

Community Participation in Mampari Village, Balangan Regency Reducing Waste Using the 3R Method

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ARTICLE INFO

Keywords: Community Participation; Waste Management; 3R Method Waste Management

Received: December 17, 2024

Accepted: December 17, 2024

Published: December 18, 2024

ABSTRACT

Every day waste production is increasing along with the increase in the number of products and people's consumption patterns. What must be done to overcome the increase in waste volume is to reduce the volume of waste from the source through waste management from the community itself. The problem in community participation regarding waste management using the 3R method in Mampari Village, Balangan Regency is what form of community participation in waste management and the level of participation in community waste management. Research on waste reduction using the 3R method in Mampari Village aims to: (1) describe the forms of community participation in Mampari Village. (2) describe the level of participation of the Mampari Village community, data collection includes interviews, observation and documentation, while data analysis uses quantitative descriptive techniques. Based on the research results, one form of community participation in efforts to reduce waste using the 3R method is by providing contributions in the form of energy, goods and money as well as community service and participating in waste management. Apart from that, they also hold community meetings once a month, which are attended by several residents. The level of community participation that occurs in Mampari Village according to the category is low, the only community members who participate are village mobilizers consisting of 10-15 people so that the implementation of waste management is very lacking and still not optimal.

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Introduction

The population and the rate of economic growth and development that continue to increase not only have a positive impact on economic change, but also have a negative impact on society, for example, environmental damage due to waste problems. The definition of waste

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based on Law Number 18 of 2008 Article 1 paragraph (1) concerning Waste Management, is stated as the remains of human daily activities or natural processes in solid form. Efforts to reduce waste generation and increase public awareness require attitudes and behaviors that care about the environment, as well as methods that have been carried out by communities and environmental organizations in the world, one of which is by managing waste using the 3R method (reuse, reduce, recycle). Government Regulation Number 81 of 2012 Article 11 paragraph (1) concerning waste control states that, the regulation of waste processing rules with the 3R method, namely the limitation of waste generation (Reduce) which aims to reduce the use of single-use waste and limit the use of waste that is difficult to decompose such as plastic waste, styrofoam, cans, and so on, and in Article 11 paragraph (1) letter b regulates waste recycling (Recycle) which in this article is interpreted as an effort to reuse or recycle unused waste so that it becomes useful goods again and has high economic value. And in Article 11 paragraph (1) letter c waste reuse (Reuse) is stated to reuse waste or goods that are no longer used. The importance of participation in waste management and reducing the amount of waste with the 3R method is community participation in the activities carried out, with the management and reduction of waste and the participation and participation of the community, it will reduce the amount of waste which is increasing day by day. Participation can be categorized: first, community members are involved in actions that have been thought of or designed by others and controlled by others. Second, participation is a process of forming strength to get out of their own problems (Ahmad, 2017). Community participation is often considered an inseparable part of community development efforts. By viewing community participation as a unit in the community development process, it can be seen that the roots of the development of thinking about community participation in waste management will be related to the community discourse. The population based on the Central Statistics Agency of Balangan Regency in 2021 shows that Batumandi District is the first most densely populated area in Balangan Regency, which is around 19,108.00 people and Lampihong District is the second most densely populated area after that, which is around 18 541.00 people, Batumandi District is one of the areas in Balangan Regency which has 18 villages. The increase in population results in an increase in the number and consumption of the community, thus causing an increase in the amount of waste, both household waste, shop waste, industrial waste and other waste (Santoso, 2009). The volume of waste based on data from the Batu Merah TPA, Lampihong District, Balangan Regency as the final waste disposal site for all areas in Balangan Regency shows that the volume of waste transported is 767 tons per year and another

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10 tons are managed by waste banks and TPS Waste Disposal Sites from several Districts in Balangan Regency.

Waste banks spread across Balangan Regency include Batu Piring, Paringin Timur, Paringin, Buntu Karau, Tungkap and Mampari Villages, from several waste banks, Mampari waste bank is included in the waste banks that participate in implementing the waste management program with the 3R method. Waste has the potential to damage the quality of the environment in Mampari Village, the existing waste is generally only thrown away and burned, this process has not solved all waste problems, this waste problem needs a paradigm shift from a paradigm that only relies on the end-of-pipe approach to a new paradigm that views waste as a resource that has economic value and can be utilized. Community participation is the main capital in efforts to achieve program targets related to realizing a program so that it runs well, if there is community participation to reduce the amount of waste, it will certainly reduce the amount of waste in Mampari Village. But in this case the researcher found that the lack of waste utilization, the waste is only a pile of material that has no value and is only to be thrown away and burned. The increasing amount of waste and its direct impact on the community and environment in Mampari Village with waste management using the 3R method is expected to be able to reduce waste generation, facilitate the collection and transportation of waste to the final disposal site, and foster a culture of loving and appreciating the environment by maintaining cleanliness, but all of that will not work if the community living there does not participate in managing the waste they produce.

