

Potency Of Karst Land Use For Community-Based Tourism Destination In Parigi, West Java

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ABSTRACT

The tourism in the karst area has been initiated by the community of Parigi District, Pangandaran Regency in West Java, Indonesia. The purpose of this study was to verify the potency of tourism in geological and agricultural sites of Pangandaran karst area for initiating the community-based and regulatory-based sustainable ecotourism development. The research method was descriptive qualitative research method using field studies, focus group discussion and interview to get primary data. The focused discussions with the community agreed to include agricultural areas as geotourism destinations with the concept of ecotourism because land is a product of geological processes; while staying in line with formal regulations. The five steps proposed by the community to strengthen and develop geotourism in Parigi in the medium or long term are 1. Determination of tourist sites and their logistics, 2. Determining the composition of management, 3. Recruitment of tour guides, 4. Geotourism control and 5. Promotion of geotourism.

Keywords: Agriculture, community participation, geotourisms, karst area,

INTRODUCTION

In the West Java Province of Indonesia, Tourism Development Master Plan was outlined in the West Java Provincial Regulation No. 15 of 2015-2025. Tourism in Pangandaran Regency of West Java has been developing for a long time and is prominent for community revenue. The tourist destinations in Pangandaran Regency are mainly located in marine and coastal area. The tourism issues are supported by the concept of a National Strategic Area according to the Indonesian Government Regulation Number 50 of 2011 concerning the National Tourism Development Master Plan 2010 – 2025 as well as the pilot project program of the United Nation World Tourism Organization in Indonesia and the Destination Management Organization (DMO) of 15 DMOs in Indonesia.

For a long time, Pangandaran Regency developed tourism in the coastal area but little attention to the tourism in geological formations in the highland. Tourism that focuses on geological areas and landscapes to strengthen the development of sustainable tourism is known as Geotourism (Dowling, 2013). The potency of geotourism in the Pangandaran highlands has not been developed, but a decade ago the community in Parigi District initiated to develop river-based tourism in the karst area. The Parigi highland landscape has karst formations formed from erosion of limestone and dolomite described by Hartmann et al. (2014). The karst area in common contains karst hills, doline, underground rivers, springs and caves (Radulovic, 2013). The attraction of geotourism that has been carried out by residents of Parigi is river tubing, exploring river flows on the hillsides of karst cones such as in Selasari and Parakanmanggu villages. Karst formations in Parigi is associated with terra rosa soil in between karst hills that have been used as agricultural land for food crops including lowland rice (Hindersah et al., 2020).

The concept of ecotourism in geosites was established and related to economic interests and protection of karst areas (Hall and Day, 2014). Geotourism is in line with the 2005-2025 National Long-Term Development Plan which requires the application of the principles of sustainable development in Indonesia. The tourism sector has now developed from mass tourism to sustainable tourism (Nasution, 2018). However, tourism in karst area need to consider geological protected area as stated in Regional Regulation Number 22 of 2010 concerning Spatial Planning Region of West Java Province in 2009-2029.

The objective of sustainable tourism is improving the economy of the surrounding community and stakeholders, by being responsible for managing and preserving the environment (Tanaya and Budiarto, 2014; Risfandini, 2017). This sustainable tourism is supported by the Quebec Declaration (Nasution et al, 2018). According to Article 1 point 1 of the Regulation of the Minister of Home Affairs Number 33 of 2009, ecotourism is a natural

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tourism activity in an area that is responsible for taking into account elements of education, understanding, and conserving natural resources. Based on the regulation, natural resources, as well as increasing the income of local communities.

The concept of ecotourism in geosites is considered necessary to realize the diversification of tourism destinations in Parigi, for example the concept of tourism that is integrated with picking vegetables or having lunch on agricultural land. This concept is very important for both individual and family tourism. River tubing destinations are only safe for adult people so they need other tourism alternatives that are more environmentally friendly, namely agro-tourism (Kuswaryan et al., 2021). In addition, tourist visits to Parigi become expensive and consume a lot of time if only for one destination. The distance from Bandung to Parigi District and Pangandaran Beach to Parigi is approximately 180 km and 22 km, respectively.

