

Pioneering Agriculture-Based Edutourism in Wonosari Village, Gondangrejo Subdistrict, Karanganyar Regency

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ABSTRACT

Edutourism combines education and tourism, means traveling and learning simultaneously. Most of the people in Wonosari Village live from farming, have opportunity to develop agriculture-based edutourism, which can be realized as a tourist garden with various agricultural plants. The development of edutourism in Wonosari Village aims to educate the surrounding community, especially school-aged children, by introducing various food source plants. It's also essential to increase local village communities' awareness of the potential of their environment, which can be used as a tourist attraction and an object for agriculture learning. The pioneering activities for the creation of an edutourism park were carried out in several stages, starting with the socialization of the edutourism park, surveying the location for the creation of the edutourism park, planting of crops including corn, chilies, long beans, and eggplant. The next stage is assistance in making organic fertilizers and pesticides, making infographics regarding edutourism gardens, including plant taxonomy, plant water needs, fertilizer needs, cultivation stages, and explanations regarding pests of several types of plants in Wonosari Village. In the final stage, we invited MI students to visit the pioneering educational tourism park. The activity results were the realization of a pilot agricultural plantation with corn, chili, long bean, and eggplant plants and infographics, located in Munggur Hamlet, Wonosari Village, Gondangrejo District, Karanganyar Regency. It can be concluded that Wonosari Village has excellent potential for developing agriculture-based edutourism, which can support the advancement of the welfare of village residents and increase tourists' knowledge about agriculture.

Keywords: education, infographics, learning, tourist attraction

INTRODUCTION

Tourism has recently emerged as a crucial means of alleviating the monotony and strain of daily routines, frequently referred to as a therapeutic experience. Edutourism refers to a form of tourism that incorporates educational elements. It is a purposeful activity with numerous advantages (Devi et al., 2019). For travelers, educational tourism serves as a means of rejuvenation and an opportunity to enhance knowledge through learning (Devi et al., 2019). Agriculture-based edutourism is a tourist attraction (Nabul & Marsadi, 2022), showcasing

agricultural elements to educate tourists. The educational process implemented in tourism activities is a dynamic and innovative learning approach, serving as a very effective alternative learning method (Hayatri & Prasetyo, 2021). Agricultural-based education enables individuals to learn about many varieties of agricultural plants that serve as a primary source of sustenance and the techniques required for their cultivation.

There is a perceived deficiency in focusing on developing agricultural educational tourism despite the abundant opportunities available in geography and from the tourists' perspective.

Developing Wonosari Village into a tourism attraction could provide significant opportunities due to its potential to offer a unique brand image, especially considering that most of its population relies on farming as their primary source of income ([Kastowo et al., 2022](#)). This condition presents a chance to transform Wonosari Village into an educational tourism destination focusing on agriculture and presenting agricultural education through tourism fosters comprehension and enthusiasm among the younger population towards the farming industry ([Utami et al., 2023](#)). Agricultural edutourism can be implemented by establishing a tourist garden that showcases a diverse range of crops well-suited for cultivation in the region, including corn, peanuts, chilies, long beans, eggplant, and more. The establishment of agriculture-based education tourism in Wonosari Village aims to educate the surrounding population, particularly school-aged children, by introducing diverse agricultural plants and teaching cultivation techniques. In addition, it is crucial to raise awareness among local village residents about the untapped potential of their environment, which can be used as a tourist attraction and a source of knowledge about agricultural plant development. When promoting edutourism, several factors, such as human resource development, natural resources, promotion, transit facilities, and institutions, must be examined ([Gultom et al., 2023](#)).

METHOD

The implementation of edutourism village activities in Wonosari village involved the use of mentoring and demonstration plot approaches. The initial phase involved a focus group discussion (FGD) on the process of socializing edutourism and elucidating the prospects and possibilities for fostering edutourism in Wonosari Village. Survey the village area to ascertain the precise placement of the edutourism park and garden. The third step involves establishing trial plots for cultivating crops such as corn, chiles, long beans, and eggplant. The fourth phase involves aiding in producing organic fertilizers and vegetable insecticides to facilitate plant upkeep. The fifth phase involves creating infographics like a wall magazine showcasing comprehensive information on edutourism gardens. This condition includes details about plant taxonomy, water requirements, fertilizer requirements,

growing stages, and explanations regarding plant pests. During the concluding phase, extend an invitation to Madrasah Ibtidaiyah (MI) students to visit the pilot edutourism park to assess the significant function of edutourism parks and gardens.