Methodology

This research was conducted in Mampari Village, Balangan Regency with the research sample being the Mampari Village community totaling 175 people. This research is included in descriptive quantitative research and uses primary data and secondary data as its data sources. Primary data were obtained from field observations, interviews and filling out questionnaires to respondents who live in Mampari Village, Batumandi District, Balangan Regency. Secondary data were obtained from journals, books, archives of related agencies, government publications and other sources that are sources of data in the study. The questionnaire was compiled based on the research variables and indicators. Data analysis used descriptive statistics obtained based on the answers to the questionnaires filled out by respondents. The results of filling out the questionnaires obtained from respondents will be analyzed descriptively to explain the researcher's findings.

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To determine the level of community participation, a scoring method will be used by adding up the scores of 10 question items from the questionnaire which are each given a score ranging from 1-5. From 10 questions that have been validated and considered valid based on experts, it was obtained that from the 10 questions the largest score is 1 and the smallest score is 5, and if 10 questions then the lowest score is 10 and the largest score is 50. If the score value has been known, it is then used to find the number of interval values for giving each category of community participation level using the following formula:

$$\text{Range} = \text{Largest Score} - \text{Smallest Score}$$

$$\text{Class Length} = \frac{\text{Range}}{\text{Number of Classes}}$$

Given: Largest Score = 50

Smallest Score = 10

Answer: Largest – Smallest Score

$$\text{Range} = 50 - 10 = 40$$

$$\text{Then Class Length: } \frac{\text{Range}}{\text{Number of Classes}} = \frac{40}{5} = 8$$

Result

Description and results of the questionnaire score analysis for community participation in Mampari Village in reducing waste using the 3R method are presented in table 1 and table 2 below:

Table 1. Community Participation Category

<i>No</i>	<i>Responses</i>	<i>Frequency</i>
1	<i>Very active</i>	18
2	<i>Active</i>	22
3	<i>Quite active</i>	34
4	<i>Less active</i>	55
5	<i>Inactive</i>	46

Table 2. Community Participation Category Score Analysis

<i>No</i>	<i>Category</i>	<i>Class length</i>
1	<i>Very low</i>	10 – 17
2	<i>Low</i>	18 – 25
3	<i>Enough</i>	26 – 32
4	<i>Tall</i>	33 – 40
5	<i>Very high</i>	41 - >48

Based on the data obtained in table 2 with a total of 175 respondents, it can be seen that the results of the questionnaire score with a total of 10 questions with the highest score value is 5 and the lowest value is 1 with a total of 175 respondents. The total score of all respondents based on the data is 3583, so the average score is as follows:

$$\frac{\text{Score}}{\text{Average}} = \frac{3583}{175} = 20.47$$

Furthermore, the scores that have been obtained will be interpreted using the classification of community participation levels in table 2. Based on the results of the average score, the score of 20.47 is included in the low category. The low level of community participation can be seen from the participation of the community in attending meetings for the program to reduce waste using the 3R method when the meeting was held the community prefers to work so that the community gets less information regarding the program.

Discussion

Participation comes from Latin, *pars* means part and *capare* means taking part or can also be called participation or participation, participation is voluntary participation or involvement by the community in the changes they determine (Ahmad, 2017). Participation is an active process of initiative taken by community members themselves, guided by their own way of thinking, using means and processes (institutions and mechanisms) where they can assert control effectively. This participation can be categorized: first, community members are involved in actions that have been thought of or designed by others and controlled by others. Second, participation is the process of forming strength to get out of their own problems. Based on the results of research that has been conducted in Mampari Village, Batumandi District with a total of 175 respondents, namely 93 men and 82 women. The age of respondents in the study has a fairly varied age group, the majority of respondents aged 31-34 as many as 46 people and

