

Empowerment of Zero Waste Maritime Village Based on Creative Economy in Wirittasi Village, Kusan Hilir, Tanah Bumbu

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ABSTRACT

The empowerment of Zero Waste Maritime Village Caring for the Marine Environment Based on Creative Economy was organized by the PPK Ormawa HMG Team, Lambung Mangkurat University, through socialization and education methods, training, and mentoring to the people of Wirittasi Village. With this program, the community can realize the potential of waste in Wirittasi Village. The activity results show that the district already has knowledge and skills in managing waste in Wirittasi Village through waste sorting activities and the 3R Movement. If continued, this program will improve the economic opinion of the community through waste management activities by the community. To maintain the program's sustainability, it is necessary to implement further programs, and the participation of village and local governments as facilitators for this community empowerment activity is needed.

INTRODUCTION

Indonesia has maritime potential in various sectors such as marine, marine waters, biotechnology areas, minerals, shipping industry, and defense to the world maritime industry. Marine debris is a serious problem that impacts marine ecosystems and Indonesia's geographical location as a maritime country (Al Syahrin, 2018). Environmental politics is about the politics of natural resource management. The government must design appropriate policies to address environmental problems, and environmental politics offer various possibilities and choices that can be taken when addressing natural resource management (Robertua, 2020).

Since 2010, Indonesia has become a country contributing 10% of waste to the global ocean. The Center for Climate and Atmospheric Research (PRIMA), Earth and Maritime Research Organization (ORKM)-National Research and Innovation Agency (BRIN), explained that from around 18 million tons per year the total generation of household production waste on land throughout Indonesia, which can be managed is about 77.39%, This means that there are still around 4.2 million tons/year (or 22.61%) that have not been managed, if it is assumed that 10% of the waste falls into rivers and the sea, it means that there are still 0.42 million tons/year or 22.61% that has not been managed. In one square meter, there are 106.3 grams of marine debris in the form of organic, domestic, plastic, and metal. Indonesia in the 2017 East Asia Summit (EAS) conference in Bali, has campaigned for "the war on plastic waste in the oceans, which is regulatorily supported by Presidential Regulation No. 83 of 2018 concerning Marine Debris Management and implemented in the 2018-2025 National Action Plan. The movement of handling marine debris in Indonesia is the responsibility of all elements and levels of society in Indonesia, including Pagatan Beach in Wirittasi Village in Kusan Hilir District, Tanah Bumbu Regency, South Kalimantan Province. To be able to reduce the impact caused by the problem of waste that pollutes the environment, especially in the marine environment, by carrying out environmental management through the involvement of various related parties. For this reason, the community must be the primary mover and the leading actor in its direction to overcome this environmental problem.

Wirittasi Village is one of the maritime villages that has an area of 15.5 hectares with a population in 2023 of 1,572 people and 506 Heads of Families (KK). The term "Wirittasi" toponymically comes from the Bugis language, which means seafront. The existence of the sea has a lot of influence on the social and cultural life of its people, where the community settlements are geographically located directly on the seafront and consist of 4 Neighborhood Pillars (RT). On the other hand, the problem of marine debris is one form of the complex problem caused by the absence of good waste management, starting from sorting types of household waste to Temporary Landfills (TPS). The number of polling stations in Wirittasi Village is currently 35, or a service ratio of every 1 (one) TPS unit for 13 households or 1 (one) TPS unit for 43 residents; supported by the existing types of polling stations, there is no grouping of the kinds of organic waste and inorganic waste. In addition, the garbage on the Pagatan beach in Wirittasi

Village also comes from garbage sent by other regions. As for waste management, the majority of people in Wirittasi Village still apply the old way without sorting the type of waste when disposing of their waste, so it can cause air pollution due to mixing between organic waste and non-organic waste. Waste that is mixed and directly in the environment can threaten environmental quality. In addition, people often still destroy debris by burning. The Wirittasi village community considers that burning waste is the fastest way to eliminate trash in their environment.

IMPLEMENTATION AND METHODS

Community empowerment activities are carried out by Ormawa Student Association of the Geography Study Program through the Student Organization Capacity Strengthening Program (PPK Ormawa) organized by the Directorate General of Higher Education (DIKTI) of the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek). The implementation of the PPK Ormawa HMG FISIP ULM program is located in Wirittasi Village, Kusan Hilir District, Tanah Bumbu Regency, South Kalimantan Province in a period from July to November 2023 or for four months.



Figure.1 Map of the Activity Location

The activities of PPK Ormawa HMG FISIP ULM in Wirittasi Village focus on community-based waste handling and management to realize a Zero Waste Maritime Village that Cares for the Marine Environment. The method of implementing training activities and implementing Zero Waste Maritime Village that Cares for the Marine Environment includes lectures, discussions, and workshops. There are several stages carried out in this activity including the preparation stage, training stage, and mentoring stage. The preparation stage is carried out by identifying and coordinating with a number of parties. The socialization stage was carried out with the introduction of Zero Waste Maritime Village, Care for the Marine Environment and the 3R waste movement and an in-depth explanation related to these activities. The training phase is carried out by training the community to manage waste in the village to become crafts that can reduce waste discarded and can have economic value.

