

Activities Mapping in the Three Mangrove Ecotourism in East Java

Candra Adi Intyas^{1*}, Mimit Primyastanto¹, Agus Tjahjono¹ and Diah Yustinaningrum²

¹ *Socio-Economy Fisheries and Marine Department, Faculty of Fisheries and Marine Science, University of Brawijaya, Indonesia*

² *Directorate General on Marine Spatial Management, Ministry of Marine Affairs and Fisheries, Indonesia*

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ABSTRACT

Mangrove forest plays a pivotal role in the land and sea ecosystem. The physical, economic, and ecological function of mangrove has been widely unknown, so establishing mangrove ecotourism can be the medium to educate society about the importance of mangroves. This study aimed to analyze the three developing mangrove ecotourism, namely Beejay Bakau Resort Probolinggo, Kampung Blekok Situbondo, and Pancer Cengkong Trenggalek. The data were analyzed using Analysis Interactive by Miles and Huberman. The result showed that Beejay Bakau Resort ecotourism was professionally managed by the private sector using the concept of a combination of natural tourism (mangroves, beaches) and environmentally friendly artificial tourism (attractions). Meanwhile, Blekok Situbondo Ecotourism and Pancer Cengkong Trenggalek ecotourism legally belong to the government managed by POKDARWIS and POKMASWAS, which use the nature conservation concept. Besides that, Pancer Cengkong ecotourism has developed more slowly due to the lack of secondary actors' role.

Key words : Mangrove, Value chain, Ecotourism

Introduction

Fisheries resources, which are common property, cause many parties to exploit marine products potential, which often negatively impacts water conditions, one of which is the mangrove ecosystem. Globally, Indonesia has the largest mangrove ecosystem area, with the highest biodiversity of around 3.4 million hectares, of which 1.8 million hectares are in a damaged condition (Ministry of Environment and Forestry, 2017).

Mangrove ecosystems have a vital role in various kinds of biota that live in coastal areas. Mangrove ecosystems have various functions, such as ecologically, economically, and socially. One of the most

important ecological functions is to provide nutrients for sediment in coastal waters ecosystems. Besides, mangroves also protect the coastal area from abrasion effects (Sambu, *et al.*, 2018). One of the efforts to protect the mangrove ecosystem and repair the damage is by establishing ecotourism.

Anchored in the Minister of Home Affairs Regulation No. 33/2009, ecotourism is a natural tourism activity in the regions responsible for education elements, understanding and supporting natural resource conservation efforts, and increasing local community income.

The concept of ecotourism combines five core elements, namely natural, environmental education, ecological sustainability, having a positive impact on

local communities, and meeting visitor demands (Tanaya and Rudiarto, 2014). Several mangrove ecotourism areas in East Java are relatively developed, including Beejay Bakau Resort Probolinggo, Kampung Blekok Situbondo, and Pancer Cengkong Trenggalek. The research objectives were formulated from this background, namely, to analyze the activities and actors involved in ecotourism activities in three locations.

Research Method

The method used for sampling at each location in this study was a nonprobability sampling method with a snowball sampling technique. Snowball sampling is a technique of determining a sample that is initially small in number, then enlarges. In determining the sample, one or two participants are selected. If the data obtained from those participants are not sufficient, the researcher will look for other knowledgeable people to complete the data from two previous participants (Sugiono, 2015).

The data analysis method uses data analysis model Interactive analysis from Miles and Huberman (1994), which divides analysis activities into several parts: data collection, data reduction, data presentation, and drawing conclusions or data verification.

1. Data collection collects data on the activities and actors involved in ecotourism activities carried out through objective interviews, observations, and field documentation.
2. Reducing data is summarizing the data and then selecting the compatible data with the research objectives.
3. Data presentation is presenting data based on compiled information.
4. Conclusions or verification is checking and demystifying the data obtained after being examined to generate causal or interactive relationships, hypotheses, or theories.

Findings and Discussions

Ecotourism Profile

The biota's diversity associated with mangrove forests and various types of mangroves has made the area developed as a tourist area. The development of tourism areas with ecotourism is an effort to utilize nature as tourism-oriented towards conserva-

tion and preserving sustainable resources. Ecotourism development activities are explored by increasing the potential for priority diversity of flora and fauna. The higher the potential for ecotourism, the more it will attract visitors to visit the area. Local communities' involvement, either directly or indirectly, in ecotourism management, is needed to support the sustainability, rehabilitation, and conservation of mangrove (Honey, 1999). The profiles of the three ecotourism areas are:

Beejay Bakau Resort (BJBR) Ecotourism Probolinggo

Beejay Bakau Resort Ecotourism is a tourist spot that provides mangrove ecotourism, which is located in the Mayangan Beach Fishery Port area in Mangunharjo Village, Mayangan District. Apart from providing natural tourism in mangrove ecotourism, Beejay Bakau Resort also provides modern artificial tours for young people and adults.

