

Strategies for sustainable ecotourism development in the cemara Beach, Banyuwangi, East Java

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ABSTRACT

Tourism grew is one of the primary sectors for many national economies at the end of the last century. This beach began to rise in popularity starting at the end of 2015 because it has a different appeal. Cemara Beach is managed by a coastal community in Pakis Village, Banyuwangi District whose job is as a fisherman. The specific objectives of the research are as follows: Knowing the carrying capacity of visitors who come to Cemara Pakis Beach, Banyuwangi and determine ecotourism management strategies in facing the new normal at Cemara Pakis Beach, Banyuwangi. The research was conducted at Cemara Beach, Pakis Village, Banyuwangi District, Banyuwangi Regency. The time of research is October - November 2020. This study shows several ecotourism management strategies in facing the new normaly at Cemara Beachwhich in turn hope that tourism can be productive and safe from Covid-19.

Key words : Sustainable eco-tourism, East Java, Beach

Introduction

Tourism grew is one of the primary sectors for many national economies at the end of the last century (Lopez Espinosa de los Monteros, 2002). However, the growth of the economy because of the development of tourism is followed by the inevitable damage to the environment, wildlife and aesthetics in the areas where massive activities of tourism occur (Goodwin, 1996; Weaver, 2002) even this pandemic covid 19 massively decreased Tourism grew. The environmental problems produced by tourism activities, like damage to the biodiversity (Islamy and Hasan, 2020), water pollution (Islamy *et al.*, 2017; Islamy, 2019; Kilawati and Islamy, 2019), coral reef destruction and wetland degradation resulted in the global government and NGOs considering

ecotourism as one of the most significant threats to natural landscapes. Thus, tourism management should consider the principles of sustainable ecotourism that accommodates the socio-economic and ecological impacts of tourism (Das and Chatterjee, 2015; Ghorbani *et al.*, 2015). The new approach to sustainable tourism, which supports the environmental protection and economic development, was broadly introduced in the early 1990s. Some terms such as 'sustainable tourism' and 'environmentally-sensitive tourism', including 'ecotourism', are used as concepts for preserving the values of natural resources and the benefits of the local economy in the tourism areas (Diamantis and Ladkin, 1999; Honey, 2008; Hill and Gale, 2009).

Banyuwangi Regency has the potential for marine tourism, from beaches, coral reefs, turtle conser-

vation to mangroves. And this then became the capital of the Banyuwangi Regency Government to make several coastal areas a marine tourism destination, from the north to the south. A marine tourism destination in Banyuwangi Regency, which has become quite famous, namely Cemara Beach which offers views of the sea, which in the coastal area are turtle conservation, mangrove and pine conservation. This area becomes an area that presents tourist attractions in the form of coastal resource conservation, which in its management must prioritize the principle of sustainability.

The coastal area of Cemara Beach is dominated by sandy beaches and there are mangrove ecosystems, coastal pine plants which are then used as nesting sites for turtles. This beach began to rise in popularity starting at the end of 2015 because it has a different appeal. Cemara Beach is managed by a coastal community in Pakis Village, Banyuwangi District whose job is as a fisherman. They are members of a joint venture group forum (KUB) PantaiRejo, which was deliberately formed to facilitate the government in coordinating with fishermen groups, especially regarding community empowerment for the benefit of increasing welfare and the social strata of society from incapable to being able. So that in the course of the formation of the KUB, it is true that it will be able to improve welfare through sustainable environmental management and alternative livelihoods.

Facing the new normally due to the COVID-19 pandemic in ecotourism areas not only using masks and hand sanitizers, but social distancing also needs to be taken into account, and these efforts are linear with determining the carrying capacity of an area that is used for tourist activities. The carrying capacity of an ecotourism area is needed nowadays, where there are natural resources that must be preserved so that the sustainability of ecotourism is also a priority. Therefore, while the "keep your distance" behavior has become a habit for most people, there is nothing wrong if the "new normal" era is used as a momentum to apply the concept of environmental carrying capacity by limiting the number of visitors to tourism destinations. In other words, the "new normal" era can be used as a momentum for the awakening of conservation-based ecotourism. For this reason, it is necessary to conduct research in the management of ecotourism based on carrying capacity at Cemara Pakis Beach, Banyuwangi. The specific objectives of the research

are as follows: Knowing the carrying capacity of visitors who come to Cemara Pakis Beach, Banyuwangi. Determine ecotourism management strategies in facing the new normal at Cemara Pakis Beach, Banyuwangi.

