



Enhancing Sustainable Tourism in Medan through Heritage-Based Development

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: <https://doi.org/10.9734/sajsse/2024/v21i11901>

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/125490>

Original Research Article

Received: 03/10/2024

Accepted: 18/10/2024

Published: 26/10/2024

ABSTRACT

This study aims to analyze the strategies for developing heritage tourism in Medan, focusing on the Kesawan area as a key destination. The research utilizes SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), which helps identify the internal and external potential in the development of heritage tourism in the city. The results show that Kesawan's strengths lie in its historical, cultural, and architectural value, as well as its strategic location, making it an attractive tourist destination. However, the weaknesses identified include inadequate infrastructure, limited human resources, and insufficient funding. Opportunities include the growing trend of cultural tourism and government support for heritage development. Nevertheless, threats such as uncontrolled urbanization, climate change, and economic pressures require particular attention in

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Cite as: Panjaitan, Herbert Hamonangan, Satia Negara Lubis, and Agus Purwoko. 2024. "Enhancing Sustainable Tourism in Medan through Heritage-Based Development". *South Asian Journal of Social Studies and Economics* 21 (11):63-73. <https://doi.org/10.9734/sajsse/2024/v21i11901>.

managing the area. The integration of heritage aspects in the city's tourism master plan is progressing well, with the Medan City Tourism Development Master Plan (RIPPARKOT) outlining sustainable development strategies and policies. This study recommends improving infrastructure, enhancing human resources, and adopting effective marketing strategies to support sustainable heritage tourism development. Proper management could position Kesawan as a premier heritage tourism destination, contributing to the local economy.

Keywords: Heritage tourism; SWOT analysis; tourism development; Medan, Kesawan.

1. INTRODUCTION

Cultural heritage plays a crucial role in shaping the identity and economy of cities. Medan, one of Indonesia's largest cities, boasts a rich cultural history, evident in its colonial-era architecture, which blends Malay, Dutch, Chinese, and Indian influences. The management of cultural heritage in urban planning is essential to preserving these cultural assets, which include historical buildings, landscapes, and traditions that reflect the city's multifaceted heritage [1-3]. Globally, cities are increasingly integrating heritage conservation into urban development strategies, as cultural heritage is considered both an economic and cultural asset [4,5].

Heritage tourism has emerged as a significant driver of urban economic growth. Medan, with historical sites like the Kesawan area, has untapped potential to leverage heritage tourism for local economic enhancement. However, the role of heritage in tourism development remains underutilized. Strategic planning and policy interventions are needed to integrate heritage into the city's tourism master plan [6, 7]. Globally, integrating heritage into urban tourism planning has been explored with successful models demonstrating its impact on enhancing cultural identity and economic sustainability [8,9].

Preserving heritage sites is critical, not only for maintaining cultural continuity but also for promoting urban regeneration [10-12]. The ongoing demolition of historic buildings in Medan for modern commercial development threatens the city's cultural landscape, despite local government efforts to enforce regulations like Local Regulation No. 6 of 1988, which mandates the preservation of certain heritage sites [3,13] [14]. Therefore, it is essential to explore strategies that balance heritage preservation with urban development, ensuring that heritage contributes both to cultural preservation and economic growth [10-12,15].

Heritage-based tourism, if supported by adequate infrastructure and effective marketing strategies, has the potential to attract domestic and international tourists [16,17]. Colonial-era buildings and historical landmarks in Medan, such as Tjong A Fie Mansion and Maimun Palace, represent opportunities for sustainable tourism development [2] [4] [18]. However, the lack of coordinated efforts to promote these sites limits their economic potential. Improving accessibility, upgrading infrastructure, and creating thematic tourism experiences are crucial steps in positioning Medan as a heritage tourism destination [1,6,3].

The SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) provides a comprehensive framework for evaluating the current state of heritage management in Medan and identifying strategies for its development [19-21]. SWOT analysis has been widely applied in urban planning and tourism development to assess the internal and external factors affecting the success of heritage tourism [8,1] Hamzah et al., [22]). In this context, SWOT analysis is used to identify Medan's heritage strengths, weaknesses in infrastructure and policy implementation, opportunities for economic growth through tourism, and threats posed by modern urbanization [23-25].

