

Community-based dark tourism development strategy in the disaster-prone area of Mount Semeru, East Java

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Abstract

Pronojiwo District has a geological uniqueness because some areas are close to the Mount Semeru area. The history of the eruption of Mount Semeru on December 4, 2021, which had a wide impact on society and the environment. This study aims to identify the potential and formulate a strategy for developing dark tourism in the slopes of Mount Semeru, especially in Pronojiwo District, Lumajang Regency. The research method uses a qualitative and quantitative descriptive approach to understand the potential, challenges, and management models for dark tourism on the slopes of Mount Semeru. The results of the study show that the potential for dark tourism was identified through spatial analysis of affected locations and mapping of tourist attractions such as Tumpak Sewu, Kapas Biru, Kali Kebo, Sarkawi, and Sumberurip which are within a radius of <5 km from the center of volcanic activity. In addition, Pronojiwo District is in quadrant I (Strength-Opportunity), indicating high potential for growth-based development. The development strategy focuses on two main aspects: improving destination management (attraction, promotion, institutions) and strengthening human resources (training, disaster literacy, and certification of tourism actors). This study shows that community-based dark tourism in the Semeru area can be a model for developing reflective and educational tourism in Indonesia, while also contributing to strengthening the local economy, disaster awareness, and community resilience.

Keywords: dark tourism; Mount Semeru; disaster tourism; development strategy

INTRODUCTION

The phenomenon of dark tourism (*Dark Tourism*) has attracted widespread attention in the study of global tourism due to its unique and complex nature. This tourism refers to tourist visits to locations associated with death, tragedy, or suffering, which often provide an emotional and educational experience to visitors (Baloch et al., 2023; Martini & Buda, 2020). Emerging models of dark tourism include dark aesthetic approaches, emotional contagion, to thanatological perspectives that link socio-cultural understandings of death to tourist attraction (Fabros et al., 2023; Podoshen et al., 2015). This emotional experience is in line with several disaster events that occurred in the East Java area, especially on Mount Semeru.

The slopes of Mount Semeru in East Java have great potential to be developed as a disaster-based dark tourism destination. High volcanic activity in Semeru, such as the eruption in early January 2025 with an eruption height of 1200 meters and an eruption frequency of up to 14 times in 24 hours, makes this area attractive to tourists who are interested in extreme natural phenomena and disaster mitigation education (Kompas, 2025; Detik, 2025). This potential has

not been widely exploited, although similar experiences in other locations, such as "Hope Tourism" in Fukushima, Japan, have shown the success of the development of post-disaster education-based tourism (Jang et al., 2021). The potential of Mount Semeru needs to be developed like in Japan by conducting research to determine strategic models in development. The tourism development model can be carried out by identifying the potential and interests of tourists as well as phenomena that occur in the community (McCabe, 2024; Sgroi & Modica, 2024).

The dark tourism development model begins with tourists' interest in phenomena that occur in nature and society. Research on dark tourism shows that tourists' motivations are very diverse, from curiosity about death to a desire to have an unusual new experience (Kerr et al., 2022; Koenig-Lewis et al., 2014). In addition, illicit tourism makes a significant contribution to the formation of collective identities and historical narratives in society, which can be used as an educational tool and social awareness enhancement (Weaver et al., 2018). However, despite research advances showing many opportunities, the development of illicit tourism in disaster-prone areas such as the slopes of Mount Semeru faces significant challenges. These challenges include a lack of strategic planning and a negative public perception of this type of tourism, which is often perceived as an exploitation of tragedy (Kennell & Powell, 2021; Šerić et al., 2024). In addition, the safety risk of tourists in areas prone to volcanic eruptions is a major concern in destination management (Šerić et al., 2020).