Materials and Methods

The research was conducted at Cemara Beach, Pakis Village, Banyuwangi District, Banyuwangi Regency. The time of research is October - November 2020. The carrying capacity of ecotourism is classified as specific and is more related to the environmental (biophysical and social) carrying capacity of tourism activities and their development. The carrying capacity of tourism can be calculated by the formula of Yulianda (2010) as follows:

$$D = K \times \frac{Lp}{Lt} \times \frac{Wt}{Wp}$$

DDK: Regional Carrying Capacity; K: Potential ecological visitors per unit area (people per m²); Lp: Area or Length of usable area (m²); Lt: Unit area (m²); Wt: Time provided by the region (hours / day); Wp: Time spent by visitors (hours / day).

SWOT analysis is used to identify the strengths and weaknesses of internal factors, as well as opportunities and threats from external factors that affect an appropriate strategy for ecotourism management in facing the new normal at Cemara Beach, Banyuwangi Regency. SWOT analysis is preceded by the creation of an Internal Strategic Factor Analysis Summary (IFAS) matrix and an External Strategic Factor Analysis Summary (EFAS) matrix. The preparation of the IFAS and EFAS matrices is based on the results of the analysis of the system, namely by looking at the factors that are internal strengths and weaknesses, as well as external opportunities and threats.

Results and Discussion

Regional Overview

Pantai Cemara is one of the coastal areas in the Rowo neighborhood with two hamlets, namely Pantai Rejo Hamlet and Pantai Sari Hamlet, Pakis Village, Banyuwangi District, Banyuwangi Regency with a geographical location of 114022'22.2 "East Longitude and 0.8015'50" LS. To the east, the position of the beach faces the Bali Strait with a black

sand beach. The location of Cemara Beach in the south is bordered by PondokNongko Village, Kabat District. To the north, it is bordered by Dusun Pantai Sari, Kelurahan Pakis. Whereas those who have a diversity of natural resources of Mangrove, Cemara, and Turtle Conservation with community-based management in the area of Pantai Rejo Hamlet RT 01 and RT 02, RW 02. Management is carried out by fishing communities in Pantai Rejo Hamlet who are members of the Coastal Joint Business Group (KUB). Rejo with the legality of Lurah Decree Number 600/13 / 429.601 / 2015, and SK MENHUKHAM Number AHU.0036497. AH.01.07 of 2016.

The potential of Cemara Beach is not only pine trees and turtles, but also mangrove plants that have many benefits, not only from an ecological perspective as well as an economic side. This location However, the people around Cemara Beach actually do not really care about the existence of mangroves that are scattered on the coast of Cemara Beach, the sur-

rounding community only knows that mangroves cannot be cut down. Even though the mangroves in the vicinity can be used sustainably for alternative livelihoods, such as processing mangrove fruit into syrup and so on, as well as ecotourism. This location can even be used as a place for ornamental fish cultivation with the eurihaline type of fish such as fish from the Cichlidae family (Hasan and Islam, 2020; Hasan *et al.*, 2020a; Insani *et al.*, 2020; Hasan and Tamam, 2019). The location of Mamang mangroves is very potential to be managed based on its economic and ecological functions (Isoni *et al.*, 2019; Islamy and Hasan, 2020). The creation of a freshwater fishery tourism area can also increase tourism potential and also the economy of local residents who are predominantly fishermen. Other fish that can be developed to improve the economy of local residents from the fisheries sector are fish from the Cyprinidae family (Hasan *et al.*, 2019a; 2019b). The ornamental fisheries sector is indeed supportive, but supervision must be carried out so that these fish do