Several previous studies have explored various aspects of heritage tourism. For example, [8] highlight the potential of innovative technologies in promoting heritage tourism, while Zhang et al. [1] provide insights into global trends in heritage tourism through bibliometric analysis. Bhowmik [3] examines the psychological and cultural factors influencing heritage tourism, emphasizing the importance of community involvement in heritage preservation. These studies underscore the importance of heritage tourism as a tool for economic development but also point to challenges in balancing modernization with preservation [3,9,1].



Fig. 1. Tjong a fie mansions



Fig. 2. Maimun palace

In the context of Medan, several studies have assessed the potential of heritage sites for tourism development. Umam [26] examined the potential of Sukadiri Village as a heritage tourism destination, while Aidin et al. [27] analyzed urban heritage tourism development strategies in Makassar. However, these studies have not fully addressed the integration of heritage into urban tourism master plans. This study aims to fill that gap by focusing on the strategic development of Medan's heritage through SWOT analysis, emphasizing its integration into the city's tourism master plan [26,28,22].

This research is important because it provides a comprehensive analysis of how heritage can be strategically developed to support tourism and urban growth in Medan. By focusing on SWOT analysis, this study offers practical recommendations for policymakers, urban

planners, and tourism stakeholders to ensure that heritage is effectively integrated into the city's tourism strategies, maximizing its economic and cultural potential. Given the growing global interest in sustainable heritage tourism, this research contributes to ongoing discussions on how cities like Medan can leverage their historical assets for urban regeneration and economic development [1] [13,4].

2. METHODS

2.1 Research Design

This study adopts a qualitative descriptive approach to analyze the potential and strategies for heritage development in Medan. The qualitative descriptive approach aims to provide an in-depth description of the phenomena by analyzing the collected data. Data was gathered

through interviews, field observations, and document analysis. The primary focus of this research is to analyze the integration of heritage into Medan's tourism master plan and develop appropriate strategies using SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis.

2.2 Research Location and Timeframe

The research was conducted in the heritage areas of Medan, which include several historical sites such as Medan Railway Station, Medan Post Office, Tjong A Fie Mansion, Tip Top Restaurant, and Warenhuis Building. The selection of these locations was based on their historical value and tourism potential. The study took place from August to September 2024.

2.3 Type of Research

This research is a qualitative descriptive study that aims to describe the current condition of heritage in Medan and identify strategies for its development. A descriptive method was chosen as it provides a detailed overview of the research subject and facilitates systematic exploration of the strengths, weaknesses, opportunities, and threats (SWOT) related to heritage management and development.

2.4 Data Sources

This research utilizes two types of data sources:

- **Primary Data:** Collected through direct interviews with key informants, including heritage stakeholders, heritage site managers, and representatives from the Medan city government. The interviews were semi-structured, allowing for an in-depth exploration of the informants' understanding and perspectives on heritage management and development in the city.
- **Secondary Data:** Consists of archived documents, books, reports, and relevant literature on urban planning and heritage management. These documents were used to strengthen the analysis and serve as references for comparison.

2.5 Data Collection Techniques

The data collection process employed several techniques, as follows:

- **In-Depth Interviews:** Conducted with key figures, including heritage site managers

and government representatives, to obtain information regarding policies, challenges, and opportunities in managing heritage in Medan.

- **Field Observations:** The researcher conducted direct observations at several heritage sites to assess the physical condition of the buildings, tourist activities, and supporting infrastructure. These observations provided visual data and firsthand experience of the existing heritage potential in the field.
- **Document Analysis:** This included photographs, videos, and written records supporting the results of the observations and interviews. In addition, policy documents and regulations related to heritage management were reviewed.

2.6 Data Analysis Techniques

The collected data was analyzed using SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). SWOT analysis was chosen as it is an effective method for evaluating the potential and challenges in heritage management. The analysis process involved the following steps:

- **Identification of Strengths:** This involved analyzing Medan's heritage assets, such as historical value, unique architecture, and existing tourist attractions.
- **Identification of Weaknesses:** This included analyzing the limitations faced, such as inadequate supporting infrastructure, minimal tourism promotion, and the public's lack of understanding of the importance of heritage preservation.
- **Identification of Opportunities:** Opportunities were identified to enhance heritage tourism, such as the potential for increased tourist visits through promotion and collaboration with the private sector.
- **Identification of Threats:** The analysis of threats included modern urbanization, which could potentially damage cultural heritage, and the lack of effective policy support for preservation.

