

# LOCAL ECONOMY-BASED MANGROVE ECOTOURISM DEVELOPMENT STRATEGIES IN LANGGE ANGGREK GORONTALO UTARA

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## ABSTRACT

The research aims to analyze local economy-based mangrove ecotourism development strategies. This research was conducted in six months started from July to December 2019 at a mangrove ecotourism area in Langge Anggrek Gorontalo Utara. The data analysis used to examine the local economy-based mangrove ecotourism development strategies is a SWOT analysis. Based on the SWOT analysis, the local economy-based mangrove ecotourism development strategies in Langge Anggrek Gorontalo Utara are (1) performing arts and culture to introduce the local cultural values and traditions, (2) promoting strategic local business units to develop mangrove ecotourism sustainably, (3) promoting tourism activities and travel agents to attract tourists to visit the mangrove ecotourism area, and (4) providing the supporting facilities of mangrove ecotourism activities to attract tourists.

**Keywords:** *Development Strategies, Ecotourism, SWOT Analysis*

## INTRODUCTION

An optimal use of local resources is through a tourism development with an ecotourism concept. Ecotourism activities are alternatives to overcome environmental issues due to human's exploitation of the mangrove ecosystem by creating an alternative to recover the economy for society (Basyuni *et al.*, 2016).

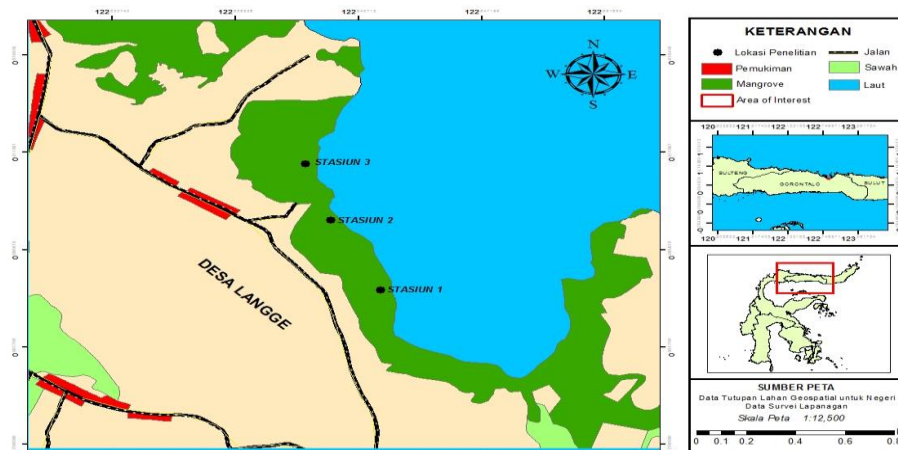
The potentials of mangrove forests in Langge Anggrek are continuously optimized to promote the local economy. Purnamasari *et al.* (2015) argue that mangrove ecotourism can be an alternative to optimize the potentials by constantly emphasizing the ecosystem sustainably and creating an economically valuable area. The

development of mangrove ecotourism is conducted using an educational approach to increase people's knowledge of the use and preservation of mangrove forests to be sustainably used and achieve social welfare. This research aims to investigate the local economy-based mangrove ecotourism development strategy in Langge Anggrek Gorontalo Utara.

## RESEARCH METHODOLOGY

### Research Location

The research is conducted at a mangrove ecotourism area in Langge Anggrek Gorontalo Utara. It was conducted in six months in July-December 2019. The map of the research location is depicted in Figure 1.



**Figure 1. The Map of Research Location**

### Research Methods and Design

The research methods on local economy-based mangrove ecotourism development strategies are observation and interview. The observation method is applied to obtain the data of the supporting facilities of ecotourism activity. Meanwhile, the interview is conducted with the community living in the mangrove ecotourism area that is familiar with the history and development of the area. We can thus obtain information regarding the community's socio-economic condition related to the local economy-based ecotourism management. Davinsy *et al.* (2015) clarify that in general, the evaluation of the community's socio-economic condition in terms of tourism development covers (1) the community's characteristics (name, age, sex, address, latest education, and occupational status), (2) the community's perception/knowledge of mangrove ecosystem, mangrove functions and uses, mangrove forest potentials, mangrove management, and mangrove ecotourism development, and (3) the community's participation in the mangrove ecotourism development

(planning, implementation, and monitoring).