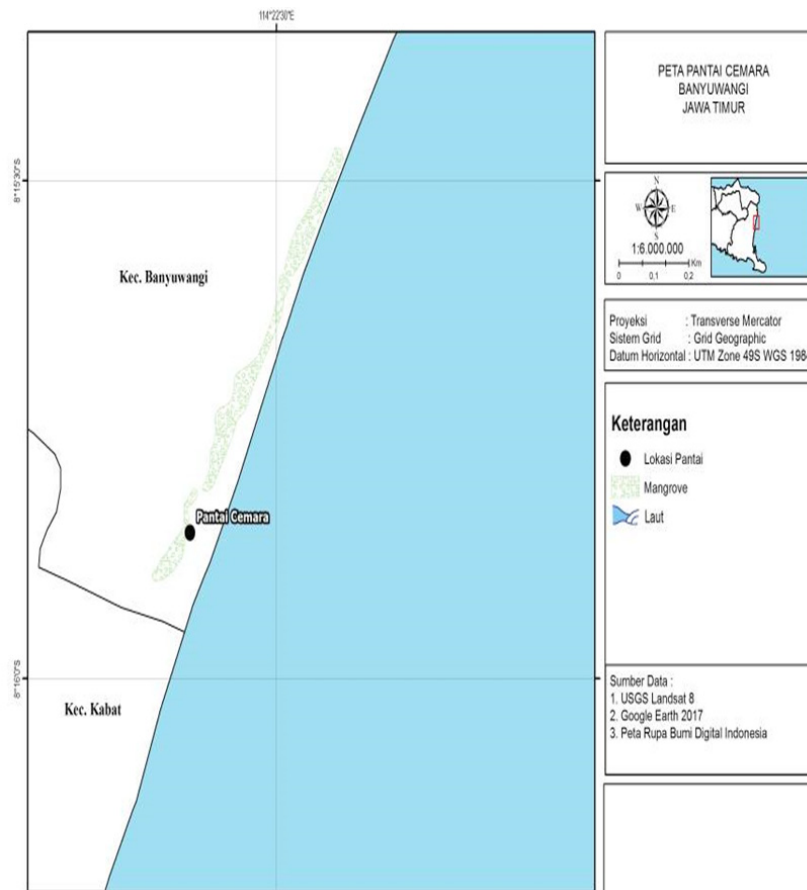


Fig. 1. Location Map of Cemara Beach

not escape into public waters, become invasive and damage local fish populations (Hasan *et al.*, 2020b; Fadjar *et al.*, 2019; Pratama *et al.*, 2020)

Cemara Beach has an area of 10.2 hectares, with the potential for pine trees to be in the north and south, which is often used by turtles to lay eggs, covering an area of 8.2 hectares, while in the west there is an estuary on both sides of which mangrove forests are overgrown with an area of about 2.62 hectares.

Capability (carrying capacity) of visitors coming in Cemara Beach

Calculating the carrying capacity of a tourist area requires the area needed for tourism activities, and for the Cemara Beach, from the coast area of about 16.36 hectares, it is divided into several zones, namely there are core and utilization zones. The utilization zone which is frequently visited by tourists is around 3,832 Ha. Meanwhile, the average visitors who come every day can reach 250 people except for holidays, on average it can reach 1,000 people per day. In addition, the area needed by each visitor to spend time on Cemara Beach is 50 m² with an average of 3 hours spent. This information becomes

the data in determining the carrying capacity analysis at Cemara Beach, so the results of the analysis relating to areas that can accommodate optimal visitor capacity are as shown in the Table below.

Based on the Table above, the optimal number of visitors coming to Cemara Beach based on the analysis of the carrying capacity of the area above is 306 people per day. Meanwhile, compared to the results of surveys and observations, the number of visitors per day is an average of 250 people per day, so it can be said that the current Cemara Beach area can accommodate all tourist activities without exceeding the carrying capacity of the area or it can be said that the carrying capacity of the area has not been exceeded. support it. However, if a holiday comes, the number of visitors can reach 1,000 people or even more in one day, therefore a strategy is needed to overcome the carrying capacity of the area, especially with regard to the protocol for preventing COVID-19, which includes the principle of social distancing.

Ecotourism management strategies in facing the new normal at Cemara Beach

Determination of the strategy using a SWOT analy-

Table 1. Total Support Capacity of Visitors in the PantaiCemara Pakis Area, Banyuwangi

K(People)	Lp(m ²)	Lt(m ²)	Wp(h/day)	Wt(h/Day)	DDK(People/Day)
1	3.832	50	12	3	306

Table 2. IFAS Matrix - Strength Factor.

No.	Strength Variable	Weighting	Rating	Score
1	The government's efforts are very high to increase marine tourism during the COVID-19 pandemic	0,174	4	0,696
2	Sufficient human resources are available	0,171	4	0,684
3	Good cooperation between district level stakeholders	0,168	4	0,672
4	Owned conservation areas such as turtles, mangroves and pine trees	0,165	3	0,495
5	The awareness and strong desire of some fishermen in doing conservation	0,165	3	0,495
6	Has a beautiful view in the morning (sunrise)	0,157	2	0,314
	Total Strength Score / Streghts	1,00		3,356

Table 3. IFAS Matrix - Weakness Factors.

