

Assistance in the grand design planning of Sendang Mudal Edupark in Sawangan Village

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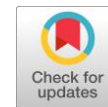
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ABSTRACT

This activity aims to, initially provide a clear picture regarding the steps to realizing the Sendang Mudal Edupark in Sawangan Village. In addition give more insight and provide a new perspective in the development of one of the tourist destinations in Sawangan, namely Sendang Mudal. The method used in assisting planning the grand design of Sendang Mudal consists of five stages, namely: coordination, problem analysis, survey, socialization and discussion, and preparation of the grand design. Based on problem analysis, the main problem in the development of Sendang Mudal Edupark is the lack of human resources that the village has who have competence in the fields of natural tourism and education. After providing assistance, participants have the ability to map the potential and problems faced regarding the development of Sendang Mudal Edupark. The main output of this assistance is the creation of Sendang Mudal Edupark development planning documents for the short, medium and long term. This study tries to contribute to the development of edupark natural tourism, especially by using a rural community base.



KEYWORDS

Master plan
Grand design
Edupark



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1. Introduction

Magelang is one of the districts in Indonesia which has potential tourist attraction [1]. The number of tourist visits to Magelang in 2019 reached 1,280,424 domestic tourists and 6,534 foreign tourists [2]. One of the tourist destinations in Magelang Regency which is very well known among foreign tourists is the Borobudur temple [3], approximately 20 kilometers from the temple there is a village called Sawangan Village. Based on geography, Sawangan village is also located on the western slope of Mount Merapi and the majority of the villagers' livelihoods are farming [4]. Apart from having agricultural potential, Sawangan Village has a number of natural tourist objects, such as: Sendang Maren, Sendang Mudal, Kedung Kayang Area, Wonolelo Tourism Village, and Watu Nganten.

Based on the results of the discussion by the service team with the Head of Sawangan Village, village officials, and managers of Village-Owned Enterprises (BUMDES) in Sawangan Village, data was obtained that many residents of Sawangan village besides farming also pursued various businesses such as fishing, culinary, food businesses, livestock breeders, dairy goats, and tourism. Sawangan Village already has a Village-Owned Enterprise (BUMDES) which was established in 2016. The BUMDES in Sawangan Village focuses on the Sendang Mudal tourism business, Market Management and Waste Management. Sendang Mudal is one of the natural springs owned by Sawangan Village besides Sendang Mareng which has been managed by drinking water company (PDAM). Sendang Mudal has been used by local residents as a source of drinking water and for their daily needs. Waste water or residue that is distributed to residents is accommodated in swimming pools that are open to the public and managed by BUMDES. This research focuses on determining the development steps for Sendang Mudal Tourism. This is because Sendang Mudal has natural springs with quite high discharge. It is hoped that the remaining water discharge that is not distributed can be utilized optimally so that it can bring economic benefits to both

residents and BUMDES in the future, so that the independence of the village and its residents can be achieved in a sustainable manner. Tourism is also an industry that have good long-term prospect growth [5].

Based on the literature, there are many factors that influence the success of tourism businesses such as the uniqueness of the concept (authenticity) [6], government policy [7], infrastructure and modernization [8], and tourist income [9]. Apart from the concept, according to Hanaysha et al (2022) it is important for a business to have an innovative direction for future business development so that it can continue to attract customers and maintain its sustainability [10]. Unfortunately the management of the Sendang Mudal area as a tourist area has not been maximized, there is no clarity on the edupark concept that is being carried out and there are no plans for structuring and development in the future. Apart from that, the direction for the development of the concept or theme that Sendang Mudal is promoting as an edupark is also not clear and detailed. Based on these facts, it is necessary to carry out a survey, mapping and design of the grand design of the Sendang Mudal edupark in Sawangan Village so that it can become one of the leading tourist destinations in Magelang.

The development of Sendang Mudal Tourism with the Edupark theme is based on the desire of the village government together with the village council, so that tourist attractions are not only a place of recreation and a new source of income for residents but are expected to be a tool for educating the younger generation about the need to preserve natural water. Edupark is a tourism attraction that is integrated with learning materials [11], [12]. Edupark development in Indonesia has been carried out in various places such as Mifan Waterpark Pedang Panjang [13], Geopark Ngarai Sianok and Bukik Chinangkiek tourism park [14]. Several of these studies related to the development of eduparks in various places emphasize the integration of tourism attractions with applied physics lessons. It is hoped that this study will be able to contribute by producing an edupark design that prioritizes water conservation, which is the domain of applied biology learning.

