Feasibility and Institutional Analysis of Eco-Tourism Development in the Simarjarunjung Area, Dolok Pardamean District, Simalungun Regency

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Abstract

Tourism is one of the regional income sectors and can improve the welfare of people's lives. Ecotourism with ecological principles and sustainable development theory will provide benefits by paying attention to the factors that affect it and good management is needed to maintain and continue the development and development of tourism. This study aims to analyze the feasibility of development and institutions in the management of the Simarjarunjung ecotourism area in Dolok Pardamean District, Simalungun Regency. This research is a qualitative descriptive analysis research, where data interpretation and analysis are carried out with data collection steps through documentation techniques as well as interviews and observations, combining relevant information that can answer problems, and drawing conclusions as answers to problems. The results of the feasibility assessment for the development of the potential of the Simarjarunjung Ecotourism Area show a category worthy of development and a feasibility level with an index of 75.74%. The community plays a direct role in ecotourism management for the development of Simarjarunjung ecotourism. The institutional form of ecotourism management is the Association of Farmer Groups (GAPOKTAN) and Tourism Awareness Groups (POKDARWIS). The management of Bukit Indah Simarjarunjung ecotourism is managed privately and the Pine Hills Forest Nature Tourism is managed by the Setya Tani Forest Farmer Group. The strategies carried out in the development of Simarjarunjung ecotourism are planning, implementing, and utilizing. The norms used are internal norms that prioritize local communities and minimize outside participation in the development of Simarjarunjung ecotourism.

Keywords tourism; ecotourism; feasibility; institutional



I. Introduction

Ecotourism based on ecological principles and sustainable development theory will be able to conserve resources, especially biodiversity, and maintain sustainable use of resources, can enhance ecological experiences and obtain economic benefits. Ecotourism builds a harmonious symbiotic relationship between tourist visits and environmental protection, which can have a negative or positive impact, because the concept that is often found in ecotourism management is to develop without paying attention to the principles of ecology and sustainable development.

The development of ecotourism has brought economic interests that have a major impact on the local ecological environment, such as being free from piles of garbage that affect the beauty, if the amount of waste obtained exceeds the capacity of the tourism environment, it will cause damage and pollution to the environment. The basis of good

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ecotourism is not only economic income from the results of ecotourism development but also a guarantee of ecological security and sustainable development and maintaining the natural nature of the environment.

The development of tourism areas is a part of economic activity that does not only focus on the final goal, namely in the form of economic output or financial value produced, but tourism development can involve social, cultural and security issues. Tourism development should be able to develop into an industry that involves the interests of various parties that are mutually beneficial (Fretes, 2013).

Ecotourism as a concept that combines environmental and tourism aspects into a tourism structuring concept by adding aspects of community participation in it. Ecotourism is sustainable tourism based on ecological principles and the theory of sustainable development. Ecotourism aims to conserve natural resources, especially biodiversity and maintain the sustainable use of natural resources, both of which provide an ecological experience to tourists, conserve the ecological environment and obtain economic benefits (Wan and Tong, 2009).

The purpose of this study was to analyze the feasibility and institutions in managing the development of the Simarjarunjung ecotourism area in Dolok Pardamean District, Simalungun Regency.

II. Research Method

The population of this research is all visitors who come to visit Ecotourism Simarjarunjung. The research sample is part of the population taken as a data source and can represent the entire population. The sample collection method used is purposive sampling which is a method of taking respondents intentionally based on the purpose of the study. The determination of the number of samples in this study used the slovin formula (Karsudi et al, 2010). The error tolerance limit is 10% because if the number is greater than 100 people it is taken between 10-15% or 20-25%. Based on the results of interviews at the time of site review, the average number of visitors in a week is 200 visitors, so according to the formula the number of respondents is 66.7 or 67 respondents.

Data analysis method is a method used to process research results to obtain conclusions. The data analysis used in this study is a qualitative descriptive analysis, because this study aims to analyze the tourism potential in the area. The interpretation and analysis of the data is carried out in the following steps:

- a. Collecting data through documentation techniques to obtain secondary data as well as interviews and observations for primary data.
- b. Combining some relevant information obtained so that it becomes a presentation that can answer the existing problems.
- c. Drawing conclusions from the basis of data analysis and is the answer to the formulated problems.

The variables analyzed in this study refer to the guidelines for the Analysis of Operation Areas for Objects and Natural Tourism Attractions (ADO-ODTWA) of the Director General of PHKA in 2003. The description of the variables in this study can be seen in Table 1.

