Development of community-based community-based agrotourism tea gardens for optimization of agricultural resources

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Abstract. The James tea plantation is located in Girikerto Village, Sine District, Ngawi Regency, East Java. The number of tourists at the Jamus Tea Garden Tourism Object has decreased due to the Covid-19 pandemic. The purpose of this study was to examine the potential development of the Jamus Teagarden as a community-based agricultural tourism attraction as an effort to optimize agriculture resources. This study used a descriptive research method with a qualitative approach. Field observations, in-depth interviews, Focus Group Discussions, and document studies were carried out in data collection. Data validity uses data source triangulation. Agrotourism potential development is needed to utilize agricultural resources without damaging the environment. The potency of the Jamus tea garden in the utilization of agricultural resources can be optimized through the role of the community in various sectors. Especially in the economic sector, without any benefits, tourism business actors, including the community, will not be motivated to realize the success of agrotourism. The development of Agrotourism must also be primarily based on the environment. The environment must be maintained and preserved so that it can function sustainably.

1. Introduction
Ngawi Regency has a wealth of extraordinary natural potential. The landscape with the contours of green hills has become an attraction of Ngawi tourist destinations that many local and foreign tourists are starting to see, namely the Jamus Tea Garden Agrotourism, in Girikerto Village, Sine District, Ngawi Regency, East Java [1]. The location of Jamus Tea Garden Agrotourism is closer to Sragen, with a distance of about 40 km to the east. Meanwhile, from Ngawi City to go to the Jamus Tea agro-tourism object location, the direction is 45 km to the West [2]. This Jamus tea plantation tourism object in Ngawi
Regency was once a former Dutch colonial heritage in 1886. For the entrance ticket to the Jamus Tea Plantation tourist attraction area, we have to pay IDR 8,000 / person. The East Java Jamus Tea Plantation occupies 478.2 hectares with 460 hectares of land planted with tea, and trees with large logs cover the remaining 60.2 hectares. That said, with the presence of shady plants and trees, the Jamus Ngrambe Tea Garden area feels cooler. Apart from that, the air around the location of this Ngawi natural tourist attraction already feels cold [3]. In the Jamus Tea Plantation tourist attraction area, you can enjoy the sensation of a holiday with a new experience about the vast tea gardening. The process of picking tea leaves carried out by tea farmers can be witnessed every day. The processing process starting from the initial transportation of tea to the processing house until the tea is ready to drink can also be seen at any time [4].

![Figure 1. Position Jamus tea plantation of Ngawi Regency in East Java Province](Source: Peta-HD.Com, 2020 [5].)

The agricultural sector is the main support for the needs of people's lives because it is a source of food that must exist continuously. Ngawi Regency has been trying to develop agrotourism. This area has the potential of agricultural gardens that can be developed into a tourist attraction. However, there are problems that have been faced for a long time but have not received serious treatment, namely the unutilized agricultural potential [6]. This problem needs to be addressed immediately. Ngawi Regency can be developed into a tourist destination by motivating people to develop agriculture and preparing villages in mountainous areas to become special interest tourism areas by relying on agricultural potential. The purpose of this study was to examine the potential development of Jamus tea gardens for community-based agricultural tourism attractions as an effort to optimize agricultural resources.

2. Materials and methods
This research was descriptive research with a qualitative approach. The sources of data were the informants, places (locations), events, archives, and related documents. The informants consisted of elements of the private sector, the community, the government (the Tourism Office of Ngawi Regency and the Ngawi Regency Agriculture Office), and aspects of the community in the area. Data was collected using field observation methods (direct observation), focus group discussions (FGD), in-depth interviews, and the observation method or existing document study [7]. This research used interactive
3. Results and discussion

The development of tourism is now moving towards the specification of tourist interest in the type of trip or type of tourism. One type of tourism that is currently getting more attention is agriculture-based nature tourism (agrotourism). Agroecotourism as a tourism market segment is relatively new and has a high level of development. The tourism sector continues to grow and increases twenty percent every year. Ecotourism refers more to tourism that prioritizes natural potential, such as in the Jamus tea garden, Ngawi. Nature means the physical environment and includes the environment of cultural origin [9-10].

The development of the agrotourism potency of Jamus tea gardens is a part of improving the local economy. Efforts can be made by utilizing and managing the available nature to support economic growth to achieve community welfare. Physical and non-physical management is carried out in developing tourism. The essence of regional management is the continuity of the process which can be started with an inventory of data on problems, potential opportunities, and challenges that will be faced in the future. This is formulated at the analysis stage, and a strategy is developed to manage an area [11]. Aspects of function, efficiency, and aesthetics are very much considered in the management of the area. The impression raised is that regional understanding is closely related to physical structure. In addition, physical aspects and economic, social, cultural, and political aspects can also be considered and can affect the process of managing an area [12]. However, humans with their activities need to be considered related to the arrangement of an area. Humans with all their activities can affect the environment [13].

The Jamus tea garden is located on the slopes of a mountain so that it has a sloping and steep topography. The location is at an altitude of 1200 meters above sea level with a steep hilly location and there is a diversity of flora and fauna. Biodiversity is a term used for diverse natural resources, including the number and frequency of ecosystems, species, and genes in a place. Biodiversity acts as an indicator of the ecological system and a means to detect changes in species. Biodiversity is very important for the survival and sustainability of living things. This biodiversity is beneficial for the sustainability of nature in supporting all forms of ecosystem life. In addition, biodiversity is very beneficial for traditional multi-ethnic communities [14]. In particular, this study aimed to examine agricultural resources to be developed as nature tourism in Ngawi Regency and identify the supporting and inhibiting factors for optimizing agricultural resources through community-based tourism development. In addition, this study assessed the participation of all stakeholders in supporting the optimization of agriculture resources through the development of community-based tourism, maintaining soil fertility and health, supporting the preservation of environmental functions, improving the economy and community welfare, and creating quality experiences for tourists.

