



JSRLM

Jurnal of Sport Recreation and Leisure Management

ANALYSIS OF THE ECOTOURISM POTENTIAL OF LEDOK SAMBI, KALIURANG, YOGYAKARTA: CHALLENGES & OPPORTUNITIES

Agnes Prabandari ¹, Ari Septiyanto ²

Fakultas Vokasi Universitas Negeri Yogyakarta, Jln Mandung, Wates, Kulon Progo, DIY, Indonesia. 555651
Email: agnesprabandari.2021@student.uny.ac.id

Received: 12 September 2025; Revised: 12 September 2025 ; Accepted: 12 September 2025

Abstrak: Tempat ekowisata Ledok Sambu yang berada di Kabupaten Sleman ini menjadi daya tarik tersendiri bagi wisatawan, terutama karena keindahan alam pedesaan, sungai alami, dan aktivitas edukatif dan rekreatif. Penelitian ini bertujuan untuk mengetahui potensi sumber daya alam dan sosial, tantangan pengelolaan pascapandemi Covid-19, serta strategi pengembangan yang dapat meningkatkan daya tarik wisata. Pendekatan yang digunakan adalah deskriptif kualitatif dengan observasi dan wawancara terhadap 15 responden, meliputi pengelola wisata, pengunjung, masyarakat lokal, pedagang, dan *stakeholder*. Hasil penelitian menunjukkan bahwa pengelolaan Ledok Sambu memuaskan pengunjung dan keterlibatan masyarakat lokal aktif mendukung keberlanjutan wisata. Temuan ini menjadi dasar untuk merumuskan strategi pengembangan destinasi ekowisata unggulan di Yogyakarta.

Kata Kunci: Potensi Wisata, Ekowisata, Ledok Sambu, Tantangan, Peluang

Abstract: The Ledok Sambu ecotourism site in Sleman Regency is a unique attraction for tourists, primarily due to its rural beauty, natural river, and educational and recreational activities. This study aims to determine the potential of natural and social resources, the challenges of post-COVID-19 pandemic management, and development strategies that can enhance its appeal. A descriptive qualitative approach was used, with observations and interviews with 15 respondents, including tourism managers, visitors, local communities, vendors, and stakeholders. The results indicate that Ledok Sambu management satisfies visitors and that local community involvement actively supports tourism sustainability. These findings form the basis for formulating a strategy for developing a leading ecotourism destination in Yogyakarta.

Keywords: Tourism Potential, Ecotourism, Ledok Sambu, Challenges, Opportunities

How to Cite: Prabandari, A & Septiyanto, A. (2025). An Analysis Of Ecotourism Potential In Ledok Sambu, Kaliurang, Yogyakarta: Tantangan And Opportunities. Jurnal of Sport Recreation and Leisure Management, 1(1), p.8-16.

INTRODUCTION

Tourism is a vital source of income for a country. It plays a crucial role in generating revenue for each tourist attraction. According to Nugroho (2021), tourism is a phenomenon involving the movement of people with the aim of gaining new experiences, both in terms of culture, nature, and social interaction. Sutanto (2022) states that tourism is an activity involving travel to a place to enjoy

the natural beauty, culture, and history of the location, along with the various facilities and services that create a lasting impression for tourists. Tourism contributes to foreign exchange earnings, job creation, production activities, national income, private sector growth, and infrastructure development. Furthermore, the tourism sector plays a crucial role in infrastructure development, job creation, and increasing national income. The tourist attractions offered are not limited to natural beauty; they also include cultural, historical, and tourist attractions that characterize these destinations. Indonesia, with its rich natural and cultural heritage, has significant potential to develop the tourism sector as a key pillar of the economy.

Tourism is a rapidly growing industry. It is expected to grow with the discovery of new attractions that will impact the many destinations and regions visited by tourists. Indonesian tourism is characterized by its rich cultural, tourist, and historical elements. Cultural and historical factors in visited destinations are one of the main draws for tourists, thanks to the heritage of our ancestors, packaged into compelling attractions with unique characteristics. Each region possesses diverse natural and cultural resources, creating unique appeal and strengths. Marsono (2018) explains that tourism is divided into three categories based on its destination: nature tourism, special interest tourism, and cultural tourism.

Recreation is an activity undertaken to fill time for relaxation or tranquility. This can improve mental health. Soo (2024) states that recreational activities can provide benefits by reducing stress, enhancing positive moods, and contributing to mental health. According to Hardiantoro & Pratiwi (2022), we must recognize that a lack of recreation can trigger stress. Therefore, recreation is an activity undertaken by humans to minimize the occurrence of more serious mental and psychological disorders. Lack of vacations can lead to decreased brain function, anxiety, and depression.