### Data Analysis

The analysis used to determine local economy-based mangrove ecotourism development strategies is a SWOT analysis. When making the analysis, we identify the relationship between ecotourism development and other resources. SWOT analysis is performed by comparing internal factors i.e. strengths and weaknesses with external factors i.e. opportunities and threats. Patang (2012) concludes that the analysis used to determine local economy-based mangrove ecotourism development strategies is SWOT analysis (strengths, weaknesses, opportunities, and threats). The method aims to identify various internal and external factors systematically and the identification results are used to plan management and formulate mangrove development strategies.

### Respondent Selection

The research respondents are local communities and tourists in the mangrove ecosystem area that are purposively selected. Sari *et al.* (2015) confirm that respondents are adult

citizens domiciling in the research location area that is directly connected to the ecotourism area. The respondents are purposively selected, or purposive sampling (the respondents selected are ≥12 years old because at the age, they have set a personal mindset and started thinking critically).

The number of respondents is determined using the following formulae (Sevilla *et al.*, 1993 in Watina *et al.*, 2015).

$$n = \left( \frac{N}{1 + N(e^2)} \right)$$

Where:

- n : the number of respondents
- N : the number of population
- e : the critical value (accuracy limit of 10%)

## FINDINGS AND DISCUSSION

### 1. Analysis of Internal Factors

The analysis of the internal factors of mangrove ecotourism development is

conducted by determining the strength and weakness elements.

#### a. Strength Element

Based on the analysis, the factors of the strength element of mangrove ecotourism development are excellent mangrove forest characteristics with a weight of 0.25, clarity in the regulation of mangrove ecotourism with a weight of 0.25, the community's high awareness of environmental preservation with a weight of 0.17, cultural values consistently preserved for generations with a weight of 0.17, and local distinguished culinary with a weight of 0.17. Weighing is performed by the level of the interest showed by each factor in the determination of the strength element of mangrove ecotourism development. Based on the analysis of the strength element of mangrove ecotourism development, we figure out the following matrix.

**Table 1. The Matrix of the Analysis of Strength Element**

No.	Strength Element (S)	Weight	Rate	Score
1	Excellent mangrove forest characteristics	0.25	4	1
2	Clarity in the regulation of mangrove ecotourism development	0.25	4	1
3	The community's high awareness of environmental preservation	0.17	3	0.51
4	Cultural values consistently preserved for generations	0.17	3	0.51
5	Local distinguished culinary	0.17	3	0.51
<b>Total</b>		<b>1.0</b>		<b>3.53</b>

The matrix of the analysis of strength element indicates that the total score is 3.53 comprising excellent mangrove forest characteristics with a score of 1, clarity in the regulation of mangrove ecotourism development with a score of 1, the community's high awareness of environmental

preservation with a score of 0.51, cultural values consistently preserved for generations with a score of 0.51, and local distinguished culinary with a score of 0.51.

#### b. Weakness Element

Based on the analysis, the factors of the weakness element of mangrove

ecotourism development are difficulties in distributing the cultural values as a local identity presented to tourists with a weight of 0.23, minimum socialization or marketing of mangrove ecotourism development activities with a weight of 0.15, no non-governmental organizations that train and channel the community's capability of developing distinguished local culinary with a

weight of 0.23, no travel agent service with a weight of 0.15, and low-quality accessibility, clean water and sanitation facilities, and other supporting facilities of mangrove ecotourism development with a weight of 0.23. According to the analysis of the weakness element of mangrove ecotourism development, we figure out the following matrix.

