Marine Tourism Development Study to Improve Tourist Visit at Santolo Beach, Garut Regency

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Authors’ contributions

This work was carried out in collaboration among all authors. Author GT designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors AR and Rosidah managed the analyses of the study. Author AAHS managed the literature searches. All authors read and approved the final manuscript.

ABSTRACT

This study aims to analyze the tourism potential of Santolo Beach and formulate a development strategy for Santolo Beach so that it can be developed as a marine tourism area to increase tourist visits. The research was conducted at Santolo Beach in January - March 2021. This study used a case study method using primary and secondary data. Primary data obtained from questionnaires and interviews as many as 60 respondents consisting of tourists and Santolo Beach managers using purposive sampling method as the research sample. Secondary data were obtained from related agencies. The analysis used is a SWOT analysis to analyze the strengths, weaknesses, opportunities and threats of Santolo Beach which will produce a development strategy for Santolo Beach. The results of the study are based on calculations carried out through SWOT analysis, the final value of the strengths is 1.64, the weaknesses are 1.44, the opportunities are 1.78 and the threats are 1.41. It can be seen from the results of these calculations that the Marine Tourism of Santolo Beach, Garut Regency has dominant strengths compared to weaknesses and greater opportunities than threats. If these values are included in the SWOT Quadrant Diagram, it can be seen that the position of marine tourism development to increase tourist visits in Santolo Beach, Garut Regency is in the position of the Growth Strategy / SO Strategy, which is to make optimal use of the strengths and opportunities it has.

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1. INTRODUCTION

In the current era of globalization, the tourism sector is an industry largest and strongest in financing the global economy. The tourism sector will be the main driver of the 21st century world economy, and become one of the globalizing industries [1]. Tourism is a recreational activity or travel outside the domicile to get away from routine work or to find another atmosphere [2].

Indonesia is a country with abundant tourism potential. Indonesia's tourism potential is in the form of 17,508 islands stretching as far as 5,120 km with a cool tropical climate both on land and on the coast and sea. But based on data World Tourism Organization statistics of 1.3 billion tourists in the world only 4 million who visit Indonesia, while the rest mostly visited Malaysia, Thailand and European countries. Seeing the above problems means that tourists are interested in visiting Indonesian tourist objects and low local, because so far Indonesian tourism is still not optimal in developing it [3].

Marine tourism is one type of special interest tourism whose activities are related to waters, beaches and the sea including the provision of facilities and infrastructure as well as offering services such as fishing, sailing, surfing, diving, rowing or simply exploring islands and beaches by getting around [4]. Natural resources that can be used as marine tourism objects are marine, coastal, flora and fauna parks. Marine tourism activities have various criteria that must be met which consist of physical, social, economic and cultural criteria [5].

Various economic potentials that exist in the coastal and marine areas of Indonesia that have not been managed optimally have attracted the interest of the central, city and district governments to utilize these resources [6]. In carrying out this exploitation, the government is well aware of the need for rational and sustainable exploitation, and has decentralized control over planning. The tourism sector has great potential to become a mainstay commodity for a country [7].

Santolo Beach is one of the marine tourism destinations located in Cikelet District, to the south of the city center of Garut, to be precise. Santolo Beach has a long stretch of beach, with fine white sand. Apart from being used as a tourist spot, Santolo Beach is also a dock for fishing boats that try their luck on the high seas to look for fish.

The atmosphere on this beach is not too crowded, because not many people know the beauty of Santolo Beach. But lately there are several factors that have become obstacles in its development, namely the lack of tourist attractions owned by Santolo Beach for tourists, so that the activities there are fairly minimal and monotonous. In the sense that tourists visiting Santolo Beach can only enjoy the beauty of the beach without any attraction activities that can be carried out by tourists for tourism development on Santolo Beach, especially in marine tourism activities.

The purpose of this research is to analyze the tourism potential of Santolo Beach and formulate a development strategy for Santolo Beach so that it can be developed as a marine tourism area to increase tourist visits.

2. METHODOLOGY

2.1 Place and Time

The research was conducted at Santolo Beach Cikelet District, Garut Regency, West Java Province, Indonesia. From January to March 2021.