RESULT AND DISCUSSION

The pilot initiative of the edutourism village in Wonosari Village commenced by organizing a focus group discussion (FGD) to raise awareness about edutourism and elucidate the prospects and possibilities for its development in Wonosari Village. The proposal for establishing edutourism was well-received by the Wonosari Village Government, led by Mr. Waluyo, who serves as the Head of Gemblung Kulon Hamlet in Wonosari Village. The primary occupation of the majority of Wonosari Village inhabitants is farming. Farmers mostly plant food crops, including rice and corn, along with legume crops such as peanuts. FGD activities revealed that Wonosari Village is situated within the Sangiran Archaeological Site, which prohibits any alteration to the land structure. Despite having a sizable village treasury land, Wonosari Village has not used it. The conducted focus group discussion (FGD) on edutourism provided valuable insights to the Wonosari Village Government and has been identified as one of the initiatives to be prioritized in the upcoming 5 year development plan.

Following an agreement with the Wonosari Village to create agricultural edutourism, a survey was conducted in the area to decide the location of the edutourism park. [Figure 1](#) shows the survey activities to determine the location for implementing the realization of the park. After conducting a regional survey, a specific spot was chosen near Embung Munggur. The rationale behind selecting this location is using a rain-fed system in the agricultural area of Wonosari Village. The rain-fed system is a farming technique that relies on rainwater as the primary source of irrigation for agricultural land ([Riyanto et al., 2020](#)). This approach is typically employed when the land owned is situated at a considerable distance from irrigation channels or rivers ([Riyanto et al., 2020](#)). This situation results in land becoming infertile during the dry season due to water scarcity. The presence of water for plant growth in rainfed land is of utmost importance, so the water supply from reservoirs plays a vital role in preserving crop

yields ([Wihardjaka et al., 2020](#)). The land surrounding Embung Munggur is still underutilized despite its extensive one hectare coverage. This region is intended to serve as a prototype site for cultivating crops before transforming into an agricultural edutourism destination.



Figure 1. Wonosari Village area survey to determine the location of the edutourism park

Establishing demonstration plots for crops serves as an educational tool for farmers and tourists, allowing visitors to witness, observe, and validate the information presented. Agricultural demonstration plots have been established, explicitly targeting crops such as corn, chiles, long beans, and eggplant. The initial trial for cultivating crops was conducted by 11 individuals from the farmer's group in Wonosari Village, namely the Makmur Farmer Group I. Presently, the individuals comprising the farmer group are in the preliminary phases of executing measures to bolster agricultural edutourism. The members of the farmer groups exhibit exceptional zeal and wholehearted dedication to developing crops. The members of this farmer group show a strong level of excitement, which is the primary motivating factor for establishing demonstration plots for agricultural products. This collaboration aims to enhance the knowledge and abilities of farmer group members in agricultural production to benefit agricultural growth in the Wonosari Village region. The edutourism concept serves the purpose of improving the well-being of local communities. Therefore, the management of edutourism regions should prioritize the community by recognizing them as owners, participants, and beneficiaries of the primary advantages ([Wahid et al., 2023](#)).

The Wonosari Village possesses significant natural resources that can be effectively employed to produce organic fertilizer and crop insecticides. An efficient method to decrease



Figure 2. Socialization of the making of vegetable pesticides

manufacturing expenses is to exploit local resources, which are readily available and may be obtained at no cost as raw materials. Harnessing the natural resources can enhance the economic status of the town ([Mau et al., 2023](#)). Nevertheless, the limited understanding, both in theory and practice, of the advantages and techniques of producing organic fertilizers and vegetable insecticides leads to the majority of farmers relying on inorganic fertilizers and chemical pesticides as the primary components to enhance agricultural productivity. Utilizing inorganic fertilizer is a pragmatic approach, as it can generate substantial crop yields when applied in moderate quantities. This condition makes farmers rely on synthetic fertilizers ([Dewi & Afrida, 2022](#)).



