



The development of tourism destinations based on natural tourism potential in Lohia District, Muna Regency

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Article Info:

Received: 17 - 11 - 2022

Accepted: 17 - 01 - 2023

Keywords:

Development, development direction, NTOA

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Abstract. *Natural tourism objects and attractions (NTOA) can be developed as tourist destinations to improve the regional economy and community welfare. Therefore, it is necessary to determine the priority of NTOA development. This study aimed to determine the classification of NTOA development potential and formulate the development directions of natural tourism destinations in Lohia District, Muna Regency. Analysis of NTOA development potential based on modifications to the Guidelines for Operational Area Analysis - Objects and Natural Tourism Attractions (OAA-ONTA) and formulation of development directions was using SWOT analysis. The results showed that the classification of NTOA Meleura Beach, Napabale Lake, and Motonuno Lake was classified as very potential, while the NTOA Wakila Peak and Liangkabori Cave were classified as potential. The direction of NTOA development in Lohia District, namely: (1) development according to NTOA potential; (2) improving the information media and tourism promotion; (3) preparation of the NTOA management plan; (4) inviting investors for NTOA development; (5) monitoring and evaluation of tourism impacts; (6) involving the community as a driver of tourism activities.*

How to cite (CSE Style 8th Edition):

Sainu MA, Hermawan R, Kosmaryandi N. 2023. The development of tourism destinations based on natural tourism potential in Lohia District, Muna Regency. *JPSL* 13(2): 277–289. <http://dx.doi.org/10.29244/jpsl.13.2.277-289>.

INTRODUCTION

Tourism activity is one of the fulfilling human needs in finding another atmosphere and breaking away from routine. These activities are related to an area's natural environment, culture, and uniqueness (Suprpto 2005). Tourists' main motivation to visit tourist attractions is because they have certain characteristics and ease of reaching tourist sites (Teguh et al. 2010). Tourism objects must include five important elements so that tourists feel satisfied in enjoying their journey, namely attractions, facilities and infrastructure, transportation, and hospitality (Spillane 1994). The benefits generated by tourism activities can majorly contribute to the tourism destination's economic system (Suprpto 2005).

Tourism development is influenced by several factors, including the attractions presented, available facilities and infrastructure, existing accessibility, and promotions carried out (Avenzora 2008). The first three factors are closely related to site development planning if attractions are presented as natural landscape potential. The existence of natural tourism objects not only encourages regional economic growth and

improves people's welfare but can also preserve natural resources and biodiversity as objects and tourism attractions. Conservation area managers must be able to highlight the uniqueness, peculiarity, and packaging of a tourism product without neglecting the area's protection function (Sekartjakrarini 2009).

Lohia District has various types of tourist objects with unique natural resources, which are the main capital to be developed as tourist destinations. The lack of potential data for each object in the form of tourist attractions, local culture, and regional characteristics is the main obstacle in developing it as a leading tourist object for Muna Regency, resulting in a lack of tourist visits. Therefore, to find out the potential and priorities for the development of tourism objects and the efforts that need to be made, it is necessary to carry out this research. The aims of this study were: 1) to determine the classification of potential development objects and natural tourist attractions (ODTWA) in Lohia District; 2) to formulate directions for developing natural tourism destinations in Lohia District.

METHOD

Research Site and Time

This study was conducted in Liangkabori Village (Liangkabori Cave), Kondongia Village (Wakila Peak), Lakarinta Village (Meleura Beach and Motonuno Lake), and Lohia Village (Napabale Lake). The location is in Lohia District, Muna Regency, Southeast Sulawesi Province (Figure 1), and was held in July –September 2019.

