

Literature study of the Karangsong mangrove development strategy to become a tourist attraction

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Abstract

Karangsong mangrove ecotourism Indramayu is a tour that was opened in 2015 and a conservation area which is intended as a means of educating tourists about environmental sustainability. The existence of mangrove forest areas as a barrier from abrasion disasters, and can become a tourist attraction in Indramayu. This study aims to determine the attractiveness of Karangsong mangrove forest tourism as a community tourism destination, to find out strategies to increase the potential for visitors from all over Indonesia and even from abroad. However, interest in visiting the Karangsong forest is not optimal, every month there is a decrease in visitors. Even not everyone knows about the Karangsong Mangrove. This is evidenced from previous research data. The method used is library data collection, reading and taking notes, and managing research data in an objective, systematic, analytical, and critical manner. The conclusion of this research is to develop a type of mangrove tourism in Karangsong. In addition, this type of attraction can be an educational tool that will attract the public's interest in visiting Karangsong Mangrove faster development.

Keywords: mangrove, mangrove attraction, strategy development.

A. INTRODUCTION

Indramayu is a city with an area of +204,011 ha, which is divided into 31 sub-districts and 302 villages, Indramayu city has a population of 1,888,890 in 2022, while in 2018 the population was 1,719,187, which has an increase of 169,603 people. The Indramayu region is close to Pamban Harbor, which has a travel time of 45 minutes from the city of Indramayu. With an average slope of 0-2%, most of the area is plain. Indramayu Regency is located on the north coast of Java Island with a coastline length of 147 km, The results of natural resources in Indramayu Regency are very abundant, which makes investors interested in the location. In terms of the economy, Indramayu is not only famous as the granary of West Java but also the Mango City. One of the factors influencing the structure of Indramayu's economy is the presence of the Balongan oil refinery, which has been operating since 1997. Economic activities related to the oil and gas sector play an important role in the development of the region's economy.

Mangrove itself is defined differently by various experts. However, all of these definitions refer to the same thing. According to the kkp.go.id page, by Saenger in 1983. Mangrove trees are identified as typical littoral plants that grow on protected tropical and sub-tropical coasts. Meanwhile, mangrove trees described by Soerianegara (1987) are forests that are usually located in river estuary areas and coastal areas that develop on mud

soils or so-called alluvial soils and their existence is influenced by tides. Mangrove forests are tropical coastal communities dominated by several types of trees that can grow in tidal areas (especially on sheltered beaches, lagoons, river mouths, and estuaries). According to Law No. 41/1999 governing Forestry, mangroves are forest vegetation that develops on (alluvial) soils in coastal areas and river estuaries whose existence is influenced by tides.

The scientific name of mangrove is "Rhizophora mucronata Poir, while other Indonesian names are true mangrove, black mangrove, and others. The diameter of the mangrove trunk can reach 70 cm, while the height of the tree can generally reach 27 meters. The bark of mangrove trees is dark to black, the bark has horizontal striped fragments. Mangrove trees also have flowers, the flowers are usually in groups and have 4-8 florets. Mangroves occupy the most diverse habitats, ranging from mud, sand to rock or coral fragments. The existence of mangrove forests ranges from dry land to coastal land. Mangrove forests consist of various types of plants, ranging from the genus *Avicennia*, *Sonneratia*, *Rhizophora*, *Bruguiera*, *Ceriops*, *Lumnitzera*, *Excoecaria*, *Xylocarpus*, *Scyphophora*, and *Nypa*. However, Karangsong Mangrove has different characteristics from mangrove forests in other areas. This mangrove forest has typical plant species, such as oil mangrove (*Rhizophora apiculata*), ringtail mangrove (*Rhizophora mucronata*), white fire (*Avicennia alba*), black fire (*Avicennia marina*), and red fire (*Avicennia officinalis*). In addition, the Karangsong mangrove forest also has a different topography from mangrove forests in other areas, which is in the form of lowlands located along the coast.

Mangrove planting in Karangsong has various benefits for the city of Indramayu, ranging from the general benefits of mangrove planting, namely preventing coastal erosion and abrasion, providing habitat for various marine species around Karangsong mangroves in preventing waste pollution due to Pertamina's oil leak. In addition, planting mangrove trees can provide a beautiful view, so that beauty can be utilized by the local community to create environmentally sound educational destinations or tourism activities called ecotourism which hopefully can attract people to visit. Ecotourism can be a source of livelihood for the local community, ecotourism is expected to help the local community from an economic point of view. Besides being able to help the community from an economic point of view, ecotourism activities also inadvertently involve local communities in preserving nature and the environment and promoting sustainable development in the area. The local community has been actively involved in planting and conservation efforts as well as Pertamina who helps support mangrove planting and conservation efforts in Karangsong. Overall, mangrove planting has had a positive impact on the environment, local communities, and the regional economy.

