

THE MANAGEMENT OF BANGSRING UNDERWATER AS CONSERVATION - BASED ECOTOURISM FOR INTERNATIONAL TOURISM DESTINATION

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Abstract: Bangsring Underwater site has high potential of ecotourism attraction for international tourists. The purpose of this study was to determine 1) the potential of Bangsring Underwater ecotourism based on attractions, accessibility, amenities, and 2) Bangsring underwater management as conservation-based ecotourism for the international tourist destination. The research design used qualitative descriptive methods. The primary data were obtained from observations and focus group discussions (FGD) with related parties, while secondary data obtained from government agencies, institutions, and communities in the Banyuwangi Regency. The data were analyzed using qualitative descriptive analysis. The results showed that Bangsring underwater has high potential in attractions, accessibility, amenities, and 2) the management of Bangsring underwater can make the place an ecotourism destination for international tourists. Furthermore, it is recommended that the alternative policies are needed to create conservation-based ecotourism for international tourist destinations.

Key words: ecotourism, conservation-based, international tourist destinations

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INTRODUCTION

The tourism industry is one of largest industrial economic sector in the world. World Travel and Tourism reported that in 2018 the tourism sector contributed to 10.4% of global GDP. The huge potential of tourism also makes a significant contribution to reducing poverty (Sumarmi et al., 2020a; Marlina et al., 2021). In several developing countries, tourism has proven as a solution to poverty issues (Eshun and Tichaawa, 2020). Tourism can also tremendously contribute to local and national economic development (Dilwan and Astina, 2019; Untari and Suharto, 2020; Atmodjo et al., 2019).

The famous Indonesian tourism destination is Bali. Over time, tourism in Bali has experienced overload, so there are many attempts to find other destinations as new tourist centers. The search for "The Next Bali" will be beneficial for other areas of Indonesia with high tourism potential (Sumarmi et al., 2019). One of them is Banyuwangi, which is located and not far from Bali. Also, Banyuwangi has tourism potentials to be developed, such as Bangsring Underwater. In Banyuwangi regency, the total number of tourists has increased eight folds more in last 10 years compared to the situation of 2010 (Table 1). The majority (98%) are the local tourists, which exhibits not only changing social and recreative lifestyle but enormous implications on local economy from the tourism sector.

Bangsring Underwater is located in Krajan, Bangsring Village, Wongsorejo District, Banyuwangi. The location is on the north coastline of Banyuwangi, about 1 km from the main highway, and can be reached within 45 minutes from Banyuwangi city. The coral reefs spreading across 15 hectares with rich marine life and natural conservation area serves as a special attraction for tourists. The attraction of the natural resources that is maintained in this tourist spot is the main attraction for tourists so that every year there is always an increase in the number of tourists (Sumarmi et al., 2020b). The increase in the number of tourists in Bangsring Underwater can be seen in Figure 1 below.

International tourist destinations provide services for recreational and business purposes with international visitors (Montemayor et al., 2020; Untari and Suharto, 2020). Besides, international tourist destinations must also have high competitiveness with other world tourist destinations. The competitiveness of tourist destinations can be assessed using the

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Travel & Tourism Competitiveness Index. The travel and tourism competitiveness index into four main factors, including 1) environmental carrying capacity, 2) travel & tourism policies and supporting circumstances, 3) infrastructure, 4) natural and cultural resources (World Economic Forum, 2017). Meanwhile, based on the Constitution Law no. 10 of 2009 defines tourism destination areas as geographic areas in one or more administrative areas where there are tourist attractions, such as public facilities, tourism facilities, accessibility, attractions, accessibility, amenities and related communities. The purpose of this study was to determine: 1) the potential for Bangsring Underwater ecotourism based on attractions, accessibility, amenities, and 2) Bangsring underwater management as conservation-based ecotourism for the international tourist destination.

Table 1. The Number of Tourist Visits in Banyuwangi Regency (Source: BPS, 2020)

No	Year	Tourist Visits		Total
		Local	International	
1.	2010	654.602	16.977	671.579
2.	2011	789.101	13.377	802.478
3.	2012	860.831	5.502	866.333
4.	2013	1.057.952	10.462	1.068.414
5.	2014	1.363.530	30.068	1.393.598
6.	2015	1.727.958	45.569	1.773.527
7.	2016	4.022.449	77.139	4.099.588
8.	2017	4.832.999	98.970	4.931.969
9.	2018	5.200.000	127.420	5.327.420
10.	2019	5.307.054	101.622	5.408.676

