DEVELOPMENT STRATEGY FOR SPECIAL INTEREST TOURISM (SIT) THROUGH COMMUNITY-BASED ECOTOURISM (CBET) IN PERAWAN BEACH TO PROMOTE A SUSTAINABLE ECONOMY

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Abstract: Perawan Beach is a popular tourist destination due to its unique and beautiful natural views. The research aimed to: (1) identify the carrying capacity of the environment in developing ecotourism in Perawan Beach; (2) identify the economic conditions of the community around Perawan Beach to develop ecotourism; (3) identify community participation in developing ecotourism in Perawan Beach; (4) identify Special Interest Tourism (SIT) activities that are fit and attractive to tourists at Perawan Beach; and (5) develop optimization of Community-Based Ecotourism (CBET) strategies through Special Interest Tourism in Perawan Beach to promote the sustainable economy. This research method used the explanatory sequential mixed methods design. Data collection methods include field tests, observations, and interviews. The data analysis technique used is SWOT analysis using a quantitative descriptive approach based on the results of the IFAS and EFAS matrices. The SWOT analysis results demonstrated that the development of the tourism area in Perawan Beach is currently in quadrant III, indicating that development opportunity that can benefit tourist attractions is to increase tourism activities at the Pedotan and Gundang Wetan attractions through Special Interest Tourism (SIT). Moreover, it is essential to develop tourist attractions and integrate the ecological value of the area through edutourism-based development. Details of area development can be carried out in a sustainable manner, beginning with community participation, visitor training for environmental preservation, and training through Special Interest Tourism area of Perawan Beach, the Pedotan area, and the Gundang Wetan area.

Key words: community-based ecotourism, special interest tourism, development strategies

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INTRODUCTION

Coastal areas offer many benefits to the surrounding community. The environmental characteristics that define the boundary between land and water create an area filled in natural resources with unique characteristics in each location (Bungău et al., 2019; Husamah and Hudha, 2018). Some of the many resources that exist in coastal areas, such as fisheries, marine transportation infrastructure, the maritime industry, tourism, mining, and settlements, as well as the majority of industrial and residential activities, are found in coastal areas (Manik, 2019). If the coastal area focuses on developing the tourism sector, it can improve the economy, empower communities, maintain the ecology, and preserve local culture

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(Ciacci et al., 2021), allowing for its continued use in the Indonesian coastal environment (Astuti et al., 2020). Perawan Beach, like other beaches, is a popular tourist destination due to its unique and attractive natural environment (Sahrina et al., 2022). However, the development is not aligned with other beaches in South Malang. This beach is still very attractive, as evidenced by an area untouched by tourists, tourism developers/investors, or official publications (Interview, 2023).

This is likely a concern given that the area has been open to tourism since 2007 (Interview, 2023). The development of tourism at Perawan Beach is particularly slow, in contrast to the near beaches, which are able to support the "thousand beaches" tourism branding of the South Malang areas (Muluk, 2020). The incredible views of the mountain ranges along the route can provide relief to exhausted travelers. There are more areas to see, including plantations for huge trees of all different types, coffee, cocoa, and coconuts. Tourism development in Perawan Beach requires attention to a number of factors, including increasing promotion, conserving the environment through community participation, developing a variety of tourist attractions, completing supporting facilities, and enhancing the quality of human resources, to correspond with the objectives of sustainable development in terms of ecological, economic, and social dimensions that can be balance with culture (Cărbunar et al., 2022; Parmawati et al., 2020). Furthermore, tourism development that is quite diverse can operate more effectively if an appropriate development strategy is implemented (Sumarmi et al., 2021).

The development of ecotourism is an important strategy for promoting coastal tourism. The characteristics of this strategy are the reason that Perawan Beach, with better resources such as vegetation variations and local uniqueness, will be very promising to deliver progressive benefits through ecotourism development strategies (Santoso et al., 2019). This is aligned with information received from coastal managers indicating that they have difficulty directing the pace of area development despite the potential for environmental criteria to be developed as a tourism destination (Interview, 2023).

Based on the actual conditions in the field by collecting the results of observations and measurements, this study aimed to describe the condition of the area and design an optimization strategy for tourism development. The Perawan Beach area has a good opportunity of continuing to develop as a tourist destination. Observations on the field demonstrated that two major attractions had not been optimally developed due to various limitations. Therefore, the results of this study aimed to design the development of a sustainable tourism area based on an ecotourism development strategy supported by the main supporting tourist attractions, namely Pdotan and Gundang Wetan. The ecotourism strategy refers to diverse ecological conditions, amazing views, and unique landscapes, as well as opportunities for increasing the economy through community participation, in order to maintain the environment and support sociocultural communities (Bungău et al., 2019: Arrasyid et al., 2021). This study is expected to optimize regional development strategies by focusing on environmental conditions and ecotourism (Nasruddin et al., 2019). Ecotourism is a sustainable tourism development concept that integrates tourist activities with conservation with the goal of protecting nature, supporting the economy, and educating the public about environmental issues (Stronza et al., 2019). Along with its development, ecotourism has evolved into a strategy to build a stable economy by playing an essential role in environmental management and local community participation (Jaya et al., 2022). This is supported with the principle of community-based ecotourism, which requires simultaneously supporting the community and conserving the environment through sustainable tourism (Giriwati et al., 2019).