One of the villages in Indramayu Regency in the 1960s, Karangsong Village had the potential to preserve mangrove forests. But around 1985 the local community began to convert mangrove forests into shrimp ponds, by 1990 mangrove forests had become ponds, which resulted in the area experiencing enormous abrasion. In 2008, Karangsong beach was polluted by PT Pertamina's oil pipeline leak, which initially the beach became a place to make a living for residents now became damaged and made the activities of fishermen stop because many fish died, in addition to fish on the beach, residents' ponds were also damaged. This had a huge impact on the community. After the tragedy, residents wanted to turn the destroyed ponds back into mangrove forests, but despite their limitations, the government and PT Pertamina helped the community by planting mangroves. As a form of responsibility, PT Pertamina began rehabilitating mangroves as many as 16 thousand seedlings and providing education on how to plant and maintain mangroves to residents,

their goal of planting mangroves is to be protected from abrasion. On June 15, 2014, the government, PT Pertamina inaugurated the laying of the first pole of the mangrove forest with an area of 58ha. The operation of the mangrove forest began in July 2015, but in 2015 – 2016 the visitor data decreased due to the lack of activities in the mangrove forest, plus the rainy season. The mangrove area manager introduced activities in the mangrove forest, such as education, fishing with fishermen, and expanding the route so that people can travel around the area by boat to enjoy the scenery and study the flora and fauna, in response to the respondents’ responses. In addition to being protected from abrasion, coastal communities also utilize the mangrove forest as a place to improve their economic well-being.

Mangrove forests have the potential to be developed as an attractive tourist attraction. In addition, the development of mangrove ecotourism can provide economic benefits for the surrounding community and increase awareness about the importance of environmental conservation (Yulianto, 2016) and (M. Fauzi, n.d.). Mangrove forests have an important role in preventing natural disasters in coastal areas. In addition, mangrove forests can also be developed as tourist attractions and educational facilities to raise awareness about the importance of environmental conservation. (BPSDM Marine and Fisheries, n.d.). Overall, experts agree that mangrove forests have the potential to be developed as an attractive tourist attraction and educational facility. In addition to providing economic benefits to the surrounding community, the development of mangrove tourism can also increase awareness about the importance of environmental conservation and the prevention of natural disasters in coastal areas.

B. METHODS

The method used in this research is literature study research. The literature study in this research is a series of activities related to library data collection methods, reading and recording, and managing research data objectively, systematically, and analytically.

C. RESULT AND DISCUSSION

Journal 1

According to Utari (2019), The name of this journal is “DEVELOPMENT OF TOURISM ATTRACTIONS BASED ON WISEWORKS’ ASSESSMENTS AND PREFERENCES IN KARANGSONG MANGROVE AREA, INDRAMAYU DISTRICT” The research method used a descriptive method with a quantitative approach.

The results showed that Karangsong Mangrove Area is a tourist attraction that has the beauty of natural scenery and its location in front of Karangsong Lestari Beach. This area has a total area of 58 hectares. Currently, the area is managed by the Tourism Activist Group (Kompepar), but the task of advancing and promoting this area as a tourist destination in the Indramayu Regency will be given to the Indramayu Regency Tourism Office.

In Karangsong Mangrove Area, tourists can do tracking activities, take pictures, and play around the beach. Tracking activities are the core activities in this area because there are no other facilities provided by the manager to support tourist activities. In addition, this area has several tourism potentials, including:

- a) Mangrove: Green scenery and dense trees, this area also has mangrove flora and fauna that provide natural beauty.
- b) Karangsong Sustainable Beach: Karangsong Mangrove Area is directly opposite Karangsong Sustainable Beach. The main tourist attraction in Indramayu Regency is beach tourism, and the location of this mangrove area adjacent to the beach can increase tourist attraction in the area.
- c) Ponds: In this village, there is also a Fish Auction Place (TPI) and many residents work as fishermen. Ponds owned by residents in front of the Karangsong Mangrove Area can be utilized as a tourist attraction, such as fishing activities for tourists.

