

Revealing Sukamandi Village as a sustainable tourism destination in Subang Regency, Indonesia

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Abstract. Sukamandi Village in Subang Regency, Indonesia, demonstrates significant potential for developing nature-based tourism as part of national and regional initiatives to promote community welfare. This research aims to reveal Sukamandi village as a sustainable tourism destination in Subang Regency. We used a qualitative approach to assess Sukamandi's tourism potential, utilizing field surveys, interviews, literature reviews, and tourist satisfaction data. The research reveals that Sukamandi Village possesses strong natural attractions, primarily Bukit Jamali and Curug Cibingbin, complemented by picturesque mountain vistas, clear rivers, clove plantations, and local agricultural products. A trial itinerary with six local and international tourists yielded positive feedback, particularly regarding scenic views and local cuisine. However, the study identifies several challenges hindering optimal tourism development: 1) Tourism management remains largely voluntary, lacking a professional team for consistent, high-quality service; 2) Limited accessibility, with small roads and considerable distances between attractions, poses logistical challenges; 4) Inadequate internet and cellular connectivity affects the tourist experience to upload their activities. To realize Sukamandi's full tourism potential and drive local economic growth, the study recommends enhancing physical and digital accessibility, upgrading infrastructure, implementing comprehensive disaster risk management, and increasing tourism promotion efforts.

1 Introduction

Tourist village is a regional and local development activity to improve community welfare as well as empower the natural and human resources available in rural areas [1]. This village is a tourism concept that involves local communities in the management and development of tourist attractions. Tourist village attractions generally consist of activities involving local

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communities such as agriculture, handicrafts, traditional dances, and so on [2]. Tourist villages, currently, have become a development trend in rural areas and continue to receive support from many parties because they have the potential to create original income [3].

This obsession has encouraged many new tourist villages that exist without considering resource analysis and input from tourism experts thoroughly. Tourist villages must be formed by considering environmental, economic and socio-cultural aspects, thus that their existence is in accordance with sustainable development goals (SDGs) [4, 5]. Many local governments from the provincial, regencies and village levels are motivated by success stories from several tourist villages. Subang Regency is taking part in this development trend because, for a long time, it has had various popular natural tourist attractions in West Java such as hot springs, beaches and mangrove forests, tea plantations, and volcanic mountains [6].

Since 2019, the Regent of Subang has also inaugurated more than 15 tourist villages, each with its own characteristics [7]. This number is expected to continue to increase because the tourism sector has been proven to be able to optimize regional potential and provide benefits to local communities [8]. One of the areas of concern for developing this program is Sukamandi Village which is located in Sagalaherang District, Subang Regency. Sukamandi Village is also still very limited in conducting tourism categorization, even though this analysis is very important for mapping the superiority of tourist attractions among tourists.

Tourism development in Sukamandi Village requires attention from many parties, thus it continues to develop, is able to compete, and is in line with sustainability principles. Regional governments with the involvement of stakeholders from universities, research institutions and tourism organizations should be able to synergize planning, mentoring, monitoring and evaluation activities regarding the implementation of tourism village development [9-11]. Therefore, this research aims to reveal Sukamandi village as a sustainable tourism destination in Subang Regency.

2 Methodology

This research was located in Sukamandi Village, Sagalaherang District, Subang Regency, West Java, Indonesia (Figure 1). This village is located to the north of Mount Tangkubanparahu with cool air and fertile agricultural land with an area of 72.7 square km. In terms of accessibility, this village is connected by two local roads with a travel time of around 10-20 minutes from the national road by motorbike or car. To achieve the research objectives, we used several data acquisition methods including field surveys, literature studies, and interviews. Field surveys are useful for looking at the actual conditions and potential for future development of tourist villages, while interviews are useful for exploring the social, economic and cultural potential that can be an attraction or strengthen development [12]. Field surveys not only screen attractiveness but also aspects of feasibility in terms of routes, disasters and other hazards, especially those originating from water and land [13]. Meanwhile, literature studies focus on reviewing the results of previous studies originating from credible articles, news, books, and reports [14].

