

Development of Kalipasang Tourism as Sustainable Ecotourism at the Kopeng Resort, Mount Merbabu National Park

Bagus Hermawan ¹, Jilan Ashila ², Ardhitya Rio Febrian ³, Fauziana Erlis Safitri ⁴, Auriga Wahyu Widyadana Ramadhan ⁵, Muhammad Amin Sunarhadi ⁶

^a Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

^b Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

^c Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

^d Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

^e Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

^f Faculty of Mathematics and Science, Sebelas Maret University, Surakarta 57126, Indonesia

¹ bagushermawan@student.uns.ac.id; ² jilanash0125@student.uns.ac.id; ³ ardhityario@student.uns.ac.id; ⁴ fauzianaerliss@student.uns.ac.id;

⁵ aurigaw05@student.uns.ac.id; ⁶ mamin.sunarhadi@staff.uns.ac.id

* Corresponding Author



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ABSTRACT

Kalipasang is one of the tours in the Kopeng Resort area which has the appeal of pine stands and campgrounds. This tour is part of the Kopeng Resort which is in the Mount Merbabu National Park area which has been extensively developed. However, good tourism is tourism that can boost the economy, have benefits for the community, and maintain the environment. Therefore, the purpose of this research is to find out the appropriate strategies to do so that Kalipasang tourism can be optimal as a sustainable ecotourism. The data collection method was carried out by means of field observations and interviews. The data processing method uses an analysis of the basic principles of ecotourism, IFAS and EFAS, SWOT, and sustainable ecotourism modelling. The results of this study indicate that the strategy for developing Kalipasang tourism as a sustainable ecotourism can be seen in 3 aspects, namely economic, social and environmental. From an economic aspect, it is necessary to improve facilities, carry out promotions, and make ticket prices competitive. Meanwhile, from a social aspect, it is necessary to have community participation in tourism development, efforts to educate tourists, and involve stakeholders. Meanwhile, in terms of environmental aspects, efforts to conserve plants or animals and good waste management are needed. With the combination of these three aspects, Kalipasang tourism as sustainable ecotourism can develop

KEYWORDS

Kalipasang
Ecotourism
Sustainable
Development
Mount Merbabu National
Park

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1. Introduction

Sustainable development has 3 main pillars, namely economic, social and environmental (Asyari, 2018). If all three can be balanced then sustainable development can run well and vice versa, if one of the pillars of sustainable development is dominant then problems will occur (Banjarnahor et al., 2021). The background to this sustainable development is related to poverty, social injustice, to food and environmental problems that can cause instability. Therefore, sustainable development was first introduced at the UN conference in Stockholm in 1972 which discussed the environmental field (Hapsoro and Bangun, 2020). Based on the Rio Summit, there are several important principles, namely the inter-generational principle, the intra-generational principle, the principle of early prevention, the principle of protecting biodiversity, and the principle of internalizing environmental costs and incentive mechanisms (Yonatan et al., 2021). Therefore, sustainable development needs to be carried out so that economic, social and environmental conditions can be stable so that they can be utilized for present and future generations.

Ecotourism can be interpreted as an activity in which the territory can be enjoyed and appreciated by the presence of nature and existing cultural aspects, then developing conservation activities so that they can obtain socio-economic benefits (Pramono et al., 2020). Thus, the

development of tourism with ecotourism can provide economic, social, and environmental sustainability benefits (Asy'ari et al., 2021). However, there are weaknesses in the development of this tourism concept, namely regarding the understanding of the concept of ecotourism which is relatively low by both the manager and the tourists, therefore it is still necessary to empower ecotourism in order to increase understanding of the concept of ecotourism (Widiyanto et al., 2019).

One of the ecotourism located in Mount Merbabu National Park is Kalipasang. Kalipasang is a tourist attraction where the attraction is the camping ground, views of pine stands, the presence of bird species such as dederuk, finches, prenjak, and pentet, besides that there are also types of plants such as pine, puspa, acacia, mountain cypress, and other. According to Gunn in Adriani (2016), a good tourist area is tourism that can make the lives of the surrounding community better, can improve the economy, can protect the environment, and is integrated with the surrounding community so that it can reduce the negative impacts that exist. Therefore, ecotourism needs to be carried out with a sustainable concept so that it does not only improve the economic aspect, but also maintains the social and environmental aspects. Therefore, this research was carried out which aims to find out the appropriate strategy so that Kalipasang tourism can be optimal as a sustainable ecotourism so that it can compete with other tourist attractions.