Tabel 2. Rekapitulasi Penilaian Wisatawan terhadap Atraksi Wisata

No	Pernyataan	Skor total	Ket.
<i>Something to see</i>			
1	Keindahan pemandangan	410	Baik
2	Penataan fasilitas wisata (toilet, papan petunjuk arah, dan gazebo)	282	Cukup
3	Kebersihan	256	Kurang Baik
4	Kerapihan (keberadaan saung-saung di area parkir)	303	Cukup
5	Pintu utama (tersedia gambar ikon dan papan nama lokasi)	301	Cukup
6	Ketertarikan terhadap wisata mangrove	402	Baik

7	Kelengkapan fasilitas pendukung (track/jembatan kayu, menara pemantau, dan leaflet)	304	Cukup
8	Kondisi fasilitas pendukung (track/jembatan kayu dan menara pemantau) di Kawasan Mangrove Karangsong	252	Kurang Baik
9	Toilet, gazebo, menara pemantau, dan tempat makan	260	Cukup
10	Laban parkir yang tersedia	272	Cukup
11	Tempat tiket	258	Kurang Baik
12	Tempat beristirahat dan bersantai	341	Baik

No	Pernyataan	Skor total	Ket.
13	Akses Jalan	326	Cukup
<i>Something to buy</i>			
14	Ketersediaan Warung Makan dan Minuman	241	Kurang Baik
15	Kondisi warung makan dan minuman	250	Kurang Baik
16	Harga makanan dan minuman	277	Cukup
17	Penjual souvenir	234	Kurang Baik
18	Keberagaman souvenir	243	Kurang Baik
19	Kekhasan souvenir	245	Kurang Baik
20	Kualitas souvenir	282	Cukup
21	Harga souvenir	248	Kurang Baik
22	Harga tiket mangrove	315	Cukup
JUMLAH SKOR TOTAL		6302	

Based on research, the development plan for tourist attractions in the Karangsong Mangrove Area is considered very important to increase the number of tourists, where according to the results of the respondents, there are still those who give an unfavorable assessment of the tourist environment, for example; cleanliness, inadequate ticket booths,

inadequate places to eat and drink, and tourist attractions currently owned are considered less diverse, so it is feared that tourists will quickly feel bored. Therefore, it is necessary to have a development plan that will create innovations in the tourist area.

The results of the data illustrate the current condition of the Karangsong Mangrove Area as a tourist attraction and also mention the tourism potential that exists in the area, such as the beauty of mangroves, Karangsong Lestari beach, and ponds.

The following is the “SWOT ANALYSIS” from the journal:

Strengths:

1. Karangsong mangrove area has amazing natural beauty and biodiversity which is the main attraction for tourists.
2. Tourist assessments of tourist attractions in the Karangsong mangrove area tend to be positive, indicating strong attraction potential.
3. There is potential for the development of tourist attractions based on education and environmental sustainability, which can provide added value to the tourist experience.
4. The relatively close distance from the city center of Indramayu district (about 3 km) facilitates tourist access to the Karangsong mangrove area.

Weaknesses:

1. The mangrove area is not managed directly by the tourism office of Indramayu City, but through a tourism drive group, so coordination and management can be more complicated.
2. Tourists consider the number of merchants in the mangrove area to be very limited, which can affect the comfort and variety of their tourism experience.
3. Infrastructure in the Karangsong mangrove area is still inadequate to support tourism, such as public facilities and sufficient information markers.
4. There is still a lack of public and visitor awareness in maintaining cleanliness and environmental sustainability in the Karangsong mangrove area, which can affect the tourism experience.
5. Tourist attractions in the Karangsong mangrove area are still lacking in terms of development and maintenance.

Opportunities:

1. The potential for developing tourist attractions based on education and environmental sustainability can increase tourist attraction and provide economic and social benefits for the local community.
2. Cooperation can be done with related parties, such as the tourism office and local government, to improve infrastructure and facilities in the Karangsong mangrove area.

Threats:

1. The potential for environmental damage due to irresponsible tourist visits, such as litter and damage to natural habitats.

2. Competition with other tourist destinations in the surrounding area, can affect the attractiveness and number of tourist visits to the Karangsong mangrove area.

