The Development Strategy of Puncak Damar Ecotourism

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Abstract. Sumedang District in West Java is aggressively developing tourism potential. The various types of tourist attractions and the number of visitors in Sumedang have a huge potential for tourism development. Puncak Damar in Sumedang has potential in the development of ecotourism. However, the utilization of ecotourism of Puncak Damar is not ideal yet. This study aimed to seek strategy to develop Puncak Damar-ecotourism-based by conducting SWOT and QSPM analysis. The results of the analysis showed that Puncak Damar had not been ideal yet in developing ecotourism concept since the utilization of the strengths and opportunities had not ideal and could not reduce the weaknesses and threats. The results of the IFE and EFE analysis with a total score of 2,377 and 2,549 respectively indicated that the Puncak damar ecotourism was in the fifth quadrant position. This meant that the strategies used are hold and maintained by product development and penetrating markets. The alternative strategy suggested by this study was to improve the infrastructure and facilities to support ecotourism in maximizing attractiveness and to have a good coordination among managers.

1. Introduction

The tourism sector in Indonesia has become an important sector in contributing to the country's foreign exchange. Since 2013, the Tourism Sector is the 4th largest contributor to the country's foreign exchange, after oil and gas, coal and palm oil. The beauty of nature, biodiversity, and cultural richness that Indonesia has can be a potential to be developed in the tourism sector. According to Nugroho [1], tourism development has a significant role in economic, social, and environmental aspects. In economic aspect, tourism sector contributes to the foreign exchange savings from the visits of international tourists, and to the GDP with its components. In social aspect, tourism has a role in labor absorption, the appreciation for national arts, traditions, and cultures, the improvement of national identity, and others.

Currently, there is a shift in the concept of world tourism from mass tourism to special interest tourism or what is known as ecotourism [2]. Based on the World Travel Tourism Council (WTTC) report in 2000, ecotourism growth averaged 10% per year. This figure is higher than the average annual growth for tourism in general, which is 4.6% [3].

According to international Ecotourism society, Ecotourism is now defined as responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education. Education is meant to be inclusive of both staff and guests [4].
The results of research in developing countries like Nepal showed that ecotourism helps in environmental conservation and socioeconomic development. It also helps in increasing employment and entrepreneurship at a local level. Ecotourism provides employment opportunities for unskilled labor through the provision of environmental, cultural and unique and natural opportunities for adventure holidays [5], therefore, ecotourism is the best alternative in the development of sustainable tourism to support the efforts to keep the environment and to increase the community participation in its management. This is in line with community based tourism empowerment. Minister of Home Affairs Regulation No. 33/2009 on Guidelines for the Development of Ecotourism in the Regions, has encouraged the regional government to develop ecotourism.

Sumedang Regency has a leading sector in agribusiness, tourism, and industry. Based on the Sumedang tourism policy outlined in the 2015 Regional Tourism Development Master Plan, tourism development is directed at the availability of adequate tourism objects and supported by reliable tourism actors. Puncak damar is one of the attractions that utilizes the natural beauty, culture and local wisdom and in Jatigede reservoir that has the potential to be developed into ecotourism [6] This is evidenced by the decrease of Puncak damar visitors from 2017 to 2018 [7]. Therefore, the research is needed to get the right ecotourism development strategy in Puncak Damar Sumedang Regency.

The purpose of this study was to determine internal and external factors that influence ecotourism in Puncak Damar and to find out the appropriate alternative strategies in developing the Puncak Damar Ecotourism area.

2. Research Method
This research used qualitative method with a case study approach. According to Cresswell [8] case studies are qualitative strategy in which the researcher explores in depth a program, event, activity, process or one or more individuals. The cases(s) are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over sustained period of time. The research area was determined purposively in Puncak damar ecotourism that administratively located in the Pakualam village, Darmaraja Subdistrict of Sumedang regency. The data were used consist of primary and secondary data. Technical data collection was done by observation, interview and literature study. The interview were conducted with several informants consisting of managers, investors and tourist of puncak Damar ecotourism, head of the pakualam village forest farmers group and manager of the Perhutani tourism sector. Data were analyzed descriptively and the technique of data processing were used EFE-IFE matrix, SWOTS and QSPM analysis.

3. Result and Discussion

3.1. The Performance of Puncak Damar Ecotourism Attraction
Puncak Damar Ecotourism is located within the Baros plot block forest area 24 Ciboboko Forest Management Resort (RPH), Cadasingampar Forest Management Unit (BKPH) at Pakualam village Darmaraja district Sumedang Regency. Puncak Damar is located at an altitude of 361 meters and has a forest of 25.70 Ha.