Figure 3. Extension activities on making liquid organic fertilizer

Support is provided through guidance and assistance for creating organic fertilizers and vegetable insecticides to maintain plants effectively. This help is intended for all members of the Makmur Farmers Group I. This helps provide farmers with the guidance and knowledge necessary to produce organic fertilizer and vegetable insecticides using the natural resources available in Wonosari Village. [Figures 2](#) and [3](#) show socialization activity regarding organic pesticides and training how to make them. The primary components utilized in

organic fertilizer production include kirinyuh leaves, kale leaves, johar leaves, and banana stems. The primary components of vegetable pesticides are mindi leaves, mahogany leaves, and brotowali. Botanical pesticides have great potential due to the ample availability of natural resources used in their production (Kiswando et al., 2022). The production of vegetable pesticides does not necessitate advanced technology and is ecologically sound due to active components that readily disintegrate in the natural environment (Kiswando et al., 2022). These materials are used to maximize the utilization of readily accessible and plentiful natural resources. By employing readily available natural materials, it is possible to establish ecologically conscious and sustainable agricultural practices promoting organic farming initiatives. Liquid organic fertilizer comprises essential nutrients and growth regulators necessary for plant growth. Its application can effectively reduce reliance on environmentally harmful chemical fertilizers (Marpaung et al., 2018). Vegetable pesticides have a hit-and-run effect, meaning that when sprayed, they kill the pests and then naturally break down, leaving no residue behind. This condition ensures that the plants are free from any traces of pesticides (Ningrum et al., 2023). The aim is to decrease the utilization of inorganic fertilizers and chemical pesticides to preserve soil fertility. In addition, farmer organizations can reduce expenses on fertilizer purchases by producing their own liquid organic fertilizer and vegetable insecticides.



Figure 4. Installation of agricultural tourism edu infographics in the Embung Munggur area

Establishing visual communication resources by developing agricultural infographics to promote agricultural education is crucial. Infographics are visual representations that combine data, information, or expertise using charts, images, or timetables. They go

beyond language and have a significant and captivating visual impact (Trisnayanti & Sugiartawan, 2022). The activity presented in Figure 4 is the provision of infographics at the edutourism park. They created infographics like wall magazines to effectively convey comprehensive information about different types of agricultural plants cultivated in the edutourism garden. The infographics generated encompass a wide range of information, including plant taxonomy, plant water requirements, fertilizer requirements, cultivation stages, and descriptions of plant pests. The sections in the infographic are organized succinctly and straightforwardly, ensuring easy readability and comprehension for readers, particularly farmers and people of Wonosari Village. The agricultural wall magazine infographic was strategically positioned on the roadside near the demonstration plot for sowing crops. This location ensures easy access and educates readers with pertinent knowledge in the agricultural industry.

Following the completion of multiple activities aimed at enhancing the capabilities of human resources, particularly for members of farmer groups, and the establishment of edutourism parks, an evaluation was conducted to assess the significant role of these parks and gardens. An excursion was organized by inviting students from MI Muhammadiyah Munggur to visit the newly established educational tourism park, as seen in Figure 5. This visit was arranged as an instructional instrument that provides a distinctive and pleasurable learning encounter. Field excursion activities serve as an educational method that offers students tangible experiences and exposes them to subjects beyond the confines of the classroom (Is & Yanurtuti, 2020). The educational tourism aspect of this visit encompasses activities that aim to familiarize visitors with different agricultural plant species and various varieties of flowers. Additionally, visitors will be able to plant chilies and harvest vegetable crops. The pupils are offered many amenities such as support with organizing field trips, provision of food, and tangible outcomes from cultivating chili peppers and harvesting vegetables, specifically kale, mustard greens, and spinach.

The visit commenced by encouraging the students to observe firsthand the diverse array of seasonal plants cultivated by farmers in the pilot agricultural crop planting plots and the numerous species of flowers in the vicinity of

Embung Munggur. The activity proceeded with cultivating chili plants in polybags and harvesting several vegetable crops, including kale, mustard greens, and spinach. During the visit, students can witness, comprehend, and admire the significant values in edutourism parks and gardens. The children from MI Muhammadiyah Munggur showed great enthusiasm and excitement throughout their participation in the field trip. A subset of the pupils enthusiastically posed inquiries during the visit. Edutourism parks and gardens play a significant role in enhancing students' educational experiences not only in regards to acquiring academic information but also in terms of cultivating attitudes and talents.



Figure 5. Edutourism field trip activities

CONCLUSION

The service activity yielded favorable outcomes, which is evident in the growing public interest in advancing agricultural education and tourism. It is obvious from the involvement of community members in the initiatives aimed at establishing agriculture focused edutourism in Wonosari Village. The participants' enthusiasm and active engagement during the activity demonstrate the successful execution of all stages of this service. One of the specific outcomes of this service activity is manufacturing liquid organic fertilizer and vegetable insecticides using locally available resources. The aim is to scale production and make these goods commercially available to enhance the community's well-being.

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