2.2 Types and Data Source

The method used in this research is primary data and secondary data. Primary data based on interviews by filling out questionnaires by respondents. Questionnaire is a data collection technique which is done by giving a set of questions or written statements to respondents to be answered [8]. Secondary data were obtained from documents and information from various related agencies such as the Garut Regency Tourism and Culture Office and previous research literature.

2.3 Sampling Technique

The sampling technique used in this study was purposive sampling technique. Purposive sampling is a sampling technique with certain considerations [9]. Respondents in this study were 60 people. Consists of 40 Santolo Beach tourists and 20 Santolo Beach managers.
2.4 Data Analysis Method

Data analysis is an activity to research, examine, study, compare existing data. Data analysis can also be used to identify the presence or absence of a problem [10]. The data analysis process begins by examining all the data obtained either through questionnaires or interview assistance. Data processing and analysis were carried out with the help of a SWOT analysis.

3. RESULTS AND DISCUSSION

3.1 Location Description

Garut Regency as one of the regencies in the Priangan region of East West Java, is located about 64 km southeast of the capital city of West Java (Bandung City) and about 250 km from the capital city of Indonesia (Jakarta), with an area of 3,065.19 km (306,519 Ha). Garut Regency is rich in tourism potential known as GURILAPS (Mountain, Forest, Sea, Beach and Cultural Arts) to be developed into a leading tourist attraction, even in the era of the 1920s, Garut was known as "Swiss van Java", because of its charm. amazing nature with very exotic contours, with the air is cool, fresh and clean.

Santolo Beach is located in the south of Garut Regency and directly adjacent to the Indian Ocean, astronomically located at coordinates 07° 28' latitude - 07° 40' latitude and 107° 37' east longitude - 107° 46' east longitude. The length of this beach is about 5 km with an average beach width of more than 50 meters and is at an altitude of 0-100 meters above sea level. Santolo Beach is a type of sandy beach, the stretch of sand on Santolo Beach is white with a fine texture from weathering the corals. There are not so many living organisms found on Santolo Beach, there are only three dominant types of vegetation, namely sea pandanus (*Pandanus odoratissimos*), katang-katang (*Ipomea pescaprae*) and ketapang (*Terminalia Catappa*).

3.2 The Potential of Santolo Beach Tourism Objects

A tourist destination must have components or elements that must exist, including: tourism objects and attractions, tourism infrastructure, tourism facilities, management / infrastructure, society / environment [11]. The potential contained in the Santolo Beach tourist attraction is quite diverse, based on the research results, these potentials can be classified into natural tourist attractions, cultural tourism attractions and educational or scientific tourism attractions. These potentials are: white sand, crashing waves, fishing activities, catching sardines, a feast ceremony for Pakidulan side dishes and LAPAN's scientific tourism.

3.3 Analysis of Santolo Beach Marine Tourism Development Strategy

The analysis of the Santolo Beach tourism development strategy serves to determine the appropriate strategy for the development of Santolo Beach in Cikelet District, Garut Regency. Analysis of Santolo Beach development strategies using SWOT analysis, by determining the IFAS-EFAS assessment, SWOT Quadrant, and making a SWOT Matrix.

3.3.1 SWOT analysis

SWOT analysis is a systematic identification of various factors to formulate a corporate strategy. SWOT stands for internal environmental strengths and weaknesses as well as opportunities and threats. The analysis is based on logic that maximizes strengths and opportunities, but at the same time minimizes weaknesses and threats [12]. Below is an analysis of the conditions faced in the development of marine tourism development in Santolo Beach, Garut Regency based on interviews and questionnaires to the respondents which can be seen in Table 1.

3.3.2 Internal (IFAS) and external (EFAS) strategic factor assessment

IFAS is an internal factor that has aspects of strengths and weaknesses in Santolo Beach marine tourism, and EFAS is an external factor that has aspects of opportunities and threats that exist in marine tourism in Santolo Beach. The calculation of the IFAS and EFAS matrices is a calculation to determine the weights, ratings and scores where the total weights do not exceed 1.00, and calculates the rating value of each factor by giving a scale of 1 (below average / not important) to 4 very good [13]. The following are the results of the calculation of the IFAS matrix, which can be seen in Table 2 and the EFAS matrix in Table 3.