This research aims to develop a safe and sustainable community-based dark tourism management strategy on the slopes of Mount Semeru. Specifically, this study will identify the factors that influence tourist interest, explore public perceptions of illicit tourism, and propose an educational tourism model that can increase awareness of disaster mitigation. The urgency of this research lies in the great potential of illegal tourism in the Semeru area as an alternative to conventional tourism. With the right management strategy, this area can become a leading destination that not only provides economic benefits to the local community but also plays an important role in volcanic disaster mitigation education. This is in line with the urgent need for ethical and community-based tourism development in the face of extreme natural risks in Indonesia (Hwang et al., 2023)

Dark tourism is a form of tourism that involves visits to locations associated with death, tragedy, and human suffering. Foley and Lennon (1996) was the first researchers to introduce this concept, highlighting the attraction of tourists to places of tragic historical value. Several models have been developed to understand this phenomenon. One popular model is a framework-based thanatology by Kerr et al. (2022) and Stone (2006), which views dark tourism as a means of modern society in dealing with death. Development of a dark tourism model that integrates elements of simulation and emotional transmission (Biscaia & Marques, 2022; Podoshen et al., 2015).

Research on illicit tourism is growing with a variety of theoretical approaches that highlight the emotional, educational, and social aspects of the tourists' experience in these destinations (Lewis et al., 2021; Millán et al., 2021). In Indonesia, illicit tourism has great potential considering the many historical locations and natural disasters that can be developed into educational tourist destinations. This research on illegal tourism is a special motivation for tourists

The motivation of tourists in visiting destinations for illegal tourism varies greatly. Research shows that curiosity about history and tragic events is a major factor that drives tourists to visit these places (Lewis et al., 2021). In addition, the desire to get a unique and immersive experience is also an important reason for tourists (Fabros et al., 2023). The social impact of dark tourism includes increasing awareness of the importance of preserving local history and culture.

The development of illicit tourism in various countries has had a significant impact on social, cultural, and economic aspects. Research in India shows the potential of dark tourism in strengthening cultural heritage and raising historical awareness (Dhatrak, 2020). However, there

are challenges in the development of illicit tourism, such as negative perceptions from the public and ethical issues that consider this tourism as a form of exploitation of tragedy. Therefore, a community-based approach that involves local communities in destination management is essential to ensure the sustainability of illicit tourism (Kennell & Powell, 2021).

Tourism development in this region must be carried out by considering aspects of security, education, and local community involvement. Strategies that can be implemented include educating tourists about disaster mitigation, developing adequate infrastructure, and promoting destinations as educational tourism destinations. Local community support is essential to ensure the sustainability and success of dark tourism (Panayidou et al., 2024).

The approach to illicit tourism development requires comprehensive integration with various local elements such as natural resources, customs, and historical culture in order to create attractive and sustainable tourism products (Wailmi et al., 2024). This integration is important to enrich the attraction of the destination and create added value for tourists (Dias et al., 2023). Local resource-based development also provides opportunities for the community to be actively involved in creating authentic and meaningful tourism experiences, which is in line with tourism development strategies in various countries, including Indonesia (Wailmi et al., 2024).

The sustainable development model in black tourism requires not only the integration of local elements, but also the full support of local communities and the private sector. The involvement of local communities in the management of illicit tourism destinations is essential to maintain the social and economic sustainability of the region (Millán et al., 2021). In addition, the private sector plays a role in providing adequate infrastructure and supporting facilities, thereby improving the comfort and safety of tourists. The involvement of all parties will create a balanced tourism development model and support local economic growth without neglecting local cultural values (Dolenec & Vodeb, 2021).

Harmonious relationships between local communities, the private sector, and the government are critical to the success of the development of illicit tourism (Dolenec & Vodeb, 2021; Millán et al., 2021). This relationship needs to be well managed through the application of ethical principles in destination development, given the sensitivity of dark tourism to historical and emotional values. An ethical and participation-based approach, dark tourism can provide educational benefits to tourists as well as raise awareness of the dark events of the past, while strengthening local cultural identity (Dolenec & Vodeb, 2021; Wailmi et al., 2024).