2. Method

The location used for this research is Kalipasang Tourism which is in the Kopeng Resort, Mount Merbabu National Park. The time frame for conducting the research is October – December 2022. October is used for activity preparation, then November is used for observation and interviews, while December is used for data processing and article writing.

2.1. Tools and Materials

This study uses tools and materials including stationery, tally sheets, questionnaires, respondents, and laptops. Questionnaires were made before the observations and interviews were carried out which contained questions about Kalipasang tourism. Respondents were taken, namely managers and tourists in Kalipasang to find out from the responses from each party. Stationery and tally sheets were used to record interview results. Meanwhile, laptops are used to process data and write articles.

2.2. Data Collection Stage

The stages of primary data collection in this study were carried out by direct observation at the Kalipasang tour and interviewing the management or visiting tourists. Direct observation was carried out in order to find out how the tourist situation was at that location. Meanwhile, interviews were conducted in order to find out the actual situation regarding Kalipasang tourism. In addition, secondary data collection was carried out, namely through literature studies obtained from documents, journals, and books.

2.3. Data Processing Stage

Observation and interview data were processed using Microsoft Word. First, an analysis of the 5 basic principles of ecotourism that has been contained in Kalipasang tourism, then it is scored using internal & external strategic factors so that a value is obtained to be included in the internal & external matrix table. From these factors, it can be included in the SWOT analysis so that a sustainable tourism development strategy is known, which will then be obtained as a sustainable ecotourism model.

3. Results and Discussion

3.1. Basic Principles of Ecotourism

According to Koen Meyers in Silvandi and Mandalia (2021), tourism is a travel activity carried out temporarily from the original place of residence to the destination area for reasons not to settle or earn a living but only to have fun, fulfill curiosity, spend free time. or holidays and other

purposes. Meanwhile, ecotourism is a tourism activity that prioritizes aspects of conservation, socio-economic culture, learning, and local communities (Abdullah et al., 2021). The five basic principles of ecotourism are preservation/conservation, education, tourism, economy, and community participation. An explanation of the 5 basic principles of ecotourism is as follows:

1. Preservation/Conservation: the activities carried out do not cause damage and pollution to the environment or culture;
2. Education: the activities carried out provide an educational element;
3. Tourism: activities that contain elements of fun with various tourist motivations to visit a location;
4. Economy: opening up economic opportunities, the activities carried out provide income and benefits so that they can continue to be sustainable; and
5. Community participation: provide direct/indirect benefits for the community, so that there is a reciprocal relationship between tourist attractions and the management of the benefits obtained.

Here are the 5 basic principles of ecotourism that already exist in Kalipasang tours:

1. Preservation/Conservation: efforts are made to preserve nature such as planting and cleaning tourist areas.
2. Education: making educational banners regarding tourist maps, distribution of long-tailed monkeys & Javanese eagles, and education for preserving nature & animals in Mount Merbabu National Park, besides that this place is used for recreation for school children or used as a place for research.
3. Tourism: the tourist attraction of Kalipasang is as a campground, a place for people who seek beautiful nature, and the attractiveness of standing pine forests; then there are bird species such as (dederuk, finches, prenjak, and pentet; apart from that there are plant species such as pine, puspa, tembelekan, acacia, mountain cypress, and others
4. Economy: a fee ticket withdrawal of Rp. 6,000.00 for weekdays and Rp. 8,500.00 for holidays is carried out, which includes insurance. The money is used for tourism caretakers/managers and is used to improve existing facilities in Kalipasang
5. Community participation: a workforce withdrawal was carried out for managing this tour, in addition to that for the surrounding community who are still looking for grass above Kalipasang, they will benefit indirectly, namely having better roads, and direct benefits for the surrounding community, especially those who have stalls, namely get buyers from Kalipasang tours because in the tourist area no one sells food or drinks

3.2. Internal and External Strategic Factors For Kalipasang Tourism

The internal strategic factors of tourism can be interpreted as important factors originating from within tourism so that they can influence the assessment of tourism as sustainable ecotourism. While the external strategic factors of tourism can be interpreted as important factors originating from outside tourism so that they can influence the existence of tourism as sustainable ecotourism. The following are the internal and external strategic factors of Kalipasang tourism