Here is the “FIVE FORCE ANALYSIS” from the journal:

1. Rivalry: In the context of tourist attractions in the Karangsong Mangrove Area, potential competitors can be a significant threat. Tourist areas around Indramayu Regency or surrounding areas may offer similar tourist attractions or have competitive attractions. Therefore, it is necessary to consider effective marketing strategies to attract the attention of tourists and face this competition.
2. New Entrants: With the potential for new tourist attractions or development around the Karangsong Mangrove Area can be a threat to the entry of new competitors. To overcome this threat, it is important to continue to strengthen and improve the unique attraction offered by this mangrove area and build a competitive advantage that is difficult to imitate.
3. Substitute Products: Although the Karangsong Mangrove Area has unique and distinctive natural attractions, there is still potential for tourists to choose alternative tourist destinations that can be substituted. For example, if tourists are looking for beach tourism attractions, they may prefer other beach tourism destinations around Indramayu or even elsewhere. Therefore, it is necessary to focus on maintaining the uniqueness and specialty of this mangrove area to reduce the threat of substitute products or services.
4. Suppliers: Suppliers can refer to parties that play a role in the management and development of the Karangsong Mangrove Area, such as the Indramayu Regency Tourism Office or the Tourism Activist Group (Kompepar). Supplier power negotiations can be relevant in cooperative arrangements, development planning, and allocation of resources needed to improve tourist attractions. It is important to maintain good relationships with these parties and ensure synergy in the development of the tourism area.
5. Buyer: The power of buyers or tourists is an important factor that needs to be considered. The judgment and preferences of tourists should be the basis for developing tourist attractions. Given that there are unfavorable assessments related to the tourist environment, cleanliness, inadequate facilities, and lack of variety of tourist attractions, it is necessary to focus on improving the quality of the visitor experience, improving facilities, and creating innovations in the area.

Journal 2

According to Sa'diyah et al. (2017), The name of this journal is "DETERMINATION OF IMPORTANT FACTORS BASED ON COMMUNITY ACTIVITIES FOR THE DEVELOPMENT OF MANGROVE FOREST REHABILITATION AREAS IN KARANGSONG ISLAND, INDRAMAYU DISTRICT" The research method used a case study method with a grouping method, as well as a qualitative description method.

The results of the research are four variables, namely nature tourism, functions and benefits, community involvement in management and frequency of consumption, and

knowledge that has emerged from studies of significant community factors. Nature tourism factors consist of the social functions of mangrove forests, economic activities, types and potential for tourism areas, and the origin of visitors or tourists. Frequency of utilization and understanding is a very important element because it can inspire people to learn more about mangroves. To change the perspective of a group or community, knowledge is a must. This information relates to how often the community utilizes it.

The findings of this study are consistent with other studies, such as Pratama's (2014) study, which found that community participation in protecting mangrove forests increases along with the increase in community understanding. Because of the many economic activities that occur in mangrove forest areas, issues that damage mangrove ecosystems (human influence) will become more prevalent.

Tabel 1. Matriks Rotasi Komponen Kategori Masyarakat

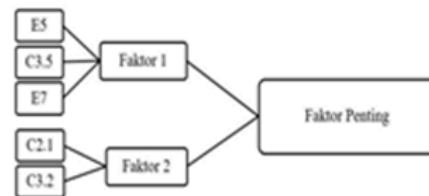
Kode	Faktor				Keterangan
	1	2	3	4	
C3.5	.929	.034	.175	.036	Faktor pengganggu ekosistem
E7	.843	.044	.184	.279	Kegiatan ekonomi di area wisata
E5	.821	.332	.060	.141	Potensi untuk tempat wisata
E6	.711	.314	.454	.110	Jenis wisata
C2.5	.660	.394	.366	-.109	Fungsi sosial hutan mangrove
E4	.599	.083	-.118	.336	Asal pengunjung/wisatawan
C2.4	.195	.889	.236	.009	Fungsi fisik hutan mangrove
C2.3	.287	.876	.149	-.064	Fungsi ekonomi hutan mangrove
C2.2	.078	.767	-.264	.161	Fungsi ekologis hutan mangrove
C3.2	.049	.726	.524	.102	Manfaat hutan bagi manusia
C2.1	.118	.708	.260	.414	Pengetahuan fungsi hutan mangrove
D2	.100	.031	.911	.120	Keikutsertaan dalam pengelolaan
E8	.299	.222	.839	.072	Efek negatif hutan mangrove menjadi area wisata
C3.3	.219	.073	.162	.902	Frekuensi pemanfaatan hutan mangrove
E2	.362	.484	.050	.512	Pengetahuan tentang ekowisata

