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# Waste Management and the Formation of Environmental Concern Behavior in the Social Perspective of the Community

Fatmawati Sungkawaningrum<sup>1\*</sup>, Alfiatul Istinganah<sup>1</sup>, Anisa Nurul Shanti Kusuma Wardani<sup>1</sup>, Artika Nurohmatul Azizah<sup>1</sup>

<sup>1</sup> Sharia Economics Study Program, Nahdahatul Ulama Islamic Institute of Temanggung, Indonesia

\*Correspondence: E-mail: [fatmawati2017ekn@gmail.com](mailto:fatmawati2017ekn@gmail.com)

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## ABSTRACT

Waste management is still a problem that needs to be resolved. Garbage that is not processed properly will cause things that are harmful to the environment such as pollution to water, soil and air and can cause disease. Therefore, community service activities are needed to increase understanding and awareness so that changes in people's behavior in waste management occur. Community service activities were carried out in Krincing Village, Secang Subdistrict, Magelang Regency at February 2022. With approximately 50 participants. The main activity of community service is in the form of sharing (speech) and discussion followed by questions and answers. Then practice waste management by sorting and selecting which waste still has economic value (price). With this community service activity, understanding and concern for the community is seen to increase by showing enthusiastic and active behavior in waste management practices. In addition, people who have practiced waste management get income from the sale of waste which still has economic value by waste bank (bank sampah).

## 1. Introduction

Waste is defined as any material that is discarded, disposed of, or abandoned, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, as well as community activities ([United States Environmental Protection Agency, 2022](#)). Waste management is still a problem that needs to be resolved. Garbage that is not processed properly will cause things that are harmful to the environment such as pollution to water, soil and air and can cause disease.

Waste management in the community can be approached with a socio-economic approach through community service which includes counseling and training. Community behavior which includes community members and industry can be evaluated with programs or activities that can be carried out using methods that are appropriate to the waste problem in the area. The form of efforts towards environmental concern can be deconstructed to be able to carry out and carry out environmental awareness programs. Waste management will involve the government and community members because waste cannot be managed independently. This means that in managing waste must be collectively. Waste and its management can be used as a creative and transactional economic method ([Pangestu & Ratnawati, 2022](#)). To increase public understanding and awareness of waste management behavior, this community service activity is needed

## 2. Methods

This activity was held in February at Krincing Village, Secang Subdistrict, Magelang Regency by a community service team from the Nahdhatul Ulama Islamic Institute of Temanggung. Participants in this community service reached 50 participants with the dominance of women. There are several steps in this community service activity.

1. Management of permits and administration. This activity is carried out to obtain permission to carry out community service by the village government and initial coordination with the community of prospective community service participants
2. Extension activities: Counseling is carried out by direct lecture method and followed by discussion and question and answer
3. Waste management practices: creating a waste bank system
4. Monitoring

## 3. Results and Discussions

Community service activities begin by obtaining permission from the village head to carry out community service activities. This activity is carried out in addition to obtaining a permit for community service activities as well as requesting permission to obtain a location that will later be used as a waste bank (Bank Sampah). In this activity the village head and village government support this community service activity.



**Figure 1.** Arrange for permits the location of village land for waste collection (waste bank).

The next activity is counseling. Counseling was carried out by a community service team from the Sharia Economics Study Program, Nahdhatul Ulama Islamic Institute of Temanggung. The counseling method used is presentations and lectures. In this activity the participants are active in discussing waste management, especially how waste bank activities can work.



**Figure 2.** Counselling or extensions.

#### **Extension material:**

#### **Waste problem analysis**

Garbage in general means the result of human activities and activities that cause leftovers that are no longer used, but with the development of science and technology, waste can be managed and recycled. With the process according to the type and classification so that it can be reused. Measurable waste management can minimize pollution levels. In many countries in the world, such as in Italy, waste gets special attention from both a scientific and socio-economic perspective. Garbage according to its type can be processed into materials for building construction such as vinyl and asbestos materials ([Aloi et al., 2019](#)). This means that waste management in economic civilization must be thought of systematically. Community empowerment can play a role in waste management programs and community empowerment can be adapted to posing problems in the sense of geographical situations or conditions and the related industrial environment.

Geographical conditions and the type of the majority of economic activities will affect the program. In conditions or waste management programs, waste from livestock requires livestock manure in large quantities if the program is biogas from animal manure. The program will not work and will only waste money if the local people in raising livestock are only limited to owning livestock. These conditions cannot meet the volume of livestock manure to be processed into biogas. The program for handling waste and waste in the biogas program will be effective and have economic value when applied to conditions or areas with a large number of livestock that produce a large amount of manure. Which can be used to meet the main ingredients for biogas energy sources ([Firmansyah et al., 2021](#)).

## **Waste problem evaluation**

Waste management must be programmed as a collectivity that is useful for achieving goals. The government has issued a handling regulation in PERPRES NO 97 of 2017 which contains policies and strategies for waste management. It is targeted that by 2025 there will be 70% waste handling and a reduction of up to 30% (Kristina et al., 2020). The government program can be implemented with social theory because it is more effective in terms of economic communication. Society needs a real realization that is in accordance with the culture of society. With the language of communication, it will be more effective in implementing waste management programs in accordance with government policies. Communities need financial income to meet their economic needs. Because social status is also needed in life (Talakua, 2021).

Economic position is the main and fundamental part of the necessities of life. The method can be in the form of a program or field of economic rotation that generates money for the necessities of life, then social theory will be effective in waste management programs through the Implementation of the We Prosperous Waste Bank Program (Wardani et al., 2016). Effective language and social theory can be implemented because the level of education and academic knowledge of the community has different understandings.

## **Waste problem deconstruction**

Community behavior factors play an important role in handling waste with all its problems. Behavior can be deconstructed using the 3R method “Reuse, Reduce, Recycle (Rahman, 2013). With the 3R education apart from educating the public in social behavior, the community will automatically be more knowledgeable in environmental awareness. By sorting waste and reducing the use of plastic waste. Where in the program also generates financial income.

Community behavior in caring for the environment can be started by providing a special place for waste according to its type (Rosnawati et al., 2017). Education about sorting waste will speed up and support it in terms of time and cost efficiency because all waste has been classified systematically (Helmi et al., 2018)

## **Waste Bank Practices**

Waste Bank practice is carried out in a predetermined location. In general, the waste bank model is quite simple, namely:

1. The community sorts and chooses which household waste still has economic value
2. The community deposits the waste in the waste bank
3. Then the waste that is stored is recorded by the waste bank team
4. The waste bank team will classify the type of waste that still has economic value according to its type (eg cardboard, paper, bottles etc.)
5. The waste bank team sells the waste to collectors.
6. The money earned will be given to the people who deposit waste in the waste bank.





**Figure 3.** People deposit garbage into the waste bank.



**Figure 4.** Waste bank team



**Figure 5.** Data collection by waste bank



**Figure 6.** Bank Sampah (Waste bank) activity

In this practice indirectly there are several things that are obtained, namely:

1. Increased public concern and awareness in waste management
2. The negative impact generated by waste can be minimized
3. The positive impact is that the community benefits in the form of money by depositing waste in the waste bank

#### **4. Conclusions**

The conclusion from this community service activity is that community understanding and awareness of waste management seems to be getting better as shown by the enthusiasm for waste bank activities. The existence of a waste bank can minimize the negative impact of waste and has the potential to provide income for the community.

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