The calculation of each indicator uses tabulation where the numbers are obtained from the results of the assessment and research. The scoring of the weights is guided by the 2003 ADO-ODTWA assessment by the Director General of PHKA. The amount for one assessment indicator can be calculated using the following formula:

Information:

S = Score/value of a criterion

N = the number of element values in the criteria

B = Weighted Value

The score obtained from each indicator is then compared with the total score of an indicator. The score obtained from each variable will be found the feasibility level using the following equation:

Feasibility Index Value of a Tourism Object = $A/(B) \times 100\%$

Information:

A = Criteria Score

B = Total Criteria Score

After the comparison, the feasibility index will be obtained in percentage. The criteria for the feasibility index of an ecotourism area are as follows:

- a. The feasibility level > 66.6% indicates that an ecotourism area is feasible to be developed. This is supported by high potential, facilities and infrastructure based on predetermined parameters and supported by adequate accessibility.
- b. The feasibility level of 33.3% 66.6% indicates that an ecotourism area is not yet feasible to be developed. This is supported by potential, moderate facilities and infrastructure based on predetermined parameters and supported by adequate accessibility.
- c. The feasibility level <33.3% indicates that an ecotourism area is not feasible to be developed. This is due to the low potential of facilities and infrastructure based on predetermined parameters and inadequate accessibility.

Tourism Institutions

The institutional theory used is to describe the relationship between the organization and its environment, about how and why the organization carries out a structure and process and how the institutional process is carried out.

III. Discussion

The results of the assessment of the feasibility level of developing Siamrjarunjung Ecotourism were obtained from the attractiveness of the location, accessibility to reach ecotourism locations, available accommodation, socio-economic environmental conditions of the community in the Simarjarunjung Ecotourism area, supporting infrastructure facilities, and the availability of clean water at the ecotourism location. The results of the assessment can be seen in table 2.

Developing the potential of tourism objects must be carried out by the manager in order to maintain the attractiveness of visitors and maintain the sustainability of the ecotourism area. This is in accordance with the statement of Yuniarti et al (2018) which states that efforts to improve and develop tourism objects are an important thing to pay attention to. The existence of objects and attractions is an important option in carrying out a tourism activity, the development of which is carried out by maintaining the preservation of tourist attraction objects and maintaining cleanliness in the Simarjarunjung Ecotourism area.

Table 1. Matrix of Feasibility Data Collection for Simarjarunjung Nature Tourism

Variable	Indicator				
	1. Attractiveness				
Foosibility of	2. Accessibility				
Feasibility of Simarjarunjung Nature	3. Social Environment Condition				
Tourism	4. Accommodation				
Tourisiii	5. Facilities and infrastructure				
	6. Water Availability				

Source: ADO-ODTWA Assessment Director General of PHKA (2004)

Table 2. Results of the Feasibility Level Assessment of Ecotourism in Simarjarunjung According to the ADO-ODTWA Guidelines

No		Weig	Scor	Caora	Max	Inday	Notes
No	Criteria	ht	e	Score	Score	Index	Note:
1	Attractiveness	6	125	750	1080	69.44	Worthy
2	Accessibility	5	85	425	600	70.83	Worthy
3	Socio-economic environmental conditions	5	85	425	600	70.83	Worthy
4	Accommodation	3	40	120	180	66.67	Worthy
5	Infrastructure	3	90	270	300	90	Worthy
6	Availability of clean water	6	130	780	900	86.67	Worthy
	Eligibility level					75.74	Worthy

Accommodation is one of the important criteria to consider in conducting ecotourism activities, especially when visiting a location that is quite far away. Ecotourism must have accommodations that can encourage visitors to have environmental and cultural awareness, so that socialization is needed to the community and management to improve the quality of ecotourism. This is in accordance with the statement of Achmadi et al (2020) which states that accommodation has an important role in ecotourism activities and nature conservation must be maintained so that education is needed for the community to improve the quality of the ecotourism program. Accommodation prepared to meet a need, such as temporary accommodation for people who are visiting,

Ecotourism development requires a support that must be accompanied by good management and the availability of adequate supporting facilities and infrastructure, because this support makes it easier for tourists to carry out ecotourism activities. This is in accordance with Ghani's (2017) statement which states that facilities and infrastructure are important elements that complement and function to facilitate the process of ecotourism activities so that they can run well. Ecotourism managers who provide facilities at ecotourism locations will increase the interest of tourists to visit and stay at the destination location.

The type of infrastructure is an important component in conducting ecotourism activities. This is in accordance with Suwantoro's statement in Badarab et al (2017) which states that infrastructure is an absolute natural resource and human resource and is needed by visitors when traveling to tourist sites such as roads, electricity, telecommunications, terminals and so on.