**Table 2. The Matrix of the Analysis of Weakness Element**

No.	Weakness Element (W)	Weight	Rate	Score
1	Difficulties in distributing the cultural values as a local identity presented to tourists	0.23	4	0.92
2	Minimum socialization or marketing of mangrove ecotourism development activities	0.15	3	0.45
3	No non-governmental organizations that train and channel the community's capability of developing distinguished local culinary	0.23	4	0.92
4	No travel agent service	0.15	3	0.45
5	Low-quality accessibility, clean water and sanitation facilities, and other supporting facilities of mangrove ecotourism development	0.23	4	0.92
<b>Total</b>		<b>1.0</b>		<b>3.66</b>

The matrix of the analysis of weakness element indicates that the total score is 3.66 comprising difficulties in distributing the cultural values as a local identity presented to tourists with a score of 0.92, minimum socialization or marketing of mangrove ecotourism development activities with a score of 0.45, no non-governmental organizations that train and channel the community's capability of developing distinguished local culinary with a score of 0.92, no travel agent service with a score of 0.45, and low-quality accessibility, clean water and sanitation facilities, and other supporting facilities of mangrove ecotourism development with a score of 0.92.

Referring to the analysis, the total score of the internal factors of mangrove

ecotourism development, the strength element score 3.53 is lower than that of the weakness score that is 3.66. In other words, the weakness element is more significant than the strength element in terms of mangrove ecotourism development.

## 2. Analysis of External Factors

The analysis of the external factors of mangrove ecotourism development is conducted to determine the opportunity and threat elements. Rangkuti (2014) argues that the internal strategy variable has an impact on the development of mangrove forest management.

### a. Opportunity Element

Based on the analysis, the factors of the opportunity element of mangrove ecotourism development are sustainable mangrove ecotourism development with

a weight of 0.33, local cultural values, tradition, and culinary with a weight of 0.11, an increase in tourists' interest in mangrove ecotourism with a weight of 0.22, and availability of job fields and

social welfare with a weight of 0.33. According to the analysis of the opportunity element of mangrove ecotourism development, we figure out the following matrix.

**Table 3. The Matrix of the Analysis of Opportunity Element**

No.	Opportunity Element (O)	Weight	Rate	Score
1	Sustainable mangrove ecotourism development	0.33	4	1.32
2	Local cultural values, tradition, and culinary with a weight	0.11	2	0.22
3	An increase in tourists' interest in mangrove ecotourism	0.22	3	0.66
4	Availability of job fields and social welfare	0.33	4	1.32
<b>Total</b>		<b>1.0</b>		<b>3.52</b>

The matrix of the analysis of opportunity element indicates that the total score is 3.52 comprising sustainable mangrove ecotourism development with a score of 1.32, local cultural values, tradition, and culinary with a weight with a score of 0.22, an increase in tourists' interest in mangrove ecotourism with a score of 0.66, and availability of job fields and social welfare with a score of 1.32.

**b. Threat Element**

Based on the analysis, the factors of the threat element of mangrove ecotourism development the exploitative use of mangrove forest potentials with a weight of 0.33, disturbed environmental preservation a weight of 0.17, changes in social and cultural values in communities with a weight of 0.17, and conflicts of job fields with a weight of 0.33. According to the analysis of the threat element of mangrove ecotourism development, we figure out the following matrix.

**Table 4. The Matrix of the Analysis of Threat Element**

No.	Threat Element (T)	Weight	Rate	Score
1	The exploitative use of mangrove forest potentials	0.33	3	0.99
2	Disturbed environmental preservation	0.17	1	0.17
3	Changes in social and cultural values in communities	0.17	2	0.34
4	Conflicts of job fields	0.33	3	0.99
<b>Total</b>		<b>1.0</b>		<b>2.49</b>