Some of the exciting rides offered by Beejay Bakau Resort are games, restaurants, inns, and others. The Rest Tent is a floating restaurant or restaurant with a unique view of the sea, complete with mangrove plants. Apart from providing a restaurant, Beejay Bakau Resort also provides lodging or family bungalows. This tour is equipped with other facilities such as a large parking area, a floating prayer room, toilets, cafes, water boom, flying fox. In Figure 1, the visitor can select one of the icons that appear when entering the Beejay Bakau Resort ecotourism area.



Fig. 1. Globe Tourist Icons

Preservation of Beejay Bakau Resort mangrove forest ecotourism provides direct benefits in the form of green mussels, oysters, blue swimmer crabs, and mangrove crabscatch. The community also get

greater benefits from the existence of ecotourism because it provides employment for the surrounding community (Fattah, Utami and Intyas, 2019).

Ecotourism of Kampung Blekok Situbondo

Ecotourism in Kampung Blekok is a mangrove forest that is a habitat for waterbirds, especially the Ardeidae species, with approximately 6.3 hectares. Administratively, Kampung Blekok is located in Pesisir Hamlet, Klatakan Village, Kendit District, Situbondo Regency. The first Ecotourism in Kampung Blekok opened in December 2018 and was inaugurated on March 24, 2019 (Environmental Service of Situbondo Regency, 2019).

Ecotourism in Kampung Blekok is an ecotourism area based on the conservation of mangroves and Blekok and Egrets. Tourists can enjoy the beautiful atmosphere of the mangrove forest and the atmosphere of a well-maintained bird sanctuary. Tourists can also enjoy a beautiful beach tour along the river estuary from a wooden bridge.

Ecotourism Kampung Blekok also provides shopping tours for tourists who want to bring souvenirs in the form of accessories from Ecotourism Kampung Blekok. Locals also provide accessories in Ecotourism Kampung Blekok with various types and prices. These accessories are produced directly from residents because most of the residents around Ecotourism Kampung Blekok work as craftsmen that located in one area as a culinary center, as shown in Figure 2 below.



Fig. 2. Culinary Center of Ecotourism of Kampung Blekok Situbondo

Pancer Cengkong Trenggalek Ecotourism

Ecotourism Pancer Cengkong is famous for its diversity of mangrove species found in the ecotourism area opened in 2012. Currently, there are 16 mangrove species found in this ecotourism, the largest

number in East Java.

Ecotourism Pancer Cengkong Trenggalek also has several options for mangrove bridge tours, pigeons feeding, boat tours, and planting mangrove seedlings in the area. Currently, crab cultivation with cages is also being developed, as shown in Figure 3 below.

Actors involved in Ecotourism Activities

Actors or stakeholders are divided into three: key, primary, and secondary. Key actors are actors who are fully responsible for ecotourism activities legally. Primary actors are the actors most directly affected by positive or negative impacts and significantly influence activity. Then secondary actors are actors who have no direct interest in the activity. The activities carried out but still have great concern for an activity (Crosby, 1991). The classification is based on actors in the three ecotourism areas, as shown in Table 1 below.

Table 1 will be explained as follows:

1. Key actors are related to the business's legality at Beejay Bakau Resort Mangrove Ecotourism related Service (Government).
2. Primary actors in the three ecotourism areas involve local suppliers to supply logistics and labor. At Beejay Bakau Resort, Probolinggo, the primary actor, is managed by private sector. In Kampung Blekok Situbondo, there are Pokdarwis Kampung Blekok, and at Pancer Cengkong Trenggalek, there are POKMASWAS (community supervisory groups) Kejung Samudera. Beejay Bakau Resort Probolinggo and



Fig. 3. Crab breeding using cage

Table 1. Actors involved in Ecotourism activities

No	Actors	<i>Beejay Bakau Resort</i> Probolinggo	Kampung Blekok Situbondo	Pancer Cengkong Trenggalek
1	Key	Relevant Department (Government)	Relevant Department (Government)	Relevant Department (Government)
2	Primary	Private Company, local suppliers, travel agency	POKDARWIS Kampung Blekok, local suppliers, travel agency	POKMASWAS Kejung Samudera, local suppliers,
3.	Secondary	Local community,	The local community, companies, and visitors	The local community, university, and visitors

Kampung Blekok Situbondo have travel agents that have channel visitors, but it does not exist at Pancer Cengkong Trenggalek.