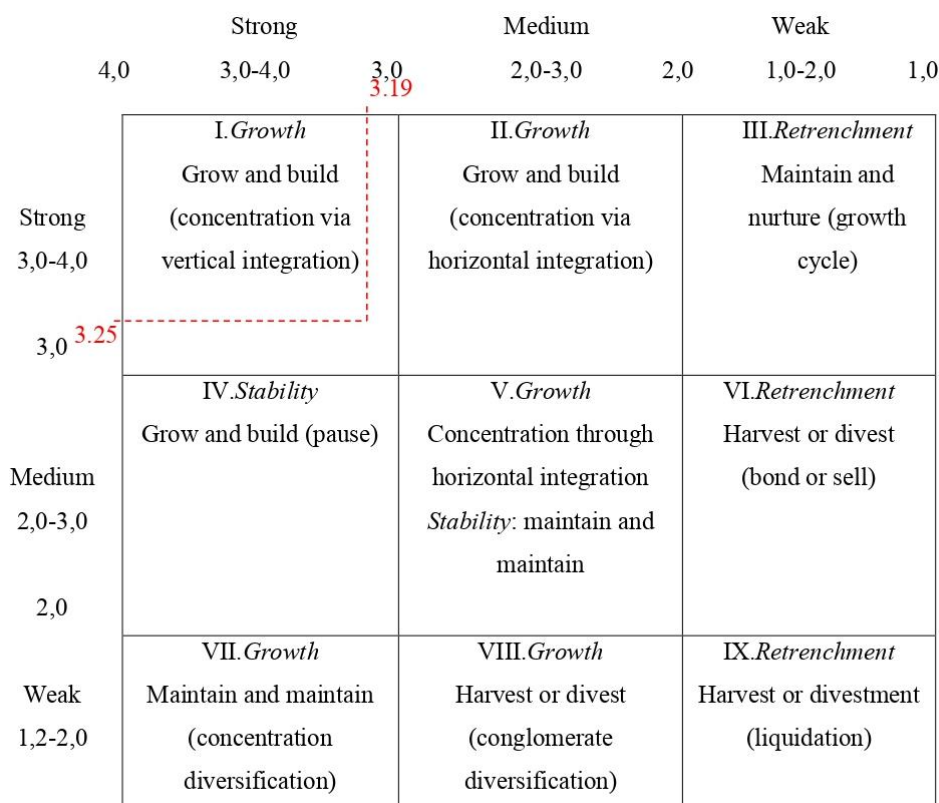
Table 1. Internal Strategic Factors

No	Internal Strategic Factors	Weight	Rank	Score
Strengths				
1	Pine trees (<i>Pinus merkusii</i>)	0.15	4.00	0.60
2	Campground	0.12	3.75	0.45
3	There are photo spots and views of Kalipasang	0.08	3.00	0.24
4	The presence of birds and several types of forest plants	0.05	3.00	0.15
5	Strategic location	0.08	3.00	0.24
6	Availability of halls, parking areas, toilets, prayer rooms, gazebos and viewing posts	0.08	3.50	0.28
7	There are educational banners about types of	0.05	2.50	0.125

animals and preserving nature				
Weakness				
1	Garbage in several places	0.10	2.75	0.275
2	Lack of stakeholders	0.08	2.75	0.22
3	Limited bathroom and gazebo facilities for camping people	0.12	2.50	0.30
4	There are no tourist closing gates	0.04	2.75	0.11
5	No tour guide	0.05	4.00	0.20
TOTAL		1.00		3.19

Table 2. Internal Strategic Factors

No	External Strategic Factors	Weight	Rank	Score
Opportunities				
1	The rapid development of social media	0.15	4.00	0.60
2	Opportunities for cooperation with stakeholders	0.10	3.50	0.35
3	Public interest in traveling	0.12	3.50	0.42
4	There are jobs for the community	0.08	3.00	0.24
5	Tourism development prioritized by Mount Merbabu National Park	0.15	3.00	0.45
Threats				
1	Competition for other tourist objects in Kopeng	0.08	3.00	0.24
2	The impact of the spread of the Covid-19 virus	0.12	3.50	0.42
3	Tourists who damage/contaminate tourist facilities	0.12	2.75	0.33
4	Natural events such as rain which can worsen access roads become slippery	0.08	2.50	0.20
TOTAL		1.00		3.25