METHOD

Research Design

This study uses qualitative and quantitative descriptive approaches to understand the potential, challenges, and models of illegal tourism management on the slopes of Mount Semeru. A qualitative approach to discuss the phenomenon that occurs while a quantitative approach to formulate a development strategy through SWOT analysts. This approach was chosen because it is in accordance with the research objectives, which is to explore the phenomenon of dark tourism that is complex, unique, and closely related to the local social and cultural context (Foley & Lennon, 1996; Hwang et al., 2023; Stone, 2006). The education and disaster mitigation based tourism model is the main framework in this research design, considering the importance of integrating educational aspects in the development of illicit tourism in disaster-prone areas (Jang et al., 2021).

Research Location

This research was conducted on the slopes of Mount Semeru, in Pronojiwo District, Lumajang Regency, East Java. This location was chosen because Mount Semeru is an active volcano that often erupts, as recorded in early January 2025 with 14 eruptions within 24 hours

and the height of the eruption reached 1200 meters (Kompas, 2025; Detik, 2025). The existence of this natural phenomenon makes the area have the potential to be developed as a disaster-based dark tourism destination.

Data Type

This study uses primary and secondary data. Primary data were obtained through in-depth interviews with the study subjects, direct observation at the research site, and focused group discussions (*focus group discussion*). Secondary data in the form of documents, official reports, and relevant literature, including previous research on illicit tourism (Millán et al., 2021; Wailmi et al., 2024).

Data Collection Techniques

The primary data collection technique in this research is through interviews, observations, and focus group discussion. Interviews were conducted directly with local communities, tourists, and local governments. This interview aims to explore their views, experiences, and expectations regarding the development of illegal tourism in the slopes of Mount Semeru (Kennell & Powell, 2021). Observations were carried out to see firsthand the condition of the area, tourist activities, and the involvement of local communities in tourism management. These observations will note things that were not revealed in the interview but are important to analyze further (Kerr et al., 2022). Focus Group Discussion (FGD) are conducted by involving various stakeholders, such as local communities, local governments, and academics. This discussion aims to formulate a community-based illicit tourism management model that is in accordance with local conditions (Dolenec & Vodeb, 2021).

Data Analysis

The data analysis of this study uses two data analyses, namely: 1) data analysis to determine the potential through an interactive analysis model by Miles and Huberman. Social data in this study is from qualitative interviews using an interactive analysis model by Miles and Huberman (2002), which includes data collection, data reduction, data presentation/data display, conclusion, and verification. The data analysis in this study is qualitative analysis and quantitative analysis. Using John and Cheryl's (2018) qualitative approach, all collected materials are first transcribed as part of data processing and preparation, then read thoroughly and entered into the dataset. The next step is data reduction, selecting, streamlining, simplifying, abstracting, and transforming the information, followed by a closer examination of manager and visitor activities on the slopes of Mount Semeru, organizing the findings into components pertinent to dark-tourism development. Building on the emerging code categories, the analysis then investigates the direction of tourism development at a deeper level and concludes by identifying distinctive and noteworthy insights and formulating the study's conclusions.

Quantitative analysis in this study was used SWOT. SWOT analysis is used to support strategic decision-making, especially for environmental management (Bitoun et al., 2023). In addition, SWOT analysis can help prioritize sustainable development goals based on stakeholder knowledge (Pomatto et al., 2023). This approach is used to facilitate decision-making analysis and allows individuals to identify internal and external factors in tourism development on the slopes of Mount Semeru. This approach examines strengths, weaknesses, opportunities, and threats, stakeholders can gain insights that can be used in the decision-making process. The SWOT structural model helps formulate an organizational strategy to build a reconstruction model can be seen in Table 1.