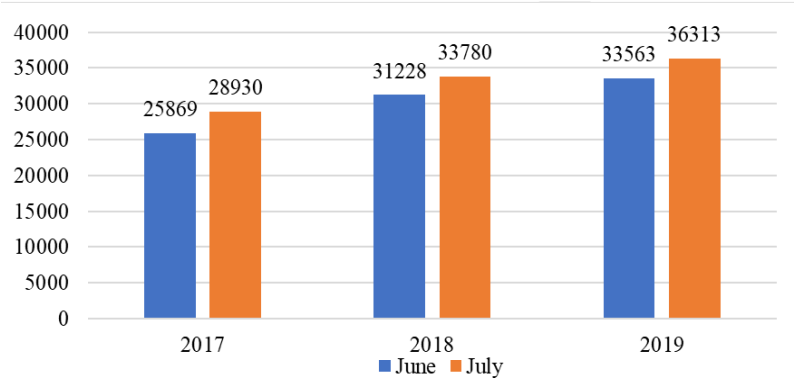


Figure 1. Tourists at Bangsring Underwater from June-July 2017-2019 (BPS, 2020)

METHODS

The research object was the Bangsring Underwater ecotourism, which is located in Bangsring Village, Wongsorejo District, Banyuwangi Regency. The research method used is a qualitative descriptive method. The data used in this study are primary and secondary. Primary data was obtained from in-depth interviews, observations, and focus group discussions (FGD) with tourism managers, villagers, and sub-district governments. In-depth interviews of visitors, tourism managers, business communities, and fishermen were conducted in the conservation area around Bangsring Underwater area. Secondary data were obtained from government agencies, institutions, and the community.

An interactive analysis model developed by Miles and Huberman (2002), and Moleong (2004) was selected to analyze the data. The analysis included three stages: (1) data reduction by selecting, simplifying, abstracting and transforming the raw data obtained from the field, (2) presentation of reduced data according to the topic for an easier interpretation, (3) draw conclusions by verifying and checking the collected data. Several criteria are used to ensure the validity of the data obtained during research activities: (1) the degree of trust by making in-depth observations, triangulation, and member-checking, (2) transferability by describing in detail, thoroughly, carefully and deeply during the subject matter, so that it can be distinguished between the data obtained and the interpretation of the researcher, (3) dependence by careful re-examination of the components, processes, and results of the research, and (4) result by conducting peer discussions with Geography student who has been worked as an intern at Bangsring Underwater related to tourism management problems. The location of Bangsring Beach can be seen in the following Figure 2.

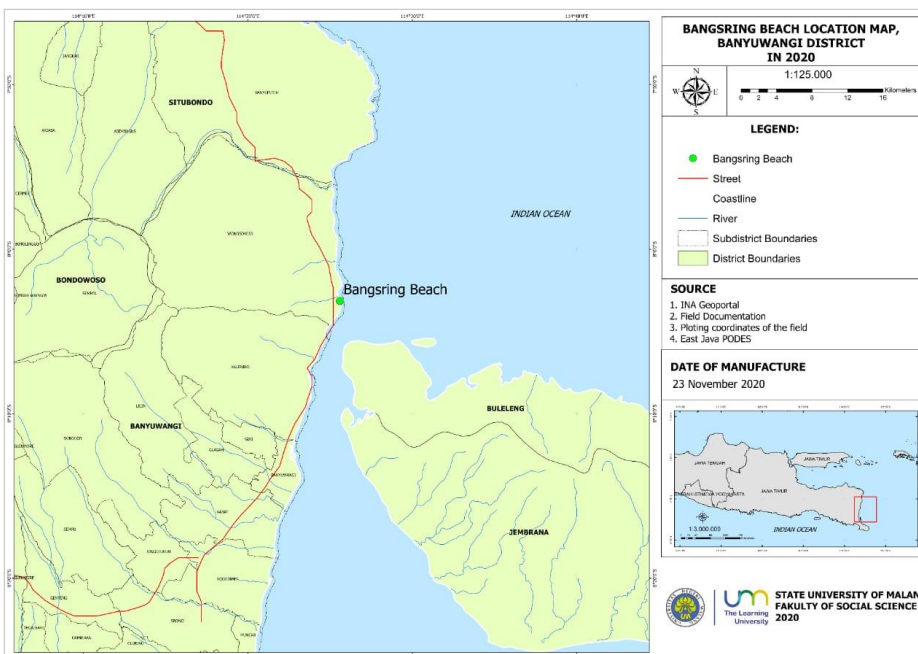


Figure 2. Map of Bangsring Beach, Indonesia



Figure 3. Tourist Attraction at Bangsring Underwater (Source: Author, 2020)

RESULTS AND DISCUSSION

Bangsring Underwater is located in Bangsring Village, Wongsorejo District. Bangsring Underwater is a beach that is rich in coral reefs and beautiful fishes. Activities carried out by the community for the conservation are planting cypresses, making artificial coral reefs, making fish houses, and transplanting coral reefs to make Bangsring Underwater an international tourist destination. The conservation initiated by the Samudera Bakti group is good for the marine environment, but fishers also have a positive impact by increasing knowledge and improving the community's economy. Bangsring Underwater is famous as water sport destination and as research site, especially in marine and fisheries sciences (Hadi, 2019).