Puncak Damar was established in 2015. The name of the Puncak Damar is taken from the name of the famous ancestral grave site in Pakualam village. The background of the establishment of Puncak Damar is the desire of the community to see and enjoy the view of the Jatigede Reservoir as the second-largest reservoir in Indonesia. Puncak Damar Ecotourism presents the natural beauty of the mountains to the west and the beauty of the Jatigede Dam stretch to the east.

The potential physical of the carrying capacity of Puncak Damar ecotourism development is in the very high category. This is supported by climate indicators which consist of air temperature, rainfall, wind speed, soil, air quality, and a good landscape so that tourists feel comfortable traveling in these locations. While the carrying capacity of tourism facilities in the Low Regions related to the tourism facilities available at Puncak Damar Wanawisata are inadequate and supports the needs of tourists [9].
Based on an assessment of climate indicators in the form of air temperature, rainfall and wind speed, soil conditions, water availability and quality, as well as land shape (morphology), the potential physical capacity of Puncak Damar ecotourism is in the very high category. Therefore, tourists feel comfortable doing tours in these locations. While the carrying capacity of tourist facilities at the Puncak Damar is at a low condition by the reason of its availability was not sufficient to support the needs of tourists [9].

According to tourism law no 10 of 2009, the tourist attraction is anything that has a uniqueness, value, and convenience in the form of natural, cultural and man-made diversity is a tourist visit. There are five requirements that must be owned by the Tourist Destination Area, namely (a) what to see, something that can be seen by tourists in a tourist attraction in the form of natural scenery, tourist attractions, and cultural arts activities, (b) what to do, recreational activities provided by the manager that can be done by tourists while in tourist destinations, (c) what to arrive, in the form of transportation (access roads and modes of transportation) to arrive at tourist sites, (d) what to buy, in the form of supporting facilities for tourists to buy something (food, drink), and souvenirs to take home to their original place, and (e) where to stay, such as lodging accommodations for tourists to stay temporarily, such as homestays, hotels, etc[10].

Ecotourism attractions in Puncak Damar have a huge potential to be developed. This is in line with the results of Endah et al.[11] research on supporting factors in the Pakualam tourism village in the form of natural beauty, public friendliness towards tourists, and the existence of non-governmental organizations that care about the preservation of art, tradition and culture, advances in information and communication technology for promotion, investment opportunities from local communities and potential land use with the concept of agroforestry.

The agroforestry concept with an agrosilvopascular pattern that is a combination of plantation, forestry and animal husbandry business as done by the community in Surian sub-district of Sumedang district [12] can also be done in the Puncak Damar ecotourism area. Potential commodities that can be developed consist of pepper, vanilla, kapolaga, banana, pinus (pinus merkusi), sengon (albizia chinensis), indigofera (indigofera sp), elephant grass (pennisetum purpureum cv.Mott) and sheep farming. A well-managed agroforestry could be an attraction for tourists.

| Table 1. Puncak Damar Tourism Potential |
|----------------------------------------|
| Types of tourist attractions          |
| **Potential**                         | **Actualization**                   |
| What to see                           |                                      |
| 1) The view of Jatigede reservoir and hill in the middle | - The view of Reservoir Jatigede and hill in the middle |
| 2) Shaded pine trees                  | - shaded pine trees                 |
| 3) Agroforestry pine plant with fruits, coffee, vanilly and pepper |                                      |
| What to do                            |                                      |
| 1) Taking photo on *view of deck*     | - taking photos on view of deck     |
| 2) Camping                            | - camping                           |
| 3) Photoselfie and family photos      | - Photoselfie and family photos     |
| 4) Motorbike and jeff *Off road*      | - Boating                           |
| 5) Boating                            | - Fishing                           |
| 6) Fishing                            | - motorbike and jeff off road       |
| 7) Flying fork                        | -                                  |
| 8) Introduction of local wood herbal plants | - introduction of animal husbandry business |
| 9) Introduction of animal husbandry business |                                      |
| 10) *Outbond : canopy trail, jungle track and jogging track* |                                      |
| What to buy                           |                                      |
| 1. Seed of various fruit plants       | - Culinary variety of processed foods |
| 2. Product of local agricultural trees |                                      |
Types of tourist attractions

| Potential | Actualization |
|-----------|---------------|
| 3. Fres local fish. | - The road conditions are unpaved and narrow, so big bus cannot pass well. |
| 4. A variety of typical culinary products | - No local public transportation to the location |
| 5. Crafts: hat, key chains, flip flops, t-shirt, etc | |