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between the ages of 19-22 as many as 24 people, this age range is included in the productive age and plays a greater role in village development activities so that it is very potential to be involved in the program to reduce waste using 3R. The majority of respondents' jobs in the research area are farmers, the community is fully dependent on this work so that many people prefer to maintain and maintain gardens rather than follow the program to reduce waste using the 3R method. Mampari Village is located in Batumandi District, which is the area with the second largest population occupying Balangan Regency, it is known that the more people occupy an area, the more waste will be produced, this is in line with research conducted by Ivan Septiawan in 2018, which stated that the rapid increase in population will also have an impact on the volume of waste produced. Therefore, it is necessary to have management and programs that deal with the waste problem. Waste management is related to health issues, climate, poverty reduction, resources, and sustainable production and consumption. Waste that is not managed properly will cause various negative impacts.

The small number of landfills in Balangan Regency, which is only one landfill, makes it difficult for the landfill to accommodate the large amount of waste. The waste in the landfill is increasingly piling up and piling up and cannot be decomposed properly. As a result, waste is one of the factors causing environmental pollution. The large amount of waste that cannot be handled properly, so the community tries to manage waste so that it is more useful. With the hope of 3R, namely reduce, reuse and recycle, it is hoped that it can become a concept that will truly overcome the waste problem, which is known that in waste management in Indonesia, the principle of collect-transport-dispose is still used without knowing the impact that will be caused after doing it, this is in line with the opinion of (Damnhuri, 2001). Humans in their activities cannot be separated from the need for space. The space where they live in their efforts to improve their status and quality of life is by processing resources, both natural resources and human resources themselves (Minister of State for the Environment, 2003). This is in line with research conducted in Batumandi District, especially in Mampari Village, which is one of the villages that strives to improve the quality of life by managing their waste by implementing the 3R program in reducing and managing waste, but it was found that the level of public awareness and participation in managing and processing waste using the 3R method is still relatively low, people prefer to work and go to the garden which they think is more profitable. Many people are less interested and care and are not very enthusiastic about the waste reduction program which can be seen from the initial stage, namely when the meeting was held (Figure 1), many people did not attend it on the grounds that they prefer work that produces immediate results

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such as rubber and vegetable gardening, likewise during the meeting to provide ideas/ideas and evaluations, many people did not attend it on the grounds that they were busy with their main work such as farming and so on. In providing contributions in the form of labor, goods/materials and money in the waste reduction program using the 3R method, it was also quite low, only the driving committee participated in giving and donating, for the others they thought that providing the contribution was not too important to carry out.

Figure 1. Waste Reduction Program Meeting Using the 3R Method



Waste management and utilization have been carried out by village activist members who are aware of the importance of maintaining village cleanliness from waste. Waste management activities in reducing the amount of waste from several community members divide tasks starting from the waste collection stage carried out by youth groups (figure 1) and the community who contribute labor, then at the utilization stage carried out by women's groups (figure 2), and the community who contribute expertise. Activities in managing waste in Batumandi District, precisely in Mampari Village, are waste management activities known as the "Mampari Group", a waste management program that applies the 3R method (reuse, reduce, recycle) the main activities are buying and collecting waste and recycling waste, most of the activities here are recycling waste, this waste management activity also empowers the surrounding community to participate in waste recycling activities.

Figure 2. Waste Management Carried Out by the Community (Left) Youth Group (Right)
Women's Group



The results of observations on respondents obtained data that all respondents who were asked for information in this study were still low with a figure of 20. This can be seen from the number of attendance when a meeting was held to provide ideas and evaluations for the program to reduce waste using the 3R method which was held once a month in a year. Based on this, the number of residents who attended was not too many, with an average of 10-18 people attending representing each community group, namely women's groups, youth groups, parents' groups, village officials, and TPA managers. Likewise, in providing contributions in the form of labor, goods/materials and money, only a few people and the program's driving committee, to manage waste, both organic and inorganic, they were also less interested.

Conclusion

Based on the results of the analysis and discussion, the answer regarding community participation in reducing waste using the 3R method (reuse, reduce, recycle) in Mampari Village, Batumandi District, Balangan Regency, it was concluded that community participation is included in the low category with an average figure of 20.47. Community participation in reducing waste using the 3R method is still said to be low because the community is less interested in utilizing the waste produced, this can be seen from several activities carried out such as attendance at meetings both in providing ideas and evaluations, providing contributions in the form of manpower, goods/materials and money, many people are absent and choose to work and do not care about their presence. Likewise in processing waste, the waste produced is immediately burned without going through the selection and utilization process.

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