Source: IFAS and EFAS

Fig. 1. Strategic Position Kalipasang Tourism

Table 3. Kalipasang Tourism SWOT Analysis Matrix

EFAS	IFAS	STRENGTHS (S)	WEAKNESSES (W)
		<ol style="list-style-type: none"> Pine trees (<i>Pinus merkusii</i>) Campground There are photo spots and views of Kalipasang The presence of birds and several types of forest plants Strategic location Availability of halls, parking areas, toilets, prayer rooms, gazebos and viewing posts There are educational banners about types of animals and preserving nature 	<ol style="list-style-type: none"> Garbage in several places Lack of stakeholders Limited bathroom and gazebo facilities for camping people There are no tourist closing gates No tour guide
	OPPORTUNITIES (O)	STRATEGY SO	STRATEGY WO
	<ol style="list-style-type: none"> The rapid development of social media Opportunities for cooperation with stakeholders Public interest in traveling There are jobs for the 	<ol style="list-style-type: none"> Increase promotion on social media regarding Kalipasang tours Organize tourism events with the local community Involve the community when 	<ol style="list-style-type: none"> Organize cleaning and planting activities Organize tour guides if needed by foreign and local tourists Looking for stakeholders for

community 5. Tourism development prioritized by Mount Merbabu National Park	developing tourism facilities 4. Provide equipment rental for camping	tourism development
THREATS (T) 1. Competition for other tourist objects in Kopeng 2. The impact of the spread of the Covid-19 virus 3. Tourists who damage/contaminate tourist facilities 4. Natural events such as rain which can worsen access roads become slippery	STRATEGY ST 1. Keep the pine stands in good condition so that they become photo spots and campgrounds 2. Providing hand sanitizer facilities, a place to wash hands, temperature detection, and a Peduli Lindungi scan 3. Making educational banners so tourists don't damage the facilities 4. Make tourist entrance tickets prices competitive	STRATEGY WT 1. Improving tourism support facilities such as playgrounds 2. Procurement of gates for security and addition of bathrooms & gazebos for camping facilities 3. Adding trash bins and managing waste properly

3.3. Optimization Strategy for Kalipasang Tourism as Sustainable Ecotourism

Based on tables 1 and 2 above regarding internal & external strategic factors so as to get a value for the strategic position of Kalipasang tourism which is in quadrant 1 which can be seen in table 3. This means that tourism conditions in Kalipasang have developed very quickly. Based on table 4 regarding the SWOT analysis matrix for Kalipasang tourism, the following sustainable ecotourism development strategies are obtained:

a. Strategy Strength – Opportunity

Strategies that can be carried out include increasing the promotion of Kalipasang tourism on social media so that more people know about the existence of this tour so that visitors who travel will increase. In addition, it is necessary to hold interesting events or if you are carrying out the construction of tourist facilities by inviting the surrounding community so that they can increase community participation in these tourist attractions. Then the provision of borrowing equipment for camping is carried out so that tourists do not need to bring equipment from home, besides that it can even increase economic circulation at this tourist location.

b. Strategy Strength – Threat

Maintaining the condition of the pine stands as photo spots and camping grounds is something that must be maintained because the essence of this tour is the view of the pine trees. With the Covid-19 virus situation that is spreading, the strategy that must be implemented is to provide hand sanitizers, a place to wash hands, detect temperature, and scan Peduli Lindungi so that tourists will be better protected from the virus. Then because there are tourists who damage/contaminate the location, it is recommended to make educational banners to protect the tourist environment. Because the Kopeng location has many tourist attractions, Kalipasang tours must make competitive ticket prices so they can compete with other tours.

c. Strategy Weakness – Opportunity

Kalipasang Tourism has a few problems regarding waste in several spots so that cleaning or planting activities can be carried out which can also be documented as indirect promotions on social media. Tour guides are needed for foreign and local tourists, especially for educational facilities about plants or animals in that location. Stakeholders are needed as tourism developers to improve tourism facilities.

d. Strategy Weakness – Threat

Improvement of supporting facilities such as playgrounds or the like needs to be held in order to attract tourists so that they can compete with other tourist objects. With this tourist condition there is no closing gate, it is necessary to procure a gate to increase security and increase the number of bathrooms and gazebos for camping people. This is because if there are hundreds of people camping but there are only a few bathrooms, it will cause long lines. In addition, proper waste management is needed so that the tourism aesthetics will remain good.

