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COMMUNITY EMPOWERMENT IN MANAGING THE POTENTIAL OF MINING MATERIALS

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Abstract

Pattappa Village is a village that has the potential for minerals. However, in developing its potential, residents tend to ignore it because they do not know how to manage it. Residents only know that to manage it, they must attract investors. The uniqueness of the mining materials potential can be encouraged from a tourism perspective. This can ensure sustainability compared to mining, which has a management life. Community empowerment activities aim to provide an understanding of the potential of mining materials-based tourism owned by the village. The implementation is by conducting socialization, filling out questionnaires, and discussing the evaluation of questionnaire results. The activity results showed a paradigm shift in villagers' development of tourism potential. Residents have the awareness to manage the potential of minerals in geotourism.

Keywords: Geotourism, Mining Materials, Pattappa

INTRODUCTION

Law Number 10 of 2009 [1], concerning tourism, states that Tourism is a variety of tourist activities supported by various facilities and services provided by the community, entrepreneurs, and local governments. One of the fundamental goals of developing countries such as Indonesia today is achieving strong and sovereign economic growth. In line with tourism development, the government tourism village aims to increase economic growth, and people's welfare, eliminate poverty, overcome unemployment, preserve nature, environment, and resources, and advance culture.

The development of tourism villages is also a form of accelerating integrated village development to encourage village social, cultural, and economic transformation of villages. Therefore, each region and village needs to look at its potential to be raised and developed to provide added value benefits and produce high productivity to improve the welfare of the local community [2]. The tourism sector, as one of the drivers of Indonesia's economic growth, is expected to increase the number of foreign tourist visits, archipelago tourist trips, increase foreign exchange earnings from the tourism sector, absorption of tourism labor, and an

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increase in Indonesia's tourism competitiveness index in the global realm.

Barru Regency is characterized by a complex geological setting known as the Bantimala Complex (Maulana, 2019); rock variations in the region have implications for the presence of complex minerals. We recorded earth and mining study programs in Makassar and conducted field lectures. These study programs include Mining Engineering at Muslim Indonesia University, Geological Engineering at Hasanuddin University, and Mining Engineering-Geological Engineering at Bosowa University.

Pattappa Village, in particular, is the location of field campuses for Mining Engineering at Muslim Indonesia University and Mining Engineering at Bosowa University. The minerals found in this area are galena (Falah & Tabbu, 2022), chromium (Supriadidjaja & Hartanto, 2012; Purawiardi, 2014; Bakri et al., 2023; Wakila et al., 2024), manganese (Munasri, 2013; Padillah et al., 2021; Jafar, 2021; Padillah et al., 2021; Juradi et al., 2023; Bakri et al., 2024), coal (Umar, 2017; Malaidji et al., 2018; Kasmiani et al., 2018; Brotowati et al., 2019; Chalik et al., 2024). These minerals are potential areas that can be encouraged to become mainstay commodities for the village.

Residents have realized the existence of minerals. However, according to residents, their utilization is constrained by stakeholders and processing technology. In addition, research on minerals has never revealed the quantity as one of the requirements for mining feasibility. The potential of this mining materials material, if appropriately managed, will become a natural potential for developing village independence, especially in the welfare of the local community. Tourism development based on mineral/rock excavation resources is not widely practiced in Indonesia. Similar management can be seen in Karang Sambung, which is managed under the auspices of the National Research and Innovation Agency.

IMPLEMENTATION METHOD

Implementation of activities by conducting socialization and filling out questionnaires. Socialization was carried out to find out the community's response to the activities to be carried out. In addition, this activity is also an administrative permit for the government and local leaders to reveal the potential of mining materials materials in the village.

The second activity was filling out the questionnaire. The questionnaire mainly contained an understanding of the potential of minerals owned by the village and the management of the potential owned.

Both activities were conducted simultaneously. The final activity was to conduct an evaluation. This activity focuses on the educational aspect of mineral resources management. To foster awareness of green management and sustainable development

RESULTS AND DISCUSSION

The service activities carried out in Pattappa Village, Pujananting District, Barru Regency, South Sulawesi Province, were attended by 24 residents. Consisting of elements of the Village Head and his apparatus, the Village Consultative Body, Youth Organization Management, PKK Management, and residents. In this activity, residents also voluntarily facilitated the consumption of local plantations that are the mainstay of the village, namely pineapple and peanuts. The level of attendance of village elements and the participation of consumption not only shows the hospitality of the villagers but also shows the positive participation of the village in efforts to build and develop the village.

Picture 1. Photo of socialization activities attended by the Head of Patappa Village at the Village Hall

In this activity, after distributing questionnaires, it was found that the level of understanding of the potential of mining materials materials in Pattappa village was very high, reaching 93%. Residents even wrote down the mining materials material. Table 1 shows the contents of residents about the types of mining materials materials in Pattappa Village.

Table 1. Residents' Input on Types of Mining materials Materials in Pattappa Village

Type of Excavation Material	Number of Respondent's Choices
Coal	24
Manganese	24
Chromium	9
Galena	6
Gold	24

Table 1 shows that not only is the knowledge of the village's potential minerals high. However, villagers can also eloquently write down the types of minerals. In this activity, it is known that villagers generally know because there was once a company that mined manganese and coal. In addition, a company that mined coal now used the village office.

More than ten people knew about galena and chromium. During the discussion, it was revealed that they only knew they were black stones. Specifically, they did not know that the names were galena and chromium. However, they do know the location of these minerals

because these two minerals have also been explored.

Furthermore, managing the potential of existing excavation materials is essential. Residents' answers tend to be the same. They expect mining to be carried out by bringing in companies or investors to manage it. The residents' answers can be seen in Table 2.

Table 2. Expectations of Mining materials Potential Management

Type of Mining materials Potential Management	Number of Respondent's Choices
Mining is done	19
Made into Geotourism	0
Left alone	9

The choice to manage the potential of mining materials materials in Table 2 is generally based on the reason that mining can bring income to the village. Meanwhile, the number of residents who chose 'left alone' was due to concerns about the negative impacts of mining; for the option 'to be used as tourism,' residents did not choose because they did not understand this.

In the follow-up discussion and education session, it was conveyed that the impact of mining can indeed bring speedy income, but negative impacts also accompany it. Extractive activities, causing landscape changes and changes in land/environmental functions, also negatively impact. In addition, changes in the social and cultural aspects of the village will be very significant. Finally, mining minerals has a mine life, whereas the changes mentioned earlier cannot be restored as before.

An understanding of geotourism sensitizes residents to appropriate management to provide an image of village management. This management paradigm does not have a management age. Educational aspects can also be added because 'black stones' (coal, manganese, chromite, and galena) are raw materials widely used in the development of the electric vehicle industry. The leading indicator of this awareness is forming a team to accelerate village tourism development based on the potential of village minerals.

CONCLUSION

Pattappa Village residents experienced a paradigm shift in village development towards a tourism village based on the potential of excavated materials.

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