Tabel 1. Matrix of SWOT

SWOT Analysis			
External Audit	Internal Audit		
	Opportunities	Strengths	Weakness
		SO	WO
	Threats	ST	WT

Source: Arinta and Susilo (2023) and Sumarmi et al. (2020)

RESULTS AND DISCUSSION

Description of the Research Location

Pronojiwo District is located in the southern region of Lumajang Regency, East Java Province, and is located in the volcanic material capture zone of Mount Semeru. This region is geomorphologically located on an active volcanic landscape, which is directly influenced by the eruptive activity of Mount Semeru (Kurnia et al., 2024; Wavelet et al., 2022). The highest volcano on the island of Java with an elevation of 3,676 meters above sea level. These geographical and geological conditions make Pronojiwo one of the areas with a high level of vulnerability to geological disasters, while at the same time holding the potential as an educational area for disaster mitigation and tourism development based on extreme experiences (dark tourism). Pronojiwo District administratively includes several villages that are in the zone prone to volcanic disasters, including Supiturang, Oro-Oro Ombo, and Sumberwuluh Villages. This area is one of the areas with the highest level of vulnerability to geological disasters on the island of Java, especially because of its position in the path of avalanche hot cloud flows (APG), rain lava, and other volcanic activities from the top of Semeru.

Mount Semeru has a long history of eruptive activity, and one of the significant eruption events occurred on the date 4 December 2021 (Rosyida et al., 2021; Suhadha & Harintaka, 2024). This secondary eruption occurred due to an avalanche of lava dome triggered by high rainfall intensity in the summit region. Based on data from the Semeru Volcano Observation Post (PPGA), two incidents of earthquakes and pyroclastic avalanches were recorded with an amplitude between 21–25 mm and a duration between 480 to 5,160 seconds (Lavigne et al., 2007; Sumarmi et al., 2024). The eruption caused significant physical and social damage, including burned homes, broken connecting bridges, and changes in the morphology of the landscape around the affected area. In addition, this incident caused a massive evacuation and left ecological and social trauma for the local community (Arrasyid et al., 2023).

Post-disaster conditions in Pronojiwo District create a social space that stores the collective memory of tragedy and community resilience. This makes the area have great potential to be developed as a disaster education-based dark tourism destination (Kunwar & Karki, 2019). In addition to presenting a strong visual and emotional experience, this destination can function as a learning space for tourists about risk mitigation, social adaptation, and human relationships with natural disasters. Therefore, the selection of Pronojiwo District as the location of this study is based on the complexity of the socio-ecological context, as well as the urgency of developing an ethical, participatory, and sustainability-oriented tourism management strategy.

Potential of Dark Tourism in the Mount Semeru Area in Pronojiwo District, Lumajang

The slope area of Mount Semeru in Pronojiwo District, Lumajang Regency, is an area that has high attractiveness to be developed as a dark tourism destination (dark tourism). This potential is characterized by the existence of an active volcanic landscape that not only presents dramatic natural beauty, but also harbors an intense and monumental trail of disasters (Saad et

al., 2024; Zhang, 2021b). This makes the area an attractive location for tourists who have an interest in extreme phenomena and traces of natural tragedies.

Spatially, Pronojiwo District has a number of points that are relevant to the dark tourism category, such as cold lava flow areas, former evacuation routes, and locations affected by hot cloud avalanches. In addition, there are several tourist attractions that are directly or indirectly related to the volcanic activity of Mount Semeru. Dark tourism objects have their own uniqueness because they are located in an area with a distance of <5 km from the center of volcanic activity, thus creating an authentic and thrilling tourism experience, one of which is the Kalikebo object can be seen in Figure 1 and Tumpaksewu Waterfall in Figure 2. The existence of natural panoramas, changes in land morphology after eruptions, and the stories of people who survive in the midst of disaster risks add a cultural dimension that can enrich the tourist experience. The following are tours in the Pronojiwo District area that are included in dark tourism can be seen in Table 2.

