



RESEARCH PAPER

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Strategy of Mangrove development for community-based Natural tourism

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Abstract

Strategy of mangrove tourism development in Angsana Village used SWOT Analysis (Strength, Weakness, Opportunity and Threats). The SWOT analysis stage used in analyzing the data further was collected all the information affecting the ecosystem in the study area, either externally or internally. The results of identification and accumulation of internal and external factors were obtained in quadrant I, which supported aggressive strategy which meant with a considerable strength must take advantage of the best opportunities.

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Introduction

Natural tourism is a form of tourism activities in which there is an interaction between recreational activities and conservation development as well as being able to improve the welfare of the community by re-arranging the potential of natural resources on an ecologically, economically and socially supported basis to the environment and surrounding communities.

Angsana Village has mangrove vegetation located along the river with an area of 43.61 hectare, the condition is still natural, access road to the mangrove area is available, this mangrove area has the potential to be developed as a tourist spot. On the other hand, the management of mangrove ecosystem as a tourist destination has not become an alternative of natural tourism, an alternative that can be developed is the mangrove tourism. The aim of the study to find an alternative solution to the development strategy of mangrove tourism activities.

Material and method

Material

Tools and materials used in research included: stationeries, GPS, photo cameras, questionnaires and laptops.

Method

In determining the direction of development strategy of Mangrove tourism area in Angsana Village, SWOT analysis was used with internal factors analysis strategy (IFAS) and external factor analysis strategy (EFAS). SWOT analysis was an alternative decision-making by comparing internal strength (strengths)

and weaknesses (weaknesses) factors with external factors (opportunities) and threats (Rangkuti (2005).

The SWOT analysis steps were as follows:

1. Identify the Strength (S), Weakness (W), Opportunity (O), and Threat (T) from result of observation done.
2. The results of identification; it was selected some points that were considered important from each component of the SWOT.
3. Next to determine the strategy to be executed by creating a combined matrix of the four SWOT components. From the results of the combined matrix, we could define the strategies in general group (SO, WO, ST, and WT), which would then be spelled out in a more specific form.

Then the next step was to determine the weight of internal and external factors in accordance with the level of importance. The sum of all weights should be 1. After that the writer gave ratings for each factor based on the response / response's effect (value: 4 = excellent, 3 = good, 2 = less good, 1 = below average). Then the writer multiplied the weights by the rating value of each factor to determine the value of rating then adding up all the scores to get the total score.

The next stage was data analysis to compile the strategy factors, processed in the form of SWOT matrix. This matrix could clearly illustrate how external opportunities and threats were likely to arise, as well as adjustments to their strengths and weaknesses. The matrix could generate four possible alternative strategies in detail on Table 1.

Table 1. Matrix Standard of SWOT Combination (Rangkuti, 2005).

IFAS EFAS	Strengths (S) Determine 2 - 10 internal strength factors	Weaknesses (W) Determine 2 - 10 internal weakness factors
<i>Opportunities (O)</i> Determine 2 - 10 external opportunity factors	Strategy (SO) Create strategies that use the power to utilize opportunities	Strategy (WO) Create strategies that minimize weaknesses to take advantage of opportunities
<i>Threats (T)</i> Determine 2 - 10 external threat factors	Strategy (ST) Create strategies that use power to avoid threats	Strategy (WT) Create strategies that minimize weaknesses and avoid threats

Furthermore, it was done the determination of mangrove ecosystem management strategy with strategy formulation based on data that had been in perification through combination table of SWOT analysis, where each SWOT element was connected to obtain alternative strategy which referred to ecological condition of mangrove resource and society perception. Then the next step was to recommend the right strategy for management of mangrove ecosystem based on SWOT element on quality position of mangrove ecosystem.

Result and discussion

Strategy of Mangrove Development as Tourism Area
 Analysis of mangrove tourism development strategy in Angsana Village used SWOT Analysis (Strength, Weakness, Opportunity, and Threats). The SWOT analysis stage used in analyzing the further data was collecting all the information affecting the ecosystem

in the study area, either externally or internally. The result of field study through primary and secondary data analysis was done based on research methodology, stakeholder perception in which the government in this case consisted of local community domiciled around tourist area (head of family and community Fig.) and visitors then the SWOT analysis was conducted. The results of identification and accumulation of internal factors are presented in Table 2.

Table 2 above showed a strategy matrix that for the utilization of mangrove ecosystem as a tourist area had a strength that was equal to 3.3 while the weakness showed the value of -1.4 where the total value of this internal factor was 1.9. Utilization of internal ecosystem resources was so strong that to formulate its strategy relied on the existing strengths. As for the accumulation of external factors of mangrove ecosystem can be seen in Table 3 below.

Table 2. Matrix of internal strategy factors of mangrove ecosystem.

No.	Internal Strategy Factor	Weight	Rating	Score
Strengths				
1	Variety of potential and appeal to mangrove tourism	0.4	3	1.2
2	Mangrove area adjacent to Angsana beach resort	0.3	4	1.2
3	Security and community support	0.3	3	0.9
		1		3.3
Weakness				
1	Level of community skills was low	0.3	-1	-0.3
2	Lack of supporting facilities and infrastructure of mangrove tourism activities	0.4	-2	-0.8
3	Cleanliness was less maintained	0.3	-1	-0.3
		1		-1.4
Total				1.9

Table 3. Matrix of external strategy factors of mangrove ecosystem.