A potential ecotourism destination is Ledok Sambu, located on Jalan Kaliurang KM. 19.2, Area Sawah, Pakembinangun, Pakem, Sleman, Yogyakarta. Ledok Sambu's unique rural atmosphere, combined with its natural and social environment, attracts visitors. While there is no official entrance fee, the Ledok Sambu Ecotourism management allows visitors to make a donation. Ledok Sambu offers outbound packages, paintball, ziplining, camping, and other activities for a fee. Ledok Sambu relies heavily on promotion to attract visitors. The Ledok Sambu Ecotourism employs a social media promotion strategy, which is considered valid for gathering detailed insights, such as the number of visitors viewing and liking Ledok Sambu through social media posts. Ledok Sambu does not promote its site through billboards or similar methods, as these strategies are considered ineffective in determining the number of people interested in Ledok Sambu Ecotourism.

Visitor factor research is necessary to determine what attracts both domestic and international visitors. Although numerous previous studies have examined the motivations that motivate tourists to visit a destination, Friska Amel (2023) states that tourist motivation is the desire that drives individuals to visit a place based on interests, personal needs, or the desire to discover new experiences that provide emotional, social, and cultural satisfaction.

Tourist satisfaction, a key factor in the success of a tourist destination, has a significant impact on its development. Satisfied tourists will attract visitors who have never visited Ledok Sambu before, which will impact the number of tourist visits to Ledok Sambu. The purpose of this study was to identify the potential, challenges, and opportunities in Ledok Sambu. The method used was observation and interview.

METHODS

TYPE OF RESEARCH

This research is a qualitative descriptive study. The methods used in this study are observation and interviews. The aim is to provide a detailed and systematic description of the ecotourism potential in Ledok Sambu. This method is used to describe the phenomenon accurately without comparing variables or making generalizations. In this study, the description is presented in words and narratives, focusing on the challenges and opportunities that support the development of Ledok Sambu Ecotourism.

TIME AND PLACE

This research was conducted at Ledok Sambu, located at Kaliurang KM 19, Pakem, Sleman Regency, Yogyakarta Special Region. The study was carried out from October 4, 2024, to July 10, 2025.

POPULATION AND SAMPLE

The population of this study is all parties involved in the management of Ledok Sambu Ecotourism. Saturated sampling was used, meaning that the entire population was included as research samples. This sampling technique was chosen to obtain accurate and comprehensive information regarding the potential and development of Ledok Sambu Ecotourism. A total of 15 respondents were selected. The targets in this study include ecotourism managers, local residents, stakeholders, tourists, and vendors, with 3 respondents from each group.

OPERATIONAL DEFINITION OF VARIABLES

The operational definition is a part of research that clearly and specifically explains how research variables are measured and observed. By having an operational definition, researchers can ensure consistency in data collection and analysis, resulting in more valid and reliable findings.

Ecotourism potential refers to the natural and cultural resources in Ledok Sambu that can be developed to support ecotourism activities. This includes factors such as the existence of natural resources (rivers, flora, and fauna), ecotourism activities (camping, water activities, outbound), supporting facilities (parking areas, gazebos, food stalls, prayer rooms, toilets, nursing rooms, school health units), and support from the local community.

This study aims to assess the extent to which these ecotourism potentials can be developed and optimized. Ecotourism challenges and opportunities are factors that can affect the development of ecotourism in Ledok Sambu, including social, economic, and environmental aspects. Challenges include limited accessibility, insufficient supporting facilities, environmental impacts, and resistance from the local community. Meanwhile, opportunities include the potential for local economic improvement, increased environmental awareness, and the development of conservation-based tourism activities.

DATA COLLECTION TECHNIQUES AND INSTRUMENTS

Data in this study were collected using observation, interviews, and documentation. Observation was conducted to record conditions and ecotourism activities in Ledok Sambu. Interviews were used to obtain in-depth information from managers, employees, vendors, local residents, tourists, and government officials. Documentation complemented these data by recording facilities, community activities, and other relevant information.

DATA ANALYSIS TECHNIQUES

The data in this study were analyzed using qualitative descriptive analysis. The process involved reducing, presenting, and interpreting data collected from interviews, observations, and documentation. Data reduction included selecting relevant information and summarizing key points into main themes: ecotourism potential, challenges, and opportunities in Ledok Sambu. The data were then presented in descriptive narratives, tables, and visual documentation such as photos and recordings. Finally, conclusions were drawn based on the main findings to answer the research questions.