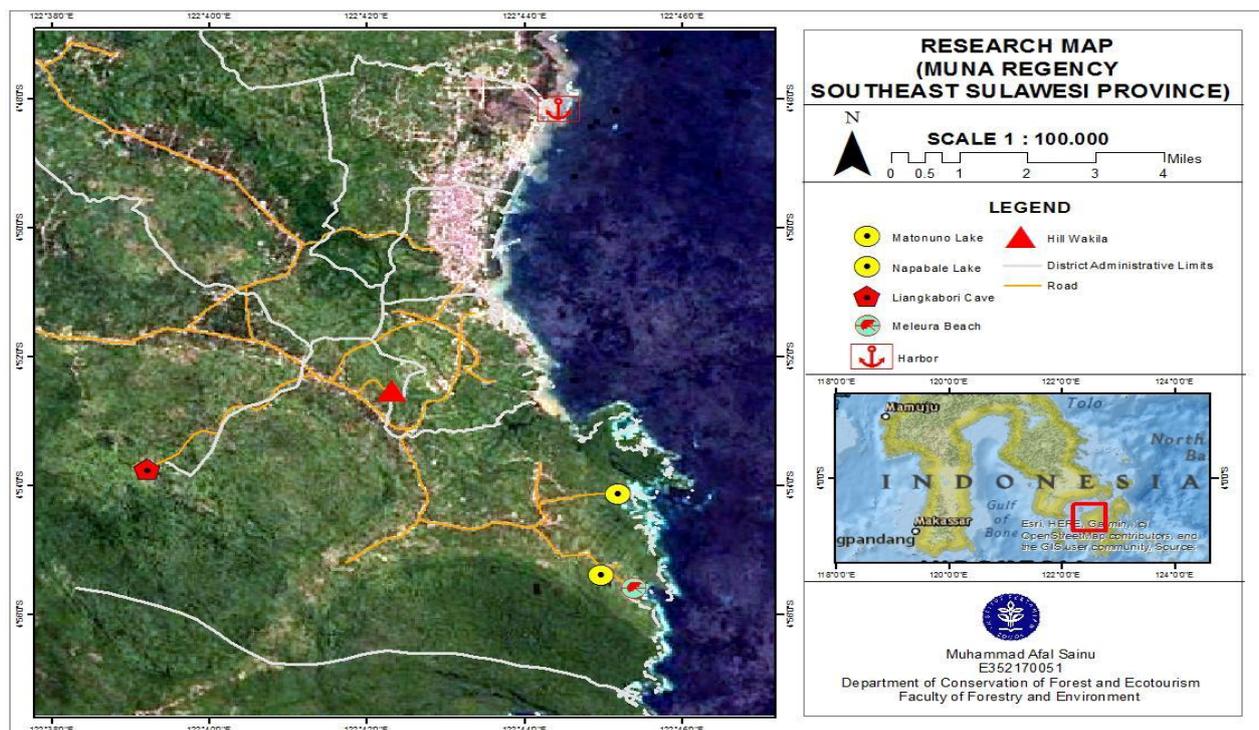


Figure 1 Research Sites Map

Collecting Data

The tools used in this study were stationery, camera, interview guide, questionnaires, and location map. The research subjects were visitors (tourists), communities around the area, and managers from both community groups and local governments, while the objects of research included natural tourism objects and attractions (NTOA) located in Liangkabori Village (Liangkabori Cave), Kondongia Village (Wakila Peak), Lakarinta Village (Meleura Beach and Motonuno Lake) and Lohia Village (Napabale Lake), Lohia District, Muna Regency.

The data used in this research were primary data and secondary data. Primary data were obtained from observations in the field and interviews with respondents as supporting information in the assessment of NTOA from government agencies, managers, communities, and visitors. The respondents for managers were selected by purposive sampling, while the community and visitors were selected by an accidental sampling of 30 people in each object. Secondary data includes supporting data and information such as Regional Medium Term Development Plans, Regional Tourism Development Master Plans, and Regional Spatial Plans Related to research.

Data Analysis

The assessment of objects and natural tourism attractions was carried out using a scoring and weighting system based on modifications to the Guidelines for Operational Area Analysis - Objects and Natural Tourism Attractions (OAA-ONTA) compiled by the Director General of Forest Protection and Nature Conservation (2003) as presented in Table 1. The criteria used as the basis for the assessment included the objects and natural tourist attractions, accessibility, conditions around the area, accommodation, management and services, infrastructure, availability of clean water, security, marketing, and market share. The score/value for one NTOA assessment criteria can be calculated using the formula:

$$S = N \times B$$

Description:

S : Score/value

N : The total value of the elements in the criteria

B : Value scores

The assessment results of each criterion on each object were classified into three aspects, namely less potential, potential, and very potential. Likewise, it is for the total assessment of each NTOA. The value interval for each classification is determined by the following equation (Destrianto 2019):

$$Interval = \frac{Smaks - Smin}{K}$$

Description:

Interval : Interval value in the determination of the classification interval

S max : Highest score value

S min : Lowest score value

K : The number of assessment classifications

The classification value of NTOA development is shown in Table 2. NTOA with a "very potential" assessment classification is a priority for development, while NTOA with "potential" and "less potential" assessment can be recommended for the next stage of development because it still needs much improvement. Determining the priority of the NTOA-based development strategy from several alternative choices was based on the results obtained through Strength, Weakness, Opportunity, and Threat (SWOT) analysis (Rangkuti 2000). The data and information on internal factors (strengths and weaknesses) and external factors (opportunities and threats) were obtained from the NTOA analysis, respondent questionnaires, stakeholder interviews, and literature review results.