No.	External Strategy Factor	Weight	Rating	Score
Opportunities				
1	The opening of new job alternatives to increase the income of the surrounding community	0.3	3	0.9
2	Local government and other stakeholders supports	0.4	4	1.6
3	Increase the number of visitors to conduct tourism activities	0.3	3	0.9
		1		3.4
Threats				
1	Conflict of interest	0.4	-3	-1.2
2	There was no well-structured management of the institutional or policy	0.3	-2	-0.6
3	The occurrence of coast abrasion	0.3	-2	-0.6
		1		-2.4
Total				1.0

The matrix of external strategy in Table 3 showed that the value of the opportunity component was 3.4 and the threat component was -2.4.

From the external factors it was obtained a total value of 1.0. This situation might indicate that to utilize the existing opportunities should anticipate possible

threats so that the utilization could run as expected (Rangkuti, 2005). The value of SWOT matrix analysis results, by summing the value of internal and external factors indicated that mangrove ecosystem condition in Angsana Village was used as tourism area in quadrant I position, as shown in the picture below:

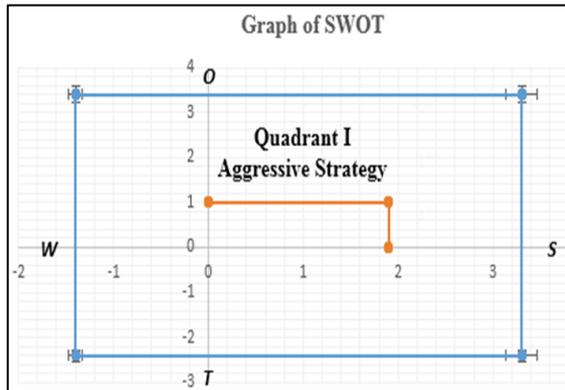


Fig. 1. Graph of SWOT matrix analysis results.

From the graph above it could be seen that from various internal and external factors it was obtained results that were in quadrant I, which supported the aggressive strategy.

According Rangkuti (2005), this was a very good situation where the utilization of Mangrove ecosystem as a tourist area had the power so as to take advantage of opportunities. Furthermore Rangkuti (2005), argued that the strategy should be applied in these conditions was to support an aggressive growth policy. This meant that with considerable strength that must take advantage of opportunities as well as possible.

After knowing the position of the SWOT matrix analysis result then the next step was to determine the alternative of recommended utilization strategy, considering the consideration between the strength and the opportunity on the resources gave specific strategy to the form of utilization as tourist area that was done by aggressive strategy - SO (strength and opportunity) which created a starategy by using power to take advantage of opportunities. The strategic steps taken to support the utilization of mangrove ecosystem resources as a tourist area, among others, as presented in Table 4.

Table 4. An alternative strategy for mangrove tourism areas.

Internal Factors	Strengths	Weakness
	i. Variety of potential and attraction to mangrove tourism ii. The mangrove area was adjacent to Angsana beach tourism iii. Security and community support	i. Community skill level was low ii. Lack of supporting facilities and infrastructure of mangrove tourism activities iii. Cleanliness was less maintained
External Factors		
Opportunities	Strategy (SO)	Strategy (WO)
i. The opening of new job alternatives to increase the income of the surrounding community ii. Increase the number of visitors to conduct tourism activities iii. The existence of local government support and other stakeholders	i. The planning of mangrove tourism design ii. Conduct promotion on mangrove tourism iii. Community involvement with the stakeholders in mangrove tourism development	i. The skill improvement of local community ii. The increasing of tourism facilities and infrastructure iii. The management and handling of garbage around the tourist sites
Threats	Strategy (ST)	Strategy (WT)
i. Conflict of interest ii. There was no well-structured management of the institutional or policy iii. The occurrence of coastal abrasion	i. Socialization of ownership and land potential ii. Establish a system of monitoring and evaluation which involves communities and stakeholders iii. The planting of abrasion retardant mangrove type continuously	i. Good relationships need to be woven between the community and the government so as to create a culture of mutual trust ii. The need for more attention from stakeholders in order to increase the potential of the region iii. Cooperate with local authorities or authorities to control coastal abrasion

The recommended strategic alternative in Table 4, it was taken the most influential internal and external factors to support mangrove tourism activities in Angsana village which can be seen in Table 5.

Table 5. Alternative strategies that have a major impact on mangrove tourism.

Internal Factors	<i>Strengths</i> Security and community support	<i>Weakness</i> Community skill level was low
External Factors		
<i>Opportunities</i> The existence of local government support and other stakeholders	Strategy (SO) Community involvement with the stakeholders in mangrove tourism development	Strategy (WO) The quality improvement of human resources of local community Strategy (WT) Good relationships need to be woven between the community and the government so as to create a culture of mutual trust
<i>Threats</i> Conflict of interest	Strategy (ST) Socialization of ownership and land potential	

Conclusion

An alternative solution to the development strategy of mangrove tourism activities, they were:

Utilized security and community support in mangrove tourism development activities, so that tourism activities could provide a sense of security for the visitors. Utilized the support of local government and

other stakeholders in the management of mangrove tourism activities, so that activities could run well. Addressed conflicts of interest in tourism activities, by building good relationships between communities and governments so as to create a culture of mutual trust. Improved the skill level of Angsana villagers who were classified as low skills, so that in the future people would have better skills.

Recommendations

There should be a resolving of conflicts of interest in tourism activities and an improving of low skill level of Angsana villagers, so that people in the future will have better skill level. Besides that it is necessary to develop infrastructure in mangrove area in a planned way to support natural tourism activities.

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