



IMPROVING AWARENESS OF ENVIRONMENTAL CLEANLINESS MANAGEMENT AT THE TAMASAPI WATERFALL TOURIST ATTRACTION IN MAMUNYU VILLAGE

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Abstract

Background: *The problem of scattered and accumulated waste in the Tamasapi Waterfall tourist area in Mamuju, West Sulawesi, is hindering the progress of this destination. Limited facilities and waste management capacity, including irregular emptying and inadequate trash bins, are the causes of this problem.*

The main objective of this community service project was to raise awareness among the Tamasapi community about environmental cleanliness management. Local potential was identified, and socialization and community service activities (baksos) to clean up trash in the waterfall area were carried out. The activities took place on July 2, 2024, and involved five local community members.

The results of the activity showed that the socialization and baksos went smoothly. Participants also gained a better understanding of the importance of proper waste management. The results of the pre-test and post-test questionnaires showed an increase in knowledge among all participants, indicating an increase in awareness. This shows the importance of waste management in maintaining environmental sustainability and the quality of Tamasapi Waterfall Tourism.

Introduction

Efforts to improve the quality and appeal of tourist attractions in order to attract more visitors are known as tourism development (Baretto & Giantari, as cited in Sinaga, 2025; Chaerunissa & Yuniningsih, 2020; Oktaviani & Yuliani, 2023). Environmental management is a conscious effort to maintain, preserve, and improve the quality of the environment to meet human needs. These development efforts are



closely related to this term. Especially for tourist attractions, environmental management, particularly waste management, is very important. Poorly managed waste can cause environmental pollution, ecosystem damage, and negative impacts on the health of visitors and local communities. Therefore, sustainable tourism depends on sustainable environmental management, particularly waste management.

This place of service is Tamasapi Waterfall in the Tamassapi neighborhood, Mamunyu Village, Mamuju Regency, West Sulawesi Province. This waterfall, considered the highest in West Sulawesi, attracts tourists from Mamuju and other surrounding areas. Tamassapi has many opportunities for nature tourism, agriculture, and plantations. The majority of people in the Tamassapi neighborhood are farmers, earning most of their income from agriculture and plantations. This farming community plays two roles in the tourism and environmental industries: as local residents who interact directly with the waterfall ecosystem and as managers of natural resources. However, there are issues with sanitation management in this community, particularly regarding waste. This situation indicates that the local community needs to be more knowledgeable about waste management to support sustainable tourism.

Tamassapi Waterfall Tourism faces complex waste management issues, causing trash to accumulate and scatter throughout the area, disturbing visitors. Three main categories of factors contribute to this problem: 1. Low Awareness and Education: Visitors and the surrounding community are unaware of the importance of maintaining environmental cleanliness and lack sufficient knowledge about waste management. 2. Limited Capacity and Facilities: Inadequate trash bins, irregular emptying, and limited management resources (funds, equipment, and manpower). 3. Weak Coordination and Regulations: There is no coordination between relevant parties, and there are no strict rules and clear sanctions for those who violate them.

These piles of waste have many negative effects, including water, soil, and air pollution, a decline in natural beauty, and health risks from disease vectors. Due to this urgency, the community service program offers solutions by raising awareness about environmental hygiene management through socialization and community service activities. The main objective is to raise awareness among the Tamassapi community about proper waste management methods and change their mindset about it. They also want to encourage them to actively participate in waste management programs such as plans to establish a Waste Bank.

METHOD

This community service activity (PKM) was carried out in Mamuju Regency,



West Sulawesi Province. Two strategic locations were used to carry out the main activities: Activity Location Outreach/Socialization: This activity was carried out in the Mamunyu Village Office Hall. This hall served as a venue for delivering materials, providing training, and conducting initial evaluations of the community, which included pre- and post-tests. Mamunyu Village was chosen because of its proximity to tourist attractions. Practical/Cleanup Activity Location (Social Service): Held in the Tamasapi Waterfall tourist area, Mamunyu Village. This location is a center for waste problems because it can be used for social service activities, also known as baksos, or direct waste cleanup. The activity took place on Tuesday, July 2, 2024, from 9:00 a.m. to 3:00 p.m. WITA.

Activity participants

Representatives of the Tamasapi community and managers of the Tamasapi Waterfall tourist attraction in Mamunyu Village were the main participants in this PkM activity. Five participants were involved in the socialization and were assessed through questionnaires. The direct objectives were to increase literacy, knowledge, change mindsets, and raise awareness about environmental hygiene management among participants.

Partners and Coordination: The Head of Mamunyu Village is the main partner in the implementation of this activity. From the beginning, they have worked together and collaborated to: Request permission for community service; Determine the time and number of participants in the socialization. To achieve the goal of developing waste-free management of Tamasapi Waterfall, the government and local community also support this initiative.

This community service project uses a community capacity building approach to change perspectives on environmental hygiene management at tourist attractions. 1. Socialization/Education (Lecture Method): This method is used to provide education on waste management and provide material on the importance of managing hygiene, how to manage waste properly, and the importance of maintaining the quality and sustainability of the Tamasapi Waterfall tourist attraction. This socialization aims to improve the literacy, knowledge, and awareness of the community. 2. Social Service (Baksos)/Demonstration and Participatory Method: Cleaning up waste around Tamasapi Waterfall is a direct activity. This method is in line with the idea of Asset-Based Community Development (ABCD), which states that the community must actively participate in solving environmental problems, namely waste, to achieve sustainable environmental goals.