The sustainable community-based ecotourism strategy can be implemented in marine and coastal areas with tourism activities such as conservation, special interest tourism, and limited interest tourism (Wahono et al., 2019). The Community-Based Ecotourism (CBET) development model can be implemented through a multidimensional environmental, cultural, social, economic, and infrastructure approach to support the sustainability of ecotourism (Cărbunar et al., 2022; Nurhayati et al., 2019). As one of the beaches that did not receive optimal management, Perawan Beach has plenty of tourism development potential. Perawan Beach has a natural landscape with clear water and beaches with brownish-white sand. Perawan Beach is famous for its unique name, which attracts the curiosity of tourists. Perawan is the name given to this beach since it is still attractive and is rarely visited by visitors. Furthermore, this beach has a unique attractiveness due to its U-shaped formation, as if surrounded by two hills, which contributes to its beauty. The waves striking the shoreline and shattering the coral contribute to the exotic appearance of Perawan Beach. Tourists are not permitted to swim at Perawan Beach due to the huge and powerful waves, but they can enjoy the landscape around the beach and play in the sand on the beach, as well as in the water in the Pedotan and Gundang Wetan areas. Tourists can also take advantage of coastal cypress trees that were intentionally planted to prevent erosion as photo backdrops. Moreover, behind the dense seashore pine trees is a river mouth that is typically used for fishing by locals. Also, there are now floating net cages (KJA) on Perawan Beach that serve the purposes of fish farming, research, cycling trips, rowing, and nature tourism. One of the developments is Community-Based Ecotourism (CBET).

Community-Based Ecotourism (CBET) has the potential to create a blue economy through the use of sustainable marine resources for economic development, social welfare, and the protection of marine ecosystems. Implementation of Community-Based Ecotourism (CBET) plays a significant role in ecosystem protection, diversification of livelihoods, financial supports, and distribution of conservation benefits to remote areas if administered with the proper leadership and support (Phelan et al., 2020). Special interest tourism is a form of tourism that provides for specific preferences or interests of tourists (Sumarmi et al., 2020). This indicates that tourists visit to pursue or engage in activities that correspond with their interests or hobbies. There are many types of special interest tourism, including culinary tourism, cultural tourism, nature tourism, sports tourism, archaeological tourism, shopping tourism, and religious tourism (Zhang et al., 2023). Individual interests and preferences can be accommodated on special interest tourism, which typically provide a more indepth experience in a particular area of interest. Community-based ecotourism is an approach to managing and developing tourism that involves active community participation and direct community benefits (Sumarmi et al., 2021). This strategy prioritizes environmental sustainability, community empowerment, and cultural and natural preservation. Local

communities are directly involved in planning, managing, and benefiting from tourism operations in their area in community-based ecotourism (Zamzami et al., 2021). Local communities participate in decision-making, natural resource management, infrastructure development, and the delivery of tourism services and experiences (Giriwati et al., 2019). Some essential principles of community-based ecotourism include community participation, environmental sustainability, community empowerment, and cultural and heritage preservation (Nicolaides, 2020).

The primary objective of community-based ecotourism is not only to promote environmental tourism, but also to guarantee appropriate economic and social benefits for local communities (Phelan et al., 2020). This helps to minimize the negative impacts of conventional tourism while maximizing the positive potential in terms of environmental preservation, culture, and local community welfare (Husamah and Hudha, 2018). Thus, the development of sustainable special interest tourism can employ a framework that integrates environmental sustainability, community empowerment, and cultural preservation in the community-based ecotourism (Machado et al., 2019; Osman et al., 2018). These two approaches can have more beneficial effects on the development of sustainable tourism as a whole if they are implemented together.

Many research investigations on the development of Community-Based Ecotourism (CBT) strategies in Indonesia are frequently conducted, including: Community-Based Ecotourism (CBT) development for fishing tourism (Sumarmi et al., 2020), Community-Based Ecotourism (CBT) development on Lombok Island, Indonesia (Kuijstermans, 2020), Community-Based Ecotourism (CBT) for turtle conservation in West Sumatra (Zamzami et al., 2021), Community-Based Ecotourism (CBT) turtle conservation at Bajul Mati Beach (Irawan et al., 2022), Community-Based Ecotourism (CBT) for mangrove conservation (Sumarmi et al., 2021; Sumarmi et al., 2022), Conservation of cultural tourism on the Goa China Beach (Astina et al., 2021), and CBT on Pulau Merah, Banyuwangi (Sumarmi et al., 2021). Meanwhile, only few of these studies have investigated the development of special interest ecotourism on the coast. This study emphasizes on the development of a sustainable economy through the community-based management of special interest tourism. Based on the background of the problems above, this article aimed to: (1) identify the carrying capacity of the environment in developing ecotourism in Perawan Beach; (2) identify the economic conditions of the community around Perawan Beach to develop ecotourism; (3) identify community participation in developing ecotourism in Perawan Beach; (4) identify Special Interest Tourism (SIT) activities that are fit and attractive to tourists at Perawan Beach; and (5) develop optimization of Community-Based Ecotourism.

MATERIALS AND METHODS

This research was conducted at Perawan Beach, in Sidoasri Village, Sumbermanjing Wetan District, Malang Regency, East Java, Indonesia in 2023. This area is located in the South Malang coastal areas with a distance of \pm 64.1 Km from Malang City (Figure 1). This study utilized both quantitative and qualitative research methods, also known as mixed method research. The research design implemented refers to the explanatory sequential mixed methods design, in which the primary research is conducted through quantitative research, the research results are analyzed, and then the research results are explained in more detail through qualitative descriptions so that the integrity of the research can solve problems (Creswell and Creswell, 2017).