The results of the SWOT analysis were then used to formulate strategic recommendations for the development of heritage in Medan, which are expected to serve as a basis for policymakers in outlining future steps.

3. RESULTS AND DISCUSSION

3.1 Research Results

3.1.1 History as a tourism potential of medan

Medan was founded by Guru Patimpus Pelawi on July 1, 1950, during the reign of the Haru II or Ale Kingdom in East Sumatra, with Deli Tua as its capital [2]. The history of Medan began with a small village established by Guru Patimpus at the confluence of the Babura and Deli Rivers. Despite being a swampy area full of mosquitoes and wild animals, the village grew rapidly due to Guru Patimpus' prowess as a healer, attracting many settlers to the area.

Guru Patimpus' arrival from the Karo highlands was spiritually motivated, driven by his encounter with Datuk Kota Bangun, a renowned Islamic scholar [2]. The victory of Datuk Kota Bangun in a mystical duel led Guru Patimpus and his followers to convert to Islam, which transformed the social and cultural dynamics of the region. Medan subsequently became a trade center due to its strategic location near the Deli and Babura Rivers.

The establishment of tobacco plantations by Nienhuys in 1863 marked a significant economic shift for Medan. Deli tobacco, known as the finest cigar wrapper in the world, turned Medan into a city with many Dutch-owned plantations. In 1886, the Dutch moved the capital of the East Sumatra Residency from Bengkalis to Medan, solidifying the city's role as an economic hub.

The rapid development of Medan as an economic center continued with the construction of important infrastructure, such as Belawan Port in 1604 and the Medan-Belawan railway line in 1884. Medan's prominence continued to grow, and in 1909, the city was officially established as a municipal government (Gemeente).

3.1.2 Medan tourism in the national tourism development policy

The tourism sector in Medan has played a significant role in infrastructure development and the regional economy. Medan is recognized as one of Indonesia's alternative tourism destinations, which has been continuously developed over the past few decades. The city government has designed various development policies that align with global trends to advance tourism, particularly in the areas of

destination development, marketing, and tourism institutions.

Tourism development in Medan focuses on increasing local revenue, expanding employment opportunities, and promoting local tourist attractions. These policies also support community empowerment and the utilization of natural and cultural resources as key tourism attractions. The development of sustainable tourism integrates social, economic, and environmental aspects into its planning and implementation.

A key focus of Medan's tourism strategy is heritage tourism, which offers a unique and strong comparative advantage. Heritage has great potential in Medan, especially due to the diverse colonial architecture that has been well-preserved to this day. This potential is framed within the strengths, weaknesses, opportunities, and threats (SWOT) involved in managing and developing tourism destinations [14].

The strengths of heritage tourism in Medan include the significant historical assets, cultural diversity, and support from both the private and public sectors in managing tourism destinations. However, weaknesses include insufficient infrastructure and poorly organized promotion efforts. Opportunities for heritage tourism development are growing, with increasing interest from both domestic and international tourists seeking authentic cultural experiences. Nonetheless, threats such as rapid modernization and a lack of public awareness of heritage preservation pose challenges that need to be addressed.

3.1.3 Heritage development potential analysis

The Kesawan heritage area in Medan has tremendous potential to support local tourism and economic growth. This area not only holds deep historical significance but also features a range of historical buildings that reflect various eras and cultural influences. The presence of buildings with architectural styles ranging from neo-classical to art-deco and Indies reflects the rich cultural and historical heritage of Medan's multicultural past. These buildings, scattered throughout the city, have become icons that support Medan's identity as a center of trade and culture since the colonial era.

The main strength of the heritage area lies in its architectural diversity, representing different

historical periods, from buildings with distinctive clock towers to houses blending local and foreign architectural influences. The cultural acculturation that occurred in Medan over centuries provides a unique cultural heritage, making Medan a key destination for historical tourism [14]. This makes the Kesawan area an important element in the development of cultural tourism in Indonesia, also known as heritage tourism.