Departing from the literal concept of edupark with the origin of the words education and park, which means there is a park for visitors to learn something at that location [15], [16]. This main concept is then used as the main reference by all Sawangan village officials. The existence of a survey, mapping and also the drafting of the Sendang Mudal Edupark will later become material for discussion for the construction of the Sendang Mudal Edupark. The preparation of this grand design is not without foundation, but is based on the potential that already exists in the Sawangan village area. Hereafter, this study's subject is discussed as follows. In Section 2, the authors present the method that used in this study. Section 3 discloses the result and discussion. Finally, Section 4 presents summaries, limitations, and suggestions for potential future research.

2. Method

This study conducted in Sawangan village, Magelang, Central Java, Indonesia. The research method used in this study is Research and Development, by developing a modified Plomp model [17]. The Plomp model is a research and development model that consists of three stages, namely preliminary research, prototype phase, and assessment phase [18], [19]. The preliminary phase in planning the grand design of Sendang Mudal is divided into several stages, namely: coordination, problem analysis and survey. The prototype phase emphasizes initial design planning with village and BUMDES figures. Meanwhile, the final stage, namely the assessment phase, is carried out using a socialization and discussion approach.

Coordination is carried out between the service team and village officials and BUMDES managers. After the coordination stage, the service team also carried out a situation analysis which aims to find out the problems and potential solutions to problems that exist in Sawangan village. After knowing the formulation of the problem to be solved, the service team conducted a survey. The survey method was used to find out and map the potential that could be developed and poured into the grand design of the Sendang Mudal edupark design in Sawangan Village. The survey was conducted with BUMDES managers in the Sendang Mudal area such as: Sendang Mudal, Sendang Mareng rice fields and the Sawangan Market. After the survey, the service team formulated and designed the grand design for the development of the Edupark.

The last stage of this service is the socialization of the results of the sawangan edupark grand design and discussions with the managers of Sendang Mudal, the village government, and BUMDES managers.

After the discussion, the researcher carried out an evaluation regarding the participants' understanding of the edupark concept that had been prepared together. Evaluation was carried out using in-depth interviews with each participant [20]. Deep understanding from participants is one of the conditions necessary for the success of creating an edupark in the future. The assistance stage in the grand design planning of sendang mudal edupark show as Fig. 1.

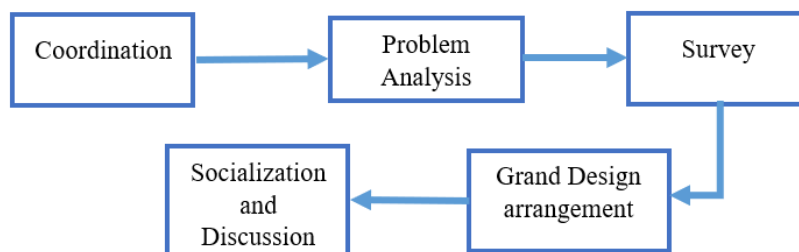


Fig. 1. The Assistance Stage in The Grand Design Planning of Sendang Mudal Edupark

3. Results and Discussion

This service activity is centered at Sendang Mudal in Sawangan Village. This activity was carried out within 4 days, namely December 13, 15, 16 and 17 2021. This study is an initial study of the design of the Sendang Mudal edupark for the next 5 years. Before the activity took place, the team of service lecturers had coordinated with local officials so that the event could run smoothly. This dedication activity was realized in the form of assistance in designing the grand design of the Sendang Mudal edupark design in Sawangan Village. This activity consists of several stages, namely the preliminary phase (coordination stage, the problem analysis stage, surveys 1 and 2), prototype phase (making the Sendang Mudal Edupark grand design), and assessment phase (discussion and evaluation).

The first stage of this activity is the service team coordinating show as Fig. 2. Coordination is carried out with the managers of Sendang Mudal, village officials and BUMDES managers. The purpose of coordination and analysis of this initial situation is to find out the real condition of the audience and the potential for superior products in Sawangan Village. Coordination and analysis of the initial situation was carried out to find out the problems and potential that exist in Sawangan Village so that the lecturer program with activities outside the campus can be realized according to the needs and on target. Coordination and analysis of the initial situation was carried out on Monday 13 December 2021. The event was attended by the service team and core village officials as well as the head of the BUMDES manager. The result of this deliberation is an agreement and joint commitment to develop a grand design for the Sendang Mudal edupark. After coordination, the service team decided to conduct a phase 1 survey at Sendang Mudal, which is not far from the Sawangan village office. This is the capital and basis for conducting a phase 2 survey.