Sumber: Hasil Penelitian, 2016

Tabel 2. Matriks Rotasi Komponen Kategori Pengelola

Kode	Faktor		Keterangan
	1	2	
C4	.961	-.077	Rekomendasi dan upaya pengembangan ekowisata
B6	.902	.244	Ancaman bagi kondisi hutan mangrove
B12	-.632	-.151	Pengaruh upaya konservasi terhadap kondisi hutan mangrove
B11	-.096	.976	Respon masyarakat terhadap kelompok dalam pengelolaan
C1	-.168	-.936	Kondisi hutan mangrove dilihat dari kerapatan dan keragaman

Sumber: Hasil Penelitian, 2016



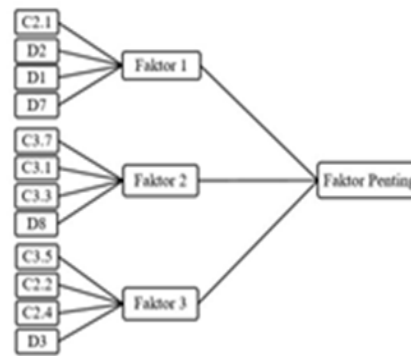
Gambar 2. Faktor Penting Pengelola

Two key components of management are management activities and the influence and reaction of the community toward managing mangrove areas. Management efforts and recommendations in the development of ecotourism carried out by the manager, Pantai Lestari Group, influence the condition of the mangrove forest itself. Karangsong Beach mangrove forest is vulnerable to threats such as coastal erosion, ROB (highest tide), land use change, and others. According to the manager, efforts made against existing risks in the mangrove forest area are sufficient. However, stakeholder participation needs to be maximized, for example including the surrounding community in the management of mangrove forest areas. The community reacts well to management initiatives. If the condition of the mangrove forest in terms of density and diversity is high (good), then the community response to management is low, but if the condition of the mangrove forest in terms of density and diversity is low, then the community response is high. Community response to management activities is good.

Tabel 3. Matriks Rotasi Komponen Kategori Pelaku Perikanan

Kode	Faktor			Keterangan
	1	2	3	
C2.1	,938	,269	,205	Pengetahuan tentang fungsi hutan mangrove
D2	,938	,269	,205	Pengetahuan tentang ekowisata
D1	,938	,269	,205	Pelaku pengelolaan ekowisata
D7	-,938	-,269	-,205	Kegiatan ekonomi di area wisata
C3.7	,277	,935	,220	Frekuensi kegiatan di kawasan hutan mangrove
C3.1	,109	,887	,173	Tingkat manfaat mangrove
C3.3	,396	,820	,228	Frekuensi memanfaatkan mangrove
D8	-,396	-,820	-,228	Efek negatif pengembangan hutan mangrove menjadi area wisata
C3.5	-,061	,400	,873	Faktor pengganggu ekosistem mangrove
C2.2	,475	-,145	,868	Fungsi ekologis hutan mangrove
C2.4	,333	,436	,796	Fungsi fisik hutan mangrove
D3	,237	,260	,767	Tanggapan tentang hutan mangrove menjadi area wisata

Sumber: Hasil Penelitian, 2016



Gambar 3. Faktor Penting Pelaku Perikanan

There are 3 important criteria, namely knowledge, frequency of use, and conditions that damage mangrove ecosystems are very important for fisheries actors. The crucial component is the understanding of fisheries actors on the function of mangrove forests and ecotourism. This is because the frequency of mangrove forest utilization will be affected if fisheries actors do not have sufficient knowledge about mangrove forests.

The role of the mangrove ecosystem and Its harmful components is a crucial factor. Ecological and physical functions are two important functions of mangrove forests. Human activities are the main cause of the disruption of mangrove forest areas in the mangrove rehabilitation area of Karangsong Beach. The knowledge component is the most important element for fisheries actors, as well as an important element in society.

The following Is the “SWOT ANALYSIS” from the journal:

Strengths:

1. The rehabilitation program makes the Karangsong mangrove area more developed.

Weaknesses:

1. A lack of community understanding of the importance of mangrove forest conservation indicates the need for further education and awareness efforts.
2. The growth of the mangrove forest rehabilitation zone, which requires ongoing care and maintenance, is hampered by a lack of human and financial resources.
3. Not involving the surrounding community in the management of mangrove forest areas can reduce the participation and support needed to maintain the sustainability of the ecosystem. Participation in ecotourism management is only carried out by individual members of the management group.