Developing and strengthening tourism that offers products and services for immersive experiences is complicated and uneasy. Ecotourism in Parigi has never been specifically discussed by the local government or the community. The concept of tourism can be determined by the community and the local government. By prioritizing and paying attention to the movement of economic activity in the Karst Parigi area, and referring to the concept of Geotourism development, a bottom-up approach will be more in line with opportunities for Parigi residents. In order to increase the livelihood and wellbeing of the communities living in natural area, the bottom-up approach is better than a top-down approach which (Ghimire, 1994; Colchester 1996). To achieve economic and social stability in the Karst environment, the weaknesses of the top-down approach that may arise in Parigi Pangandaran are:

1. Persons outside Parigi Subdistrict do not know the potential and behaviour of rivers in the Karst Area (Figure 1a) which are commonly used for river tubing. River tourism destinations have been determined by the community by considering the current, depth and access to the river (Figure 3).
2. Academics generally prohibit agricultural activities in certain karst areas due to karst conservation issues. On the other hand, residents have been carrying out basic agricultural activities that are intrinsic and non-destructive, such as farming on terra rosa soil between karst hills (Figure 1b).
3. Karst mining under the coordination of the provincial government is not oriented towards sustainable alternative livelihoods for the local community



Figure 1. River in karst area (a) and banana plantation in Parakanmangu village Parigi

A good bottom-up concept is to pay attention to the regulations and policies of the central and local governments. Thus, ecotourism is established through planning and is not based on intrinsic and intuition. Parigi district has already a number of quantitative and qualitative databases, as well as unwritten and village regulations in order to support ecotourism. They already have an intrinsic tourism concept, including tourist routes and destinations. The local government has a concept of tourism in mainly karst area but the bottom-up approach in Parigi can pose to the conflict in management. The different interest between community and government will result in the conflict of biosphere management, karst buffer zones, and sharing (Urich et al., 2001).

The tourism community in Parigi and the village government do not yet have an appropriate geo-tourism concept and do not even have the potency of tourist destinations as well as another support for geo-tourism development. The purpose of this study was to verify the potency of tourism in geological and agricultural sites of Parigi karst area in order to support the initiation of community-based and regulatory-based sustainable eco-tourism development.

METHODOLOGY

The study location is Parigi District (specifically Cintaratu, Parakanmangu and Selari Villages) of Pangandaran Regency, West Java. Parigi district is located in the highlands of Pangandaran with a distance of 22 km from the capital city of Pangandaran Regency (Figure 2).



Figure 2. Geographical position of Parigi District in Pangandaran Regency, West Java

The research method was descriptive qualitative research method using field studies, focus group discussion and interview. Primary data were obtained through interview and observation collected from the communities in the research site consisting of local community leaders, youth organizations, housewife's communities, and the manager of karst-based tourism. The Focus Group Discussions (FGD) were carried out for gathering different opinions from various related parties, namely the community in Parigi (geotourism actors, farmers and farmer groups, traditional elders and influential persons), officers of Cintaratu Village, the Tourism Office, regional planning and development agency of Pangandaran Regency, and non-government Organizations that observe environmental issues. Secondary data were taken from various literatures and research reports published in national journals and reputable international journals related to research issue.

Data analysis was carried out using a qualitative approach; primary data and secondary data were analysed qualitatively. This general opinion was deduced based on FGD and records of observations, interviews, and individual experiences, as well as legal principles and principles as well as local wisdom for ecotourism activities in Parigi (Kurniati et al., 2019).

RESULT AND DISCUSSION

Ecotourism in Legal Perspective

Ecotourism specifically includes 1) Communities efforts to actively contribute to the conservation of nature and culture; 2) participation of local residents in planning, development and operation of tourism activities and enjoying welfare; 3) transfer of knowledge about cultural and natural heritage to visitors; and 4) forms of independent tourism or small tour groups (Adharani et al, 2020). The development of ecotourism in the regions is specifically regulated in Ministry of Home Affairs Regulation number 33 of 2009 about Guidelines for the Development of Ecotourism in the Regions. This regulation is motivated by the potential of natural resources, the environment, as well as the uniqueness of nature and culture which has the potential to become one of the leading sectors of the region that has not been developed optimally.