Fig. 2. The Coordination and Problem Discussion with Sawangan Village Government

The third stage of PPM activities is a survey of tourism potential in Sawangan Village, Magelang, Central Java. The activity took place on Wednesday 15 December 2021. At this stage the service team and BUMDES manager jointly conducted a survey of potential tourism areas owned by Sawangan Village such as Sendang Mareng, Sendang Mudal, rice fields and traditional markets in Sawangan Village. During the survey, the service team and BUMDES as the tourism manager of Sawangan Village actively discussed the business that had been carried out and plans for the development of the tourism area that had been

owned and hopes for the future. Overall, activities in the second stage can run well and smoothly. The survey documentation to traditional markets and sendang mudal show as Fig. 3.



Fig. 3. The Survey documentation to traditional markets and Sendang Mudal

As a follow-up to the results of the first and second phases of the survey, in the fourth stage the service team conducted brainstorming and continued discussions on making a grand design for the development of the Sendang Mudal Edupark. Given time and space limitations, this discussion was conducted online. This is done to discuss the appropriate steps that need to be taken over the next five years by the Sawangan Village government and stakeholders to realize the Sendang Mudal edupark in Sawangan Village. The result of this stage is the Sendang Mudal edupark planning document which is then discussed with Mr. Taufik as the head of BUMDES management. The Sendang Mudal Edupark grand design document show as Fig. 4.



Fig. 4. The presentation and discussion of the results of the development of the Sendang Mudal Edupark grand design

The last activity was the presentation of the grand design of the Sendang Mudal edupark design which was held on Friday 17 December 2021. At the event, 31 participants from Sawangan village officials, BUMDES managers and the community service team were present. After the presentation session continued with discussion and responses from participants. In general, the implementation of the presentation went smoothly and took place enthusiastically.

The final stage is evaluation using the interview method. One by one the participants were asked questions regarding the extent of their understanding regarding the Edupark design that had been prepared and whether there were any stages that were not yet understood. As a result, 80% of participants understood the concept of Sendang Mudal Edupark which prioritizes preserving natural water and the

environment. Meanwhile, the remaining 20% are still confused about the design but have good optimism about the concept being prepared.

3.1. Supporting Factors

The supporting factors for this activity were the high level of enthusiasm from the village government, BUMDES and Sendang Mudal managers in participating in the activity. During the mentoring, participants actively discussed and carried out critical thinking related to the grand design of the Sendang Mudal edupark design. Assistance participants also find it easy to convey ideas and put them in the form of planning documents which can later be used as a reference for the development of the Sendang Mudal edupark.

3.2. Obstacle Factors

The inhibiting factor for this activity was the Covid-19 pandemic so that crowds were minimized. Implementation time is also limited to tackle the spread of the Covid-19 pandemic.

4. Conclusion

Broadly speaking, the implementation of Lecturer activities outside the campus, especially in Sawangan Village, which carries the theme "Assisting in the Design of the Grand Design of the Sendang Mudal Edupark in Sawangan Village" went smoothly. The assistance aims to solve problems related to the absence of documents related to the development of the Sendang Mudal tourism area for the next five years. It is hoped that this study can contribute to the development of eduparks with the theme of water conservation. The participants were enthusiastic and played an active role in a series of mentoring activities for the design of the Sendang Mudal edupark grand design. The main output of this activity is the grand design document for the development of the Sendang Mudal edupark. In addition to the main outputs, it is hoped that this assistance will increase participants' knowledge and insights regarding the development of tourist attractions, especially those that carry the edupark concept.

Even so, in order to realize the grand design of the Medium Mudal edupark tourism in Sawangan Village, there are still a number of things that need to be considered. There needs to be cooperation with various parties to be able to develop these tourist destinations. Cooperation can be forged from now on, especially with universities, investors and the outside community to be able to manage the area to become a leading tourist spot in Sawangan Village. Another challenge for the realization of Sendang Mudal Edupark is the sustainability of tourist attractions for the future. Long term evaluation and strong commitment of related parties to implement the stages contained in the Sendang Mudal Edupark development planning document are needed.

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