The community service method was carried out through several systematic stages. 1. Identification of Local Potential and Issues: The first stage involves



identifying tourism potential (Tamasapi Waterfall) and key issues, such as poor waste management and lack of public awareness. 2. Permits and Partner Coordination: Collaborating, requesting permission from the Head of Mamunyu Village, and coordinating the timing and number of participants. 3. Activity Preparation (Pre-evaluation): Preparation of socialization and community service materials; distribution of pre-test questionnaires (7 multiple-choice questions) to measure the community's initial knowledge of waste management before the material was provided; and 4. Core Community Service (Socialization and Community Service Implementation): Registration and welcome. Presentation of socialization materials on the importance of proper waste management and its methods. Implementation of social service, namely cleaning up waste in the Tamasapi Waterfall Tourism area. 5. Evaluation of Results (Post-evaluation): Distribution of questionnaires after the test with the same questions after the presentation of materials and social service was used to evaluate the level of knowledge and awareness of the community that had increased.

RESULTS AND DISCUSSION

The socialization and community service activities were carried out on Tuesday, July 2, 2024, involving 4 participants. The participants were representatives of the community and managers of the waterfall tourist attraction in Mamunyu Village, Mamuju District, Mamuju Regency, West Sulawesi. The activity began with participant registration, where participants filled out attendance sheets and were given questionnaires and pens. The opening remarks were delivered by the head of the community service committee. This was followed by a presentation on the importance of waste management and proper waste disposal methods. After the socialization event, a community service activity was held to clean up trash around the waterfall. This socialization activity went well and smoothly, as expected by the researchers. Several documents of the material presentation and photos of the researchers with the socialization participants can be seen in the following images.



Figure 1. Presentation of Material

Figure 2: Photo of the outreach team and participants

Figure 3: Community service around Tammasapi Tourism

In environmental management, raising awareness of these cognitive and affective components, as demonstrated by changes in public perspective, is very important. This increased awareness supports conscious efforts to maintain, preserve,



and improve the environmental quality of tourist attractions.

Factors such as a lack of waste management capabilities and a lack of awareness among visitors and the community about waste issues at Tamasapi Waterfall are the causes. Therefore, the main solution offered is to raise public awareness about waste management and provide training. Theoretically, behavioral changes driven by this socialization will help reduce the harmful effects of waste, such as water and soil pollution, deterioration of natural beauty, and environmental health

risks, such as the spread of disease. This is in line with the principles of tourism development that require good environmental management. This improved understanding will foster clean and healthy environmental habits and encourage the community to actively participate in future waste management programs, such as establishing a Waste Bank.

KUESIONER

Nama :
Usia :
Alamat :

1. Bagaimana menurut anda pengelolaan sampah yang saat ini telah tersedia di kawasan wisata?
A. Baik
B. Cukup baik
C. Tidak Baik
2. Menurut anda apakah perlu dilakukan pemilahan sampah (organik dan anorganik) di kawasan wisata?
A. Ya
B. Tidak tahu
C. Tidak perlu
3. Jika sampah berserakan di kawasan wisata apakah akan merasa nyaman?
A. Nyaman
B. Tidak Nyaman
C. Sangat Tidak Nyaman
4. Apakah anda menghindari barang yang penggunaannya sekali pakai (Botol Plastik, Kertas Pembungkus Nasi, dll) ?
A. Ya
B. Sese kali
C. Tidak tahu
5. Apakah anda mengingatkan orang lain untuk tidak membuang sampah sembarangan di Kawasan wisata ?
A. Ya
B. sese kali
C. Tidak pernah
6. Jika melihat sampah berserakan apakah anda akan memungut dan membuangnya ketempat sampah ?
A. Ya
B. Sese kali
C. Tidak pernah
7. Jika ada program pemilahan sampah di lingkungan wisata apakah anda mendukungnya ?
A. Ya
B. Tidak
C. Tidak tahu

Figure 4 Questionnaires distributed before and after the presentation of the material socialization

Table 1: Pre-test and Post-test Questionnaire Results

No	Participants	Pre-test	Post-test	Remarks
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1	Aco	1A 6B	3A 2B 2C	There is an increase
2	Ali	2A 4B 1C	5A 1B 1C	There is an increase
3	Azman	1A 4B 2C	4A 2B 1C	There has been an increase
4	Word	1A 4B 2C	4A 3B	There is an increase in change
5	Sumardi	5B 2C	3A 4B	There is an increase in change

From the questionnaire results table above, it can be concluded that all five participants showed changes in their test answers before and after the presentation of material on the importance of waste management for maintaining the quality and sustainability of the environment in the Tammasapi Waterfall Tourist Area.

CONCLUSION

Based on the results of the community service activity on waste management to improve sustainable environmental quality, it can be concluded that:

1. The implementation of the socialization and community service activities went well and smoothly as expected with 5 participants consisting of the Tammasapi community.
2. Through the socialization activity, the Tammasapi community gained a better understanding of proper waste management in the Tammasapi tourist area. They became more aware and educated about the importance of waste management in maintaining the quality and sustainability of the Tammasapi Waterfall Tourist Area environment.

RECOMMENDATIONS

Through the socialization activities, we, as researchers, recommend that the community, especially the Tammasapi neighborhood, increase public awareness of the importance of maintaining the cleanliness of the tourist environment to preserve and ensure the sustainability of the Tammasapi Waterfall Tourist Area.

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