Tourism Potential in Bangsring Underwater is Divided into Tourist Attractions, Accessibility, and Amenities (3A)

A. Tourist Attractions at Bangsring Underwater

Bangsring Underwater is located in the Bali Strait. The waves on Bangsring Beach are relatively small, with a depth of 2–15 m so that sunlight can penetrate the clear seawater. The condition makes Bangsring Underwater rich for coral reefs and beautiful fish. Tourist attractions that are served at Bangsring Underwater shown in Figure 3 include:

1. **Diving:** It is an activity in the deeper sea. Diving requires expertise, skills, and adequate equipment such as air tubes, diving suits, and fins (Lucrezi et al., 2020). Bangsring Underwater provides rental packages for diving equipment. There are a dive equipment rental price and a guide service of divers who are not experts for Rp. 800,000; divers who already have a diving license, the rental price is Rp. 400,000; beginner divers can use the Try on Diving package for 15 minutes with the equipment and guide services for Rp. 150,000. Every year the Banyuwangi regency government holds a Bangsring Underwater Festival to promote Bangsring Underwater ecotourism. The festival contains educational activities to save the marine environment, such as competitions for waste processing and trash collecting, and underwater attractions such as dancing and Pencak Silat under the sea.

2. **Snorkeling:** It is a diving activity at sea level that is carried out at a depth of 2-5 meters. The tools needed are a snorkel for breathing and a frog's leg or fin to move in the water (Lucrezi et al., 2020). Everyone can snorkel at Bangsring Underwater, and for those who cannot swim can use a life jacket for safety. Visitors can rent snorkel equipment for Rp. 35,000. Visitors who have never done snorkeling must be accompanied by local fishermen to keep them safe and enjoyable.

3. **Swimming with Sharks:** Bangsring Underwater has a shark conservation area called the Shark Clinic. The clinic has a cage of 3x3 meters to treat injured sharks that are accidentally caught in a fishing net. When the sharks have recovered, they will be released back into the sea. The management of Bangsring Underwater places the clinic far from the snorkeling spot so that the sharks feel safe during treatment. The manager of Bangsring Underwater provides an opportunity for visitors to experience swimming with sharks. Visitors will be guided by divers and given directions to be comfortable and safe while swimming with the sharks.



Figure 4. Coral reef farming (Source: Author, 2020)



Figure 5. Fish Apartment (Source: Author, 2020)

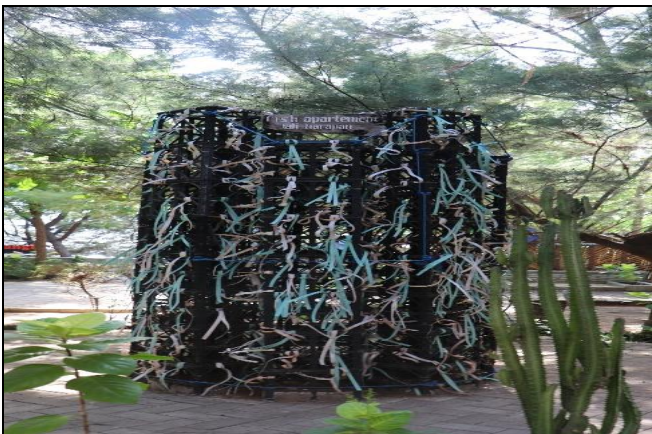


Figure 6. Prototype of Fish Apartment (Source: Author, 2020)



Figure 7. Bangsring Underwater Floating House (Source: Author, 2020)

4. **Planting Coral Reefs:** Bangsring Underwater offers visitors to participate in preserving the marine environment by planting coral reefs. The activity was part of the Marine Education program carried out by the Bhakti Samudera group, which also manages Bangsring Underwater area. Coral seedlings are taken from existing coral reefs and tied to racks made of PVC pipes. Another method used in coral planting is called the Fish Apartments. The fish apartment is made by assembling PVC into a 2-meter-high building. For this activity, the manager will charge to replace the pipes and take coral seedlings. It is shown in the following figure 4, 5 and 6.

5. **Feeding Fish:** Visitors can enjoy the beauty of Bangsring Underwater while feeding the fish that are gathered around the Floating House to give a memorable atmosphere to visitors. Visitors do not need to go into the sea, throw the crumbs of bread into the sea, and the fish will immediately come. The activity shown in the following figure 7.