Opportunities:

1. The economic potential generated from mangrove forests can improve the welfare of local communities through sustainable utilization such as ecotourism tourism and mangrove-based products.
2. Support from the central government in the development of mangrove forest rehabilitation areas can provide access to additional resources and a wider network of cooperation.

Threats:

1. The threat of coastal abrasion, ROB (high tide), and land use change in the mangrove forest area of Karangsong Beach threaten the sustainability of the ecosystem and rehabilitation area.
2. Human activities such as illegal logging and fisheries that damage mangrove forest ecosystems can disrupt the regeneration and growth of mangrove vegetation.
3. Climate change can affect the growth and survival of mangrove forests, including increased seawater temperature, increased acidity, and increased storm intensity.

Here is the “FIVE FORCE ANALYSIS” from the journal:

1. Rivalry: Natural tourism factors, including economic activities, types and potential of tourist areas, as well as the origin of visitors or tourists, can be associated with competition between mangrove attractions on Karangsong Beach with other attractions around Indramayu or surrounding areas. In improving tourist attractions, it is important to consider the attractiveness of unique mangrove areas and their competitive advantages to face competitors and develop effective marketing strategies to compete with competitors.
2. New Entrants: If there are new economic activities or tourist attraction developments related to mangrove forests in the surrounding area, this may pose a threat. It is important to continuously monitor developments in the sector and take appropriate actions to maintain the competitive advantage of the Karangsong Beach Mangrove Forest Rehabilitation Area.
3. Substitute Products: Factors such as frequency of utilization and community knowledge related to mangrove forests can be taken into consideration in seeing the potential replacement of visitors or tourists with alternative tourist destinations. Public knowledge and awareness about the importance of mangrove conservation and the benefits of ecotourism can be a factor that influences their choice of visiting the Karangsong Beach mangrove area as a tourist attraction.
4. Supplier: Management factors and the influence of managers in the development of ecotourism can be linked to the role of suppliers. In this case, suppliers refer to parties involved in the management and development of mangrove areas, such as the Pantai Lestari Group. It is important to consider the relationship with these suppliers, including stakeholder participation and community response to management, to ensure synergy in the development of mangrove attractions.
5. Buyers: Factors such as community knowledge, frequency of utilization, and damaging factors to the mangrove ecosystem can influence the power of buyers or

visitors. Increased knowledge and high frequency of utilization can contribute to the successful development of mangrove attractions. Community response to mangrove conditions can also affect the level of interest and decision of visitors in utilizing mangrove areas as tourist attractions.

Journal 3

According to Purnamasari et al. (2015), The name of this journal is “DEVELOPMENT OF MANGROVE EKOWISATA VILLAGE KARANGSONG, INDRAMAYU DISTRICT” The research method used a combined method between quantitative and qualitative data collection.

Based on the results of interviews with all respondents, there are differences in the level of perception of some respondents who consider the entrance ticket to the ecotourism site to be expensive. Respondents hope that access to the location will be facilitated by building a bridge and visitors can go to the location on foot while enjoying the view. Completeness of tourist facilities and infrastructure is expected to provide satisfaction to tourists, the results of interviews also show that public knowledge about ecotourism is still low, namely 80% of the community cannot describe ecotourism, as well as the perception of managers, namely 60% of managers who are respondents do not know ecotourism. However, the results of answers from visitors show that as many as 65% of visitors do not understand the benefits of mangrove forests from an economic, ecological, and biological perspective and the impact of mangrove forest damage on life on the coast. Different levels of perception are influenced by the background of each respondent, one of which is education. Education will affect a person’s level of knowledge. The level of involvement in an activity will be influenced or based on the high and low perception of a person or group.

Tabel 5. Partisipasi Masyarakat dalam Pengembangan Ekowisata Mangrove

Subjek Evaluasi	Masyarakat					Pengunjung					Pengelola				
	1	2	3	4	Jml	1	2	3	4	Jml	1	2	3	4	Jml
A.	22	1	2	0	25	0	2	0	18	20	0	0	0	5	5
B.	13	7	4	1	25	20	0	0	0	20	0	2	0	3	5
C.	12	2	6	5	25	16	0	4	0	20	0	4	1	0	5
D.	10	6	6	3	25	5	3	12	0	20	0	0	0	5	5
E.	18	1	0	6	25	0	9	11	0	20	0	0	0	5	5
F.	19	2	4	0	25	2	8	0	10	20	0	0	0	5	5
Jml	94	19	22	15		43	22	27	28		0	6	1	23	
%	63	13	15	10	100	36	18	23	23	100	0	20	3	77	100