Figure 1. The Location of Perawan Beach (Source: Google Earth)

The data collected in a mixed-methods research design consists of both primary and secondary data. The following methods were used to collect primary data: (1) field observations of the sand beach area, the Pedotan area, the Klatakan area, and Gundang Wetan, the range of cypress trees, and the mangrove area; (2) field measurements of the length and width of the beach, the length of the Pedotan area, and the length of the Klatakan area; (3) in-depth interviews with tourism managers, village government leaders, MSMEs as tourism managers, including special interest tourism, local communities, and visitors (Sumarmi et al., 2020). Meanwhile, secondary data collection was conducted using monographic data from Sidoasri Village to examine tourism-supporting environmental conditions, infrastructure quality,

and marketing strategies (Hanafiah and Zulkifly, 2019; Truong et al., 2020). This study applied descriptive analysis using SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis and descriptions of environmental suitability classifications for Perawan Beach tourism. The data analysis technique based on the SWOT framework consists of two stages of analysis: 1) identifying the primary factors (natural resources, human resources, and tourism supporting factors) and 2) evaluating the Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS) (Fafurida et al., 2020). The weight of each factor was determined based on the results of interviews with individuals involved in the development of Perawan Beach ecotourism, as well as field observations and measurements of actual conditions. Then, the results of this evaluation will be categorized according to the SWOT matrix (Figure 2) so that the best decision alternatives can be identified and used as a design basis for optimizing the development of Perawan Beach Ecotourism (CBET) based on special interest tourism for sustainable community economic development. The research flow is shown in the following (Figure 3).

RESULTS AND DISCUSSION

The carrying capacity of the environment in the development of Perawan Beach ecotourism

Perawan Beach has a very adequate length and width and is shaped like a basin, giving it the look of being surrounded by a bay. This beach's sand is white and tends to be brown. Green plants, such as sea cypress trees and *keben* trees, flourish on the coastal area and contribute to its beauty. Administratively, Perawan Beach is located in Sidoasri Village, Sumbermanjing Wetan District, Malang Regency. This beach is called Perawan because it is not widely known or visited by people. The view of Perawan Beach is shown in (Figure 4).

However, it is less well-known than beaches in other Sumbermanjing Wetan Districts. Therefore, it must be developed into a more appealing coastal tourism destination with a focus on special interest tourism. The Government of Malang Regency continues to optimize the potential of Perawan Beach via the Culture and Tourism Office (Dinas Budaya dan Pariwisata) of Malang Regency. Currently, the development of Perawan Beach is centered on several enhancements. The coastal access road is in dire need of immediate improvement. Meanwhile, a number of additional facilities, including parking lots, rest areas, guesthouses, and restaurants that are not yet located on the coastal area, are in need of repair. Perawan Beach was opened in 2007 along with Sidoasri Beach to provide administrative information (Interview, 2023). This area has been established for quite some time, but it is still inaccessible to tourists, as is the case with other beach tourism in the South Coastal Area of Malang.

Therefore, urgent efforts are required to enhance the area's value by balancing ecological value. Perawan Beach's natural environment is ideally suited for use as a tourist destination. A supportive coastal environment is evident from the coast's length of nearly 2 kilometers (1,870 meters), its average width of 25 to 30 meters, and its gentle slope of 11.8% (field observation, 2023), so that visitors have a comfortable space that is quite extensive along the coast. Along the coastal area of Perawan Beach, dense vegetation and shrubs/savanna cover the land. The weather conditions are typically cloudy with an average wind speed of 10-8 m/s, allowing tourists to camp.







Figure 3. Research Flow Chart (Source: Research Analysis, 2023)

This beach classification includes curved beaches that are inclined like small harbors and have sandy beach morphology, so that fine to medium-sized sand dominates the beach material (Primary data, 2023). The different changes of the coastal environment indicates that the morphological state of Perawan Beach is really suitable for development as a tourist destination. This beach has an estuary known as "Gundang Wetan" at the easternmost beach. The Gundang Wetan Estuary (Sidoasri River) has a shallow depth and gentle currents, allowing tourists to enjoy boats there. The Gundang Wetan estuary can be reached by following the path around the shrubbery, the coastline to the easternmost point, or the path nearest to Klatakan Beach. This is really interesting because the hidden location will provide tourists with enjoyment. Before arriving at the Gundang Wetan estuary, tourists will see a large lake or pool of water caused by flooding, known in the local language as "Pedotan," which translates to "the flow is cut off/stuck". The water is calm and capable of giving tourists a "healing" feeling, which can be an advantage for Perawan Beach as a tourist destination. The view of Gundang Wetan estuary is shown in (Figure 5).