Table 1 The criteria and elements of the NTOA assessment

No	Criteria	Elements	Value range	Score
1	Attractions			
	a. Terrestrial natural tourism attractions (Wakila Peak)	Beauty, the uniqueness of natural resources, the number of prominent resources, natural tourism activities, location cleanliness, regional security, and sensitivity to natural resources.	420–1,260	6
	b. Beach natural tourism attractions (Meleura Beach)	Beauty, beach safety, sand type, and color, variety of activities, cleanliness, beach width, comfort	420–1,260	6
	c. Lake natural tourism attractions (Napabale Lake and Motonuno Lake)	Beauty, comfort, safety, water stability throughout the year, cleanliness of the water and the environment, variety of activities in the lake, variety of activities in the lake environment, and the uniqueness of the lake environment	390–1,440	6
	d. Caves natural tourism attractions (Liangkabori Cave)	Uniqueness and rarity, authenticity, beauty, and diversity, environmental integrity, and sensitivity	300–900	6
2	Accessibility	Road conditions and distances, road types, and travel time from the city center	105–700	5
3	Conditions around the area	Community response to nature tourism, object area spatial planning, education, and community economic activities	225–600	5
4	Management and service	Object planning, organizing, implementing, controlling utilization, diversity, readiness, ability, and communication skills	80–240	4
5	Accommodation	Number of lodging and number of rooms	60–180	3
6	Infrastructure	Restaurants, souvenirs, public transportation, markets, cultural tourism facilities, toilets, trash cans, parking lots, electricity, telephone networks, and drinking water networks	45–180	3
7	Availability of clean water	Volume, the distance of clean water to the object, can be flowed to object, and the availability	240–720	6
8	Security	Security, fire by cause, and encroachment	175–450	5
9	Marketing	Affordable rates, varied tourism products, means of delivering information, and promotions	20–120	4
10	Market share	Origin of visitors, level of education, and livelihood	105–270	3

Table 2 The NTOA development potential classification assessment

No	Types of tourism object	Development classification		
		Less potential	Potential	Very potential
1	Natural tourism attractions of Wakila Peak	1,450–2,540	2,541–3,630	3,631–4,720
2	Natural tourism attractions of Melura Beach	1,450–2,540	2,541–3,630	3,631–4,720
3	Natural tourism attractions of Napabale and Motonuno Lake	1,510–2,640	2,641–3,770	3,771–4,900
4	Natural tourism attractions of Liangkabori Cave	1,330–2,340	2,341–3,350	3,351–4,360

RESULTS AND DISCUSSION

The Classification of Objects and Natural Tourism Attractions Potential Development

The Objects and Natural Tourism Attractions of Wakila Peak

Tourism objects and attractions are everything that has uniqueness, beauty, and value in the form of a diversity of natural, cultural, and man-made wealth that is the target of tourism visits (Purwanto et al. 2014). The results of the assessment of the potential development of NTOA of Wakila Peak are presented in Table 3. Table 3 shows that the NTOA of Wakila Peak has a medium or potential classification that is potentially feasible to develop but has several obstacles to developing as a tourism destination. Wakila Peak can be developed with further attention and improvement related to the attractiveness, accessibility, and availability of clean water.

Table 3 The NTOA classification of Wakila Peak

No.	Assessment criteria	Min. score	Max. score	Assessment results ^a	Classification
1	Attraction	420	1,260	900	Potential
2	Accessibility	105	700	450	Potential
3	Social Conditions Around the Area	200	600	425	Potential
4	Management and service	80	240	220	Very Potential
5	Accommodation	60	180	180	Very Potential
6	Supporting infrastructure	45	180	180	Very Potential
7	Availability of clean water	240	720	240	Less Potential
8	Security	175	450	400	Very Potential
9	Marketing	20	120	100	Very Potential
10	Market share	105	270	225	Very Potential
Total		1,450	4,720	3,320	Potential

^aLess Potential: 1,450–2,540; Potential: 2,541–3,630; Very Potential: 3,631–4,720

The results of the accessibility assessment were classified as medium or potential with a value of 450. This was because the distance between the NTOA of Wakila Peak and the city center was about 10 km and 20 minutes by road, which was partly in a damaged condition. The visitors who use public transportation must walk about 1 km in rocky and dusty road conditions. The visitors who used two-wheeled or four-wheeled private vehicles were not complicated by road conditions.