3.1 Institutions in the Development of Ecotourism Simarjarunjung

a. Community Role and Participation in Simarjarunjung Ecotourism Development

Broadly speaking, the community has a big role and participation in the development of Ecotourism Simarjarunjung where the community has a responsibility in overcoming environmental problems around ecotourism such as maintaining cleanliness so that it is safe and comfortable for visitors. According to the statement of Maryudi et al. (2012) which states that directly involving the community is very influential in overcoming poverty in directly empowering forests and this approach is very supportive in maintaining environmental conditions around the forest. This condition is an indication that the community is aware of the importance of maintaining the natural tourism environment.

b. Establishment of Simarjarunjung Ecotourism Management Institution

The role of the community is very large in the development of Simariaruniung Ecotourism, in the management of Simarjarunjung ecotourism, a management from the agricultural community is formed which in the field of business has similarities and is chaired by a person from the farming community, namely General Tarigan. The management of Simarjarunjung ecotourism is carried out by the Association of Farmers Groups (Gapoktan). This Gapoktan is a forum for farmers to exchange information and their existence is the main capital as a great human resource in increasing the strength of the farming community. The formation of this Gapoktan started from a sense of openness and transparency with the aim of providing support, training needed in the management and promotion of activities so that the community understands conservation and the importance of environmental and community-based ecotourism. This is in accordance with Ngurah (2018)'s statement which states that social capital, tourism potential and local community empowerment are positive influences in tourism activities because the better the quality of community empowerment, social capital, tourism potential, the better and the increase in tourism. This finding support Tourism is an industrial sector which is currently got a lot of attention from many countries in the world (Nasution, 2021). The tourism sector has become one of the leading sectors in various countries in the world, including Indonesia as one of the prima donna for foreign exchange earners (Hakim, 2021). Tourism is an industrial sector which is currently got a lot of attention from many countries in the world (Sinulingga, 2021).

3.2 Ecotourism Development Strategy

a. Planning

The Simarjarunjung ecotourism development plan includes support for the idea of tourism development, the preparation of a design plan, and the socialization of the plan. The idea of tourism development arose when there was a discussion between the community, community leaders, and village officials.

Socialization is directed to the community carried out by village officials, community leaders, and managers. The socialization aimed at is how the development can be carried out and the environment is maintained. This is in accordance with Cobbinah's (2015) statement which states that the development of ecotourism requires various roles in its implementation, such as the community, and the government. The development of ecotourism that focuses on environmental conservation, cultural preservation, and economic benefits will have a huge impact on the survival of local communities around the ecotourism area.

b. Implementation

Implementation is the implementation of the design made at the planning stage, including the process of procuring funds and implementing ecotourism development. Forms of participation in socialization can be in the form of energy, money and materials. The form of procuring funds is still being carried out in the disbursement stage from the farmer group treasury for ecotourism development.

This is in accordance with the statement of Fikri and Septiawan (2020) which states that every activity requires funds to ensure the implementation of the planned activities. The use of funds made is used in accordance with its designation and can be accounted for. Communities around ecotourism areas are also involved in physical development in the form of building existing facilities in ecotourism areas such as seats, information boards, parks, cottages, security posts and so on.

c. Utilization

The utilization stage is the stage of how the local community gets results in managing ecotourism in the form of job opportunities and making businesses. The use of ecotourism carried out by the community is in the form of making businesses such as stalls and homestays and so on. People who take advantage of business opportunities in ecotourism areas are members of the community who are more capable of capitalizing on their personal businesses. As with the statement of Setiawan, Rijanta and Baquini (2013) which states that in carrying out a form of business, the business manager is the main source of funds in creating their own business.

V. Conclusion

The conclusion from the feasibility analysis and institutional development of ecotourism in the Simarjarunjung area, Dolok Pardamean District, Simalungun Regency is feasible to be developed and the value of the feasibility level with an index of 75.74%.

The community plays a direct role in the management of ecotourism for the development of ecotourism in Simarjarunjung. The institutional form of ecotourism management is the Association of Farmers Groups (GAPOKTAN) and Tourism Awareness Groups (POKDARWIS). The management of Bukit Indah Simarjarunjung ecotourism is managed privately and the Pine Hills Forest Nature Tourism is managed by the Setya Tani Forest Farmers Group. The strategies carried out in the development of Simarjarunjung ecotourism are planning, implementation, and utilization. The norms used are internal norms that prioritize local communities and minimize outside participation in the development of Simarjarunjung ecotourism.

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