Nature conservation efforts in the Jamus tea garden are made by utilizing and developing good conservation for the community. The intention is to make natural resources are maintained and sustainable [15]. Wisdom must become the basis for conservation activities which is to realize and maintain the welfare of the community from generation to generation. Several studies have been conducted on the management of tourist areas. However, the development of tourism areas that line the environment, nature, and society has not been widely studied, especially those related to strengthening the local economy and preserving natural resource-based tourism [16]. The main objective of agrotourism management is to improve the local economy and protect natural resources. Mount Lawu has the potential as an economic resource, supported by sustainable natural resources [17]. The study took place in the teak forest area of Blora. The study found that the economy and welfare of the community were improved by efforts to preserve nature in the form of teak rain. Environmentally-based sustainable development as the main principle [18]. Research that underscores the pattern of community development in the Bengawan Solo watershed has been carried out in preserving the environment [19].
Local communities have an important role in increasing the attractiveness of agro-ecotourism [20]. This can be done by involving the community in all tourism activities. Balance and harmony in various parties are the main principles in realizing community-based tourism [21]. Agroeconomy aims to empower and increase the role and participation of the community in the development and obtain economic, social, and cultural benefits from tourism development. This effort can be done with a participatory approach [22]. This approach is used to encourage the formation of partnerships among the relevant stakeholders [23].

Essential things that can be done in the management of agro-ecotourism are maintaining traditional values and customs, preserving the environment and agricultural production [24]. Jamus tea garden has coffee-flavored tea products whose unique taste or taste can be one of the mainstays if packaged properly. Success in the management of agroecotourism is when it has realized economic, social, and cultural benefits. The community can be involved as a business activity so that it will increase economic and social benefits [25]. Some businesses that can be developed by the community in agro-ecotourism are travel agents, accommodation, and transportation businesses. Agroecotourism serves as an alternative to community economic activities [26]. Sustainable development as a basis in the development of agro-ecotourism [27]. This supports the successful development of agroecotourism [28].

3.1. Potential analysis of Jamus tea plantation through 4a analysis
Tourist attractions or tourism resources are everything in a tourist destination which is an attraction for visiting tourist objects. Tourist attractions can determine the number of tourists who come, the more attractive a tourist attraction, the more tourists visit. Tourist attractions also determine the activities of tourists while in a tourist attraction. Jamus Tea Plantation has the potential to promote tourism in Ngawi Regency. The natural beauty of the Jamus tea garden was able to attract many private TV stations to expose Jamus with its trademark Borobudur Hills and introduce it to the world's eyes. The condition of the object on Mount Lawu with uneven topography makes this object often hold off-road events. Many trail bike communities look to this place as a place to hone their skills. Object development is increasingly improved by the private sector PT. Candi Loka remembers that tourism is something that is very much needed by the community.

Accessibility is the degree of convenience achieved by tourists to an object of service or the environment. In transportation, accessibility is the ease of getting to a destination with an effective route to save time from one destination to another. To reach the Jamus Tea garden, there is only one path that can be taken easily. The condition of the road to get to the object is very good and not steep. To go to the object, there is no public transportation that can take tourists to the tourist attraction. So if tourists want to visit tourist attractions, they can use private vehicles. The distance from Ngrambe District to Jamus is about 12 km to the west so it takes approximately 30 minutes.

Tourist amenities are everything that makes it easy for tourists to meet their needs during their trip. The availability of tourism supporting facilities (amenities) is one of the factors supporting the success of developing an area as an alternative tourist attraction. The facilities in the Jamus tea garden are quite developed. Some of the facilities available are a swimming pool, children's playground, and flying fox. However, the number of bathrooms is very less for a place as big as Jamus because it only has eight bathrooms located in two locations. While lodging is not yet available in the area. Institutions are tourism support services provided by the government, private sector, or local non-governmental organizations to support tourism development in the area. Jamus Tea Plantation is managed by PT. Candi Loka, Department of Tourism, Culture and Sports / Ngawi Regency Government. The development of Jamus Tea Garden tourism object continues to be pursued so that Ngawi tourism can develop.

3.2. Development strategy
Development Strategy by the Ngawi government for the potential of the Jamus tea garden: 1. they are improving product promotion and competitiveness; 2. encouraging and strengthening investment; 3. increasing competitiveness and competitiveness; 4. enhancing the availability of quality infrastructure; and 5. increasing government synchronization, harmonization, and synergy.
3.3. The needs of local communities in empowering human resources and developing agro-tourism areas

a. Increasing knowledge about tourism assets owned by Jamus tea plantations to encourage people to develop them.
b. Improving the skills of the workforce in the tourism sector and providing good services.
c. Increasing entrepreneurship to encourage increased income and welfare.

3.4. The needs of local communities in the management of agrotourism areas

a. The development of tourist sites in the Jamus tea plantation area through the empowerment of the surrounding community to increase and strengthen the local economy.
b. The development of the potential of the Jamus tea garden orientation is towards community-based tourism development.
c. Improve marketing.

4. Conclusion

The role of the community in various sectors is the main requirement in the development of agro-ecotourism at the Jamus tea plantation. Development efforts must be economically beneficial so that income and welfare increase. The environment as a supporting element in agro-ecotourism must be sustainable and managed sustainably.

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