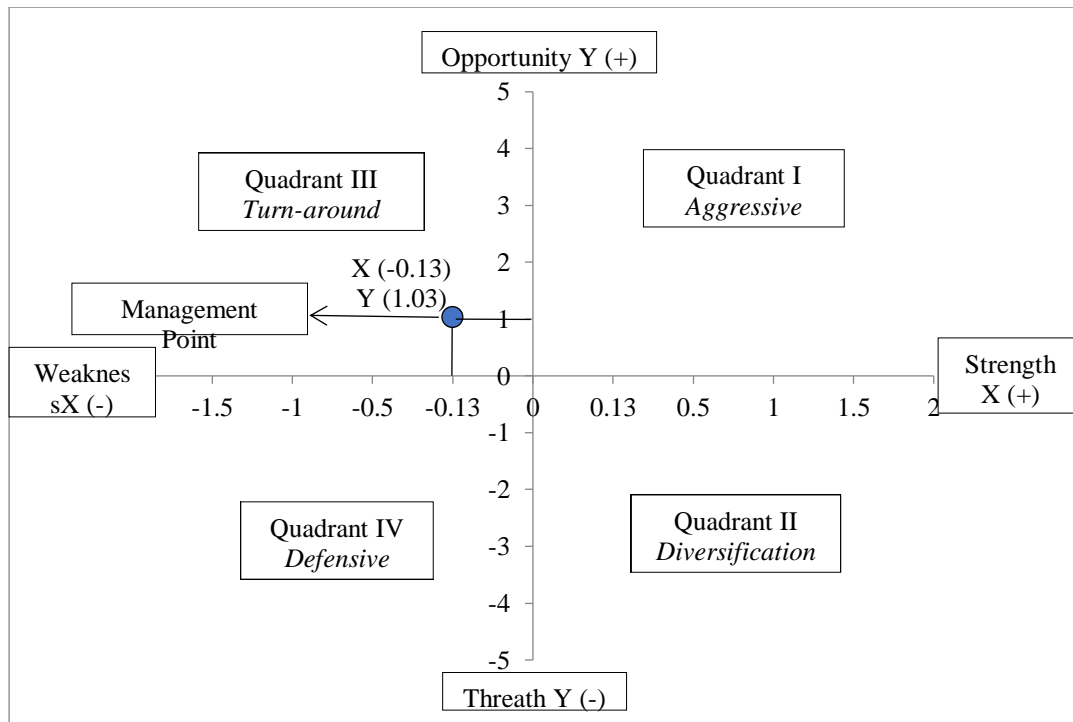
The matrix of the analysis of threat element indicates that the total score is 2.49 comprising the exploitative use of mangrove forest potentials with a score of 0.99, disturbed environmental preservation with a score of 0.17, changes in social and cultural values in communities with a score of 0.34, and

conflicts of job fields with a score of 0.99.

Referring to the analysis, the total score of the external factors of mangrove ecotourism development, the opportunity element score 3.52 is higher than that of the threat score that is 2.49. In other words, the opportunity element is more significant than the threat

element in terms of mangrove ecotourism development. The point of

mangrove ecotourism management is illustrated in Figure 2.



**Figure 2. The Quadrants of Mangrove Ecotourism Development Strategies**

According to the observation of internal and external factors illustrated in Figure 2, the mangrove ecotourism management is at Quadrant III. It indicates a high opportunity of the external factors and weakness in the internal factors of mangrove ecotourism management. The strategy best used is thus a turn-around strategy which is reducing weakness in the internal factors and elevating the opportunity of external factors.

It is in line with Lugina *et al.* (2017) that the mangrove forest management is at Quadrant III where there is a high opportunity for the external factors but a high weakness level in the internal factors. The strategy best applied at Quadrant III is a turn-around strategy where the internal issues

are minimized and hence any available opportunity can be used.

### **3. Local Economy-based Mangrove Ecotourism Development Strategies**

#### **a. Performing Arts and Culture to Introduce the Local Cultural Values and Traditions**

Performing arts and culture is crucial to promote community engagement in art and cultural attractions. This will guarantee the communities' cultural value and tradition preservation. Arts and culture should be performed as one of the mangrove ecotourism development activities. It will attract tourists to enjoy and understand the local cultural values or traditions. Sunarto (2011) concludes that ecotourism development should be engaged with communities as the

communities' local wisdom must be based on philosophical values which can be regarded as metatourism assets.

