementation of the Community Service Program that has been carried out has provided significant benefits for improving the economy of the people in Meranti Pandak Village in particular, and the people of Tilmuta Sub-district in general. The programs that have been held, especially the waste bank program, have helped in this regard. After going through socialization, training, and mentoring in waste management and the formation of a Waste Bank, it is expected that waste in Meranti Pandak Village can be utilized and have economic value. Explanations included sorting useful waste using the 3 R's system, managing waste to create economic value, and the process of establishing a Waste Bank. The socialization also included information on marketing recycled products, such as handicrafts from waste, through the media. This community service program has been successful in empowering the community to manage waste into valuable goods and form a Waste Bank. It is hoped that, with the Waste Bank, the community can process waste into valuable products and market these products through social media or the internet, helping to improve their economy.

Picture 1. Waste Bank Creation



Picture 2. Waste Weighing Simulation



Picture 3. Handover of Waste Bank to RT



Picture 4. with the Community



Based on the results of counseling and socialization to the community can be explained as follow:

1. Waste bank management can reduce the amount of waste so that it does not pollute the environment. By recycling plastic waste, it can create a sustainable waste management system and can involve local residents in making creativity from plastic waste to increase income in the area.
2. Previous research shows that waste banks can provide positive benefits, including: - Increasing the active participation of the government and the community in waste management (Astheria & Heruman, 2016; Bachtiar et al., 2015) - The importance of socialization or explanation of the existence and activities of waste banks (Nurhidayah, 2017; Saputro et al., 2015). Supporting government efforts to reduce waste production (Selomo et al., 2016) - Creating a clean and healthy environment (Haryanti et al., 2016; Novianty, 2013) - Building a sense of community (Wardany et al., 2020).
3. The implementation of the waste bank program in Meranti Pandak Village has successfully empowered the community to manage waste into valuable goods and form a Waste Bank. It is hoped that with the existence of the Waste Bank, the community can process waste into valuable products and market them through social media or the internet, so that they can help improve their economy. Overall, this study shows that waste management through waste banks can provide social, environmental, and economic benefits for the people of Meranti Pandak Village.

V. CONCLUSION

The problem of waste, both organic and inorganic, seems to be never-ending. However, effective waste management can help reduce this problem by turning waste into something useful and valuable. This service activity includes training in making eco-enzyme compost fertilizer and processing waste into handicrafts such as brooches and plastic baskets. Rural communities generally do not know much about how to utilize and manage waste that can provide benefits. It is hoped that this activity can encourage rural communities to achieve self-reliance and self-sufficiency, through increased awareness, knowledge, and active involvement in waste management in their environment.

By managing waste through the Waste Bank, several important things can be achieved: (1) Active involvement of the government and community in waste management, (2) The importance of socializing or explaining the existence and activities of the Waste Bank, (3) Supporting government efforts to reduce waste production, (4) Creating a clean and healthy environment, and (5) Building a sense of togetherness in the community.

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