We also conducted interviews with village governments, tourist attraction managers, accommodation providers, tourists, and makers/sellers of typical souvenirs. We used an unstructured interview method with prior or incidental appointments at tourist attraction locations [15, 16]. Specifically for tourists, we tested it on 6 tourists who had previously been prepared by university students with consultation from Sukamandi Village and tourism lecturers from Resort and Leisure Management at the Universitas Pendidikan Indonesia. We used a qualitative approach to identify tourism potential, the data was validated using the source triangulation model [17, 18]. Data analysis from various acquisition sources was carried out according to their characteristics. Qualitative data is processed using descriptive

analysis, after previously cleaning and synthesizing the information [19]. Specifically for mapping tourist attractions, we used geospatial analysis techniques from field surveys to produce maps/plans [20, 21]. With several water resource-based attractions, we also tested the water quality profile in the Sukamandi Village, especially in physical and chemical parameters to remain safe for tourists [22].



Fig. 1. The research location is the Sukamandi Village.

3 Results and discussion

Sukamandi Village focuses on managing tourism based on natural potential, there are at least two superior attractions, namely Bukit Jamali and Curug Cibingbin. Bukit Jamali is the highest peak (hill) in Sukamandi which offers views of the mountains, sunrise and sunset. Access to this hill is only sufficient for small four-wheeled vehicles, with paved road access and directly borders other villages to the north and east. Sukamandi Village is connected via the highway that divides Bandung and Subang, via Jalancagak [23]. The air in Bukit Jamali feels cool with pine trees combined with landscape engineering such as flower gardens, semi-permanent buildings, sanitation, parking and a play area for children (Figure 2). Bukit Jamali also has a cafe that provides various drinks and food, even though it is located far from the settlement. Water for the cafe is available through a spring which flows throughout the year.

Another top attraction in Sukamandi Village is the Curug Cibingbin (waterfall) which is in the west and flows from the Cibingbin River. Curug Cibingbin has a height of 5-6 meters from the surface with fresh water and comes from upstream near Mount Tangkuban Parahu which is known as a conservation area [24]. There are huts, prayer rooms, sanitation facilities and an arena for enjoying the river water (Figure 3). Access to Curug Cibingbin can only be via a footpath with two different routes, namely through rice fields or clove plantations. Curug Cibingbin rarely gets interaction from tourists even though it offers beautiful views. Both Bukit Jamali and Curug Cibingbin have not encouraged much economic improvement for the people there because their locations are relatively far from residential areas. In fact, tourist attractions have the potential to increase village community income, strengthen cultural identity, and promote local diversity [25].

Apart from these two natural attractions, there are at least 3 tourism potentials to be developed by the local government and the community, namely rice fields and clove plantations. Tourist attraction itself is closely related to tourist preferences. Factors that influence tourist attraction include accessibility, service quality, and environmental quality [26]. Sukamandi Village has a rice field area with very adequate footpath access, which can even be passed by motorbike without needing to be disturbed by dirt and mud. There, tourists can enjoy rice cultivation activities, and can even participate with farmers, looking for rice snails or "tutut" (*Pila ampullacea*), fishing for "belut" or "eels" (*Monopterus albus*), and picking "genjer" (*Limnocharis flava*) for vegetables. Near the rice fields, the Cihaji River flows which is clear and can be used by tourists to enjoy the water (Figure 4). The rice fields there are in a flat area with an easy route to access. Not only does its nature offer tourist attractions, Sukamandi Village also has socio-economic potential such as plantations, especially cloves (Figure 5). This plant is an alternative when tea plantation yields are no longer optimal, and there are even clove oil refining facilities available which can also be used to extract other essential oils such as lemongrass and flowers. The high selling price, ease of care, and the product being useful for spices, medicine as well as cigarettes have encouraged people to focus on cloves [27]. The people there began to pioneer the development of food crops such as oranges, various vegetables and bananas (Figure 6). The combination of fertile soil from the volcanic eruptions and high rainfall is suitable for horticulture and food crops [28].