In terms of cultural values or traditions, local wisdom can be developed to manage mangrove ecotourism. Arts and cultural attractions can be used to earn and increase incomes for the sake of social welfare. Arts and cultures are performed to promote community engagement in filling the need of job fields. Arieta (2010) clarifies that sustainable tourism is marked by a community empowerment-based tourism sector development by minimizing negative impacts on the environment and local cultures through increasing incomes and jobs and improving local ecosystem conservations.

#### **b. Promoting Strategic Local Business Units to Develop Mangrove Ecotourism Sustainably**

A sustainable mangrove ecotourism development requires other businesses. The business units developed should meet what tourists need. Furthermore, other supporting business for the mangrove ecotourism development should accommodate local economy potentials and highlight local characters. The business units that can be developed are accommodation building constructions that describe the local building construction and are managed by local communities, souvenirs in the form of artworks that describe local communities, toilets and parking areas managed by local communities, and water transportation managed by local fishers. The business units authoritatively managed by local

communities provide job fields in line with their expertise and capabilities. The sustainable mangrove ecotourism development with an increase in the local economy can thus be realized. It is in line with Satria (2009) that an ecotourism development needs various business units to support i.e. accommodation, parking areas, souvenirs, minimarkets, toilets, restaurants, and water transportation.

#### **c. Promoting Tourism Activities and Travel Agents to Attract Tourists to Visit the Mangrove Ecotourism Area**

The society's knowledge of mangrove ecotourism development should be emphasized. The knowledge can be increased through a broad information promotion or distribution. Besides, the current technology advance eases the information promotion or distribution activities of mangrove ecotourism activities. The information distribution can be conducted through online or printed media. Meanwhile, the local youth's role can be optimized to distribute the information or promote mangrove ecotourism activities. Satria (2009) confirms that ecotourism area development will be improved if it is actively promoted. It is essential to give a strong tourism image to society and thus attract them to visit the destination. Mangrove ecotourism activities can be promoted through the website.

Moreover, travel guides are necessary for mangrove ecotourism development activities. They directly communicate with tourists and thus can give explanations or understanding of activities developed at the mangrove

ecotourism area. It must be noted that the travel guides have to meet the standard quality of communication and have both good knowledge and understanding of mangrove ecotourism development. They are also demanded to understand local wisdom i.e. arts and cultures, culinary, and other potentials as the local distinguished characteristics so that a local economy-based mangrove ecotourism development can be realized. The local guides can be recruited through service business groups provided by local communities who know the condition of the ecotourism area well. Satria (2009) conveys that an ecotourism area development is inseparable from tourist guides and travel agents because tourist guides are those that directly communicate with tourists. Besides, they can also give what tourists are expecting. Therefore, tourist guides should be able to accommodate the urgency of local community empowerment to support ecotourism.

(3), and (4) providing the supporting facilities of mangrove ecotourism activities to attract tourists.

#### **d. Providing the Supporting Facilities of Mangrove Ecotourism Activities to Attract Tourists**

One of the supporting factors of mangrove ecotourism development activities is facility availability. Supporting facilities are needed to guarantee tourists' convenience and attract them. Some supporting facilities that should be prioritized are roads that support accessibility, clean water and sanitation, and others. Meanwhile, the strategies applied here are providing and maintaining all facilities required to

develop mangrove ecotourism sustainably. Nugraha *et al.* (2015) define that tourist activities developed such as beach tourism, relaxation, tracking, photography, viewing, and camping should suit the tourist activities. Furthermore, the facilities that have to be provided are roads that support accessibility, clean water sources, sanitation, security posts, mosques, medical clinics, and other facilities that support the mangrove ecotourism activities.

#### **CONCLUSION**

The SWOT analysis indicates that the local economy-based mangrove ecosystem development strategies in Lange Anggrek Gorontalo Utara are: (1) performing arts and culture to introduce the local cultural values and traditions, (2) promoting strategic local business units to develop mangrove ecotourism sustainably, (3) promoting tourism activities and travel agents to attract tourists to visit the mangrove ecotourism area, and (4) providing the supporting facilities of mangrove ecotourism activities to attract tourists.

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