The toponomy of the Perawan Beach, which is rarely visited by tourists, accurately represents this location. Tourists can observe the high ecological and conservation importance due to the extensive land cover, diverse vegetation, and protection. Beginning at the entrance, visitors will observe trees along the coast and vegetation along the path leading to the estuary of Gundang Wetan. This condition indicates that the coastal area has not experienced many significant ecological changes since it opened in 2007. On Perawan Beach, vegetation includes *Pes-caprae*, *Barringtonia Asiatica* (keben), *Pandanus Odorifer* (sea pandanus), *Cocos nucifera* (coconut), *Ipomoea aquatica* (kale), *Casuarina Equisetifolia* (sea pine), *Rhizophora* (mangrove), and shrub grassy vegetation. The distribution of this vegetation also indicates that the area is still in natural condition and that sustainability is maintained, allowing it to serve as a model for the development of coastal ecological education within the context of sustainable tourism at Perawan Beach. The distribution of vegetation in Perawan Beach coastal areas is shown in (Figure 6). An inventory of Perawan Beach's diverse and well-maintained ecological conditions can be used as an appealing reason to attract tourists. Perawan Beach, based on its characteristics, is capable of being developed in a sustainable manner; naturally, this coastal area has many benefits. This is because the sustainability of coastal tourism quality can have long-term effects on society and the environment. The long and relatively wide coastline environment, the slope of the coastal slopes, the distribution of vegetation, and the very diverse tourist attractions should make it possible to optimize the area's development so that it can provide ecological and economic benefits for enhancing human welfare.



Figure 4. The View of the Perawan Beach (A. Keben fields on the coast of the Perawan Beach; B. View of the Right Side of the Perawan Beach; C. Measuring the Length of the Perawan Beach; D. Right Side of the Perawan Beach where seawater is flowing to the Shrimp Pond) (Source: Research Documentation, 2023)



Figure 5. A. The View of the Gundang Wetan from right side; B. The View of Gundang Wetan from the left side (Source: Research Documentation, 2023)



Figure 6. The Vegetation of Coastal Perawan Beach (A. Keben plant; B. Trumpet Flower; C. Sea Pandan; D. Coconut Tree; E. Sea Pine; F. Waru Doyong/tilted tree) (Source: Research Documentation, 2023)

The ecological diversity and attractiveness of charming coastal tourism in Perawan Beach raises the question as to why less people are interested in visiting. Due to interruptions from various factors, Perawan Beach is still categorized as being in the early stages of growth when adjusted for the main attributes possessed by tourists (Interview, 2023). Indicators of the psychological needs of other tourists, such as the emergence of perspectives in the form of feedback of trust in managers. or experienced tour providers, also contribute to the fulfillment of tourist needs (Putra et al., 2017; Rai et al., 2015). Environmental sustainability and cultural sustainability are required for the sustainable development of tourism carrying capacity (Sumarmi et al., 2022). Therefore, given the field conditions and signs that tourism on Perawan Beach has not been fully developed, a comprehensive development strategy is required.

The economic conditions of the community in Perawan Beach for the development of ecotourism

Sidoasri Village is one of the localities in Malang Regency's Sumbermanjing Wetan District, and it covers a total area of 2,000 hectares. Geographically, Sidoasri Village consists of two hamlets, namely Tambakasri Wetan hamlet and Tambakasri Kulon hamlet. Namely Virgin Beach and Klatakan Beach. The community monitoring organization (POKMASWAS) of Sidolestari is responsible for the management of coastal resources in Sidoasri Village. The activities of POKMAWAS depend heavily on the availability of a government support program; if there is none, they are usually unemployed and do not carry out POKMASWAS duties as they should. Therefore, the POKMASWAS strategic plan is essential for the management of coastal resources in Sidoasri Village. The majority of the residents of Sidoasri Village work in the agricultural and fishing industries. Many fishermen travel to sea during the fishing season, but if it is not the fishing season due to bad weather, many of them shift to the agriculture sector by utilizing existing land. Perawan Beach is a toponym that defines an area that is still quite green and rarely touched. In terms of accessibility, this area's terrain is quite challenging, but it is still possible to visit. Aside from accessibility issues, the uniqueness and beauty of the coastal environment make this area a natural tourist destination that is highly accessible to visit. However, there are many opinions among tourists that the accessibility aspect is not a limitation to tourism activities (Purnomo, 2019). Managers are also aware of the situation but have been unable to do much because building facilities costs large funds, therefore they have to find other solutions to ensure the sustainability of Perawan Beach as a tourist destination (Interview, 2023).

Sidoasri Village is one of the localities in Malang Regency's Sumbermanjing Wetan District, and it covers a total area of 1,900 hectares. Geographically, Sidoasri Village consists of two hamlets, namely Tambakasri Wetan hamlet and Tambakasri Kulon hamlet. Namely Virgin Beach and Klatakan Beach. The Community Monitoring Organization (Kelompok Masyarakat Pengawas - POKMASWAS) of Sidolestari is responsible for the management of coastal resources in Sidoasri Village. The activities of POKMAWAS depend heavily on the availability of a government support program; if there is none, they are usually unemployed and do not carry out POKMASWAS duties as they should. Therefore, the POKMASWAS strategic plan is essential for the management of coastal resources in Sidoasri Village.