B. Accessibility to Bangsring Underwater

Bangsring Underwater Tourism Object is located about 20 kilometers to the north from Banyuwangi City. Visitors from Banyuwangi mostly use private cars or rent motorbikes because the location of Bangsring Underwater is 1 km from the Banyuwangi-Situbondo highway. Visitors from outside Banyuwangi can reach the location through the following transportation options.

1. **Airplane:** visitors from various cities or other countries can go to Banyuwangi with several choices of planes and airlines. After landing, visitors can continue the road trip by renting a car. The route is through Rogojampi - Kabat - Banyuwangi - Kalipuro - Bangsring.

2. **Train:** the closest train station to Bangsring Underwater is Banyuwangi Baru Station. Then visitors can continue the road trip by renting a car or motorbike through Ketapang - Bangsring route.

3. **Ferry (Ship):** visitors from Bali can reach Banyuwangi using a ferry or ship from Gilimanuk Port to Ketapang Port. Then visitors can reach the destination by renting a car or motorbike through Ketapang - Bangsring route.

4. **Intercity buses:** the transportation option is mostly used by visitors from Situbondo Regency. The location of Bangsring Underwater was in the Banyuwangi-Situbondo axis road so that visitors can get off directly in front of the entrance gate to Bangsring Underwater. From the gate, visitors can continue by renting motorbikes that serves the Bangsring Underwater-highway route for Rp. 15,000.

C. Amenities (Facilities) at Bangsring Underwater

Bangsring Underwater has several facilities to provide the best service and comfort during the visit. The facilities include:

1. **Floating House:** floating House is located 20 meters from the beach. It is the biggest attraction in Bangsring Underwater. Visitors can take a boat to reach the Floating House and rent a boat back from there to sail. The types of boats that can be rented are canoes and banana boats. The number of canoes provided is 17, while there are 4 banana boats available. The floating house has an area of 27x7 meters, which is equipped with toilets for visitors. Around the house, there are 8 pieces of cages and a shark clinic with an area. Visitors can see the view from the balcony if they are unable to go down. The floating house was built in the middle of the cage so that the sharks could survive comfortably. The house is also the best place to see the sunset. The shape is simple but unique, which is the main attraction for tourists who come (Sumarmi et al., 2020b). Visitors can rest while waiting for the sunset. The exotic view of the sunset will look even more beautiful in the middle of the Bangsring Underwater sea of 3x3 meters.

2. **Car and Motorcycle Parking:** one of the things that must be considered in a tourist location is parking space availability, both for cars and motorbikes. The parking area provided is quite large, with a cheap rate of Rp. 3,000 for motorbikes and Rp. 5,000 for the car.

3. **Public Toilets:** The public toilets with sufficient numbers and clean conditions are services provided in Bangsring Underwater. Visitors can clean easily after snorkeling, diving, or just playing on the beach.

4. **Canoe Boats, Banana Boats, and Jet Ski:** The Bangsring Underwater complements water sports facilities with canoes, banana boats, and jet skis. There are 17 canoes available and 4 banana boats. Canoe rates for Rp. 30,000 per 30 minutes, banana boat Rp. 5,000 and jet Ski for Rp. 200,000.

5. **Homestay.** The homestay is located in the Bangsring Underwater Ecotourism area and is managed by the Bhakti Samudera Group. It is located approximately 10 meters from the beach, making it easier for visitors to enjoy all of Bangsring Underwater's nature. There are 5 rooms for a single or double bed. Homestay is built using semi-permanent materials so that visitors can feel the nature and the life of fishers in the past. It is shown in the following figure 8.

6. **Taking Photos with Beautiful Fish:** vacation to Bangsring Underwater will be completed by having a photo with beautiful wild fish in the Bali Strait. The management provides an underwater camera for Rp. 150,000/unit. For the cheapest package, visitors can rent a waterproof case for Rp. 35,000 and visitors can freely take pictures using their phones. Visitors also can ask to be captured by divers for the best result. Then the photos can be printed directly on the information stand. Visitors can pay a photo printing fee for Rp. 15,000/each.

7. **Crossing to Tabuhan Island:** Tabuhan is the name of an uninhabited island located in the east of Bangsring Underwater. Administratively, this island is included in the Banyuwangi Regency area. The small white sandy island also has snorkeling and diving spots. Visitors can visit Tabuhan Island by renting a boat from Bangsring Underwater for Rp. 500,000 for 10 people.

The satisfaction at Bangsring Underwater with tourism products is quite high, but several factors need to be improved, such as the cleanliness of the area and cleanliness of the facilities at Bangsring Underwater. The development of tourism products at Bangsring Underwater needed to care about the environmental aspects. Bangsring Underwater is friendly to the natural underwater environment. Management maintains ecotourism activities in Bangsring Underwater so that it can last. Bangsring Underwater management should always improve the cleanliness of facilities and beaches on land and in the sea.