The assessment of the availability of clean water was classified as less potential. The availability of clean water was a factor that must be considered in the development of NTOA, both for management and service. The natural tourism object of Wakila Peak was not traversed by the government's drinking water network due to geographical conditions. The distance of location of the clean water source was quite far, and

the means of distribution of clean water were not optimal, so clean water was very difficult to flow in the object. Clean water for bathing, washing, and latrines at tourist attractions relies on water drops from the manager using a clean water tank car. The manager dropped water on the toilet tower twice a month with a total volume of 300 liters of clean water filling once. The availability of clean water in Wakila Peak was a top priority in development planning. Cole (2012) explained that the availability of clean water is an important factor in tourism development. Tourists can use the clean water for drinking and bathing.

The Objects and Natural Tourism Attractions of Meleura Beach

Meleura Beach is a natural tourist attraction in Lohia District with the type of tourist attraction in the form of a beach. The results of the assessment of the potential for developing NTOA of Meleura Beach are presented in Table 4. The results of the potential development assessment (Table 4) show that the NTOA of Meleura Beach has a value of 3,965, which means very potential. This value indicates that Meleura Beach has the potential and is feasible to be developed as a tourism area. From several assessment criteria, almost all have high or very potential values. Only the attractiveness and conditions around the area are classified as potential. Efforts to maximize the development of nature tourism on Meleura Beach, such as suspension bridges connecting small islands within the area and water sports, will improve the management of attractions and conditions around the area. This is in accordance with Purwanto et al. (2014) statement that attraction is a stimulus, which is then developed for the benefit of tourism.

Table 4 The classification of the assessment of the potential for developing NTOA of Meleura Beach

No	Assessment criteria	Min. score	Max. score	Assessment results ^a	Classification
1	Attraction	420	1,260	960	Potential
2	Accessibility	105	700	550	Very potential
3	Social conditions around the area	200	600	425	Potential
4	Management and service	80	240	240	Very potential
5	Accommodation	60	180	180	Very potential
6	Supporting infrastructure	45	180	180	Very potential
7	Availability of clean water	240	720	660	Very potential
8	Security	175	450	425	Very potential
9	Marketing	20	120	120	Very potential
10	Market share	105	270	225	Very potential
Total		1,450	4,720	3,965	Very potential

^aLess potential: 1,450–2,540; potential: 2,541–3,630; very potential: 3,631–4,720

The condition of the area around NTOA of Meleura Beach was classified as potential. In general, the community-supported efforts to develop these objects. Most of the surrounding community's livelihoods are fishermen and farmers, with the education level of the majority graduating from elementary school. The community expects tourism development to open up new job opportunities to increase their income and welfare.

The Objects and Natural Tourism Attractions of Liangkabori Cave

Liang Kabori Cave is a natural tourist attraction in the Lohia District with the type of area attraction in the form of a natural cave. The name Liang Kabori was given with the consideration that it would be better known by the local community. Liang, in the Muna language, means a hole in a rock, while kabori is a painting or drawing. The results of the assessment of the potential for developing the Objects and Natural Tourism Attractions of Liangkabori Cave are presented in Table 5.

Table 5 The NTOA classification of Liangkabori Cave

No	Assessment criteria	Min. score	Max. score	Assessment results ^a	Classification
1	Attraction	300	900	780	Very potential
2	Accessibility	105	700	450	Potential
3	Social conditions around the area	200	600	450	Potential
4	Management and service	80	240	240	Very potential
5	Accommodation	60	180	180	Very potential
6	Supporting infrastructure	45	180	165	Very potential
7	Availability of clean water	240	720	240	Very potential
8	Security	175	450	425	Very potential
9	Marketing	20	120	100	Very potential
10	Market share	105	270	225	Very potential
Total		1,330	4,360	3,255	Potential

^aLess potential: 1,330–2,340; potential: 2,341–3,350; very potential: 3,351–4,360

Table 5 shows that the criteria assessment of the NTOA of Liangkabori Cave is a potential or moderate classification. The Liangkabori Cave has the potential to be developed. However, efforts are needed for accessibility criteria. The conditions around the area and the availability of clean water need to be appropriately managed. Due to geographical conditions, a drinking water network does not traverse the Liangkabori Cave tourism area, so the channeled water discharge cannot reach that location. The distance to the location of the source of clean water is quite far, and the facilities for channeling clean water could be more optimal, so clean water is very difficult to distribute to the object. Clean water for bathing, washing, and toilets at tourist attractions relies on water drops from managers using clean water tank cars. The government, as the manager, is still planning the availability of clean water in inadequate locations to support management and tourism needs.