RESULTS AND DISCUSSION

1. Preparation for Activities

- a. Coordination with the Environmental Office of Tanah Bumbu Regency as a partner

The Ormawa PPK team coordinated with the Environmental Office of Tanah Bumbu Regency. To achieve effective coordination, effective communication and full commitment from all relevant parties are needed. The Ormawa PPK team coordinated with the Environmental Office of Tanah Bumbu Regency. To achieve effective coordination, effective communication and full commitment from all relevant parties are needed (Nugroho et al., 2014). In this activity, it was conveyed about the objectives, design and methods of empowerment related to waste management that will be carried out in Wirittasi Village, Tanah Bumbu Regency and invited DLH Tanah Bumbu to be part of the activity, namely as a partner who provides material through socialization, training and mentoring activities which will be implemented in partner villages to jointly empower communities related to waste management. The results of the coordination show a positive response from the Environmental Office of Tanah Bumbu Regency and are ready to become partners in the activities to be carried out by the Ormawa PPK TEAM in Wirittasi Village, Tanah Bumbu Regency.



Figure.2 The team coordination with Tanah Bumbu Environmental Office

- b. Focus Group Discussion (FGD)

The PPK Ormawa HMG FISIP ULM team and Accompanying Lecturers coordinate through Focus Group Discussion (FGD). FGD is a motede of discussion conducted with a limited number of participants and comes from certain groups with certain topics of discussion (DOONDORI, 2016). The FGD was conducted with the Village Head, Village Apparatus, RT and a number of community leaders to discuss the plan of activities to be carried out in partner villages including the objectives of the activities, designs, targets and methods of implementing the activities to be carried out.



Figure.3 FGD with village heads and community leaders

1. Socialization and Education of Martim Zero Waste Village Cares for the Marine Environment in Writtasi Village through the 3R Waste Movement (Reuse, Reduce and Rcycle).

Socialization is one of the media that affects a person's personality by accommodating and informing the public about certain things that can increase their knowledge (Murtani, 2019; Umasugi, 2021). This socialization and education activity is carried out with the aim of increasing providing knowledge to the community to manage waste with the 3R approach (Reuse, Reduce, Recycle) so that the community can have the skills to sort waste starting from the household level. Increasing public knowledge is able to influence public awareness to be able to carry out proper waste sorting and management.



Figure.4 Socialization Activities with the Community

The implementation of socialization and education activities will be carried out on September 4, 2023 at Rumah Tahfiz Wirittasi Village, Kusan Hilir District, Tanah Bumbu Regency. The intended target is fishermen's families in particular and the entire community of Wirittasi Village in general. The delivery of the Zero Waste Maritime Village program for the Marine Environment was delivered by representatives of the PPK Ormawa Team, the Student Association of the Geography Study Program while waste management materials and the 3R movement were delivered by representatives of the Tanah Bumbu Regency Environmental Office as speakers and resource persons.

2. Clean Waste Action

The action to clean up waste in the coastal environment of Wirittasi Village was carried out on September 2-3, 2023 by the Ormawa HMG PPK Team together with a number of communities who attended and participated in cleaning the coastal environment of the village. This activity is one of the efforts to realize Zero Waste Maritime Village, so as to create a clean and healthy Wirittasi Village environment.

In order to maintain the cleanliness of the coastal environment, residents can carry out beach cleaning action activities as a form of active participation (Mardiana et al., 2022) Garbage collection is carried out by spreading regularly because of its fairly wide location. The garbage that has been taken is then collected in large garbage bags and then disposed of at the village's polling station. The results of identification after the activity took place can be concluded that in Wirittasi Village it is necessary to form a waste-aware community group. This aims to ensure that the waste in the village environment, especially on the coast, can be handled and managed by the community group which can then become the foundation of waste management in Wirittasi Village. According to Mustain (2019) in waste management, community participation can increase awareness of the importance of maintaining a clean and healthy environment. In addition, community participation can also strengthen initiatives in maintaining, maintaining, and improving ecosystem function. In this activity community participation was quite high, the participants of the activity were attended by more than 30 people.



Figure.5 Clean Waste Action in Wirittasi Village Environment

3. Waste Management Training

Training is a learning activity that prioritizes practice compared to theory carried out by a person or group of people with various learning approaches that aim to improve abilities in one or several certain skills (Santoso, 2010). The main objective of the training program is to maintain, improve, and refine the skills needed today or in the future (Apriani et al., 2017). The implementation stage of the activity begins with preparing the necessary tools and teaching materials then delivering materials and demonstrations of waste management practices into crafts such as pencil holders, flower pots and gifts from straw waste.

The waste management into craft training activity was held on October 18, 2023 at Rumah Tahfiz Wirittasi Village by the Ormawa HMG PPK Team with the community who were trained directly by representatives of DLH Tanah Bumbu. For training participants, this activity is considered quite interesting and becomes a good knowledge, knowledge and skill for them in terms of utilizing waste. This activity is expected to provide changes to communities that have not been able to manage existing waste into skills that can reduce and utilize waste in the environment as a form and effort towards Zero Waste Wirittasi Village, Care for the Marine Environment.



Figure.6 Training Activities with the Community

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the program implementation starting from socialization, training and mentoring activities, it can be seen that the community is anticipating to manage the potential of waste in Wirittasi Village. Currently, the community has the knowledge and skills so that they become more understanding and determined to manage waste starting from sorting types of waste from the level of fishermen's households and all communities in particular. This can be a new economic opportunity for local communities as they begin to manage their waste. Based on these conclusions, some suggestions that can be considered include the need for further activities and stacking carried out to the community. In addition, the participation of the Village Government and Government as policy makers can be increased again so that they can become morning facilitators of waste management programs in Wirittasi Village.

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