Figure 8. Homestay in Bangsring Underwater (Source: Author, 2020)

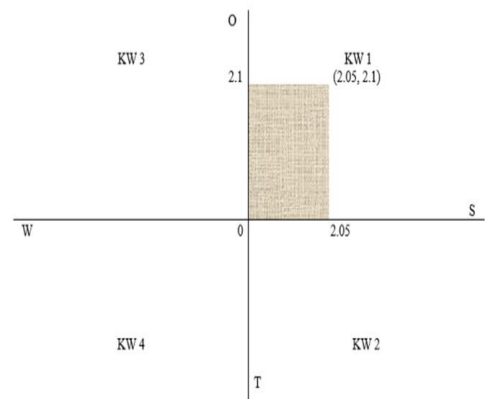


Figure 9. The SWOT Analysis Quadrant of Bangsring Beach

Bangsring Underwater always gets visits from international and local tourists every day. Visitors can snorkel, dive, swim with sharks, and use guide services to guide their activities, help take pictures in the water, or share other information related to Bangsring Underwater ecotourism. Some visitors also provide additional tips for the guides and visitor satisfaction with the guide's services. Bangsring fishers were only depending on fishing, now have more promising income from ecotourism. Business opportunities are also open to the Bangsring community. The management establishes stalls run by residents around Bangsring Underwater area. The stalls provide food, drinks, toys, and swimwear equipment. Bangsring Underwater is a place where fishers look for fish, which is underwater fills with coral reefs. Bangsring fishers use it as a land to find fish for sale.

Bangsring Underwater has tourism potential, which is currently being managed seriously for international tourism purposes. Currently, Bangsring Underwater has turned into a center for various types of water sports. Various choices of water sports are available with adequate facilities. Snorkeling, diving, banana boat, paddleboard can be enjoyed at Bangsring Underwater. The increase in the Bangsring Underwater destination occurred due to the active role of Bangsring fishers to improve the marine environment and to build the coastal area as a tourist destination (Nurhidayah, 2017).

Management of Bangsring Underwater Ecotourism as a Conservation-Based International Tourism Destination

The use of chemicals in fishing for ornamental fish has caused damage to the marine environment. However, the livelihood of the fishermen in Bangsring underwater was very much dependent on the sea. If the marine environment is damaged, it is difficult for fishers to catch fish, and it will affect to their economy (Montemayor et al., 2020; Untari and Suharto, 2020). Therefore, they were finally moved to improve their marine environment and try to improve their lives.

The awareness of Bangsring Underwater fishers to protect the environment arises from their love for their residence. The fishermen have been organized and have formed a community group called as the Samudera Bakti Group in around (samudrabakti.files.wordpress.com), and the members are seriously farming the coral reefs (Hadi, 2019). It took a long time to enjoy the benefits until they could enjoy the results. Natural conditions have changed fishermen's behavior, which was initially destructive, to protecting the marine environment (Asmit et al., 2020). "Nature is the home for all living things, if we destroy nature or other living things, this means we destroy ourselves" as a mindset embedded in the hearts of Bangsring fishers. The fishers made a deal, and the consequences for people who took the reef in the conservation area were penalized for returning 5 times. If someone takes 1 coral, they must replace it by planting 5 corals, and the multiples apply. The goal is that the underwater environment of Bangsring Underwater is preserved. The concern of fishermen for the preservation of the sea has now paid off. Bangsring Underwater is a marine ecotourism destination that is internationally acclaimed and brings economic benefits to them. The economic benefits they get actually make them even more enthusiastic about preserving the sea (Montemayor et al., 2020). Fishers are aware that visitors who come want to know the results of their hard work in planting coral reefs. Another advantage is that it is easier to invite visitors to take part in conservation activities and love the sea. The sea belongs to everyone, so everyone is obliged to protect and preserve. Bangsring fishers take effort to invite all levels of society to participate in preserving nature. It began with a visit to elementary schools on the coast of Bangsring and the surrounding villages. The fishers will enter the class and explain the importance of preserving the sea for approximately 2 hours. The activity is carried out voluntarily because they want to invite all people to be aware of the sea's importance for their lives. After visiting the elementary school, students and teachers were also invited to come to Bangsring Underwater to learn firsthand about the protection of coastal and marine life. The success of marine education at the elementary level encourages fishers to enter junior and senior high school levels.