- Secondary actors in three areas have similar communities and visitors. In Beejay Bakau Resort Probolinggo ecotourism, the government is a secondary actor, and in Kampung Blekok Situbondo the secondary actors are from several types of government companies and private companies.

Activities in three ecotourism areas

Following the classification involved in ecotourism, each ecotourism had a different actor's role and activities.

1. Beejay Bakau Resort (BJBR) Probolinggo Ecotourism

Bee Jay Bakau Resort (BJBR) Ecotourism Management involved various actors and activities that described as follows:

The government

The government of Probolinggo, as the key actors, has the authority to issue a management license through Youth, Sports, and Tourism Department (DKOP). The government also promotes and manages the activities in Beejay Bakau Resort and provides infrastructure such as bus and train stations, high-way, information centers, and signboards. In Mayangan Beach Fisheries Port, Probolinggo, visitors have to pay the port entrance fee before access to Beejay Bakau Resort with a ticket fee for motorbike visitors of Rp. 2,000 / person and Rp. 5,000 / car and sometimes Probolinggo citizens are free of charge.

Beejay Bakau Resort (BJBR) Private Company

Private companies with license management from the Probolinggo government combine natural and artificial tourism concepts that remain environmen-

tally friendly and sustainable for Beejay Bakau Resort. They also provide various interesting products and amusements, easy access to locations with various means of transportation, and comfortable accommodation and visitors' logistical needs.

The local suppliers

Local suppliers supply food and drinks at several existing facilities in Beejay Bakau Resort, including Rest O-Tent, Café Tenda, BJ Mart, and BJ Mart Wilaha. Fish supplies are obtained directly from fishers at Mayangan Fisheries Port. Meanwhile, vegetables and groceries are provided by local farmers and traders in Probolinggo. Beejay Bakau Resort has cooperation contracts with those suppliers.

The local community

BJBR provides job opportunities that can increase the income and improve local communities' economies surrounding area. However, some other locals were not involved in ecotourism activities and did not positively impact them.

Travel Agency

The collaboration between Beejay Bakau Resort and travel agents is in the form of promotions to potential visitors. If the travel agent gets visitors to Beejay Bakau Resort, the travel agent will get a 10% fee of the price.

Visitors

Beejay Bakau Resort visitors come from domestic and foreign countries.

2. Kampung Blekok Situbondo Ecotourism

The actor's activities in Kampung Blekok Situbondo Ecotourism were described as follows:

The Government

The Development of Ecotourism in Kampung Blekok is one of the "Tahun Kunjungan Wisata"

program in 2019 by the Situbondo Regency Government. Government agencies that act as key factors are the District Government, the Tourism Office, the Environmental Agency (DLH), and the Village Government.

District governments play a role in making policies related to tourism, starting from repairing and procuring infrastructure to facilitate access. One of them is repairing the main road in Situbondo Regency, funding, and various other related policies.

The Tourism Office plays a role in promoting Ecotourism in Kampung Blekok through the official website and official social media accounts and collaborating with districts/cities, one of which is cooperation with Baluran Tourism, Banyuwangi Regency.

The Environmental Agency is responsible for overseeing all activities in the Ecotourism Kampung Blekok by evaluating the performance of POKDARWIS. This responsibility is regulated in the Situbondo Regent Regulation No.13 of 2017 concerning Biodiversity Conservation.

The role of the Village Government is to form a POKDARWIS through the Decree of the Head of Klatakan Village, Kendit District, Situbondo Regency No. 188/35/ 431.510.9.4/2017. They made village regulations regarding the protection and development of biodiversity, local economy, and culture of Kampung Blekok, which are written in the Village Head Regulation of Klatakan No. 7 of 2018 concerning Management of Kampung Blekok Tourism Objects.

POKDARWIS of Kampung Blekok

Ecotourism in Kampung Blekok is managed by POKDARWIS (Kelompok Sadar Wisata). Based on the Decree (SK) of the Head of Klatakan Situbondo Village Number 188/35 / 431.510.9.4 / 2017 concerning the Determination of the Management of the Tourism Awareness Group "Kampung Blekok" Klatakan Village, Kendit District, Situbondo Regency, POKDARWIS is a community group that takes care of all the needs and activities in Ecotourism Kampung Blekok. They run ecotourism management, mangrove, egrets, Blekok birds conservation, and other activities by applying the Sapta Pesona concept (safety, orderly, beauty, coolness, cleanliness, hospitality, and memories). POKDARWIS is fully responsible for reporting monthly tourist visits to the Environmental Agency and Village Government.