The Objects and Natural Tourism Attractions of Napabale Lake

Lake Napabale is a tourist attraction in the form of a lake located in the Lohia sub-district. The results of the assessment of the potential for developing Objects and Natural Tourism Attractions of Napabale Lake are presented in Table 6.

Table 6 The classification of the assessment of the potential for developing NTOA of Napabale Lake

No	Assessment criteria	Min. score	Max. score	Assessment results ^a	Classification
1	Attraction	300	1,440	1,320	Very potential
2	Accessibility	105	700	550	Very potential
3	Social conditions around the area	200	600	425	Potential
4	Management and service	80	240	240	Very potential
5	Accommodation	60	180	180	Very potential
6	Supporting infrastructure	45	180	180	Very potential
7	Availability of clean water	240	720	570	Very potential
8	Security	175	450	375	Very potential
9	Marketing	20	120	120	Very potential
10	Market share	105	270	225	Very potential
Total		1,510	4,900	4,185	Very potential

^aLess potential: 1,510–2,640; potential: 2,641–3,370; very potential: 3,371–4,900

Based on Table 6, it is known that the tourism object of Napabale Lake has a value of 4,185. It indicates that this object is very potential and feasible to be developed. Of all the assessment criteria, the social conditions around the area have medium or potential values. Through interviews with the local village government, the community supports tourism development to open up job opportunities. Most people around the area work as farmers and fishermen as a source of income, so they are rarely directly involved with tourism activities. A small part of the community is involved as food and drink sellers and providing transportation services around the lake. It is necessary to increase public knowledge about tourism by involving the community in tourism activities. According to Ekayani et al. (2014), natural tourism contributes to conservation and fulfilling the community's economy through employment. The community participates in preserving NTOA for the continuity of natural tourism, supporting the continuity of community income.

The Objects and Natural Tourism Attractions of Motonuno Lake

Lake Motonuno is a freshwater lake located in Lakarinta Village. The lake is different from Lake Napabale, which is a saltwater lake. The results of the assessment of the potential for developing Objects and Natural Tourism Attractions of Motonuno Lake are presented in Table 7 below.

Table 7 The NTOA classification of Motonuno Lake

No	Assessment criteria	Min. score	Max. score	Assessment results ^a	Classification
1	Attraction	480	1,440	1,140	Very potential
2	Accessibility	105	700	550	Very potential
3	Social Conditions Around the Area	200	600	425	Potential
4	Management and service	80	240	200	Very potential
5	Accommodation	60	180	180	Very potential
6	Supporting infrastructure	45	180	150	Very potential
7	Availability of clean water	240	720	720	Very potential
8	Security	175	450	425	Very potential
9	Marketing	20	120	20	Very potential
10	Market share	105	270	195	Potential
	Jumlah	1,510	4,900	4,005	Very potential

^aLess potential: 1,510–2,640; potential: 2,641–3,370; very potential: 3,371–4,900

The assessment results of the potential for developing NTOA of Motonuno Lake are classified as very potential to be developed with a value of 4,005 (Table 7). The criteria with a high value become the main capital in development, while criteria with moderate or potential classification become evaluation material. Based on the market share criteria assessment results (visitors' origin, education level, livelihoods), Motonuno Lake is classified as moderate or potential. The majority of visitors are local people around the area with Senior High School education levels. Marketing criteria need to get more attention. Marketing in the form of mass media promotions is expected to provide information regarding the existence and potential of the NTOA of Motonuno Lake.

The assessment of the potential for ODTWA development in Lohia District uses the ADO-ODTWA guidelines of the Directorate General of PHKA (2003), to determine priorities for the development of ODTWA. The parameter used as a reference for assessing the potential of each object is the total score of the classification of each assessment criterion of each object. The results of the assessment of the potential for developing Objects and Natural Tourism Attractions in the Lohia District are presented in Table 8 below.

Table 8 The classification of the assessment of the potential for developing NTOA in the Lohia District

No	NTOA	Assessment results	Development classification
1	Wakila Peak	3,320	Potential
2	Meleura Beach	3,965	Very potential
3	Liangkabori Cave	3,255	Potential
4	Napabale Lake	4,185	Very potential
5	Motonuno Lake	4,005	Very potential

The assessment results of the potential for NTOA development are used to determine priorities for developing objects and natural tourism attractions. The results of the assessment show various development potentials. In order to maximize the development of NTOA, which is spread across several villages in Lohia District, to become a strategic tourism destination for the district, the availability of clean water, social conditions around the area, infrastructure, and marketing suggestions are the main concerns. Most local tourists do not know the existence of Motonuno Lake; therefore, promotional efforts are needed using print and electronic media to provide information to consumers effectively (Premono and Kunarso 2008).