Table 2. Dark Tourism in Pronojiwo District

No	Tourism Site	Types of tours	Uniqueness
1	Tumpak Sewu	Waterfall	Waterfall passed by the river from the upper reaches of the Mount Semeru area
2	Kapas Biru	Waterfall	Waterfall passed by the river flowing from Mount Semeru
3	Sarkawi	Camping Ground	A place that can be used for a camping ground and is still in danger of volcanic ash from Mount Semeru
4	Kali Kebo	River	The river is located on the slopes of Mount Semeru with a radius of 3 Km so that it is still in danger category of Mount Semeru
5	Sumberurip Village	Villages to see Point Sunrise	Villages in disaster-prone areas to see the sunrise and the beauty of Mount Semeru



Figure 1. Kalikebo, A River Used as a Tourist Attraction in the Mount Semeru Area



Figure 2. View Tumpak Sewu Waterfall in Pronojiwo District
 Source: tripadvisor.co.id

Mapping of the Potential of Dark tourism in Pronojiwo District

The development of illegal tourism in Pronojiwo District needs to be analyzed to find out how much potential it has. The analysis to find out this potential uses a SWOT analysis that can measure the strengths, weaknesses, opportunities and threats of tourism in Dark Tourism in Pronojiwo District. The following is a SWOT analysis in Table 3.

Table 3. Results of SWOT analysis in Dark Tourism in Pronojiwo District

Internal Factors (IFAS)				
No	Strength (S)	Weight	Rating	Shoes
1	Pronojiwo District has tourism with different geomorphologies	0.07	4	0.29
2	The tourism potential in Pronojiwo District is very diverse, ranging from natural tourism to agriculture	0.07	3	0.22
3	Pronojiwo District has Semeru lava tour packages	0.07	3	0.22
4	The Semeru lava tour package offers a view of the sunrise on Mount Semeru, cold lava flows, and lush pine forests. The scenery is very good in every tourist attraction and there is always the appearance of Semeru which is the mainstay	0.05	4	0.2
5	Facilities and infrastructure to support tourism in the Tumpak Sewu Area (toilets, stalls, prayer rooms, homestays, paragliding management offices, motorcycle taxi drivers' team)	0.07	3	0.22
6		0.05	3	0.15
7	All locations are still free of waste	0.02	3	0.07
8	The manager of each tour has pokdarwis and is actively involved	0.02	3	0.07
9	It has typical souvenirs, namely Pronojiwo pondoh salak chips and banana temples	0.02	3	0.07
10	Sumberurip Village as a spot to see the sunrise and Mount Semeru View	0.05	3	0.15

Internal Factors (IFAS)				
No	Strength (S)	Weight	Rating	Shoes
11	The view of Tumpak Sewu and Kapas Biru has a great view of the waterfall	0.05	3	0.15
12	Sarkawi is a spot for the campground, and it is still clean	0.05	3	0.15
13	Tumpak Sewu has karst geomorphology in the middle of volcanic landforms	0.05	3	0.15
		0.66	41	2.1
Disadvantages (W)				
No				
1	Distance is quite far from the city center of Lumajang City Along 67 Km	0.07	2.9	0.2
2	Road access to some tourist attractions should be used on two wheels such as Kapas Biru	0.07	2.9	0.2
3	Tourism governance that has not been maximized	0.05	2.5	0.1
4	There is no systematic promotion	0.02	2	0
5	There is still no system for flood detection at the Tumpak Sewu, Kapas Biru and Sarkawi tourist attractions	0.07	2.3	0.2
6	Sarkawi is still in a disaster-prone area spot	0.05	2.3	0.1
		0.34	14.9	0.9
Total		1	14.9	1.75
X = Strengths		0.35		
External Factors (EFAS)				
No	Odds (O)			
1	Away from the hustle and bustle of the city so the atmosphere is calmer and cooler	0.14	4	0.55
2	Received support from the government because it was used for international tourism	0.14	4	0.55
3	The cost of visits is relatively cheap	0.14	3	0.41
4	Have the support of the local community	0.09	3	0.27
5	It tends to be a private tourism destination because the convenient location for camping is very large	0.05	3.5	0.16
6	It is necessary to make a detailed package by proposing Local potential, such as an edutourism package for the manufacture of snake fruit crisps	0.05	3	0.14
Total		0.59	20.5	2.07
No	Threat			
1	High risk of the threat of lava and flooding because some tourist attractions are still in disaster-prone areas	0.14	2.9	0.4
2	Several points to landslide-prone locations, especially in Tumpak Sewu	0.14	2.5	0.34
3	The appearance of different names on the same tourist attractions	0.09	2.5	0.23
4	Lack of awareness of visitors to maintain cleanliness and sustainability in Sarkawi as a campground object	0.05	2.5	0.11
		0.41		
Total		1	10.4	1.1
Y = Opportunity-Threat		0.99		