Community participation in the development of Perawan Beach ecotourism

The management of Sidoasri Village have been developing Perawan Beach since 2007, but its development still requires attention. This is evidenced by the condition of sustaining tourism, which is still very limited, and the challenges of the topography to reach this location, which continue to discourage tourists from visiting. In general, terrain conditions are not an issue for tourists, but the difficulty of access or the terrain that tourists face has a significant impact on their decision to visit. Considering the distance and terrain conditions that tourists must across, this beach's accessibility still requires optimal improvement. The management had initiated the creation of a coastal environment as part of the development efforts. Water tourism activities in the Pedotan Lake area have also increased, with the addition of water duck adventures and selfie snaps in

the middle of the lake. Managers who work closely with the community have also provided facilities to support tourism activities, including a homestay, a shop that provides tourists' basic requirements (such as food and camping equipment), five toilets and a prayer room (Field observation, 2023). Given the previous development efforts, which typically drop, analyzing to identify weak points as a basis for developing a strategic plan to strengthen tourist aspects is necessary.

Table 1. The Analysis IFAS dan EFAS matrices (Source: Res	rch Data, 2023)
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Internal Factors (IFAS)								
	Strengths (S)	Weight	Rating	Score				
1.	It has a broad coastline that is typically inclined.	0.10	5	0.50				
2.	There are additional tourist attractions, namely Pedotan and Gundang Wetan, with the water is extremely calm.	0.20	5	1.20				
3.	There is available equipment and a spacious camping area.	0.10	5	0.50				
4.	Vegetation is very diverse and has preserved the sustainability.	0.20	5	1.20				
5.	The parking lot is large.	0.10	4	0.40				
6.	Beachside rest spots and tree houses are available.	0.15	4	0.60				
7.	Facilities, such as prayer room, gazebo, stalls and toilets are available	0.20	5	1.20				
8.	There is already a beach tourism manager.	0.10	3	0.30				
9.	Beach security is quite helpful.	0.10	4	0.40				
	Total			6.30				
	Weaknesses (W)							
1.	Lack a development strategy plan.	0.25	5	1.25				
2.	Accessibility is very distant, and the terrain is difficult to travel.	0.20	5	1.00				
3.	Very few promotional efforts are made.	0.30	4	1.20				
4.	Information regarding accommodations is limited.	0.20	5	1.00				
5	Outside of camping grounds, accommodations (homestays) are quite isolated and limited.	0.30	3	0.60				
6.	The coast and other supporting tourism objects have not been developed to their maximum potential.	0.25	3	0.75				
7.	Due to limited financial and human resources, managers struggle to develop the area.	0.20	4	0.80				
8.	Previous attempts to construct attractions were left.	0.20	4	0.80				
9.	Coast guard officers are minimal.	0.20	3	0.60				
10.	There is no cooperative synergy between organizations and management.	0.30	4	1.20				
	Total			9.20				
	Strengths - Weaknesses	-2.90						
	External Factors (EFAS)							
	Opportunities (O)							
1.	Expanded tourist attractions, particularly at Lake Pdotan and Gedung Wetan, including canoes, river crossings, water ducks, and APVs on the beach sand.	0.30	5	1.50				
2.	Preservation of coastal vegetation facilitates the development of educational tourism relating to coastal ecological sustainability.	0.30	5	1.50				
3.	The coastal environment is refreshing and restorative because it is isolated from the community.	0.15	5	0.75				
4.	There are many panorama tourist attractions, so it is possible to take some fun selfies.	0.25	5	1.25				
5.	Close to the beach designated for fishing activities (Klatakan Beach), so that sea food products	0.15	4	0.60				
6	The cost of a visit is very chean	0.20	3	0.60				
7.	The toponymy of the area known as "Perawan Beach" is very suitable and may attract the eurosity of tourists	0.20	5	1.00				
	Total			7 20				
Throats (T)								
1	The waters are quite high and a flood occurs annually	0.20	4	0.80				
2	Tourists can become disappointed due to difficult accessibility	0.20	4	1 20				
3	The heaches of South Malang, which are managed and significantly more annealing to tourists	0.30	4	1.20				
5.	are very competitive.	0.50	-	1.20				
4.	Lack of awareness on the part of tourists to sustain the beach's cleanliness.	0.30	3	0.90				
	Total 4.10							
	Opportunities - Threats 3.10							

The recommendations for the development of the Change Strategy area are located in Quadrant III, where the results of the IFAS and EFAS analyses of Perawan Beach are presented. Change Strategy in quadrant III (negative, positive) with a majority of a weakness value of -2.90 and an opportunity value of 3.10 indicates the need for a change in previously implemented strategy or policy, as it is believed that previously implemented policies or development efforts will be unable to capture opportunities while improving the performance of managers (Purwohandoyo et al., 2020).

Recommendations for strategy changes were gathered from a data inventory on Perawan Beach, which specifically requires a plan for creating a coastal tourism area so that indicators from the development strategy can identify and control opportunities. Based on IFAS results, which indicate that the value of weakness is higher than the value of strength (-2.90), this indicates that previous efforts have not produced significant results, particularly in terms of tourist attraction. In comparison, on the EFAS factor, the opportunity value is significantly higher than the threat value (3.10); therefore, if the weight is high in the opportunity assessment, this requires special attention to reduce the previous weakness score and will not contribute value to the threat factor. The matrix of SWOT Analysis of Perawan Beach is shown in (Figure 7).

In the IFAS (internal) factor, it can be observed that the weight is placed on weaknesses that have a significant impact on tourism development and can become a challenge if they are not appropriately managed. Starting with the absence of a tourism development strategy, limitations in managing tourist attractions, and very limited promotion efforts, the number of weaknesses in tourist sites increases. As previously explained, there have been efforts to innovate and develop attractions, but the lack of tourist interest and the small regional income have made these efforts ineffective. This may be observed in various pictures of the growth of the area, where the quality of its utilization has significantly declined. If this condition continues and no effort is made to establish an appropriate development strategy, it will be extremely difficult for Perawan Beach to compete with other beaches, particularly in terms of its economic impact on managers and surrounding communities.