No.	Weakness Variable	Weighting	Rating	Score
1	There are no written regulations regarding the COVID-19 prevention protocol	0.307	-4	-1.228
2	The low level of public awareness about the prevention of COVID-19	0.259	-3	-0.777
3	Lack of knowledge about the concepts of conservation, ecotourism and tourism	0.219	-3	-0.657
4	Egosectoral (central, provincial and district) regarding the use of water areas	0.215	-2	-0.43
	Total Weaknesses Score	1.00		-3.092

sis which is a further analysis carried out in this study, after the carrying capacity of the area is known. The data collected uses a focus group discussion (FGD) and then becomes input in determining internal and external factors.

Furthermore, based on the results of the evaluation of internal factors, namely strengths and weaknesses, as well as external factors, namely opportunities and threats, the grand strategy analysis is as follows:

$$\begin{aligned} &\text{Total internal factor values} \\ &= \text{IFAS Streghts Score} + \text{IFAS Weaknesses Score} \\ &= 3,356 + (-3,029) \\ &= 0.327 \end{aligned}$$

$$\begin{aligned} &\text{The sum of the external factor scores} \\ &= \text{IFAS Opportunity Score} + \text{IFAS Threats Score} \\ &= 3.144 + (- 2.71) \\ &= 0.434 \end{aligned}$$

The results of the calculation of the internal and external factor scores are used to determine the coordinate points of the strategy. In this case the “x” axis is the internal factor score, while the “y” axis is

the external factor score. So the coordinates of the grand strategy for SWOT analysis are (0.18, 1.09) in quadrant I which is a very favorable situation. In the management of marine ecotourism based on carrying capacity in facing the new normal at Cemara Pakis Beach, Banyuwangi, it has opportunities and

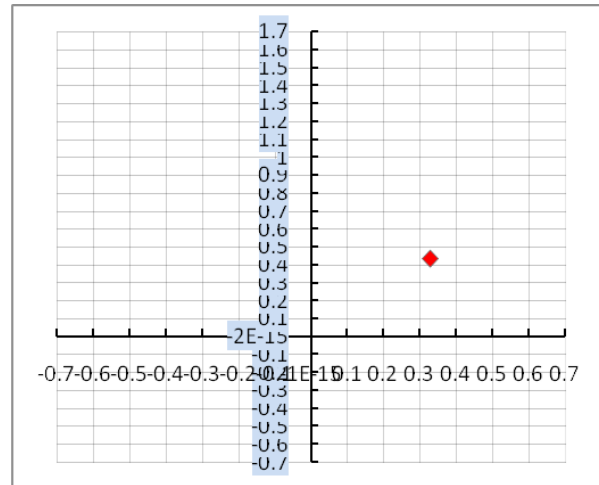


Fig. 2. SWOT Analysis Quadrant

Table 4. EFAS Matrix – opportunity Factors.

No.	Variable Opportunity	Weighting	Rating	Score
1	Central government program on accelerating recovery from the impact of Covid-19	0.169	4	0.676
2	The Ministry of Tourism and Creative Economy has compiled the CHS (Cleanliness, Health and Safety) program as a strategy for restoring tourist destinations in a new normal order.	0.165	4	0.66
3	Pantai Cemara Pakis Banyuwangi is included in the Tourism Attraction Object (ODTW) of Banyuwangi Regency	0.161	4	0.644
4	High tourism market share	0.154	3	0.462
5	Easy access to the location	0.134	2	0.268
6	Development of Science and Technology	0.114	2	0.228
7	The existence of educational and scientific institutions	0.103	2	0.206
	Total Score of Opportunities	1.00		3.144

Table 5. EFAS Matrix - Threat Factors

No.	Threats Variable	Weighting	Rating	Score
1	The increase in COVID-19 is due to low social distancing	0.245	-4	-0.98
2	The attitude of some people who are apathetic towards the management of marine ecotourism based on carrying capacity in facing the new normal at Cemara Pakis Beach, Banyuwangi	0.22	-3	-0.66
3	There has been no realization and outreach regarding local government regulations related to conservation at Cemara Beach	0.195	-2	-0.39
4	Competition with other marine tourism areas	0.175	-2	-0.35
5	Environmental pollution (due to tourists who are not environmentally friendly)	0.165	-2	-0.33
	Total Weakness / Threats Score	1.00		-2.71

Table 6. Grand Strategy Matrix for Marine Ecotourism Management Based on Supporting Capacity in Facing the New Normal at Cemara Pakis Beach, Banyuwangi.