Meleura Beach, Napabale Lake, and Motonuno Lake developments are classified as very potential, while Wakila Peak and Liangkabori Cave are classified as moderate or potential. The success of the NTOA business is largely determined by several factors that influence each other, such as natural or environmental resources, human resources, and artificial resources (physical and cultural) as basic elements of tourism products. These three factors must be the main concern of all parties to achieve the expected success in ecotourism development (Purwanto et al. 2014). The existence of NTOA of Wakila Peak, Meleura Beach, Liangkabori Cave, Motonuno Lake, and Napabale Lake, scattered in one area of Lohia District, is a strength for developing tourism in an area to become a strategic area for natural tourism destinations. Tourism development needs to pay attention to the existence of other tourism objects around it so that they can be packaged as a tour package and support each other's visits because of the tendency of tourism to visit many tourist sites in one trip (Haris et al. 2017; Yuniarti et al. 2018).

The Development Strategy of NTOA in Lohia District

The Internal and External Factors for Natural Tourism in Lohia District

Internal and external factors were obtained from the results of questions and answers and interviews with respondents. The importance of analyzing the external environment in the form of opportunities and threats before the strategy is implemented. The problem strategy to be monitored must be determined because it might affect the object's condition in the future (Rangkuti 2000). the results of the analysis of internal factors (strengths and weaknesses) in the development of ODTWA Lohia District are presented in Table 9.

Table 9 Results of the ONTA Internal Factor Evaluation (EFE) in Lohia District

Internal factors	Weight	Rating	Score
Strength			
Affordable entry fee	0.19	4	0.76
Natural tourist attraction	0.15	3	0.46
Accessibility supports	0.11	3	0.32
The existence of regional regulation regarding the status of natural tourism areas	0.10	3	0.30
Subtotal strength	0.55		1.83
Weaknesses			
Unavailability of management planning documents	0.11	3	0.32

Internal factors	Weight	Rating	Score
Limited human resources management	0.10	3	0.29
Inadequate supporting facilities and infrastructure	0.08	3	0.25
Insufficient supply of clean water	0.08	4	0.33
There is no partnership between the manager and the private sector	0.08	3	0.25
Subtotal Weaknesses	0.45		1.44
Total	1.00		3.27

The internal factor evaluation value is 3.27 (Table 9), indicating that the management of ODTWA Lohia District has made good use of its strengths and minimized its weaknesses. The results of an evaluation of external factors (opportunities and threats) in the development of nature tourism in Lohia District are presented in Table 10.

Table 10 Results of the ONTA External Factor Evaluation (EFE) in Lohia District

External factors	Weight	Rating	Score
Opportunity			
The management of tourist areas is supported by the local community	0.17	3	0.51
The carrying capacity of the area is not yet optimal for tourism development	0.15	3	0.45
Information and tourism promotion	0.12	3	0.36
Strategically located	0.12	3	0.36
Subtotal opportunity	0.56		1.67
Threats			
Garbage and vandalism	0.19	3	0.56
The decreased carrying capacity of the environment due to mining activities	0.14	2	0.28
Potential conflicts in spatial management in tourist areas	0.12	1	0.12
Subtotal Threats	0.44		0.95
Total	1.00		2.62

The external factor evaluation value of 2.62 indicates that ODTWA Lohia District is able to take advantage of existing opportunities and is able to minimize threats. Community-supported ODTWA management is the greatest opportunity, with a weight of 0.17 (Table 10). While garbage and vandalism are the biggest threats to all tourism object areas in Lohia District. The potential for spatial use conflicts has not yet become a problem that must be optimized in the management of object areas.

The Evaluation of Internal and External Factors

Internal and external factors are obtained from the results of identification and interviews with respondents. The evaluation value of internal factors (strengths and weaknesses) is 3.27, which indicates that the management of nature tourism in Lohia District has made good use of its strengths and minimized its weaknesses. Affordable entry fees are the biggest strength, with a weight of 0.19, while the biggest weakness, with a weight of 0.11, is that there are no management documents that describe the zoning of area utilization based on the carrying capacity of each object.