The results from the IFAS and EFAS quadrants indicated a large number of weaknesses that are opposite to the value of opportunities, which can be used to identify the obstacles to development. Accessibility, governance, funding factors, and the procurement of tools were identified as factors that make it difficult for this sector to increase existing opportunities. The manager explained that they had taken the initiative to develop the area by promoting and acquiring supplementary tools, but had not maximized the area's potential. They also complained that related authorities were not present in directly to provide both financial and technical equipment support, so that managers with limited funds admitted to encountering many challenges. Furthermore, the decreased number of managers has an effect on regional governance, such as reducing promotional efforts that require technology or other innovations to develop tourist areas that are difficult to implement (Interview, 2023). According to the results of the IFAS and EFAS analyses, the high results for weaknesses and opportunities align with visitor feedback. Visitors indicated that they were interested in visiting the area is essentially very attractive and free of visitors, giving it the feeling of a "private beach" where beach tourism can give the impression of ownership due to the peaceful environment. However, they also provided a number of responses regarding the difficulty of accessibility and the lack of tourism support facilities, such as a variety of tourist support, accommodation, and a sense of security because the area is so quiet and there is no area manager responsible for the beach tourism environment.

Developing a suitable and attractive Special Interest Tourism (SIT) in Perawan Beach

Further, the development of the Perawan Beach tourist area faces significant challenges. According to the results of the IFAS and EFAS matrices and a number of visitor responses, this area requires development innovations in order to become more attractive to tourists. This is further supported by the lack of tourist interest due to the lengthy distance to travel and the similarity of the coastal environment to other coastal tourism destinations in South Malang. Therefore, it is necessary to develop attractions with unique characteristics in order to increase the value of tourist destinations in Perawan Beach and to provide visitor satisfaction. Based on the results of the weaknesses and opportunities, it is evident that Perawan Beach has additional attractive development opportunities. This correlation can be observed in the poor management of tourist attractions in



Perawan Beach (Source: Research Analysis, 2023)

Pedotan and Gundang Wetan, which have a tremendous opportunity to boost tourism value. These two potential tourist destinations are situated between the beach's midpoint and its eastern edge. This beach has a long coastline and generally flat, fine brown sand, making it very simple for visitors to reach these two tourist destinations.

The Pedotan tourist attraction is located 32 meters from the beach's shore in the midst of the coastal shoals of Perawan Beach. This attraction is formed by floods that occur throughout the year until the water is trapped in a low area and creates a lagoon pool measuring 630.93 meters in length. The calm and clear water conditions at the Pedotan attraction present an excellent opportunity to develop new tourist activities such as selfies, water ducks, and canoeing. The manager must pursue the management of the Pedotan attraction as an addition to the special interest tourism in order to respond to beach conditions that are typically risky for tourists due to high waves. This urgency can also support the area's development strategy due to the area's ability to provide development benefits varying from boosting the economy to supporting nature tourism education activities, as a result of its clean and diversely vegetated environment.

Moreover, the tourist attraction that represents a development opportunity is the Gundang Wetan attraction, which is located at the eastern edge of the beach curve. This area is an estuary with gentle river currents and an average width of 25 to 58 meters. Possibilities for the utilization of Gundang Wetan tourism may reach beyond 600 meters, with an estimated area of over $21,000 \text{ m}^2$ that can be used to offer water tourism activities that support beach tourism. The location of the estuary, which is connected to rivers along the coast that continue to enlarge throughout the year as a result of annual floods, is physically responsible for the high area value. In contrast to the Pedotan attraction, however, there is no optimization of area management. Therefore, the existence of significant challenges to Perawan Beach tourism's ability to attract tourists and maintain with other beaches can be overcome by optimizing the use of this attraction. The location of the Gundang Wetan attraction is also in close reach to the water's edge, allowing tourists, particularly children, to experience water tourism, such as renting canoes and boats to travel along the river. The tourism opportunities in Pedotan attraction areas is shown in (Figure 8).

Efforts to promote Pedotan and Gundang Wetan attractions are essential to the development of special interest tourism at Perawan Beach. These two sustaining beach tourism attractions have a very good chance of accommodating limited beach tourism on Perawan Beach. In addition, these two attractions are able to offer other characteristics that distinguish them from developed beaches. So that the previously small size of the attraction will expand along with its development and innovation. One of the alternatives to developing this area is the management of regional attractions as the primary and additional tourist objects (Putra et al., 2018). The location of estuary that connects Gundang Wetan areas and the sea is shown in (Figure 9).