Utilizing the potential of the existing area for ecotourism must be developed by considering the principles of ecotourism development as regulated in Article 3 of the Minister of Home Affairs No. 33 of 2009, including:

1. Compatibility between types and characteristics (of the sites and communities)
2. Conservation, which is to protect, preserve and sustainably use natural resources used for ecotourism;
3. Economy for providing benefits to the local community and being a driver of economic development in the region as well as ensuring that ecotourism business can be sustainable;
4. Education for changing one's perception so that they have care, responsibility and commitment to environmental and cultural preservation;
5. Provide satisfaction and experience to visitors;
6. Community participation in the planning, use and control of ecotourism by respecting the sociocultural and religious values of the community around the area; and
7. Accommodate local wisdom.

The development of ecotourism in the region must be community-based as an effort to improve environmental conditions in the ecotourism area, conservation efforts in ecotourism areas, preparation of ecotourism infrastructure, increasing capacity building for ecotourism managers and community involvement in the development of ecotourism areas (Nafi et al., 2017). In Article 4 of Home Affairs Ministry Regulation No. 33 of 2009 about Guidelines for Regional Ecotourism Development, developing ecotourism is carried out through 3 activities, such as the planning, utilization and control processes.

Starting the Geotourism

Based on the FGD with the community, there are five plans to start geotourism development in Parigi namely:

1. Determination of tourist sites and their accessories.
2. Determination of the form of Management Manager
3. Recruitment of tour guides
4. Geotourism management
5. Promotion of geotourism

The five stages above are expected to support initiate create of ecotourism-based tourism and environmentally sustainable and community-based agro-tourism. All opinions in sections 1 to 5 are based on the FGD.

1. Determination of Tourist Destinations

The river tubing tourism destination in have established in the Santirah River (Figure 3) based on their intuition and experience. However, this goal has not been combined with river tourism in other villages and did not consider agricultural tourism in the future. In the FGD, the residents began to understand that agriculture is carried out on a piece of land formed by geological process, so that agriculture tourism destination is possibly called ecotourism and geo-tourism. The integration of agriculture into ecotourism with agro-tourism and culinary tourism in the garden was accepted by the communities. The production of food crops can adapt to the unique landforms in the karst area to produce various agricultural commodities with the yield depending on the nature of the soil (Hindersah et al., 2020). Agriculture in the Parigi karst has been carried out by the community on soil with chemical properties suitable for crops and food availability in a year (Zhao et al., 2014; Hindersah et al., 2021; Li et al., 2021).



Figure 3. River tubing tourist destinations on the Santirah River, Selawari Village which ends in Cintaratu Village

The community agree to decide what geological heritage and agricultural locations are important to become tourist destinations as soon as possible. Communities led by the river tubing administrator and farmers will then make a document of important events as tourist destination. The underground river, caves, fruit-tree plantation in the karst hill, food-crops plantation and local-small market of agricultural products as well as cultural and natural heritage are the potency for tourist destination so that it is need to be conserved in the long term. Inventory of eating habits and local dishes from local food in the communities as well as harvest time of certain agriculture commodities are considered important by FGD participants. This information is essential for establishing key destinations, tourist routes and tourist/tourist activity calendars. This other process prominent includes was educating the public for conserving the tourist sites physically in order to increase their economic value. Residents who have lived in Parigi for a long time are generally unable to objectively assess the heritage. Residents are used to seeing/living with cultural/natural heritage so they don't feel special senses anymore.

2. Determination of the Management Structure

This management structure is considered important to avoid conflicts of interest between actors and with local governments. The FGD participants stated that the tourism manager of the integration of geo-tourism and agro-tourism should be the "Parigi Ecotourism Actors Association" whose members are managers of main destinations, farmers and tour guides. This Ecotourism management structure will involve more local communities so that they do not lose their identity and always support their heritage. The public will also get detailed information about persons involved in the management. The Parigi geotourism Manager to be was proposed to consist of Managers (not the Chairperson) who coordinate several Heads of Sections such as Head of Destinations, Infrastructure, Cooperation, Promotion, Finance and Administration Tour Guides. According to the results of discussion with participants, this composition should be approved the village community, as well as Parigi district and Pangandaran district officer.

3. Recruitment of Tour Guides

This issue was triggered by the fact that the tour guide in tourism in Parigi is now the owner/manager of water tourism. The limited detailed knowledge of karst, hospitality and the concept of guiding tourists is an obstacle to provide appropriate guide and knowledge as well to visitors. Participants of the FGD understand that a competent tour guide who understands tourist destinations in detail is one of the selling point of tourism, but they do not yet know how to establish a reliable tour guide group. Participants agreed that local tour guides are prominent to avoid the arrival of professional tour guides from travel agencies which caused the increase of cost of visiting Parigi. Moreover, external tour guide threaten the revenue of local guides.