What to arrive

- 1. Wide and good road for vehicles to pass
- 2. A local car transportation at a tourist site

Where to stay

- 1. Hotels, villas or homestays
- 2. Gazebo or resting place

Based on Table 1, it is known that the potential for tourist attraction at the Puncak damar is not optimally managed yet. This can be seen from the still limited recreational activities and supporting facilities that can be used by tourists. Inadequate road facilities and the absence of public transportation to tourist sites may reduce tourist satisfaction so that it becomes an obstacle in the development of Puncak damar ecotourism.

3.2. Identification of Internal and External Factors of Damar Puncak Ecotourism.

Identification of internal strategic factors shows that the main strength of Puncak Damar Jatigede Ecotourism is the beauty of the natural panorama and the potential of diverse Ecotourism Attractions (Environmental Services, Fisheries, Culture, History and Education). The potential of Damar Puncak tourism attractions are seen from the parameters of attractiveness, tourist facilities and accessibility are in quite high category [9].

The main weakness of Puncak Damar ecotourism is that road access is not supported so that tourist visits have not yet continued. one of the things that underlie visiting tourists is accessibility. The distance of Puncak Damar ecotourism from the center of Sumedang city is relatively close, around 23 kilometers. However, rocky and narrow road conditions with a width of about 2.5-3 meters restrict access to the type of sedan and bus transportation. Another fundamental weakness is the unprofessional management of Puncak Damar ecotourism, as seen from indicators of the lack of availability and maintenance of facilities at tourist sites.

Attractions, accessibility, and facilities at Puncak Damar show that they are not eligible yet to become a Tourist Destination area. Puncak Damar management is expected to be more active in increasing the number and quality of tourist attractions offered to tourists [13].

Table 2. Internal and External Strategic Factor of Puncak Damar Ecotourism in 2019

| Internal and external strategic factors | weights | Rating | Total score |
|----------------------------------------|---------|--------|-------------|
| a. Strengths                           |         |        |             |
| 1. The uniqueness and beauty of the natural scenery | 0.071   | 3.75   | 0.266       |
| 1. Strategic location on the edge of Jatigede reservoir | 0.058   | 3.50   | 0.203       |
| 2. Local community participation       | 0.073   | 3.75   | 0.274       |
| 3. Potential diversity of tourist attraction in Pakualam village area | 0.075   | 4.00   | 0.300       |
| 4. There are culinary traders and facilities at tourist sites | 0.062   | 3.50   | 0.217       |
| Internal and external strategic factors | weights | Rating | Total score |
|----------------------------------------|---------|--------|-------------|
| 5. Puncak Damar ecotourism provides local community incomes | 0.061 | 4.00 | 0.244 |
| Sub-total | 0.400 | | 1.504 |

**b. Weakness**

1. Management is not professional 0.072 | 1.75 | 0.126 |
2. The low continuity of tourist visits 0.059 | 1.75 | 0.103 |
3. Inadequate road access 0.100 | 1.00 | 0.100 |
4. The potential of tourist attraction has not been used optimally 0.070 | 1.75 | 0.123 |
5. The lack of tourism promotions 0.053 | 1.00 | 0.053 |
6. Limited investment 0.099 | 1.25 | 0.124 |
7. Stakeholder involvement is low and sectoral 0.076 | 1.75 | 0.133 |
8. The lack of cooperation between Puncak Damar management 0.070 | 1.50 | 0.105 |
| Sub-Total | 0.599 | | 0.867 |
| Total number | 2.371 |

**c. Opportunity**

1. Natural tourism trends 0.135 | 2.75 | 0.371 |
2. Land use patterns supporting ecotourism 0.146 | 2.75 | 0.402 |
3. The development of internet technology for tourism promotions 0.126 | 2.00 | 0.252 |
4. Investment development through partnerships 0.141 | 3.25 | 0.458 |
| Sub-total | 0.548 | | 1.483 |