Currently, fishers no longer need to come to every school, because the school comes directly to Bangsring Underwater to get marine education. Bangsring Underwater management built a theater on the beach to support the program as a learning facility. Many students, teachers, university students, and researchers come to Bangsring Underwater to learn directly from fishers. Marine education activities receive support from the Banyuwangi Marine and Fisheries Service. Marine education topics include care and planting of coral reefs. The activity is free of charge. Participants are only asked to replace the pipes used for planting. The pipes will have the school or institution name that planted or written on it. It is expected to create a sense of belonging and love for nature (Sulistiowati et al., 2020). The potential natural resources in Bangsring Underwater include various kinds of soft and hard corals and fish that live in Bangsring Underwater. The

potential natural resources in Bangsring Underwater are scattered in several points in Bangsring Underwater, namely the Floating House, Coral garden, and the core zone. The tourism products offered at Bangsring Underwater include floating houses, snorkeling, scuba diving, canoeing, tourist boats, and transportation to Tabuhan Island and Menjangan Island. The satisfaction level of visitors at Bangsring Underwater with tourism products is high, but there are still several factors that need to be improved, such as the cleanliness of Bangsring Underwater and the cleanliness of the facilities at Bangsring Underwater (Budiman et al., 2017). Analysis of community-based ecotourism management was done using a SWOT analysis (Asmit et al., 2020). The management strategies, including 1) joint policymaking between the government and the community regarding sustainable ecotourism management; 2) educating tourists to create environmentally friendly tourism; 3) optimizing the role of stakeholders and increasing the role of the government in developing ecotourism in Bangsring Underwater (Nurhidayah, 2017; Sulistiowati et al., 2020). SWOT analysis resulted from internal factors (IFAS) and external factors (EFAS) in the Bangsring Underwater can be seen in the following Table 2 and Figure 9.

Table 2. Internal Factors (IFAS) and External Factors (EFAS) (Source: Reseach Data 2020)

Internal Factors (IFAS)						
Strengths (S)				Weight	Rating	Score
1.	Cultivating coral reefs are used as conservation objectives and main attraction	0.15	5	0.75		
2.	Floating house as a shark conservation area	0.10	5	0.50		
3.	There are many facilities to support water sports	0.15	5	0.75		
4.	The main connecting route with The Private Island (Tabuhan Island)	0.15	5	0.75		
5.	Wave height was in the low category	0.15	4	0.60		
6.	There are many restaurants and homestays	0.05	4	0.20		
7.	Large parking area and enough toilets	0.10	4	0.40		
8.	Beach security is helpful	0.10	4	0.40		
9.	NGO is managing the beach tourism	0.15	5	0.75		
10.	Promotion by governance is carried out regularly	0.10	4	0.40		
11.	Connected with the Java-Bali national road	0.15	4	0.60		
Total						6.1
Weaknesses (W)						
1.	The location is quite far from the city because it is located on the border with Situbondo Regency	0.25	5	1.25		
2.	There is no visitor limit to preserve the environment carrying capacity	0.20	4	0.80		
3.	The location is close to the river estuary, so the beach will be filled with garbage on the rainy days	0.40	5	2.00		
Total						4.05
Strengths-Weaknesses				2.05		
External Factors (EFAS)						
Opportunities (O)						
1.	Cultivation of coral reefs is the main focus of all parties, from managers, fishers, traders, and stakeholders	0.20	5	1.00		
2.	Spots for water sports are very safe with relatively flat wave heights	0.20	5	1.00		
3.	Being one of the best underwater trends in Banyuwangi District	0.10	4	0.40		
4.	The location is relatively close to Ijen Crater tourism, which is the main icon of natural tourism in Banyuwangi Regency	0.10	4	0.40		
5.	The community and stakeholders are trying to start marine education as a tourist attraction and environmental conservation education	0.10	5	0.50		
6.	Visit costs are relatively cheap	0.10	4	0.40		
7.	There are many tour and travel agencies that provide visit packages for tourist	0.10	4	0.40		
8.	Active involvement in the Banyuwangi cultural performance of "Majestic Banyuwangi"	0.10	5	0.50		
Total						4.6
Threats (T)						
1.	Located near Watu Dodol Beach, which has the same characteristics and is located right on the main road connecting Banyuwangi-Bali	0.25	5	1.25		
2.	Lack of awareness to maintain the cleanliness of the beach and there are no penalties	0.25	5	1.25		
Total						2.50
Opportunities- Threat				2.1		

