

Empowering Housewives to Become Ecopreneurs in Reducing Waste Through 3R (Reduce, Reuse, Recycle)

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Abstract

The existence of waste cannot be separated from human activities and existence. Currently, the problem that must be resolved immediately in the waste section, the community in particular, is the low level of public knowledge related to waste treatment, then the 3R system, and entrepreneurship in the waste sector, namely ecopreneurship. Efforts to develop the potential that is already owned by the community need comprehensive community empowerment. Waste is one of the serious problems in the era of industrialization. But reducing waste through the 3Rs requires a process for the community to work on. the purpose of empowerment is to provide understanding, motivate to increase income so that they can change attitudes, act and think. This community service was carried out in 2023. Participants who participated in community service consisted of the community such as housewives, lecturers, staff and students at Borobudur University. This service activity includes counseling and practice. Based on the results of the questionnaire, the average age of housewives who acted as service participants was between 40-60 years old, 42.55%, at the junior and senior high school education level with a value of 80% and categorized as a moderate level of education. For the experience of processing waste both independently and in groups with yes answers is categorized as low with the acquisition of 30%, the rest are in the no answer. The low level of education, experience in processing waste and the age of housewives who are no longer young have an impact on the way of thinking, taking attitudes and innovating and creativity, so that the community is less able to adopt the 3R concept to process waste to become an ecopreneurship which greatly impacts the economy, especially income and the quality of the environment around the community.

Keywords: 3R, Ecopreneurship, Waste

INTRODUCTION

The existence of waste cannot be separated from human activities and existence. The more humans there are, the more and more diverse the waste produced. Indonesia's economic structure, which is based on the industrial sector, also contributes to the increase in the volume of waste produced (Istiqomah, et al., 2019). Waste has the potential to create environmental health problems and environmental damage, without realizing it, waste can cause disasters (Eprianti, et al., 2021). Currently, the problem that must be resolved immediately in the waste sector, especially the community, is the low level of public knowledge regarding waste processing, then the 3R system, and entrepreneurship in the waste sector, namely ecopreneurship. This problem is exacerbated by the community environment which still contains waste and is not processed either independently or in groups, as well as public awareness of the importance of improving environmental quality which will later be related to increasing community income. The development paradigm which is still exploitative and still prioritizes short-term production needs to be changed to a sustainable development paradigm. Sustainable



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development can be seen as a concept which in principle states that the development of the current generation should not require compromise from future generations through their sacrifices in the form of lower social welfare than the welfare of the current generation. What is meant by social welfare here is economic welfare, social welfare which includes health and education, and environmental welfare. The pillars of sustainable development are economic sustainability, social sustainability and environmental sustainability, all three of which must develop in a balanced manner; otherwise, development will be trapped in a conventional development model that emphasizes economic growth alone and abandons social and environmental development (Suparmoko, 2020).

Efforts to develop the potential that is already owned by the community itself require comprehensive community empowerment. Community empowerment is carried out as an effort to increase community capabilities also in terms of innovation and creativity so that they are responsive and critical to changes that occur quickly, and are able to become sustainable independence. Efforts to empower the community as a whole are always linked to the characteristics of the recipient of empowerment as a community that has certain characteristics, backgrounds, and habits.

Waste is one of the serious problems in the industrialization era. The underlying reason for waste is not only from the production process but also survival. Therefore, waste processing must be carried out as early as possible to minimize environmental degradation. The urgency of handling and managing waste that is vulnerable to the environment, whether in the form of liquid, solid or other forms of waste (Basaran, 2013; Xue, et. al., 2013; Nasir and Fatkhurohman, 2010 in Nasir and Saputro, 2015).

However, in reality, reducing waste through 3R requires a process that can be carried out by the community, because currently it is still rare and reluctant to do this, on the grounds that it is complicated, many processes and time. On the other hand, the benefits of 3R for the community are being able to increase income, one of which is becoming ecopreneurship. Ecopreneurship is a business activity based on the environment. This means that in running their business, entrepreneurs strive to reduce the impact that is harmful to the environment (Trimeiningrum, et al., 2023). This is in accordance with the understanding of 3R, namely the activity of reducing the use of goods that will be thrown away/unused (reduce), reusing unused goods (reuse), and recycling unused goods/waste into new products that can be used or utilized (recycle) (Gusdevi, et al., 2021 in Fitria, et al., 2022).

In general, the purpose of empowerment is to provide understanding, motivate to increase income so that they can change their attitudes, actions and thinking. The purpose of this community service is: 1). Provide a shared understanding of ecopreneurship in reducing waste through 3R; 2). Invite the community to participate (move) in empowerment program activities in order to realize entrepreneurship and increase community income; 3). There is a transfer of waste processing innovation technology; 4). Provide skills to the community in waste processing. In addition, through this activity, the Community Service Team of Borobudur University also disseminates the concept of 3R and ecopreneurship to support independent communities and obtain good environmental quality.