In several European countries, the use of heritage in tourism has been proven to generate significant revenue. Heritage tourism is recognized as one of the tourism sectors that can attract high-spending tourists. Revenue generated from this sector is often used to cover the operational costs of maintaining and preserving historical buildings, while also serving as a tool for cultural preservation. The experiences of countries like Singapore and Malaysia in utilizing heritage to develop creative economies and postmodern tourism provide valuable references for the development of the Kesawan area in Medan.

Lapangan Merdeka, located in the heart of Medan, is an example of a heritage area with great potential for development. As the zero point of Medan, this area has a high density of historical buildings that retain much of their original functions, whether as government, trade, or service centers. The architectural beauty of the buildings around Lapangan Merdeka is a major attraction for tourists seeking historical and cultural experiences (Pane, 2006). The development of this area will not only enhance Medan's tourism image but also make a significant contribution to local cultural preservation.

Furthermore, developing the Kesawan area will provide additional benefits beyond tourism. Preserving Medan's historical buildings can boost the local economy by creating new jobs and strengthening cultural identity amid the forces of globalization. The success of heritage areas in major Southeast Asian cities like Singapore and Malaysia in managing and promoting their historical sites demonstrates that a sustainable balance between past, present, and future can yield significant economic value [3].

Therefore, the development and preservation of heritage in Kesawan, Medan, must be carried

out comprehensively and sustainably. This effort will not only increase tourist appeal but also strengthen the foundation of sustainable tourism in Medan, positioning the city as a leading cultural tourism destination in Indonesia.

3.1.4 SWOT analysis in developing heritage

a. Internal and External Environmental Identification

The SWOT analysis for heritage development begins with identifying the internal and external environments that influence the success of managing heritage areas in Medan, particularly in the Kesawan area. The internal environment consists of factors within the control of the government and area managers, while the external environment encompasses conditions outside direct control that can affect the potential development of the heritage site.

1) Internal Factor Evaluation (IFAS Matrix)

To analyze the internal environment, the Internal Factor Analysis Strategy (IFAS) matrix was used. The assessment was conducted in consultation with the Medan City Department of Tourism and Culture, using weights and ratings to evaluate how much influence each internal factor has on heritage development. The results of the IFAS matrix are as follows:

Based on the IFAS matrix above, the greatest strength in heritage development in Kesawan is its historical value, with the highest score of 0.48, followed by its strategic location with a score of 0.44. These two factors are the main drivers of tourism attraction and support the development of the area. Conversely, the greatest weakness is the lack of funding, with a score of 0.13, which hampers sustainable management.

2) External Factor Evaluation (EFAS Matrix)

For external factors, the External Factor Analysis Strategy (EFAS) matrix was used to assess the opportunities and threats in heritage development in Medan. The results are as follows:

Table 1. IFAS matrix analysis

No	Key Internal Factors	Weight	Rating	Score	Work Program
Strengths					
1	Historical Value	0.12	4	0.48	Utilize historical value effectively in operations
2	Cultural Value	0.06	3	0.18	Manage culturally significant heritage in an appealing manner
3	Architectural/Artistic Value	0.08	4	0.32	Maintain the area's artistic value
4	Strategic Location	0.11	4	0.44	Increase awareness of the strategic location
5	Economic Value	0.06	3	0.18	Conduct market analysis beyond the region
6	Sustainability	0.07	3	0.21	Enhance sustainable management skills
Total Strengths	0.50		1.81		
Weaknesses					
1	Lack of Funding	0.13	1	0.13	Propose incremental funding for heritage management
2	Imbalance Between Preservation and Use	0.12	1	0.12	Improve access between preservation and utilization
3	Limited Human Resources	0.08	1	0.08	Conduct training for skilled human resources
4	Incomplete Regulations and Policies	0.09	2	0.18	Socialize and improve regulations
5	Lack of Awareness and Education	0.08	2	0.16	Raise awareness about the importance of heritage development
Total Weaknesses	0.50		0.67		
Total IFAS Score	1.00		2.48		

Based on the EFAS analysis, environmental sustainability support emerged as the most significant opportunity, with a score of 0.60, highlighting the importance of environmentally friendly infrastructure in supporting heritage tourism. However, uncontrolled development is the primary threat, scoring 0.15, as it risks damaging historical sites and the surrounding environment in the heritage area.