The evaluation value of external factors (opportunities and threats) is 2.62, indicating that nature tourism in Lohia District can take advantage of existing opportunities and minimize threats. Area management supported by the community is the biggest opportunity, with a weight of 0.17. Garbage and vandalism are the biggest threat to all NTOAs in Lohia District. The potential for space utilization conflicts has yet to become a problem. Determining the coordinates or conditions encountered in the development of NTOA in Lohia District is by subtracting the sub-total number of strengths and weaknesses as the axis (X)

and the sub-total number of opportunities and threats as the axis (Y). Based on the calculations, the coordinates (X = 0.40; Y = 0.72) are obtained, where the coordinates are included in Quadrant I, namely supporting an aggressive growth policy (Growth-Oriented Strategy) by using the power they have to take advantage of existing opportunities. Nature tourism in Lohia District is very favorable because it has opportunities and strengths to take advantage of opportunities to develop more in the future.

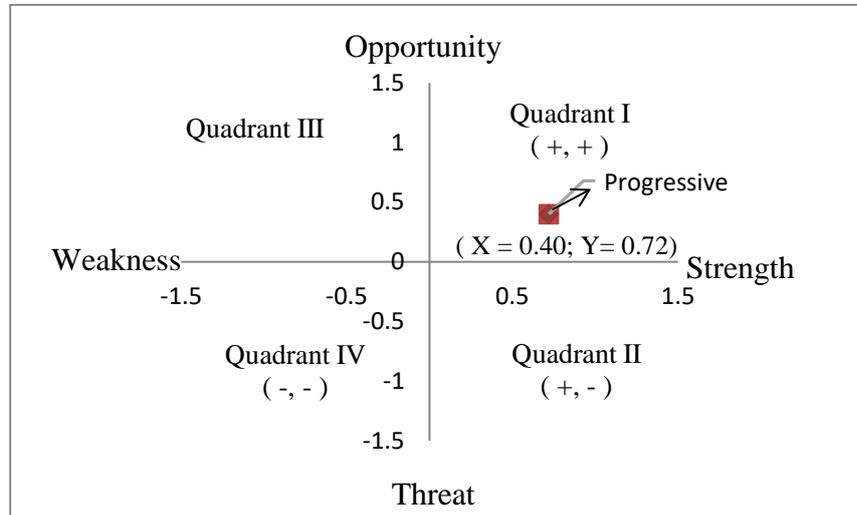


Figure 2 *Matrix space* of NTOA in Lohia District

The Formulation of Development Directions

Strategy formulation is prepared by combining various indicators contained in strengths, weaknesses, opportunities, and threats. The merging model uses the SWOT matrix, but not all strategic plans compiled from this matrix are fully used. The strategy chosen is a strategy that can solve both current and predicted problems in the future.

The formulation of development directions of NTOA in Lohia District is based on a combination of internal and external factors. The SWOT matrix can clearly describe the external opportunities and threats faced so that they can be adjusted to the strengths and weaknesses they have. This matrix can produce formulations of development directions based on four possible alternative strategies, namely the Strength-Opportunities Strategy (SO Strategy), Strength-Threats Strategy (ST Strategy), Weakness-Opportunities Strategy (WO Strategy), and Weakness-Threats Strategy (WT Strategy). The results of the formulation of development directives (strategies) are presented in Table 11 below.

Table 11 Matrix for formulating NTOA development directions (strategy) in Lohia District

Eksternal Internal	Strength (S): - Affordable entry fee - Natural tourism attraction - Accessibility supports - There is a regional regulation regarding the status of natural tourism areas	Weakness (W): - There is no management planning document yet - Limited HR managers - Inadequate supporting facilities and infrastructure - The availability of clean water is not sufficient - There is no partnership between the manager and the private sector
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<p>Opportunity (O):</p> <ul style="list-style-type: none"> - Management of tourism areas supported by local communities - The carrying capacity of the area is not optimal for tourism development - Information and tourism promotions - Strategically located 	<p>SO Strategy:</p> <ol style="list-style-type: none"> 1. The development of tourism objects is adjusted to the potential of NTOA (I) 2. Increasing tourism information and promotion media (II) 	<p>WO Strategy:</p> <ol style="list-style-type: none"> 1. Preparation of NTOA(III) management plan 2. Inviting investors for NTOA development (IV)
<p>Threat (T):</p> <ul style="list-style-type: none"> - Garbage and vandalism - Decrease in environmental carrying capacity due to mining activities - Potential conflicts in spatial management in tourism areas 	<p>ST Strategy:</p> <ol style="list-style-type: none"> 1. Monitoring and evaluation of tourism impacts (V) 	<p>WT Strategy:</p> <ol style="list-style-type: none"> 1. Fostering and involving the community as a driver of tourism activities (VI)