3.3.3 Quadrant and swot matrix

Based on calculations made through SWOT analysis, the final values of strengths, weaknesses, opportunities and threats can be in Table 4.
Table 1. Matrix of internal factors and external factors

| No. | Factor                                                   |
|-----|---------------------------------------------------------|
|     | **Internal Factors (Strength)**                         |
| 1   | The beach is beautiful, cool and pristine               |
| 2   | Relatively affordable entrance ticket                   |
| 3   | Good & conducive safety conditions                       |
| 4   | There is a fish auction (TPI)                           |
| 5   | There are culinary & lodging                            |
|     | **Internal Factors (Weakness)**                         |
| 1   | Poor promotion of tourist objects                        |
| 2   | The distance from the Santolo beach object is far from the center of Garut Regency |
| 3   | The road conditions are not good                         |
| 4   | Simple tourist attraction                                |
| 5   | Lack of professional manpower in tourism management      |
|     | **External Factors (Opportunities)**                    |
| 1   | Regional autonomy provides flexibility to develop marine tourism potential |
| 2   | The number of tourists who want to visit                 |
| 3   | There is an adequate budget                              |
| 4   | Increasing tourism products and attractions by utilizing existing potentials |
| 5   | The number of travel agents                              |
|     | **External Factors (Threats)**                          |
| 1   | The competition in the marine tourism market is quite high |
| 2   | Environmental pollution                                  |
| 3   | Coordination between sectors is still weak               |
| 4   | Unpredictable weather                                   |
| 5   | The dominance of the private sector in managing marine tourism, thereby reducing local revenue |

(Source: processed research results)

Table 2. IFAS matrix calculations

| No | Internal Factor Rating (Strength)                                      | Weight | Rating | Score |
|----|------------------------------------------------------------------------|--------|--------|-------|
| 1  | The beach is beautiful, cool and pristine                             | 0.10   | 3      | 0.30  |
| 2  | Relatively affordable entrance ticket                                 | 0.10   | 3      | 0.30  |
| 3  | Good & conducive safety conditions                                     | 0.10   | 3      | 0.30  |
| 4  | There is a fish auction (TPI)                                          | 0.10   | 3      | 0.30  |
| 5  | There are culinary & lodging                                          | 0.11   | 4      | 0.44  |
|    | **Total Strength**                                                    | 0.51   |        | 1.64  |

| No | Internal Factor Rating (Weakness)          | Weight | Rating | Score |
|----|-------------------------------------------|--------|--------|-------|
| 1  | Poor promotion of tourist objects          | 0.09   | 3      | 0.27  |
| 2  | The distance from the Santolo beach object is far from the center of Garut Regency | 0.10   | 3      | 0.30  |
| 3  | The road conditions are not good           | 0.10   | 3      | 0.30  |
| 4  | Simple tourist attraction                  | 0.10   | 3      | 0.30  |
| 5  | Lack of professional manpower in tourism management | 0.09   | 3      | 0.27  |
|    | **Total Weakness**                        | 0.49   |        | 1.44  |
|    | **Total Internal Factors (IFAS)**         | 1.00   |        | 3.08  |

From the description above regarding the SWOT analysis, that in the overall strategy framework, the basic strategy that can be planned is to use the best possible opportunity, try to anticipate and overcome threats, use strength as the basic capital of operations and make the most of it, and strive to reduce and eliminate weaknesses still available. It can be seen from the results of these calculations that the Santolo Beach Marine Tourism in Garut Regency has a dominant strength compared to its weaknesses and a greater opportunity than the threat.
Table 3. EFAS matrix calculation

| No. | External Factor Rating (Opportunity) | Weight | Rating | Score |
|-----|-------------------------------------|--------|--------|-------|
| 1   | Regional autonomy provides flexibility to develop marine tourism potential | 0.11   | 4      | 0.44  |
| 2   | The number of tourists who want to visit | 0.10   | 3      | 0.30  |
| 3   | There is an adequate budget | 0.11   | 4      | 0.44  |
| 4   | Increasing tourism products and attractions by utilizing existing potentials | 0.10   | 3      | 0.30  |
| 5   | The number of travel agents | 0.10   | 3      | 0.30  |
|     | Total Opportunities | 0.52   |        | 1.78  |