Figure 8. The Tourism Opportunities of the Pedotan Attraction (A dan D Tanaman Kangkung yang tumbuh di Pedotan, B dan E. Tempat Spot Foto, C. Kondisi Air Jernih di Pedotan, F. Jajaran Pohon Cemara yang ada di Sebelah Timur Pedotan (Source: Research Documentation, 2023)

Optimizing the Community Based Ecotourism (CBET) strategy through special interest tourism at Perawan Beach to improve the community's sustainable economy

The results of the assessment of internal and external factors reveal the main objective of the area's development efforts, namely the modification of the current development strategy. The community participation is needed to support the tourism development to be sustainable (Arinta et al., 2023). Based on the results of interviews with managers and visitors, this area does require a new strategy because management efforts were not previously guided by a specific strategy. Therefore, by responding to environmental conditions and responding to the challenges and trends of tourists where visitors are seeking more authentic experiences, opportunities to learn new things related to local conditions, and opportunities to interact with local



Figure 9. The estuary that connects Gundang Wetan and the sea (Source: Research Documentation, 2023)

residents (Machado et al., 2019), edutourism development strategies can be pursued even by focusing on the tourist attractions of Pedotan and Gundang Wetan. There is a strong possibility that the two attractions will be developed into important tourist attractions, and it is known that there is enough room to support tourism.

The distance between the Pedotan and Gundang Wetan attractions is around 900 meters, creating a space between them that is heavily overgrown with vegetation. In addition, dense vegetation is located between these two attractions, which can still be accessed on foot by following the coastline or prepared trails. During the trip from the Pedotan attraction to Gundang Wetan, visitors are likely to see a variety of natural and maintained vegetation, including *keben* tree, sea pandanus, sea cypress, and mangrove, indicating that the area has a healthy ecology. The manager also stated that a number of plants were purposefully planted and cared for to preserve the coastal environment; therefore, it would be very beneficial if tourists gained experience in caring for the coastal environment. The vegatition surrounding Pedotan and Gundang Wetan areas is shown in (Figure 10).

Tourism education in coastal areas can be used as the basis for regional development strategies. The characteristics of tourist attractions that are new and different from the typical surroundings are indicators of current trends in tourism since they provide visitors with an opportunity to learn something new. This can be supported by the development of edutourism, particularly in the strategy of developing Perawan Beach which has very complex environmental conditions so that it is able to provide meaningful experiences for tourists when properly conditioned. Essentially, the concept of education and tourism can be applied to ecological learning at Perawan Beach, as tourists are presently able to acquire knowledge while

traveling. Even though it's not ideal, tourists admit that they often learn something on unplanned vacations, and they even hope to learn more on planned vacations (Rahmat et al., 2020). Therefore, there is a connecting space between the attractions of Pedotan and Gundang Wetan which are full with various types of vegetation. It can be understood that the edutourism development strategy is feasible to implement to develop tourism.



Figure 10. Planting vegetation to support the sustainability of the coastal areas (A. Newly planted Keben trees; B. Mangrove trees planted; C. Banana trees) (Source: Research Documentation, 2023)

Several variables must be considered for systematic planning of edutourism development strategies supported by supporting tourist attractions in the Perawan Beach area. The main factors that must be prepared for the implementation of the strategy are supported by the two main supporting attractions of Perawan Beach, namely beginning with systematic development plan activities, open funding details between managers and local tourism offices, continuous implementation, and evaluation and monitoring processes to ensure the strategy's sustainability to be able to provide optimal benefits for tourism development (Sulaiman et al., 2019). Planning activities can include assessing the state of tourist areas, inventorying biotic diversity, incorporating cultural activities in the form of local events or celebrations, and planning the development of tools and supporting factors for educational activities such as plant seeds, planting tools, and training for managers to assist visitors. Through the complex conditions of the coastal environment, this area is also able to accommodate student learning activities starting from the scope of education on ecology, oceanography, to disaster. Therefore, cooperation with schools or colleges to turn this area into a natural laboratory is also part of strategic planning for regional development. By referring to field conditions and main obstacles in handling tourist attractions, it is expected to be able to accommodate the needs and demand for tourists. Moreover, tourism management for international destinations must be concerned with international standards, for example the uniqueness and excellent services and sustainable conservation of these tourist attractions are given high priority (Sumarmi et al., 2022). Optimizing the Community-Based Ecotourism (CBET) strategy based on special interest tourism in Perawan Beach to improve the sustainable community economy supported by comprehensive Pedotan and Gundang Wetan attractions is a strategic step that can be taken in the development of the Perawan Beach tourism area. Strategic initiatives that can be implemented are:

• Increase community participation in the tourism sector by enhancing ecotourism infrastructure and facilities.

• Involve stakeholders in management.

• Improve the quality of human resources for the community of Sidoasri Village and expanding networking for coastal area management.

• Involve the community in planning tourism development, including an active role between managers and local government officials, local communities who interact directly with tourists, stakeholders such as service providers and fishermen, as well as the participation of academics and the role of the government to accommodate the implementation of ecotourism development strategies.

• Inventory of current environmental, human, and economic carrying capacity as well as sociocultural functions to support the development strategy.

• Conduct ongoing training and education for managers and the neighboring community to help them comprehend the specifics of ecotourism area development based on special interest tourism.

• Specify the funding and monitoring of development efforts by involving various stakeholders, particularly the participation of local managers, the community as tourism support, the village management, and the tourism agency, as well as the fundamental elements required to enhance tourism development.

It has been demonstrated that the development of Community-Based Ecotourism (CBET) is more sustainable than other types of ecotourism due to its long-term resources and status as a tourism capital through sustainable marine conservation management (Ressurreição et al., 2022). The participation of local communities in the preservation of natural and cultural resources in marine protected areas can support the successful development of ecotourism that leads to sustainable development (Fafurida et al., 2020; Osman et al., 2018). This is in line with the relationship between community support for ecotourism development being positive. Large local community participation in the development of ecotourism can assist the community in achieving broad economic benefits and long-term well-being. This is directly related to the sustained positive effects of ecotourism on the economy, society, and environment (Rahman et al., 2022).