Fig. 2. Bukit Jamali.



Fig. 3. Curug Cibingbin.



Fig. 4. Pesawahan (rice field).



Fig. 5. Clove plantation.

Interviews with informants revealed that Sukamandi Village only started seriously working on this potential less than five years ago, as evidenced by the revitalization of Bukit Jamali Hill, Curug Cibingbin Waterfall, road constructions and promoting UMKM. This

tourism potential cannot yet be managed professionally because this village is still in the pioneering stage, tourism management is still voluntary and a professional team has not been formed to provide excellent service to tourists at all times. Of course, this is very unfortunate, tests on 6 local and international tourists regarding tour packages from the Universitas Pendidikan Indonesia (one-day trip program: Bukit Jamali □ UMKM □ Pesawahan □ Curug Cibingbin □ Buki Jamali) showed that they were satisfied with the tourist attractions, especially the views and typical food. The water resources for tourism in Sukamandi Village are of very good quality (Table 1) and meet the quality standards for human use from the Indonesian Government, provided that further processing is needed for the springs in Bukit Jamali regarding pH is quite low and smells like fluorine compounds when used for drinking [31, 32].



Fig. 6. Areas for cultivating food crops, oranges (left), bananas (middle) and vegetables (right).

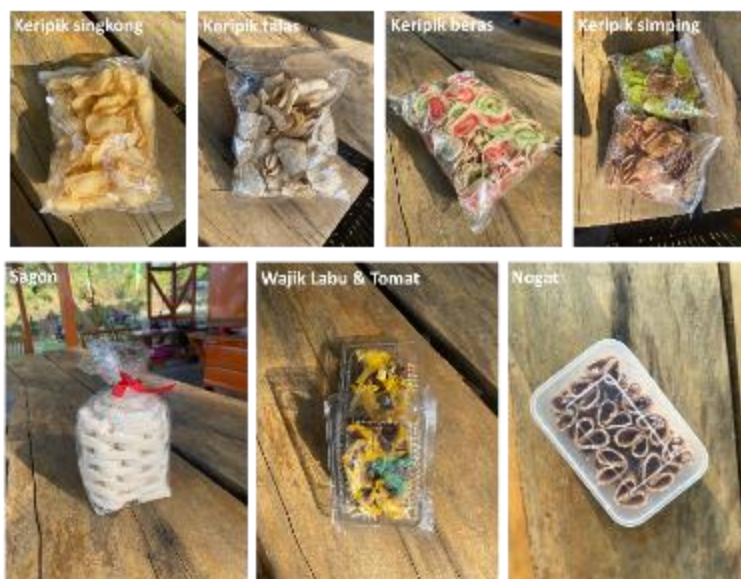


Fig. 7. Processed food products from Sukamandi Village.

Tourists hope that access there can develop even better and Sukamandi needs to try out some packages to find out their feasibility. The road is small and quite far from the main route which is also a challenge for sustainable tourism development, this is the main complaint for tourists besides the internet and cellular signal. In the digital era, physical and cyber access is the key to attracting tourists to come back [33, 34]. From the geospatial analysis, it was also revealed that the distance between tourist attractions is quite far and the

route is steep and bumpy (Figure 8). The mountainous landscape in Sukamandi Village needs attention, tourists need adequate accessibility infrastructure and prevent them from getting tired [35]. Sukamandi must create disaster assessments and mitigation strategies, especially due to landslides, drought, changes in river flows and fallen trees so that water resources remain sustainable [36-38].

Table 1. Quality of water resources at tourist attractions(on October 2023).