Based on the results, it can be concluded that the Bangsring Underwater coral reef ecosystem provided economic and ecological benefits for the communities around Bangsring Underwater. However, the long-term use of coral reefs also impacts coral reef ecosystems. Therefore, conservation works undertaken by management to preserve coral reef ecosystems include rehabilitating coral reefs with coral transplants, limiting visiting times for the ecotourism sector, and enforcement (Dilwan and Astina, 2019). Regulations related to the use of both fishing and ecotourism are also needed. Besides, fishers should make sea farming to maintain coral reefs' ecology in good condition to fish or coral reefs (Marlina et al., 2021). Management is expected to establish accommodation for tourists from outside Banyuwangi. Further research is expected to study more about sea farming (Yudhantara, 2017). Healthy coral reefs can support the local community's economy and generate profits every year, so sustainable management of the Bangsring Underwater area is needed to conserve coral reef resources (Asadi and Andrimida, 2017). The research results from SWOT table showed that the condition of coral reef cover in the core zone and the Bangsring Underwater Joint Protection Zone is dynamic and continues to change in a positive direction (Anugrah, 2015). Because of the important role of these waters for the community's economy as a tourist attraction and for the richness of biodiversity, especially in Banyuwangi, it is necessary to carry out sustainable coral reef conservation activities. The rehabilitation activity will be carried out jointly between the BISA Indonesia organization and Pokdarwis (Tourism Awareness Group) of Bangsring Underwater with Pertamina TBBM Tanjung Wangi's support (Bisaindonesia, 2018; Eshun and Tichaawa, 2020). Apart from coral reef rehabilitation activities, other activities were also

carried out, such as increasing the capacity of BISA Indonesia counterparts (Bangsring conservation groups) in managing the Bangsring waters area. So that with this program, it is assumed that the community can independently manage the marine ecosystem so that the sea can be of better quality, and its benefits will be more significant for the welfare of the community, especially the people of Bangsring and Banyuwangi (Bisaindonesia, 2019).

CONCLUSION

Bangsring underwater has a high potential with some attractions, is accessible, and has amenities needed for the tourists. Management of underwater Bangsring ecotourism as a conservation-based coastal tourism destination is shown from various cultivations carried out with managers, stakeholders, and the community to maintain the ecology on the coast. As a result of various actions that can potentially damage the coastal environment, the Bangsring Underwater tourism environment has been developed by prioritizing environmental conditions. Systematic and sustainable management focused on ensuring the continuity of underwater life to increase domestic and foreign tourists. Coastal conservation has the main coordinator, namely the Samudera Bakti Group, who also works closely with all communities and stakeholders. Significant developments after implementing the conservation strategy have saved the rehabilitation of the marine environment and increased the economic growth of the surrounding communities.