Ecotourism has the potential to improve local communities' livelihoods, raise revenue, and minimize economic vulnerability while achieving environmental sustainability (Wiredu et al., 2020). Ecotourism has a positive effect on the socioeconomic community in the form of employment opportunities, an increase in community businesses (accommodation and homestays), and an increase in community engagement (Ollivaud and Haxton, 2019). It also indicates that the

development of ecotourism can generate employment and commercial opportunities for the local community. The ecotourism development strategy must be able to increase ecological sustainability and increase the economy of the community around tourism objects to be a sustainable income (Sumarmi et al., 2022). Moreover, community involvement in the development of ecotourism can increase public confidence in the credibility of the local government, as the community is invited to collaborate in planning, administration, and decision-making (Darda and Bhuiyan, 2022).

From a financial perspective, the existence of ecotourism that involves community participation can increase economic welfare through job recruitment, profit sharing, and infrastructure improvement for economic interests. From a social perspective, ecotourism can increase the knowledge and skills of the local community regarding ecotourism, the preservation of local culture, and the exchange of information with tourists. In the meantime, from a sustainability perspective, the community can actively contribute to safeguarding ecotourism areas, thus affecting the preservation of the local environment (Kia, 2021). Good cooperation between managers (the Forestry office, District Government, Village Government, and the community) is necessary for the sustainable management of beach tourism in order to improve the local economy (Sumarmi and Untari, 2022). In developing marine ecotourism, fishing communities can independently develop the tourism sector based on conservation principles, thereby enhancing the community's economy and achieving sustainable marine tourism (Wirakusuma et al., 2019). Therefore, fishing communities are in a strategic position to develop Community-Based Ecotourism (CBET) in order to create and balance favorable conservation, tourism, and finances (Zamzami et al., 2021).

The economic impact of Community Based Ecotuorism (CBET) is raising income, expanding employment prospects, and improving tourist willingness to pay, which can have an impact on increasing local government income (Cisneros-Montemayor et al., 2020). Whereas the development of Community-Based Ecotourism (CBET) can increase local government revenue, employment, the quantity and quality of facilities and infrastructure, local product trade, and tourism services (Harahab et al., 2021). Priorities for the development of Community Based Ecotourism (CBET) include: 1) developing potential ecotourism objects in a sustainable manner, 2) empowering coastal communities, 3) forming partnerships with domestic and private business units in order to increase attractions, amenities, and accessibility, 4) implementing conservation activities, outreach, and education on sustainable marine ecotourism, and 5) increasing supervision and law enforcement (Lelloltery et al., 2021). Efforts to develop ecotourism need to integrate ecotourism principles with local wisdom and involve all stakeholders, including local communities, at each stage of tourism development (Wondirad, 2019).

Therefore, the following fundamental policy strategies are required for the development of sustainable ecotourism: 1) increasing the role and responsibility of the community in planning, managing, monitoring, and controlling; 2) maximizing the entire potential of ecotourism to achieve sustainable tourism management; 3) involving synergies and collaboration to increase, maintain, and optimize ecotourism; 4) increasing the quality and quantity of infrastructure facilities to attract tourists; and 5) establishing to increase economic acceleration and growth that supports increasing local community income, 6) improve tourism management and human resources (Arinta et al., 2023; Putra et al., 2019; Sumarmi et al., 2021). Alternative strategies for developing ecotourism include: 1) maximizing the contribution of local communities through easy access to ecotourism resources; 2) resolving conflicts of interest from various stakeholders and common perceptions of ecotourism development; and 3) developing tourism diversification to enhance the community's livelihoods and ecological resilience, 4) regional or local leaders must make decisions based on facts and requirements through the formulation of appropriate policies, strategies, and investments in order to balance land use, conservation, and community needs (Angessa et al., 2022).

CONCLUSION

The primary factor in formulating regional development strategies is increasing the number of existing tourist attraction opportunities. Based on the results of the SWOT data analysis, specifically the IFAS and EFAS matrices, which indicate a weakness value of -2.90 and opportunity value of up to 3.10. The current position of tourism area development is in quadrant III, indicating that a shift in development strategy is required to address weaknesses and focus on opportunities. By increasing tourism activities at the Pedotan and Gundang Wetan attractions through special interest tourism, the most important opportunity for area development that can provide benefits for tourist attractions can be achieved. Both of these attractions have characteristics that define them from other South Malang beaches.

Furthermore, the available space between the two tourist attractions stretches from the middle to the end of the coastline curve and is filled with vegetation that is typical of the coastal area. Therefore, ecotourism-based development must be incorporated into the development of tourist attractions in order to preserve the area's ecological value. Details of area development can be implemented in a sustainable manner beginning with individual or group tourism activities, community involvement, education and training efforts through special interest tourism activities located in the main area of Perawan Beach, in the Pedotan area and Gundang Wetan area. The Special Interest Tourism that can be developed on Perawan Beach include surfing, paragliding, climbing hills, diving and rowing. This tourist attraction can develop if there is cooperation between tour managers, stakeholders and involves the local community. Future research can be conducted to determine the suitability each of Special Interest Tourism attraction in Perawan Beach area.

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