

Embung Plumbungan Tourism Empowerment through Environmental Greening in Gondoharum Village, Jekulo Subdistrict

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Abstract: An embankment is a basin used to regulate and accommodate the supply of rainwater flow and to improve the water quality in the associated water body (river, lake). Embungs are used to maintain groundwater quality, prevent flooding, and as a source of irrigation. Embungs collect rainwater in the rainy season and are then used by farmers to irrigate land in the dry season. In Gondoharum Village there is an embung that will be used as a tourist attraction in the future, but there is a case in the embung, namely the existence of a dry soil structure that makes the land there look barren. Therefore, the KKN Team made efforts to greenish activities to improve the soil structure and to make the Embung look more beautiful and cooler to attract tourists to visit the Embung.

Keywords: I Empowerment, Embung Tourism, Greening

1. Introduction

Real Work Lecture or commonly called KKN is a compulsory course charged to all final semester students at Muria Kudus University. KKN is also a medium for students to show the community a form of social care in life in the community. Gondoharum Village is one of the villages that is the location of the 2023 Muria Kudus University Community Service Program. Gondoharum Village is classified as having a large area, there are 7 dukuns, namely Dukuh Asemtoyong, Plumbungan, Kaliwuluh, Tompe, Jajaran, Tampung, and Tlogo. The Dukuh Plumbungan was chosen to be one of the dukus that has tourism potential, namely embung tourism.

An embung is a basin used to organize and accommodate the supply of rainwater flow and to improve water quality in related water bodies (rivers, lakes). Embungs are used to maintain groundwater quality, prevent flooding, and as a source of irrigation. Embungs collect rainwater in the rainy season and are then used by farmers to irrigate land in the dry season (Ngigi et al., 2005).

The construction of Embung in Gondoharum village is also an effort of the local village government as an environmental development, one of which is a new tourist attraction. To develop an area as a tourist attraction, there needs to be an attraction. In Law number 10 of 2009 concerning tourism, tourist attraction is everything that has uniqueness, beauty, and value in the form of diversity of natural wealth, culture, and man-made products that are the target or destination of tourist visits.

There are problems or obstacles in managing the embung as a tourist attraction, namely barren land due to the dry season around the embung so that the embung looks barren. The barrenness of the land in the embung makes the embung look deserted. Based on this, this service aims to provide direction on greening to improve soil structure, conduct planting activities and encouraging the community to take care of the plants (Mardiani et al., 2017).

Greening is an effort to restore and improve the effectiveness of land so that it can function properly and optimally (Harryanto et al., 2017). The soil in the Embung is a dry type of soil so greening needs to be done to improve

the soil structure and to make this Embung Tourism in Gondoharum Village look more beautiful. This is also the support of the KKN Team to make Embung Tourism beautiful, cool, and can attract by tourists in the future.

2. Research Method

The planned community service activities are included in the agriculture category. The target of the activity is youth organization in Gondoharum village. This activity was carried out in September. The chosen location is Dukuh Plumbungan, Gondoharum Village, Jekulo District, Kudus Regency. In the service activities in Gondoharum village, the KKN Team conducted reforestation by planting plants that can survive in dry areas. There are 4 plants used, namely White Rombusa, Red Pucuk, Palm, and Trembesi. The implementation of this activity includes the following:

- Survey activities are carried out to find out the current condition of the Embung in general so that the activities provided can be in accordance with the wishes of the community and on target.
- Direct practice, namely planting activities around the embung to improve soil structure and make the embung look more beautiful. This is a follow-up action from the survey results.
- Cooperating activities with the Youth Organization of Gondoharum Village. Karang Taruna is the target of cooperation which is expected to be able to channel greening activities in the future to the local community.

3. Findings

The existence of a reservoir in an area needs to be maintained and preserved, this is to support the sustainability of the function of the reservoir (Feby et al., 2022). Given that water is our basic need in various aspects of life. Many ways can be done to preserve the embung, including planting trees on critical land, protecting trees around the embung, wise land management, not throwing garbage into channels, water bodies or rivers and others (Budianto et al., 2023).

Tree planting activities are one way of caring for the environment (Fig. 1.). Planting tree seedlings is one part of a strategic conservation effort to reduce erosion rates and draining rainwater into the soil through the infiltration process (Wardani & Putra, 2020). Tree seedling planting activities in the context of Environmental Greening which is a work program carried out by the Muria Kudus University KKN Team in collaboration with the surrounding village community with the aim of greening and preserving tourism in the Plumbungan reservoir in Gondoharum village (Saepuddin, 2023). The plant seeds distributed to the community are as presented in Table 1.

Table 1. Plant Species for greening embung plumbungan

No.	Plant Type	Quantity	Unit
1.	Trembesi	3	Seedlings
2.	Red Shoots	10	Seedlings
3.	Palm	9	Seedlings
4.	White Rombusa	3	Seedlings
Jumlah		24	



Figure 1. Types of trees to be planted

In the distribution of plant seeds, the Muria Kudus University KKN Team first conducted counseling on the potential and cultivation of plants so that they can live well. The potential of trembesi plants is that the trunks of trembesi are used as raw materials for building (Ulayya & Umami, 2023). The initial stage in cultivating trembesi plants is land preparation. The land is cleaned of weeds so that plant growth is not disturbed. The planting pattern used is monoculture or mixed

pattern with intercropping plants. Then the planting hole is made two weeks before planting with a planting hole size of 50-100 cm with a depth of 30-60 cm. The excavated soil is mixed with organic and inorganic fertilizers so that the nutrient needs of plants can be met (Hazra, 2016). Trembesi planting is done at the beginning of the rainy season and is done in the afternoon. The implementation of the tree planting practice along the edge of the Plumbungan reservoir was on Saturday, September 9, 2023. The KKN team and residents of Gondoharum Village were very enthusiastic and eager to participate in this activity(Fig.2.).



Figure 2. Enthusiasm of the KKN Team and residents in the implementation of the greening of the reservoir

4. Discussion

The results of community empowerment through reforestation at Embung Plumbungan in Gondoharum Village show that these activities in the future are able to make the land improve so that it is not barren, and it is hoped that these activities can become an example for the community to do reforestation (Ibrahim et al., 2021). The reforestation at Embung Gondoharum Village was carried out with the local youth organization so that the activity process could run on time and on target (Kalungwizi et al., 2018). For environmental development, especially the development of the new Embung Plumbungan tourism, the greening carried out by the KKN Team also aims to make the Embung look more lush, and beautiful so that it can attract tourists to visit the Embung Plumbungan tourist attraction located in Gondoharum Village, Jekulo District, Kudus Regency.

5. Conclusion

Embung Plumbungan is a pond located in Gondoharum Village. This embung is planned to be a tourist attraction. The dry and barren land around the embung makes the embung look deserted. Therefore, the KKN Team conducted Community Service activities planned by reforesting the area around Embung Plumbungan. The greening aims to improve the dry soil structure, can make the reservoir beautiful and lush, and can attract tourists to visit Embung Plumbungan Tourism. The reforestation carried out is included in the category of Agriculture. There are 4 plants used, namely White Rombusa, Red Pucuk, Palm, and Trembesi. The service activities were carried out together with the Youth Organization and the BPD of Gondoharum Village. Before carrying out the activity, the KKN Team had conducted a survey related to the target activities and the types of trees to be planted around the reservoir. This activity is expected to motivate the community to do reforestation, especially on dry land.

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Conflict of Interest

The authors declare no conflicts of interest.

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