| No. | External Factor Rating (Threats) | Weight | Rating | Score |
|-----|----------------------------------|--------|--------|-------|
| 1   | The competition in the marine tourism market is quite high | 0.10   | 3      | 0.30  |
| 2   | Environmental pollution | 0.09   | 3      | 0.27  |
| 3   | Coordination between sectors is still weak | 0.10   | 3      | 0.30  |
| 4   | Unpredictable weather | 0.09   | 3      | 0.27  |
| 5   | The dominance of the private sector in managing marine tourism, thereby reducing local revenue | 0.09   | 3      | 0.27  |
|     | Total Threat | 0.48   |        | 1.41  |
|     | Total External Factors (EFAS) | 1.00   |        | 3.19  |

Table 4. The final SWOT score

| No. | Description | Score |
|-----|-------------|-------|
| 1   | Internal factors |       |
|     | - Strength   | 1.64  |
|     | - Weakness   | 1.44  |
| 2   | External Factors |      |
|     | - Opportunity | 1.78  |
|     | - Threat     | 1.41  |

(Source: Processed research results)

Based on the IFAS and EFAS assessments above, it will then be carried out to determine the X axis in the form of Internal strategic factors and the Y axis in the form of external factors. To determine the position of Internal and External factors, see the following:

Internal coordinate analysis; External coordinate analysis

\[ (X \text{ axis}) = \frac{S - W}{2}, \quad (Y \text{ axis}) = \frac{O - T}{2} \]

\[ = \frac{1.64 - 1.44}{2}; \quad \frac{1.78 - 1.41}{2} \]

\[ = 0.1; \quad 0.185 \]

If these values included are included in the SWOT Quadrant Diagram, it can be seen that the position of marine tourism development to increase tourist visits on Santolo Beach, Garut Regency is in the position of Growth Strategy, which is to make optimal use of the strengths and opportunities they have. The SWOT Quadrant diagram can be seen in Fig. 1.

Based on the image in the diagram above shows that the intersection point (0.1; 0.185) is in quadrant I, where this situation can be done by utilizing strengths and opportunities in order to increase tourist visits on Santolo Beach, Garut Regency by utilizing the strengths that are owned such as beautiful beaches; cool and still original; relatively affordable entrance ticket; good & conducive safety conditions; there is a fish auction place (TPI); there are culinary & lodging and opportunities that are owned, among others, regional autonomy provides flexibility to develop the potential for marine tourism; the number of tourists who want to visit; there is an adequate budget; increase in products and tourist attractions by utilizing existing potentials and the number of travel agents.

Furthermore, using a matrix to show strategies that can be done for the development of marine tourism in Santolo Beach. These strategies are
### Table 5. SWOT matrix

| Internal factors | Strength | Weakness |
|------------------|----------|----------|
|                  | The beach is beautiful, cool and pristine | Poor promotion of tourist objects |
|                  | Relatively affordable entrance ticket | The distance from the Santolo beach object is far from the center of Garut Regency |
|                  | Good & conducive safety conditions | The road conditions are not good |
|                  | There is a fish auction (TPI) | Simple tourist attraction |
|                  | There are culinary & lodging | Lack of professional manpower in tourism management |

| External Factors | Opportunity | SO strategy | WO strategy |
|------------------|-------------|-------------|-------------|
|                  | Regional autonomy provides flexibility to develop marine tourism potential | Make use of regional autonomy to manage natural potential and attractive tourism objects | Collaborating with investors to help development. |
|                  | The number of tourists who want to visit | Adding water tourism attraction packages and processed fish products. | Easy accessibility to the marine tourism of Santolo Beach can be achieved by repairing damaged roads and widening roads. |
|                  | There is an adequate budget | Increase security on Santolo Beach in order to maintain comfort and attract visitors. | The need for product innovation and tourist attractions to encourage improvement in the quality of human resources in their management. |
|                  | Increasing tourism products and attractions by utilizing existing potentials | | |
|                  | The number of travel agents | | |