**c. Threats**

5. There is no spatial planning for tourism development in the Jatigede reservoir area 0.123 | 2.50 | 0.308 |
6. There is an “sesar balibis” to anticipate earthquakes 0.066 | 1.75 | 0.116 |
7. Garbage and damage facilities by the visitors 0.058 | 3.25 | 0.188 |
8. Competition land use for agriculture, settlement and tourism 0.114 | 2.00 | 0.228 |
9. Competition with other tourism objects around Jatigede reservoir 0.092 | 2.00 | 0.184 |
| Subtotal | 0.453 | | 1.024 |
| Total number | 22.25 | | 2.507 |

Based on the internal factor evaluation (IFE), the main strength of Puncak Damar ecotourism is the diversity of potential tourist attractions (such as environmental services, fisheries, culture, history and education) with a score of 0.300. The main weakness is the low continuity of tourist visits as seen from the acquisition of the lowest value of 0.059. Another major weakness is the lack of partnership between manager and investor at Puncak damar ecotourism. This is indicated by score 0.097. The partnership between Perhutani Sumedang, LMDH and Pakualam Investors is not running optimally yet, so that the tourist attraction development plan has not been implemented properly. This decreases the appeal of the Puncak damar ecotourism so that tourists are reluctant to come back again [13]. Puncak Damar management is expected to be more active in increasing the number and quality of tourist attractions offered to tourists.
Based on the external factor evaluation (EFE), the main opportunities for Puncak Damar ecotourism is the development of investment through partnerships shown at 0.458. There are investment opportunities by adding several investors who are involved in the development of Puncak Damar ecotourism through partnerships since at the present there is currently only one investor, namely the head of the forest farmer group who is involved with Perhutani through a profit sharing system. Whereas, the main threat is that there is no tourism spatial planning in the Jatigede Reservoir area which is indicated by the largest value of 0.308.

The results of the IFE and EFE analysis with a total score of 2.371 and 2.507, respectively, indicate that the Puncak damar ecotourism is in the fifth quadrant position. This means that the strategies that can be used are held and maintained through market and product development [14]. This is in line with the research results of Umar Abdullah, et al [15] which shows that the best tourism business development strategy is product diversification through product and market development. Market development is looking for new market segments to expand the market. Whereas Product Development is making new products by utilizing existing market shares. The implementation of the strategy is to innovate tour packages for different market segments, for example making prewedding tour packages, educational tour packages for students and outbound tour packages for family gatherings. Then intensive socialization and promotion of Puncak damar ecotourism is carried out through collaboration with event organizers and travel agents.

3.3. **Qualitatif Strategic Planning Matrix Analysis (QSPM)**

| No | Strategy priority | Total score |
|----|-------------------|-------------|
| 1  | Improvement of infrastructure in tourism objects | 6.385 |
| 2  | Assistance and supervision from relevant agencies and local governments | 6.147 |
| 3  | Integrated Jatigede ecotourism development program | 5.840 |
| 4  | Increasing the quality of human research management at Puncak damar | 5.828 |
| 5  | Exploiting the potential of local wisdom and culture | 5.470 |
| 6  | Building tripartite cooperation between Perhutani, LMDH and investor | 5.542 |
| 7  | Increasing promotions through social media and internet | 5.016 |
| 8  | Strengthen local community institutions | 4.897 |
| 9  | Increasing conservation and environmental improvement activities | 4.793 |

Based on the results of the assessment of the Qualitative Strategic Planning Matrix (QSPM), the biggest value is 6.358, so the main priority of Puncak Damar ecotourism development strategies are to enhance tourism facilities and infrastructure in the Puncak Damar ecotourism location. Furthermore, there needs to be assistance and supervision from relevant agencies and integrated with tourism development programs in the Jatigede reservoir area.

4. **Conclusion**

The main strength for the development of Puncak Damar is the potential of various ecotourism attractions in the form of environmental, fishery, cultural, historical, educational services, and development based on the concept of ecotourism. The main weaknesses are the involvement of stakeholders that are still low and are sectoral as well as the unprofessional management.

The main opportunities include the investment in partnership and land use patterns with the concept of environmental services. However, the most important threat is the absence of integrated spatial planning in the Jatigede Reservoir area. The high demand of land for agriculture, settlement, and tourism will threaten the availability of forest land conservation.
The strategy of developing Puncak damar ecotourism are to hold and maintain it through product and market development. Product development is carried out by increasing tourist attraction through the construction of Puncak Damar ecotourism facilities and infrastructure integrated with the development of the Jatigede tourism area. Market development is looking for new market segments to expand the market through promoting Puncak Damar ecotourism through social media, the internet, exhibitions, collaboration with event organizers tourism festivals and travel agents.

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