Keterangan:- skor 1 : Tidak pernah; 2 : Pernah; 3 : Kadang-kadang; 4 : Sering

- pertanyaan:

- A. partisipasi pengelolaan/ pengembangan ekowisata
- B. partisipasi dalam kegiatan kelompok pantai lestari
- C. partisipasi dalam pemanfaatan hutan mangrove
- D. partisipasi dalam menjaga kebersihan wilayah ekowisata
- E. partisipasi dalam menjaga kelestarian wilayah ekowisata
- F. partisipasi dalam mencegah kerusakan hutan mangrove

D: dampak kerusakan mangrove bagi kehidupan pesisir;

E: pengertian ekowisata dan pengelolaan sumberdaya berbasis ekowisata

The level of participation of each respondent varied, with 88% of the community not participating in mangrove ecotourism activities since it opened, indicating low community participation. These respondents came from villagers who were not members of the Pantai Lestari group. Some people feel that they have not been involved in the management of the ecotourism area and have not experienced changes, especially in terms of their welfare. Aspirations from respondents for the development of mangrove ecotourism consist of developing tourist attraction objects, improving infrastructure facilities, and improving mangrove ecotourism management. As many as 64% of the community hopes for the addition of tour guide facilities to attract tourists, while 70% of visitors hope for information boards around tourist sites about the types and characteristics of mangroves to increase visitor knowledge and educational elements.

Based on the results of the identification of strategy prioritization, rank I show that mangrove ecotourism management requires good cooperation between stakeholders, namely the government, local communities, managers, and visitors. To improve the welfare of the community and contribute to preserving the mangrove ecotourism area in Karangsong Village, the local community is expected to feel the positive impact of the establishment of mangrove ecotourism.

In this case, the data can be used to identify visitor needs, local community aspirations, improve knowledge and perceptions, and promote stakeholder participation and cooperation in the development of sustainable and attractive mangrove ecotourism for tourists.

Here is the “SWOT ANALYSIS” of the journal:

Strengths:

1. Karangsong Village has a variety of tourism potential which includes nature tourism, cultural tourism, culinary tourism, and entertainment tourism.
2. The potential of mangrove ecosystems in Karangsong includes groups of birds (Aves), Gastropods, and Crustaceans, and there are five types of mangroves.
3. The Karangsong area has physical potential that supports the development of ecotourism, such as nurseries, bird watching, cleaning facilities, and mangrove trekking trails.

Weaknesses:

1. The community has not commercially utilized the mangrove ecosystem.
2. Public facilities such as toilets and rinse rooms are not yet available at tourist sites.
3. Water playgrounds for visitors are still not available.
4. Entrance tickets to ecotourism sites are in the expensive category.
5. Lack of information about the types and characteristics of mangroves through information boards around tourist sites.
6. Respondents still have a poor perception of ecotourism.

7. Community participation in ecotourism development activities is still lacking.

Opportunities:

1. Access to the tourist sites of Karangsong Village is very easy, especially because of its geographical location close to the capital city of Indramayu.
2. The potential of the mangrove ecosystem in Karangsong can be developed as an ecotourism destination that can provide economic benefits for the local community.

Threats:

1. Local community participation in mangrove area management is still lacking.
2. The need for proper management of mangrove ecosystems in Karangsong to prevent environmental damage.
3. Potential over-exploitation of mangrove ecosystems if not managed properly.

The following is the “FIVE FORCE ANALYSIS” from the journal:

1. Rivalry: In developing mangrove ecotourism in Karangsong Village, competitors can refer to other ecotourism areas around the area. If there is a mangrove ecotourism location that offers a similar experience or has a stronger attraction, this can be a threat to the success of mangrove ecotourism in Karangsong Village. Therefore, it is important to develop attractive tourist attractions, improve facilities and infrastructure, and improve ecotourism management to compete with competitors.
2. New Entrants: The potential entry of new competitors in the development of mangrove ecotourism must still be considered. If there are other parties interested in developing mangrove attractions in the area, this can be a threat to the mangrove ecotourism of Karangsong Village. Therefore, it is necessary to monitor developments in the sector and take appropriate action to maintain the attractiveness and competitive advantage of the Karangsong Village mangrove ecotourism area.
3. Substitute Products: Substitute products or services refer to alternative tourist attractions that can replace mangrove ecotourism as a tourist choice. If there is another tourist location that offers a more interesting experience or has a strong competitive advantage, tourists may choose to visit that location rather than Karangsong Village mangrove ecotourism. Therefore, it is important to increase the attractiveness of attractions, increase visitor knowledge, and improve management to remain the top choice for tourists.
4. Supplier: Suppliers can refer to the parties involved in the management and development of Karangsong Village mangrove ecotourism, such as the government, local communities, and managers. It is important to ensure the active participation of the local community as well as good coordination between various related parties. This can help achieve the goal of developing ecotourism sustainably.
5. Buyers: The power of buyers is tourists or visitors to the mangrove ecotourism of Karangsong Village. The level of knowledge and perception of visitors about mangrove ecotourism can affect their decisions and preferences. It is important to

increase visitors’ knowledge and understanding of the benefits of mangrove forests, both in terms of economics, ecology, and biology. In addition, it is also necessary to improve the quality of services and facilities that can meet the needs and provide satisfaction to visitors.

Identifying strengths, weaknesses, opportunities, threats, and the Five Forces Analysis, can help in understanding the factors that can influence the development of mangrove ecotourism in Karangsong Village. By paying attention to each of these aspects, managers and related parties can identify opportunities and threats, and develop appropriate strategies to increase the attractiveness and success of mangrove ecotourism.

According to Rossadi and Widayati (2018) Attractions or tourist attractions play an important role in influencing tourists’ decisions to visit a destination. (Law No.10 of 2009). Suwanto (1997) defines tourism infrastructure as natural resources and artificial resources that absolutely must be owned by tourists. According to Tourism infrastructure is related to accommodation, places to eat and drink, and object facilities at the location (Edward Inskeep, 1991).

The active involvement of the community in the management of tourist areas can increase their awareness and concern for environmental conservation, such as mangrove forests. The data shows that community participation in the management and frequency of utilization of mangrove forest areas is an important factor. The data shows that community knowledge about mangrove forests and the frequency of utilization of the area plays an important role. With increased knowledge, the community can become partners in the management and preservation of mangrove areas that have the potential to become tourist attractions (Sugiarti, 2004).

In addition to preventing abrasion, mangroves are home to fish and other animals, fisheries actors who have adequate knowledge of the functions of mangrove forest ecosystems tend to be more aware of the importance of preserving them. The data shows that knowledge, frequency of utilization, and destructive factors of mangrove ecosystems are important factors for fisheries actors. Fishery actors who know the benefits of ecotourism and the function of mangrove forests can contribute to the development of sustainable fisheries activities that are in line with the goals of preservation and development of tourist attractions (Noor et al (1999) in Rachmad (2011)).

D. CONCLUSION

Journal 1 emphasizes more on the development plan for tourist attractions and the potential development of specific tourist activities. Journal 2 emphasizes more on the important factors found in various categories of stakeholders. Journal 3 emphasizes more on the potential of flora and fauna, community perceptions, government participation in mangroves, and aspiration managers, as well as mangrove ecotourism development strategies.

The similarities of journals 1, 2, and 3 are the lack of public understanding of the importance of mangrove conservation, not including the surrounding community in the management of mangrove forest areas, only the management community manages mangrove tourism areas, public facilities are considered inadequate, and tourism actions are considered still lacking in terms of development and maintenance. From these similarities, it can be seen that the three journals have the same direction, namely

mangrove tourism areas require appropriate and sustainable strategies to provide economic and environmental benefits for local communities.

The most effective strategy in the development of the Karangsong mangrove tourism area is to involve local villagers to participate in the management of mangrove tourism areas. There are several ways for local villagers to actively participate in the management of the Karangsong mangrove tourism area, namely providing training and education on the importance of preserving mangrove forests and how to preserve them, encouraging community participation in mangrove tourism area management activities, such as cleaning up garbage and caring for mangrove plants, providing incentives or awards to people who actively participate in mangrove tourism area management, building partnerships with local village communities and providing opportunities for them to manage small businesses related to mangrove tourism areas.

In addition, building environmentally friendly facilities or infrastructure and introducing attractive tourist attractions can increase tourist attractiveness and the number of tourist visits to the Karangsong mangrove tourism area. It is expected that by implementing these strategies, the Karangsong mangrove tourism area can be developed sustainably and can provide economic and environmental benefits for the local community.

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