The IFAS and EFAS matrix are scored according to the criteria presented in Table 1. Furthermore, the quadrant of illegal tourism locations in Pronojiwo District is determined through x and y values. The x value of 0.35 is obtained through internal factors by subtracting the strength score (S) by the weakness (W). Meanwhile, the y value of 0.99 was obtained from external factors by subtracting the opportunity score (O) by the threat (T). Thus, quadrant I is depicted based on x values of 0.35 and y 0.99, which shows that Sipelot Beach tourism is still developing, as presented in Figure 3.

Dark tourism in Pronojiwo District is in quadrant I, SO (Strength-Opportunity), or white area, which indicates that the beach has excellent potential for further development. Thus, the beach must adopt a growth-oriented strategy. Therefore, an appropriate community-based tourism strategy is determined. Examples of these strategies are increasing road access because there are still many roads access that is not good to tourist sites, increasing accessibility, especially transportation, and roads to illegal tourism in Pronojiwo District.

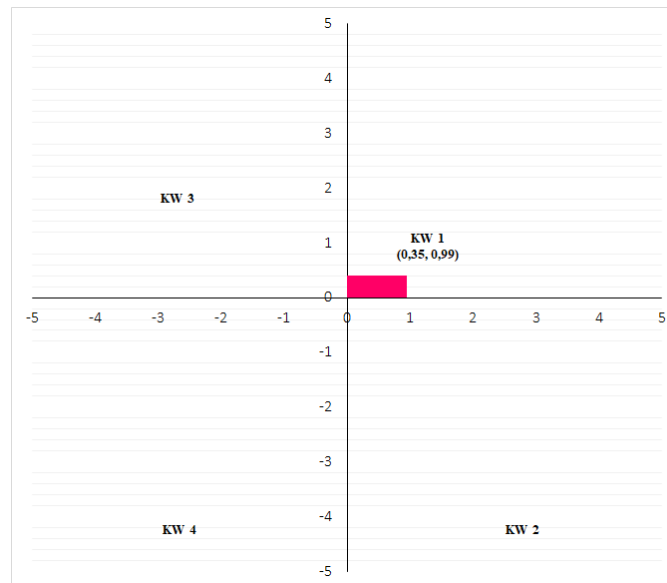


Figure 3. SWOT Analysis of Dark Tourism in Pronojiwo District

To identify its tourism potential, we analyzed the development of dark tourism in Pronojiwo District. In this analysis, we use a SWOT analysis because it measures the strengths, weaknesses, opportunities, and threats of tourism potential. The results of the SWOT analysis are shown in Table 5. The IFAS and EFA matrices were assessed according to the criteria presented in Table 1. Furthermore, the quadrant of the Pronojiwo District tourist site was established through x and y values. A value of 0.35 x is obtained through internal factors by subtracting weakness (W) from the strength score (S). Meanwhile, a y value of 0.99 was achieved from external factors by subtracting the threat (T) from the opportunity value (O). Therefore, quadrant I is illustrated based on values of 0.35 x and 0.99 y, which shows that the tourism of Pronojiwo District is still developing, as presented in Figure 8. Pronojiwo District is in quadrant I, SO (Strength-Opportunity), or white area, indicating that the area has superior dark tourism potential that can be further developed. As such, the region must adopt a growth-oriented strategy. Therefore, he determines a suitable community-based tourism strategy. Examples of these strategies are increasing road access, improving tourism facilities, and improving infrastructure, increasing tourist access to Pronojiwo District. Roads in Pronojiwo District. In addition, the W-O policy includes the repair of dark tourism location signboards in Pronojiwo District. Meanwhile, the S-T policy overcomes the limited awareness of tourists to maintain cleanliness. Finally, for the W-T policy, the community increases tourist attractions to increase their promotion.