Travel Agency

Ecotourism Kampung Blekok has collaborated with ASITA (Travel Association) East Java as a tourism travel agent. This collaboration has been stated in the cooperation agreement letter between the Situbondo Regency Government and the Regional Leadership Council (DPD) no 130/0163 / 431.004.1.3 / 2019 and no 122 / DPD-ASITA / III / 2019 concerning the Tourism Development Program in Situbondo Regency.

Company

Several private and Government companies have contributed to the concept of CSR (Corporate Social Responsibility) for the development of Ecotourism in Kampung Blekok, including Bank BRI (Bank Rakyat Indonesia), PT. Paiton Operation & Maintenance Indonesia (POMI), PT Paiton Energy, and PT. Insurance Services Indonesia (PERSERO) KC Jember

Local suppliers

To fulfill Kampung Blekok's ecotourism's needs, the manager buys raw materials from the surrounding community. The labor and logistics need such as food and beverages and souvenirs are obtained from local communities who are also members of POKDARWIS.

The local community

The local community is very supportive of Kampung Blekok Ecotourism. According to the community, Ecotourism in Kampung Blekok can bring changes both from an economic, environmental, and social perspective. The community maintains the mangrove forest in Kampung Blekok. Having mangrove forests can prevent beach abrasion close to locals' residence. Furthermore, when there are events at Ecotourism in Kampung Blekok, the community participates by helping clean up the area of Kampung Blekok. That makes Kampung Blekok always looks clean.

Visitors

Domestic visitors of Kampung Blekok Ecotourism come from various regions, districts, and cities and even from abroad, namely India and Singapore. The peak season occurred in January due to the end-term holidays for school and college. The visitors refresh by seeing the breathtaking view of Kampung Blekok Ecotourism.

3. Pancer Cengkong Trenggalek Ecotourism

The actor's activities in Pancer Cengkong Trenggalek ecotourism are described as follows:

The Government

The Government, the Fisheries and Maritime Affairs Office of Trenggalek Regency, gives management permits and mentors POKMASWAS Kejung Samudra as managers and build accessible infrastructure ecotourism.

POKMASWAS Kejung Samudra

POKMASWAS Kejung Samudra is the primary actor who manages the mangrove environment around Cengkong beach. POKMASWAS Kejung Samudra has successfully done the nursery, planting, maintenance, and processing of mangrove products.

Local Supplier

The members of POKMASWAS Kejung Samudra come from the local community who were worked as fishermen crew. All raw materials such as food, building materials, and facilities for planting mangroves are obtained from traditional markets close to the ecotourism location.

The local Community

The surrounding community's concern for ecotourism is still relatively low, which can be seen from the lack of knowledge about the importance of sustainable ecotourism management. Besides that, there is still much trash that can be found in the ecotourism area.

University

The Faculty of Fisheries and Marine Sciences, Brawijaya University sustainably coach the local community and supports facilities.

Visitors

Domestic visitors from East Java still dominate Pancer Cengkong Ecotourism visitors.

Conclusions and Suggestions

1. Beejay Bakau Resort Probolinggo is one of the three ecotourism areas that professionally managed with private ownership that combines natural and artificial environmentally friendly

concepts. Meanwhile, Kampung Blekok Situbondo ecotourism and Pancer Cengkong Trenggalek ecotourism are legally owned by the government, which are managed by POKDARWIS and POKMASWAS with the concept of conservation in nature.

2. Ecotourism Pancer Cengkong Trenggalek is developing slowly, even though it has support from universities, but it has other secondary actors' subordinate roles. For instance, it did not involve travel agents and the minimal involvement of private companies that carry out cooperation such as CSR (Corporate Social Responsibility) and internal conflicts between stakeholders.

Suggestions

1. Ecotourism Beejay Bakau Resort Probolinggo needs to consider increasing the local community involvement in ecotourism management of environmental conservation and mangrove areas.
2. Ecotourism Kampung Blekok needs to consider the performance of each ecotourism management activity and improve existing management.
3. Relevant departments in Pancer Cengkong Trenggalek Ecotourism need to consider cooperation with private and public companies to contribute through CSR programs and consider cooperation with travel agents.

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