The proposed tour guide consists of various groups including enthusiastic person and observers of Karst/Parigi. The guide may will be limited to adult and healthy person. Guides are prohibited to collect the fee directly from guests, but the payment for guide is included in the Parigi Tourism entrance ticket. In the short term, the owner/manager of the main destination could be a tour guide. Tour guide from karst observers enable to share the scientific knowledge concerning to local guide without any profit purpose. For the sustainability of ecotourism and its guides, managers are advised to have a Tour Guide Course Program in collaboration with Tourism and Agricultural Office in Pangandaran Regency. Periodically, Tourism Management as well as tour guide have to improve English language skills and interpretation of English since some foreign tourists were arrive in Parigi before Covid-19 pandemic.

4. Control of Geotourism

The core of this control is the management and conservation of the main destination. The main instruments that need to be provided are formal regulations related to the environment and an inventory of local regulations that have been or can be implemented. The manager also proposes to get supervision from the government, stakeholders (including investors, if any) and associations related to karst tourism in West Java. The necessary of tourism control includes general regulations issued by the manager, such as, visitors are prohibited from bringing soil, rocks and plants from tourist sites, cutting trees, and building houses in areas that have been determined according to regulations from the Ministry of the Environment. Local wisdom such as prohibition form entering certain protected forest should be obeyed. Basically, regulations at the community level can be made by the community itself and will become valid after being agreed by ecotourism stakeholders. The local regulation i.e. the control of the river water cleanliness by prohibiting smoking and throwing garbage/food waste on the riverbanks; or conserving karst by prohibiting making bonfires at a certain distance from the karst.

The development of the Parigi tourism area must consider all aspects of spatial planning in terms of controlling geotourism (Article 3 of Law 26 of 2007). Regional Regulation Number 3 of 2018 about the Regional Spatial Plan of Pangandaran Regency of 2018-2038 allows tourism activities but with limited and low intensity (Article 91 of Regional Regulation 3 of 2018). So that, it is necessary for the local government to have a detailed regulation to develop of Geotourism in Parigi. More operational document of the existence of a regional spatial plan is also important granting permit and evaluation of the suitability of land use with the spatial plan (Kartika, 2011).

5. Geotourism Promotion

The promotion of geotourism development in Pangandaran requires the support of government programs. The community of Parigi tourism wish the government to play its role not only in making policies and regulations, but also managing, managing and supervising their use. The community understands that promotion programs can be carried out by managers through brochures and posters; social media Instagram, Youtube; even e-radio and conventional radio. The promotion can also be delegated to travel. The government can, for example, initiate a Geo-festival, which is held for the sustainability of geological resources or a promotional platform for a karst conservation program. However, the most powerful promotion key is a Geotourism with a local atmosphere and selling stories to visitors” so that visitors have a special impression that will be told to their relatives/friends.

If the five stages are agreed upon by all stakeholders, it is necessary to conduct research to realize geotourism destinations in Parigi. This research needs to be supported by “sharing funds” from both the village/regional government, universities and the Tourism Office. Therefore, intensive communication is needed between institutions that will play a role in determining tourist destinations. The concept of determining tourist destinations is the basis for developing the concept of developing the Karst area into a geotourism area that is environmentally sustainable. Tourist destinations determined after in-depth discussions and field surveys with local communities must be in line with local laws and regulations, both written and unwritten.

CONCLUSION

The focused discussions with the community agreed to include agricultural areas as geotourism destinations with the concept of ecotourism because land is a product of geological processes; while staying in line with formal regulations. The five steps proposed by the community to strengthen and develop geotourism in Parigi in the medium or long term are 1. Determination of tourist sites and their logistics, 2. Determining the composition of management, 3. Recruitment of tour guides, 4. Geotourism control and 5. Promotion of geotourism. Sustainable tourism in the Parigi karst area needs to start with the determination of tourist destinations that include villages flowing by the river for river tubing/body rafting. The determination of tourist destinations is the basis for formulating the concept of developing the Karst area into a geotourism area which is combined with the five steps of initiating geotourism development proposed by the Parigi community. The operational procedures for all these stages still pay attention to aspects of spatial planning and land use as well as local regulations, both written and unwritten.

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