3.1.5 Observation analysis results

The researcher conducted observations to evaluate the integration of heritage aspects into Medan's tourism master plan. The average score from the observations was 3.24, which falls into the "Integrated" category (interval 2.51–3.25). This indicates that heritage aspects have been

incorporated into the tourism plan, though there is still room for improvement.

3.2 Discussion

1. Heritage Development Strategy in Medan

The findings of this study indicate that the development of cultural heritage in Medan, particularly in the Kesawan area, using SWOT analysis, is an effective approach to identifying and leveraging existing potential. This approach helps to formulate appropriate strategies for managing and developing heritage assets. Through the SWOT framework, this research evaluates the internal and external factors influencing heritage development, enabling the creation of sustainable tourism development strategies.

Table 2. EFAS matrix analysis

No	Key External Factors	Weight	Rating	Score	Work Program
Opportunities					
1	Uniqueness and Aesthetic Value	0.05	4	0.20	Develop heritage tourism through community empowerment
2	Unique Historical and Cultural Value	0.10	3	0.30	Develop heritage destinations based on cultural and historical values
3	Multigenerational Appeal	0.05	4	0.20	Collaborate with creative sectors, academia, business, and government
4	Environmental Sustainability Support	0.15	4	0.60	Build sustainable infrastructure
5	Market Trends and Interests	0.15	3	0.45	Increase public trust in heritage tourism
Total Opportunities	0.50		1.75		
Threats					
1	Uncontrolled Development	0.15	1	0.15	Collaborate with the government to control development
2	Environmental Degradation	0.08	1	0.08	Optimize the cultural aspect in tourism
3	Decreasing Heritage Value	0.15	1	0.15	Partner with businesses to safeguard heritage value
4	Policy and Regulatory Limitations	0.05	2	0.10	Draft effective regulations for heritage development
5	Lack of Education and Awareness	0.07	2	0.14	Engage the community in knowledge sharing
Total Threats	0.50		0.62		

The findings align with the concept of Heritage Tourism proposed by Dong et al., [18], where heritage tourism focuses on visitors experiencing historic sites and engaging with elements of cultural heritage firsthand. Heritage tourism not only enhances understanding of a location's history but also contributes to local economic development. However, Jones also emphasizes the need for careful management to ensure that heritage tourism does not compromise the cultural values it seeks to preserve.

This study identifies several strengths, including the historical value, cultural significance, and unique architecture of the Kesawan area, all of which serve as key attractions for tourists. The historical and cultural value of this area creates a strong aesthetic identity that can be harnessed to attract more visitors and raise awareness of the importance of cultural heritage preservation.

However, the study also reveals several weaknesses, such as inadequate supporting infrastructure and limited skilled human resources. Rimmer et al. [29] highlight that weaknesses in management and technology can impede tourism sector development, and this is also relevant in the context of heritage development in Medan.

On the other hand, the study identifies various opportunities, including emerging tourism trends and increasing support from both government and society. The support for heritage development through sustainable tourism could significantly contribute to the local economy, especially by raising awareness of the importance of cultural preservation.

Nevertheless, there are several threats to heritage development, such as urbanization, climate change, and economic pressures. These threats could hinder the sustainability of heritage

development if not addressed with appropriate mitigation strategies. Dong et al. [18] stress the importance of formulating mitigation measures to ensure sustainability in heritage tourism.

Overall, the use of SWOT analysis provides a comprehensive approach to understanding the internal and external dynamics affecting heritage development in Medan. This enables the local government and stakeholders to formulate appropriate strategic measures to preserve cultural heritage and develop it as a sustainable tourism attraction.