RESULT & DISCUSSION

RESULTS

Attraction

Ledok Sambu offers a special attraction in the form of adventure tourism such as caving, trekking, and river activities. Outside the cave, tourists can enjoy camping, flying fox, and paintball, while cultural experiences include interactions with local communities and observing traditional practices. This combination of natural and cultural tourism provides tourists with unique and educational experiences.

Amenity

Supporting facilities at Ledok Sambu include toilets, parking, homestays, prayer spaces, and culinary stalls. The management also coordinates with local health services to anticipate emergencies. However, there are some limitations, such as insufficient toilet facilities, limited storage for adventure equipment, and lack of insurance services for tourists.

Accessibility

The access roads to Ledok Sambi can be reached by two- and four-wheeled vehicles, making it convenient for tourists. The roads are generally safe and well-maintained, though some parts still retain natural terrain characteristics, reflecting the traditional village environment.

Ancillary

Local institutions, including the tourism awareness groups (Pokdarwis) and village managers, actively manage Ledok Sambi. Marketing efforts rely mostly on Instagram and word-of-mouth, while training for guides is provided by the Tourism Office, ensuring basic competencies and information services for visitors.

Solutions

The development of Ledok Sambi requires continuous collaboration among local government, village apparatus, community members, and tourism offices. Enhancements could include improving facilities, expanding marketing through social media, providing insurance and equipment storage, and offering advanced training for tour guides to increase tourist satisfaction and ensure sustainable tourism development.

Discussion

Based on the results of the study from the five analyzed indicators, it can be concluded that Ledok Sambi ecotourism has great potential to be developed as a sustainable nature-based and educational recreational destination. This potential is supported by abundant natural resources, the authentic rural atmosphere, and active community involvement in managing the tourism area. Respondents generally rated their experience at Ledok Sambi as satisfying, particularly regarding natural beauty, educational and recreational activities, and positive interactions with local residents.

Tourist visitation over the past year has remained relatively stable, with significant increases during weekends, public holidays, school breaks, year-end periods, and religious holidays. During these periods, the number of visitors is estimated to reach thousands, although detailed data is only known by management. This pattern is influenced by leisure availability, holiday moments, and special events or promotions that attract tourists. Understanding these visitation trends is essential for tourism management, including facility adjustments, workforce planning, promotional strategies, and event planning, enabling optimized visitor experiences and revenue generation.

Ledok Sambi's potential as a nature tourism destination in Pakembinangun, at the foot of Mount Merapi, is highlighted by its natural river and pristine rural environment. The authenticity of nature provides a competitive advantage amid artificial tourism sites, encouraging visitors—especially from outside the city—to enjoy river activities and the mountainous atmosphere. In addition to natural beauty, Ledok Sambi promotes local economic empowerment by involving SMEs and residents in tourism management, creating positive social and economic impacts for the surrounding community. The cool climate, strategic location near urban centers, and family-friendly environment make the site appealing to all age groups and increasingly accessible to people with disabilities.

The COVID-19 pandemic significantly affected Ledok Sambi's operations and local economy. During the pandemic, management implemented visitor limitations, mask mandates, temperature checks, partial closure of attractions, and social distancing according to health protocols. Temporary government-imposed closures forced management to adapt operations, including forming special teams, procuring personal protective equipment, and enforcing health protocols. The economic impact was felt by the local community; some residents and students took the opportunity to earn additional income, while many businesses, including hospitality, were halted, drastically reducing local earnings. Post-pandemic, all attractions reopened, with cleanliness and comfort remaining a priority, emphasizing the importance of crisis preparedness and adaptive management for sustainable tourism and local economic resilience.

Community involvement is one of Ledok Sambi's key strengths. Residents participate in providing food, beverages, parking services, and community-based activities, in line with Lestari (2019), who stated that ecotourism success depends on active community participation in sustainable economic activities. Local people are engaged according to their abilities, from employment in various roles, parking attendants, to vendors. Management supports residents by providing assistance and encouraging SME initiatives. Additionally, locals contribute to facility management, visitor services, and independent businesses, boosting the local economy.