3.4. Sustainable Ecotourism Model

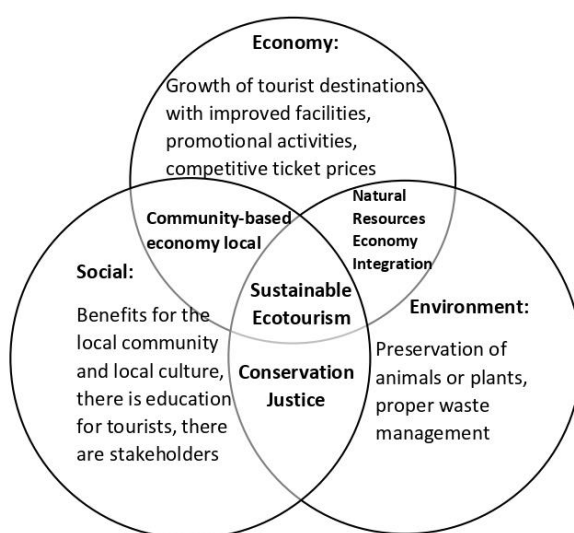


Fig. 2. Sustainable Ecotourism Model

Merbabu Mountain is a popular ecotourism site in Indonesia. The area encompasses 746 hectares of primary forest and is home to more than 130 plant species and 50 animal species. The forest also has a rich cultural history as it serves as a sacred place for the communities around Merbabu Mountain. Since 1990, Merbabu has gained international recognition as an important source of natural resources for medical purposes.

Merbabu's natural attractions have helped make the area a popular ecotourism site. Tourists come to Merbabu to experience the area's natural beauty and rich cultural history. The main attractions at Merbabu Mountain are the waterfalls, gorges, and nature trails. The forest is home to various species of plants and trees, including ebony, bamboo, and daun jambu. There are also many species of wild animals such as monkeys, lemurs, wild boars, deer, snakes, and birds. The mountain is also home to many types of insects, reptiles and other animals. A unique feature of Merbabu Mountain is its phantastic birdlife- over 200 species have been recorded in the mountain's avian community.

The Kopeng community benefits from ecotourism in the form of revenue from guided walking tours. These tours offer an opportunity for local people to make money by leading tourists through the natural attractions of Merbabu Mountain. These tours can be private or government-run; either way allows locals to supplement their income by leading tourists through the area's natural attractions. A typical tour consists of a hike up the mountain followed by a stop at one of the many waterfalls along the way. After touring the falls, tourists return to their starting point by walking back down the mountain. This route allows tourists to view different parts of the mountain while learning about its cultural significance for the local community. Sustainable ecotourism must be integrated between the economic, social and environmental. In addition, 5 ecotourism principles must also be included in this ecotourism model, namely tourism and the economy are included in the economic sphere, while community participation and education are included in the social

sphere, while preservation/conservation is included in the environmental sphere. The relationship between the economy and the environment will result in an economic integration of natural resources and the environment. In contrast, the relationship between the environment and the social is conservation justice. In contrast, the relationship between the economy and the social will give rise to an economy based on local communities.

In the economic aspect, facilities and promotions must be improved to attract more tourists to visit this tour so that the economy can run faster. In the social aspect, this tour must be beneficial for the surrounding community or for visiting tourists with education. In the environmental aspect, this tour must have good management of animals/plants or waste. If these three components can be integrated properly then sustainable ecotourism will be realized.

Merbabu's biodiversity has benefited from the establishment of nature reserves on surrounding islands decades ago. Many birds and animals travel between islands to find mates, which leads to greater biodiversity in these reserves. Additionally, protecting these reserves prevents hunting from taking place inside them which leads to greater animal populations as well. In addition to preserving biodiversity, protecting these parks also protects local culture since hunting is a traditional pastime for some areas in Indonesia. Consequently, protecting these parks preserves local culture while allowing scientists to study new ecosystems and promote international cooperation in conservation efforts.

Merbabu Mountain is an exceptional ecotourism site due to its rich cultural history and natural beauty- two factors that contribute to its popularity among both domestic and international tourists. The area is also a good example of sustainable tourism thanks to its revenue from guided walking tours and local people making money through ecotourism entrepreneurship opportunities. Ultimately, global effort is needed to preserve threatened ecosystems around the world; sites like Merbabu Mountain are an inspiration toward this goal thanks to their natural popularity and ability to generate revenue through sustainable ecotourism initiatives.

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4. Conclusion

The appropriate strategy is to do so that Kalipasang tourism can be optimal as a sustainable ecotourism based on its strategic position in quadrant 1 which can be divided into 3 namely economic, social and environmental. Economically, it is necessary to increase tourist facilities such as play areas, bathrooms, gazebos, gates, and Covid-19 prevention protocols, then increase promotional activities in order to attract more tourists, and make tourist entry ticket prices competitive with tourism other tours. Socially, it involves community participation in making facilities and events so that the surrounding community gets the benefits, then educational efforts are carried out through banners for tourists, then there are stakeholders who can improve tourism development. Environmentally, conservation efforts are needed for plants or animals because basically pine stands are the most sought after by tourists, besides that it is necessary to carry out good waste management so that it does not interfere with the aesthetics of these tourist attractions.

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