2. Integration of Heritage Aspects into Medan's Tourism Master Plan

The integration of heritage aspects into Medan's tourism master plan has been progressing well, as demonstrated by the observations and SWOT analysis conducted. Heritage tourism not only serves as a cultural preservation effort but also plays a key role in sustainable tourism development in Medan. The master plan, known as the Medan City Tourism Development Master Plan (RIPPARKOT), has incorporated several relevant strategies and policies, including in industry development, destination management, marketing, and institutional tourism frameworks. The connection between heritage aspects and Medan's tourism development policies is evident in the city's vision to position Medan as a leading heritage tourism destination. According to the RIPPARKOT document, heritage development in Medan encompasses:

1. Analyzing the potential, challenges, and strategic issues in heritage tourism development in the Kesawan area and beyond.
2. Formulating the vision, mission, objectives, and goals for tourism development, including the preservation of historic sites and enhancing the quality of heritage attractions.
3. Developing heritage tourism destination strategies focusing on tourist attractions, marketing, and supporting public facilities.
4. Strengthening tourism institutions through regulatory improvements, community empowerment, and enhancing the human resources involved in managing heritage areas.

Heritage development is also supported by the Tourism Area Development Plan, which identifies several strategic tourism areas in Medan, including Kesawan, as the center

for heritage tourism development. The RIPPARKOT document emphasizes the importance of mapping tourism destinations at a scale of 1:50,000 to ensure more structured management of heritage areas.

Overall, the integration of heritage aspects into Medan's tourism master plan demonstrates a serious effort to promote sustainable tourism based on cultural preservation and local economic growth.

3. Implications of the Research Findings

The findings of this study have several important implications for the Medan city government, the local community, and stakeholders in heritage tourism development. Some of the key implications are as follows:

1. Improving the Quality of Tourism Destinations

This research highlights the importance of improving the quality and quantity of heritage tourism destinations in Medan. By formulating the right strategies, the city government can enhance the appeal of existing heritage sites and attract more domestic and international tourists.

2. Effective and Sustainable Marketing

The Medan city government needs to strengthen effective and efficient marketing strategies to introduce the city's heritage tourism destinations to a broader market. Utilizing digital media and partnerships with the private sector will help expand the reach of heritage tourism promotion.

3. Driving Local Economic Growth

The development of a heritage tourism industry focused on empowering local communities through small and medium-sized enterprises (SMEs) will positively impact the regional economy. By developing this tourism sector, local incomes can increase alongside the growing number of tourists visiting Medan.

4. Enhancing Tourism Institutional Governance

To support sustainable heritage tourism management, institutional governance needs to be improved, involving the government, private sector, and local communities. Increasing human resource capacity, improving regulations, and forming efficient organizations will ensure that heritage development continues professionally and effectively.

In conclusion, this research provides a critical foundation for the development of cultural heritage as a tourism asset for Medan. By applying the strategies formulated through SWOT analysis, Medan can become a leading sustainable heritage tourism destination that contributes to local economic growth and cultural preservation

4. CONCLUSION AND RECOMMENDATIONS

The development of heritage tourism in Medan, particularly in the Kesawan area, holds significant potential to support the growth of the tourism sector and the local economy. Through SWOT analysis, it was found that the historical, cultural, and architectural uniqueness of the area are the main strengths that can attract tourists. However, challenges such as insufficient infrastructure, limited funding, and a lack of skilled human resources remain weaknesses that need to be addressed. The opportunities presented by growing tourism trends and the support from the government and community provide a pathway for better heritage tourism development. Nevertheless, threats such as urbanization, climate change, and uncontrolled development must be managed effectively to ensure the preservation of the existing cultural heritage. Overall, heritage development in Medan requires a sustainable approach to optimize its potential and support the city's tourism growth.