Ledok Sambi also provides basic and supportive facilities to ensure visitor comfort, including gazebos, prayer rooms, accessible roads, ample parking, play equipment, first aid rooms, and nursing

areas. These facilities enable visitors of all ages to enjoy the site comfortably and enhance overall satisfaction. Opportunities for development remain extensive, including strengthening management institutions, collaborating with environmental communities, and partnering with educational institutions to create conservation-based educational tourism packages, consistent with Fennel (2020) principles of sustainable ecotourism: ecological sustainability, community empowerment, and environmental conservation.

Most gazebos are equipped with plastic sheets or curtains, though not all. Given the outdoor nature of the tourism site, adding curtains to all gazebos is recommended to protect visitors from rain and wind. Visitors are also required to follow safety regulations, especially during extreme weather. Heavy rain may increase river flow and pose a flooding risk, requiring visitors to leave the river area and move to parking zones for safety. These policies demonstrate that management prioritizes both visitor comfort and safety.

In conclusion, Ledok Sambi ecotourism has the potential to become a leading destination that not only showcases natural beauty and educational experiences but also serves as a platform for community empowerment and environmental conservation. Existing challenges can be addressed through adaptive and collaborative strategies, strengthened promotion, and data-driven management systems to ensure sustainable development in the future

CONCLUSION

The research results indicate that Ledok Sambi Ecotourism has significant potential to be developed as a nature-based and open recreational ecotourism destination. The authentic rural atmosphere, combined with diverse activities such as outbound programs, flying fox, paintball, and local culinary experiences, serves as the main attraction for visitors. However, several challenges need to be addressed, including the absence of an entrance ticket system, which leads to the lack of accurate visitor data, as well as limited facilities during the rainy season.

Destination management faces several critical challenges, particularly the lack of a valid system to record tourist visits. The absence of an official ticketing system makes it difficult for management to obtain essential visitor statistics needed for strategic decision-making. Moreover, the rainy season poses a significant constraint since most activities are conducted outdoors, impacting visitor comfort, safety, and satisfaction.

Facility-related issues also require attention, such as the limited number of gazebos for shelter, inadequate toilets, and poorly organized parking areas. Disorganized parking often causes congestion on busy days, and the lack of a queue management system reduces the overall visitor experience. Despite these challenges, the economic impact of Ledok Sambi's development on the local community is substantial.

The ecotourism site provides employment opportunities for residents, increases income for food and beverage vendors, and creates small business prospects, demonstrating that the destination contributes to local economic growth. Active community participation in tourism management further strengthens the sense of empowerment and ownership over the destination.

Promotional strategies through social media platforms such as Instagram and TikTok are considered effective in reaching millennial tourists. However, the coverage remains limited and has not yet fully leveraged cross-sector collaborations with travel agencies, schools, travel communities, or influencers. Therefore, strengthening digital promotion and stakeholder integration is necessary to expand Ledok Sambi's tourism market reach.

Overall, the development of Ledok Sambi Ecotourism requires a sustainable approach in management, promotion, infrastructure, and community engagement. With a targeted and measurable strategy, Ledok Sambi has great potential to become an educational, inclusive, and iconic nature tourism destination in the Kaliurang area and its surroundings.

ACKNOWLEDGMENT

The author would like to express his gratitude to all parties who played an important role in the implementation of this research, for the advice, guidance, and support that have been given. In particular, the author would like to thank the management of Ledok Sambi Ecotourism, local community leaders, and the Pakembinangun village apparatus. In addition, gratitude is also extended to the Yogyakarta Tourism Office for their assistance and facilitation in supporting the smooth implementation of this research.

REFERENSI

Friska A, S. (2023). Pengaruh Motivasi Wisatawan terhadap Keputusan Berkunjung di Destinasi Wisata.

Jurnal Pariwisata Indonesia, 8(1), 45 -58.

Hardiantoro, A., & Pratiwi, I. E. (2022). Kurang Piknik Bisa Picu Stres, Ini Solusinya Menurut Psikolog.

Jurnal Educatio, 10(2), 416–424.

Marsono, D. (2018). Pengantar Pariwisata: Konsep dan Aplikasi. Yogyakarta: Penerbit Andi.

Nugroho, A. (2021). Pengertian dan Dampak Pariwisata Terhadap Perekonomian Lokal.

Jurnal

Ekonomi Pariwisata, 10(2), 100-112.

Soo, F. (2024). *Pentingnya Rekreasi Bersama bagi Kesehatan Mental*. RRI.

Sutanto, S. (2022). Peran Pariwisata dalam Pembangunan Ekonomi Berkelanjutan. *Jurnal*

Pembangunan Ekonomi 15(1), 75-89.