Location	pH	EC (µS/cm)	TDS (ppm)	CF	Temp (°C)	Debit (m3/s)
River water at Curug Cibingbin	6.73	0.01	10	0.1	24	0.15
Spring at Curug Cibingbin	6.70	0.01	10	0.1	26	Not available
Pesawahan (Cihaji River)	5.07	0.05	37.5	0.5	29.2	3.27
Bukit Jamali	5.09	0.09	60	0.9	31	Not available

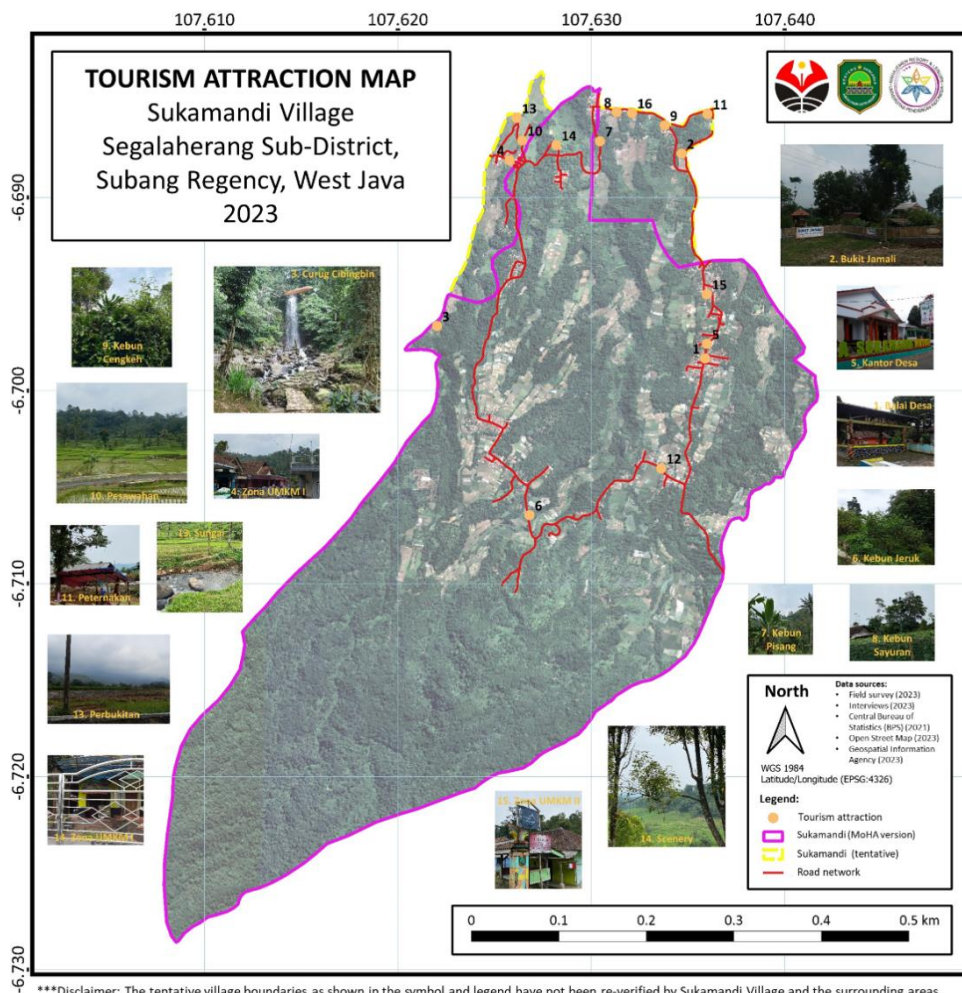


Fig. 8. Distribution of actual and potential tourist attractions in the Sukamandi Village.

4 Conclusion

Sukamandi Village has great potential in developing nature-based tourism, with two main attractions (Bukit Jamali and Curug Cibingbin), which offer beautiful views. However, this potential has not been fully exploited to improve the local economy. Apart from these two natural attractions, Sukamandi also has other tourism potential, such as rice fields and clove plantations. Success in developing tourism potential is very dependent on factors such as proper accessibility, great services and maintaining environmental quality. Sukamandi's people are starting to realize their tourism potential and have developed UMKMs to market typical village foods online. However, the main challenge faced is limited physical access, especially the distance between tourist attractions which is quite far and the winding road conditions. To optimize tourism in Sukamandi Village, they need to improve access, improve infrastructures, mitigate disaster risks, as well as increase tourism promotion. This will help the village gain greater economic benefits from the tourism industry and encourage local growth.

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