CONCLUSION

Objects and natural tourist attractions in Lohia District are classified as potential and very potential. The nature tourism of Meleura Beach, Lake Napabale, and Lake Motonuno are in the classification of very potential, while the nature tourism of Wakila Peak and Liang Kabori Cave are in the classification of potential to be developed. The results of the assessment of each element at all locations varied greatly. Not all criteria were in the very potential classification. Therefore, in order to maximize the development of tourism object areas which are spread over several villages in the Lohia District, to become strategic areas of the district, the availability of clean water, infrastructure, marketing, and accommodation around the area needs to be developed. Natural tourism objects in the very potential classification are tourism objects that are recommended or prioritized in their development, while tourism objects in the potential classification can be developed later because a lot of planning is needed in regional planning and future development. While the alternative directions for the NTOA development strategy in Lohia District are as follows: (1) development is adjusted to the potential of NTOA; (2) increasing information media and tourism promotion; (3) preparation of the NTOA management plan; (4) inviting investors to develop NTOA; (5) monitoring and evaluating the impact of tourism; (6) fostering and involving the community as a driving force for tourism activities.

REFERENCES

- Avenzora R. 2008. *Ecotourism: Evaluasi Tentang Konsep*. Di dalam: Avenzora R, editor. *Ekoturisme Teori dan Praktek*. Aceh: BRR NAD-Nias.
- Cole S. 2012. A political ecology of water equity and tourism: A case study from Bali. *Annals of tourism Research*. 39(2):1221–1241.
- Destrianto H. 2019. Strategi pengelolaan wisata alam berbasis masyarakat di Riam Kinarum KPH Tabalong Kalimantan Selatan [thesis]. Bogor: IPB University.
- Director General of Forest Protection and Nature Conservation. 2003. *Pedoman Analisis Daerah Operasi Obyek dan Daya Tarik Wisata Alam (ADO NTOA)*. Bogor: Ministry of Environment and Forestry of Republic of Indonesia.
- Ekayani M, Nuva, Yasmin R, Sinaga F, Maaruf LOM. 2014. Natural tourism at Gunung Halimun Salak National Park: A solution for ecological and economic interest. *Jurnal Ilmu Pertanian Indonesia*. 19(1):29–37.

- Haris M, Arifin SA, Soekmadi R. 2017. Potensi daya tarik ekowisata Suaka Margasatwa Bukit Batu Kabupaten Bengkalis Provinsi Riau. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan*. 14(1):39–56.
- Premono BT, Kunarso A. 2008. Pengaruh perilaku pengunjung terhadap jumlah kunjungan di Taman wisata alam pundi kayu Palembang. *Jurnal Penelitian Hutan dan Konservasi Alam*. 5(5):423–433.
- Purwanto S, Syaufina L, Gunawan A. 2014. Kajian potensi dan daya dukung Taman Wisata Alam Bukit Kelam untuk strategi pengembangan ekowisata. *Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan (Journal of Natural Resources and Environmental Management)*. 4(2):119–125.
- Rangkuti F. 2000. *Analisis Swot Teknik Membedah Kasus Bisnis: Reorientasi Konsep Perencanaan Strategi Untuk Menghadapi Abad 21*. Jakarta: Gramedia Pustaka Utama.
- Sekartjakrarini S. 2009. *Kriteria dan Indikator Ekowisata Indonesia*. Bogor: IdeA.
- Spillane JJ. 1994. *Pariwisata Indonesia: Siasat Ekonomi dan Rekayasa Kebudayaan*. Vol 5. Yogyakarta: Kanisius.
- Suprpto A. 2005. Analisis penawaran dan permintaan wisata dalam pengembangan potensi pariwisata di Keraton Surakarta Hadiningrat [thesis]. Semarang: Universitas Diponegoro.
- Teguh I, Rachmawati E, Masy'ud B. 2010. Studi tentang motivasi dan persepsi pengunjung terhadap pengelolaan pemanfaatan satwa sebagai obyek wisata di Taman Satwa Pundi Kayu Palembang Sumatera Selatan. *Media Konservasi*. 15(3):131–138.
- Yuniarti E, Soekmadi R, Arifin HS, Noorachmat BP. 2018. Analisis potensi ekowisata heart of Borneo di Taman Nasional Betung Kerihun dan Danau Sentarum Kabupaten Kapuas Hulu. *Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan*. 8(1):44–54.