The results of the SWOT analysis show that Pronojiwo District has great potential to be developed as a community-based Dark Tourism. The development of community-based Dark Tourism is an important part of a country's income because it has the potential to offer vast opportunities for local communities (Keerin et al., 2022; Wright & Sharpley, 2018). Moreover *dark tourism* Community-based also brings benefits to environmental conservation and improvement

of community welfare and socio-economic status (Xie et al., 2024; Zhang, 2021b). The establishment of Dark Tourism depends on a number of factors, consisting of (1) the potential of Dark Tourism, (2) the participation of local communities in tourism planning, (3) the involvement of local communities in the implementation of tourism, and (4) environmental conservation (Arinta & Susilo, 2023; Zhang, 2021a). The implementation strategy based on the results of the SWOT analysis is shown in Figure 4.



Figure 4. Dark Tourism Development Strategy and Program in Pronojiwo District

The development of dark tourism in the Mount Semeru area, especially Pronojiwo District, requires a systematic and integrated approach. One of the main strategies that can be implemented is to improve the quality of tourism destination management, which includes four important elements: tourist attraction, market segment mapping, promotion strategy, and management institutions. Tourist attraction can be strengthened through the arrangement of disaster-affected areas into educational sites, such as mini disaster museums, disaster interpretation routes, and the provision of narrative information that educates tourists about the eruption process and its impact (Panayidou et al., 2024). Meanwhile, market segment mapping is needed to identify potential tourists who have an interest in extreme experiential tourism and disaster education. Digital-based promotional strategies are also key, including the use of social media and travel platforms to form a unique and responsible image of the destination. On the institutional side, it is necessary to strengthen the role of pokdarwis, BUMDes, and partnerships with other stakeholders to ensure collaborative and sustainable governance (Albert et al., 2018).

In addition to the management aspect, another important strategy is to increase the capacity of Human Resources (HR) at the local level. Skilled and adaptive tourism human resources will be the main foundation for the successful development of dark tourism destinations. Training and certification programs for tourism actors, local guides, and affected residents can be focused on disaster literacy, tragedy site interpretation, trauma-based services, and ethical principles in disaster-based tourism. Ongoing education on risk mitigation, visitor safety, and risk communication should also be an integral part of capacity building. Through this approach, local communities are not only positioned as passive beneficiaries, but also as key actors in the creation of authentic and positive tourism narratives and experiences. The synergistic implementation of the two strategies is expected to be able to form a professional, inclusive, and contextual dark tourism management system. Thus, the Mount Semeru area can become a model for the development of disaster-based tourist destinations that not only strengthen the local economy but also contribute to increasing public awareness of the importance of disaster preparedness and resilience.

CONCLUSION

This study concludes that Pronojiwo District in Lumajang Regency, which is located on the southern slope of Mount Semeru, has distinctive geographical and geological characteristics as an area prone to volcanic disasters, but at the same time holds great potential for the development of dark tourism. This condition provides a strong basis for the use of the area as a tourism destination based on disaster education, social reflection, and emotional experiences. Spatially and thematically, Pronojiwo District has various tourist attractions that are directly related to volcanic activity and post-disaster conditions, such as Tumpak Sewu Waterfall, Blue Cotton, Kebo River, Sarkawi, and Sumberurip Village. These objects not only offer dramatic natural beauty, but also present an authentic and risk-free tourist experience. The results of the potential mapping through SWOT analysis show that Pronojiwo District is in quadrant I (Strength–Opportunity), indicating that this area has high internal strength and external opportunities for disaster-based tourism development. However, the development of dark tourism in this region must be carried out strategically with an orientation towards inclusive and sustainable growth. The key strategies identified include two crucial aspects: first, improving the quality of tourism management and human resource capacity building.

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