REFERENCES

- Anugrah, P.T. (2015). Coral Growth Conditions Implemented by the Bakti Ornamental Fish Fishermen Group, Banyuwangi Regency, East Java. www.repository.uib.ac.id.
- Asadi, M.A., & Andrimida, A. (2017). Economic Valuation of Coral Reefs Ecosystem of Bangsring, Banyuwangi, Indonesia. *ECSOFiM: Journal of Fisheries and Marine Socioeconomics*, 04 (02), 144-152, Permalink. <http://dx.doi.org/10.21776/ub.ecsofim.2017.004.02.04>
- Asmit, B., Syahza, A., Mahdum, A., & R.M.R. (2020). Opportunities and Prospect for Tourism Deveopmnet on Rupert Island, Indonesia. *Folia Geographica*, 62(2). 133-148
- Atmodjo, E., Lamers, M., & Mol, A. (2019). Governing Dynamics in Marine Conservation Tourism in Raja Ampat, Indonesia. *Tourism Planning & Development*, 16(5), 655-673. <https://doi.org/10.1080/21568316.2019.1686652>
- Budiman, Arif, M., Mawardi, M.K., & Hakim, L. (2017). Identification of Potential and Development of Tourism Products and Tourist Satisfaction of Tourism Products (Case Study in Bangsring Underwater, Banyuwangi Regency). *Jurnal Administrasi Bisnis (JAB)* Vol. 50 No. 4 September 2017 www.administrasibisnis.studentjournal.uib.ac.id
- Dilwan, A.M., & Astina, I.K. (2019). *Community Based Wakatobi Tourism Management Strategies*. In 1st International Conference on Social Knowledge Sciences and Education (ICSKSE 2018). Atlantis Press. <https://dx.doi.org/10.2991/icskse-18.2019.9>
- Eshun, G., & Tichaawa, T.M. (2020). Community Participation, Risk Management and Ecotourism Sustainability Issues in Ghana. *GeoJournal of Tourism and Geosites*, 28(1), 313–331. <https://doi.org/10.30892/gtg.28125-472>
- Hadi, M.R.R. (2019). Development of Bangsring Underwater Ecotourism for the Improvement of the Socio-Economic Conditions of the Fishermen Community (Descriptive study of the Fishermen Community of the Samudera Bakti Group in Bangsring Village, Wongsorejo District, Banyuwangi Regency). <http://repository.unej.ac.id/handle/123456789/92044>
- Lucrezi, S., Ferretti, E., Milanese, M., Sarà, A., & Palma, M. (2020). Securing sustainable tourism in marine protected areas: Lessons from an assessment of scuba divers' underwater behaviour in non-tropical environments. *Journal of Ecotourism*, 0(0), 1–24. <https://doi.org/10.1080/14724049.2020.1856122>
- Marlina, Sumarmi, Astina, I.K., & Susilo, S. (2021). Social-Economic Adaptation Strategies of Bajo Mola Fishers in Wakatobi National Park. *GeoJournal of Tourism and Geosites*, 34(1), 14–19. <https://doi.org/10.30892/gtg.34102-613>
- Miles, M.B., & Huberman, A.M. (2002). *Qualitative Data Analysis*. Jakarta: UI Press.
- Moleong, L.J. (2004). *Qualitative Research Methodology*. Bandung: PT Remaja Rosdakarya
- Montemayor, A.M.C., Garcia, E.E.B., Zavala, O.B., & Bocos, A.A. (2020). Chapter Three - Shark ecotourism in Mexico: Scientific research, conservation, and contribution to a Blue Economy. In D. Lowry & S. E. Larson (Eds.), *Advances in Marine Biology* (Vol. 85, pp. 71–92). Academic Press. <https://doi.org/10.1016/bs.amb.2019.08.003>
- Nurhidayah, A. (2017). Suitability Study and Supporting Capacity of Community-Based Coastal and Coral Reef Ecotourism Areas in Bangsring Underwater Banyuwangi, East Java. *Sarjana Thesis*, Universitas Brawijaya. WWW.repository.uib.ac.id
- Sulistiwati, R., Meiliyana, M., Ma'arif, S., & Meilinda, S.D. (2020). Stakeholder Partnership in the Management of Marine Tourism in South Lampung Regency, Lampung. *Indonesian Journal of Tourism and Leisure*, 1(2), 82–91. <https://doi.org/10.36256/ijtl.v1i2.105>
- Sumarmi, Kurniawati, E., & Aliman, M. (2020a). Community-based Tourism (CBT) to Establish Blue Economy and Improve Public Welfare for Fishing Tourism Development in Klatak Beach, Tulungagung, Indonesia. *GeoJournal of Tourism and Geosites*, 31(3), 979–986. <https://doi.org/10.30892/gtg.31307-530>
- Sumarmi., Bachri, S., Irawan, L.Y., & Kurniawati, E. (2020b). Cultural Ecology of Osing in Development of Kemiren Tourist Village as International Tourist Attraction. *IOP Conf. Series: Earth and Environmental Science* 485 (2020) 012017 IOP Publishing. <https://doi.org/10.1088/1755-1315/485/1/012017>
- Sumarmi, Bachri, S., Tanjung, A., & Mutia, T. (2019). A Study on the Local Wisdom of the Bali Aga Community Metruna Nyoman in the Indigenous Forest as an Effort to Build Character of Caring for the Environment. *Ecology, Environment and Conservation*, 25(4), 1638-1643.
- Untari, S., & Suharto, Y. (2020). The Development of Youth and Woman Entrepreneurship Program in Village Tourism through Partnership. *GeoJournal of Tourism and Geosites*, 33(4spl), 1538–1544. <https://doi.org/10.30892/gtg.334spl14-605>
- Yudhantara, R.D. (2017). Economic Evaluation of Coral Reef Ecosystem in Bangsring Underwater, Bangsring Village, Wongsorejo District, Banyuwangi Regency, East Java Province. *Sarjana thesis*, Universitas Brawijaya
- *** BPS. (2020). *Kabupaten Banyuwangi Dalam Angka 2020* [Banyuwangi Regency in Figures 2020]. Banyuwangi: Central Bureau of Statistics. <https://banyuwangikab.bps.go.id/publikasi.html>
- *** Bisaindonesia.com. (2018). <https://bisaindonesia.com/2018/08/31/Underwater-Study-in-Bangsring-Underwater-Research-Based-Conservation>
- *** Bisaindonesia.com. (2019). *Community Bangsring Rehabilitation Research-Based Conservation Marine Ecosystem*. <https://bisaindonesia.com/2019/01/25/rehabilitasi-ekosistem-laut-bangsring>.
- *** Law No. 10 of 2009 on Tourism. <http://www.kememparekraf.go.id/post/undang-undang-republik-indonesia-nomor-10-tahun-2009>
- *** World Economic Forum. (2017). *The Travel and Tourism Competitiveness Report 2017*. Geneva: The World. Retrieved from <http://reports.weforum.org/travel-and-tourism-competitiveness-report-2017/methodology-details/>