PUBLISHERS

IMPLEMENTATION METHOD

This community service was carried out on March 9-11, 2024. Participants who took part in the community service consisted of people such as housewives, lecturers, education staff and students of Borobudur University. The implementation of this community service was a collaboration between Borobudur University and Mulyasejati Village, Karawang, West Java and PT. Graha Inforesindo.

The implementation of Community Service is carried out using the method 1). Counseling, and at the same time implementing Pre-test and Post-test to determine knowledge, behavior or attitudes and actions or experiences related to 3R and waste processing. The pretest and post-test questionnaire method is an assessment tool used to measure the success of the progress of a learning process because the evaluation is short. The pre-test is given before the counseling activity, aiming to find out how far the respondents know about the material to be shared. The function of the pre-test is to see the effectiveness of the counseling. While the post-test will be given after the provision of counseling material to find out how far the respondents understand the counseling material after the activity is carried out (Costa, 2013 and Purwanto, 1998 in Damayanti, et al., 2017 in Oktavia, et al., 2020); and 2). Practice of making waste processing, namely making compost. This counseling and training was delivered by a Team of Lecturers, education staff and Students of Borobudur University Jakarta. To carry out community empowerment is shown with a concept like the picture below:

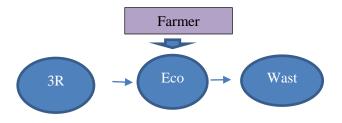


Figure 1. The Concept of Empowerment

The main material of the extension is about: 1). Integrated Waste Management; 2). Ecopreneurship Entrepreneurship Motivation. The levels of community service activities are as follows:

- 1. Conducting field observations and interviews for community service activities.
- 2. Coordinating, integrating, optimizing participation, with community leaders and community leaders by involving Borobudur University and the target of extension and



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practice, namely housewives.

- 3. Working on and creating extension programs that are in accordance with government policies and programs.
- 4. Disseminating innovations and applications of waste processing technology in the form of making compost fertilizer
- 5. Distributing questionnaires containing community characteristics.

Conduct analysis and check the results of the questionnaire that has been conducted to see how far the empowerment has been implemented well.

RESULTS AND DISCUSSION

Based on the results of the questionnaire, the average age of housewives who act as community service participants is between 40-60 years old, which is 42.55%, with an education level of junior high school and high school with a value of 80% and is categorized as a moderate level of education. For the experience of processing waste, both independently and in groups, the answer yes is categorized as low with 30%, the rest are in the answer no. The low level of education, experience in processing waste and the age of housewives who are no longer young have an impact on the way of thinking, taking a stance and innovating or creativity, so that the community is less able to adopt the 3R concept to process waste to become ecopreneurship which has a great impact on the economy, especially income and the quality of the environment around the community.

The counseling materials provided are: 1). Integrated waste processing. It is explained that through sorting, selecting and processing waste can be transformed into economic goods that can increase community income and become new jobs for the community, namely ecopreneurship. A new term that is not yet widely known by the community, but can be an additional source of income for the community.





Figure 2. Community Service activities use the 3R

Counseling is conducted for housewives. The purpose of this counseling is to provide knowledge and information to participants about integrated waste management, its impacts and benefits for society and the environment.

The results of the questionnaire on public insight and attitudes about 3R, ecopreneurship, and waste management before the counseling (pre-test) were followed by 40 respondents, while after the counseling it was followed by 38 people (post-test). The mapping results are as follows:

- Before counseling: Insight aspect: 30.6% yes, 18.9% undecided, 50.5% don't know
 - Attitude aspect: 15% agree, 10% less agree, 75% disagree After counseling:
 - Insight aspect: 87.5% yes, 12.5% undecided, 0% don't know
 - Attitude aspect: 98% agree, 1 less agree, 1% disagree

Based on the evaluation of the questionnaire results above, the community still does not have sufficient insight and attitude about waste processing. Through counseling and practice, the insight and attitude of participants have been improved, but it cannot be said that it can change habits. Anxiety arises because in waste processing, people are sometimes still confused about making it, afraid of making mistakes, and so on, which could be caused by the need for additional knowledge for participants. Therefore, innovation and creativity are needed for participants to be able to apply the knowledge gained from the counseling results, although they still have an interest because of the income that can be generated.

CONCLUSION

2.

Implementing outreach activities to the community can increase their insight and attitudes in waste management through 3R (Reduce, Reuse, Recycle). For effective practice it needs to be supported by motivation, innovation and creativity. Counseling for housewives is important because they have a major role in managing household waste. Housewives can also be role models for other family members in terms of waste management. This outreach activity is ultimately able to provide knowledge and



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information to participants about integrated waste management, its impacts and benefits for society and the environment.

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