IFASEFAS Opportunity (O)	Strength Factors(S) SO recommendations:	Weakness Factors (W) Rekomendasi WO:
Opportunity Factors	<ol style="list-style-type: none"> 1. Restoring tourist destinations in a new normal order by involving tourism industry players and the creative economy, which is expected to be productive and safe for tourism from Covid-19. 2. Development of the area as an object of tourist attraction (ODTW), which is guided by the RPJMD, RTRW of Banyuwangi Regency and the Zoning of Coastal Areas and Small Islands. 3. Improving infrastructure and facilities to support the development of marine tourism based on environmental carrying capacity and reseach. 4. Increase the knowledge and skills of the community to create creations that can be souvenirs for tourists to take home. 5. Improve accessibility and tourist accommodation for tourists outside the region. 	<ol style="list-style-type: none"> 1. Adaptation to new conditions and rearrange business model strategies so that they can survive in the new normal era, by adjusting technological developments. 2. Improving the quality of human resources and mastery of science and technology in the surrounding community, especially those related to conservation and tourism, through institutional strengthening. 3. Adding tourist attractions, so that visitors can spread out and not be concentrated in a single tourist center point to support the implementation of health protocols, one of which is social distancing. 4. Increase promotion and improve development programs to attract visitors in the new normal era
Threats (T)	ST's recommendation:	WT recommendation:
Threat Factors	<ol style="list-style-type: none"> 1. Make policies in regulating the tourism sector based on the suitability and carrying capacity of the area, in facing the new normal on the beach of the pine cone, Pakis, Banyuwangi. 2. Increasing the quality of conservation in preserving coastal resources. 3. Management of marine ecotourism that is sustainable and based on environmental sustainability. 4. Optimizing natural potential and uniqueness of tourist objects by maintaining and maintaining tourism objects on an ongoing basis to face competition between tourist objects in the new normal era 	<ol style="list-style-type: none"> 1. Covid-19 risk self-assessment policy. 2. Socialization from the government is continued with the realization of government program plans and policies related to the management of ecotourism areas in facing the new normal while still prioritizing sustainability (without leaving conservation values). 3. Formulating policies based on a governance approach (comprehensive management) covering all aspects of the ecosystem as an alternative livelihood, so that they are able to compete with other tourism areas. 4. Integration of interests involving stakeholders to achieve marine ecotourism in accordance with the new normal era

strengths so that the strategy applied in this condition is to support an aggressive growth policy (Growth Oriented Strategy).

Based on the IFAS and EFAS matrices that have been made, then summarized in the SWOT matrix to provide an alternative formulation of policy strategies suitable for carrying capacity-based marine ecotourism management in facing the new normal at Cemara Pakis Beach, Banyuwangi. The formulation of the strategy is from a combination of the SWOT factors that have been developed in the IFAS and EFAS Matrix.

With the implementation of the Large-Scale Social Restrictions (PSBB) period as an effort to prevent the spread of Corona Virus Disease-2019 (Covid-2019), currently the government is gradually starting to implement a transition period towards a new normal order. To make the new normal a success, it requires good cooperation from all stakeholders, including government, business actors, education practitioners, health practitioners, and the community. Therefore, all related parties are asked to be ready to face this transitional period, the community is asked to comply with the implementation of health protocols in the new normal period. Maintain physical distancing, use masks, wash hands and avoid various crowds. The government invites all people to comply with health protocols in entering a period of transition to a new order.

The tourism sector, which was hit hard by the Covid-19 pandemic, is entering a new normal era. A paradigm shift is underway and a number of new protocols will be implemented to welcome the new normal in the tourism industry. The new normal era brings new roles, new roads and expectations in the tourism sector. Digitalisation is growing rapidly beyond expectations. The tourism business must adapt to new conditions and rearrange the business model strategy so that it can survive in the new normal era, by adjusting technological developments.

Conclusion

This study concludes that the ecotourism management strategies in facing the new normal at Cemara Beach are: 1) Restoration of tourist destinations in the new normal order by involving tourism industry players and the creative economy, which in turn hope that tourism can be productive and safe from Covid-19; 2) Adaptation to new conditions as well as rearranging business model strategies in order to

survive in the new normal era, by adjusting technological developments; 3) Making policies in regulating the tourism sector based on the suitability and carrying capacity of the area, in facing the new normal on the beach of the pine cone, Pakis Banyuwangi and preserving the general environment; 4) Covid-19 risk self-assessment policy; 5) Socialization from the government is continued with the realization of government program plans and policies related to the management of ecotourism areas in facing the new normal while still prioritizing sustainability (without leaving conservation values).

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