| Threat | ST strategy | WT strategy |
|--------|-------------|-------------|
| The competition in the marine tourism market is quite high | Optimizing natural potential and uniqueness of tourism objects to face competition between tourism objects | Increase promotion and improve development programs with new innovations so that they are ready to face competition between tourism objects. |
| Environmental pollution | Development and construction of environmentally friendly tourism objects. | Increasing the quality of professional workforce in managing tourism objects so as to reduce environmental damage due to arbitrary development. |
| Coordination between sectors is still weak | Coordinating with related agencies. The results of the interviews with the relevant agencies were that there was no coordination. So that the development of the Santolo beach is still not optimal. | Strengthening institutions to deal with tourism developments. |
| Unpredictable weather | | |
| The dominance of the private sector in managing marine tourism, thereby reducing local revenue | | |
The SWOT matrix is a matrix that interacts with internal and external strategic factors [14]. This matrix can clearly describe how the opportunities and threats faced can be adjusted according to their strengths and weaknesses. The following is a strategy based on the results in quadrant I, the development of the Santolo Beach marine tourism area in terms of internal aspects (strengths and weaknesses) and external aspects (opportunities and threats) in the form of a SWOT matrix can be seen in Table 5.

Based on the results of observations and interviews with stakeholders (the Department of Tourism and Culture of Garut Regency, managers and visitors) in the field using a SWOT analysis, the strategy for developing a tourist attraction right on the Santolo Beach tourism object is the SO (Strength and Opportunities) strategy, with the consideration that the Santolo Beach Marine Tourism in Garut Regency has a lot of natural potential and is great for development, but has not been utilized optimally, for that in developing and increasing tourist visits. Santolo Beach, Garut Regency must create a strategy using strength to take advantage of opportunities. Therefore, on the basis of the results of the analysis of the internal and external environment, the marine tourism development policy to increase tourist visits to Santolo Beach, Garut Regency is:

1. Increase promotion of the Santolo Beach Marine Tourism in Garut Regency through various media, both print and electronic media, tourism exhibitions conducted by the Garut Regency Tourism and Culture Office.
2. Improve the facilities and infrastructure as well as supporting infrastructure such as building water games and other supporting facilities so that they are attractive and comfortable for visitors. In general, according to the results of observations, investigations and experiences in the past, a good tourism area to be visited is an area classified into a Tourist Destination Area that depends on nature, namely places for vacation, rest, and recreation for physical health and spiritual [15]. Besides that, the improvement of accessibility to Santolo Beach, Garut Regency. Good accessibility will determine whether or not the location is easy to reach. In addition, the road network is one that influences the

![Fig. 1. SWOT quadrant diagram](image-url)
smooth running of public services which is very important. The availability of accessibility in tourist attraction areas will affect the increasing number of tourist visits [16].

3. The development of marine tourism in Santolo Beach, Garut Regency, really needs to be improved, especially with the increasing number of other tourism objects and increasing competition between tourism objects, so Santolo Beach, Garut Regency requires new innovations to develop better. The regional government in developing Santolo Beach is constrained by funds, so it needs assistance from private investors without reducing local revenue, namely coordinating with private parties to invest their capital, by forming cooperative bonds based on agreements and a sense of mutual need in order to increase capability in a certain business sector. Partnerships that are applied in the development and management of tourism must have a clear concept and provide benefits to the surrounding community [17].

4. Utilizing the potential of Santolo Beach, namely a beautiful, cool and pristine beach as well as developing marketable opportunities such as a fish auction that can attract tourists. A tourism business is an activity that aims to provide tourism services or provide or manage tourist objects and attractions, tourism goods businesses and other businesses related to the said sector. The tourism industry is an organizational structure, both government and private, that is involved in the development, production and marketing of a service product to meet the needs of people who are traveling [18].

4. CONCLUSION

The development of marine tourism needs to be done so that the development of marine tourism is in accordance with what has been formulated to achieve the desired goals or objectives. Based on the results of the SWOT calculation, it can be seen that the marine tourism development strategy for Santolo Beach is in quadrant 1 (one). In this quadrant, tourism objects in Garut Regency are in a favorable situation, because marine tourism at Santolo Beach in Garut Regency can use strength to take advantage of opportunities. An alternative strategy that can be used is the SO Strategy, which is a strategy designed to seize opportunities by using existing strengths, including:

1. Make use of regional autonomy to manage natural potential and attractive tourism objects
2. Adding water tourism attraction packages and processed fish products.
3. Increase security on Santolo Beach in order to maintain comfort and attract visitors.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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