The government needs to improve infrastructure and provide training for human resources involved in managing heritage areas. Additionally, public awareness of the importance of heritage preservation must be increased through outreach and education initiatives that actively involve the community. Effective marketing strategies, utilizing digital media and partnerships with the private sector, are also essential to expand the reach of heritage tourism promotion. Furthermore, strengthening regulations and institutional governance is necessary to ensure professional and sustainable management. Empowering local SMEs and fostering creative economic development should also be a priority, allowing the local community to directly benefit from the heritage tourism development in Medan.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Zhang S, Liang J, Su X, Chen Y, Wei Q. Research on global cultural heritage tourism based on bibliometric analysis. *Heritage Science*. 2023;11(1):139.
2. Ridwan N. Strategi Pengembangan Objek Wisata Air Guruh Gemurai Desa Kasang Kecamatan Kuatan Mudik Kabupaten Kautan Singgig. *Jurnal Jom Fekom*. 2015;2(2):1-13.
3. Bhowmik P. Heritage tourism: A bibliometric review. *Anatolia*. 2021; 32(3):387-403.
4. Prasetyo DA, Syafrini D. Community participation in cultural tourism development in the Sijunjung Indigenous Village, West Sumatra. *Jurnal Perspektif*. 2023;6(1):47-57.
5. Fatmawati F, Fortuna H, Siburian BE, Ilhami A. Development of halal tourism destinations in multi-ethnic and multi-religious areas: Case study of the Asia Heritage tourist object. *Jurnal Industri Pariwisata*. 2023;6(1):41-49.
6. Solemede I, Tamaneha T, Selfanay R, Solemede M, Walunaman K. Strategi pemulihan potensi pariwisata budaya di Provinsi Maluku. *Noumena: Jurnal Ilmu Sosial Keagamaan*. 2020;1(1):69-86.
7. Ardiwidjaja R. *Pariwisata Budaya*. Uwais Inspirasi Indonesia; 2020.
8. Jia S, Chi OH, Martinez SD, Lu L. When "old" meets "new": Unlocking the future of innovative technology implementation in heritage tourism. *Journal of Hospitality & Tourism Research*; 2023. Available: <https://doi.org/10.1177/10963480231205767>
9. Mahrous AH. The role of heritage tourism in economic development: A case study of the Bedouin Village in Matrouh Governorate. *Bulletin De La Société De*

- Géographie d'Egypte, 2022;95(2):123–157.
10. Djausal GP, Larasati A, Muflihah L. Ecological tourism strategy in the face of the COVID-19 pandemic challenge. *Jurnal Perspektif Bisnis*. 2020;3(1):57–61.
 11. Eddyono F. Kebijakan dan Perencanaan Pariwisata. *Uwais Inspirasi Indonesia*.
 12. Ermawati EA, Putra AP. Development strategy of the Inggrian Dormitory tourist object as heritage tourism in Banyuwangi Regency. *Sadar Wisata: Jurnal Pariwisata*. 2023;3(2): 61–71.
 13. De Man A, Tavares J. Local development policies for heritage tourism. *Review of Economics and Finance*. 2023;21(1):330–335.
 14. Foster, S. Fundamental Concept in Aquifer Vulnerability, Pollution Risk and Protection Strategy. *Vulnerability of Soil and Groundwater to Pollutants*, TNO Committee on Hydrogeological Research, Proceedings and Information. 1987;38.
 15. Fitria NJL. Singosari Special economic zone as sustainable development with the theme of heritage and historical tourism based on technology. *The Indonesian Journal of Public Administration (IJPA)*. 2022;8(1).
 16. Labadi S, Giliberto F, Rosetti I, Shetabi L, Yildirim E. Heritage and the Sustainable Development Goals: Policy guidance for heritage and development actors. *International Journal of Heritage Studies*; 2021.
 17. Riyani E. Community participation in developing natural tourism at Jumog Waterfall and the economic condition of the people: Study in Bejo Village, Ngargoyoso District, Karanganyar Regency, Central Java. *Yogyakarta*; 2018.
 18. Dong Y, Mo X, Hu Y, et al. Epidemiology of COVID-19 among children in China. *Pediatrics*. 2020;145:e20200702.
 19. Harirah Z, Azwar W, Isril I. Tracing the existence of local wisdom in the tourism development policy of Siak Regency in the era of globalization. *Jurnal Ilmu Sosial dan Humaniora*. 2021;10(1):70–81.
 20. Kairiss A, Geipele I, Olevska-Kairisa I. Sustainability of cultural heritage-related projects: Use of socio-economic indicators in Latvia. *Sustainability*. 2023;15(13): 10109.
 21. Kuntari ED, Lasally A. Tourists' perception of the attraction of De Tjolomadoe heritage tourism. *Journal of Tourism and Economic*. 2021;4(2):153–163.
 22. Hamzah F, Hermawan H, Srinatami D. Analisis Strategi Pengembangan Situs Cagar Budaya Gunung Padang Sebagai Destinasi Wisata dan Peninggalan Sejarah Kebudayaan. *Media Wisata*. 2021;19(1):57-67.
 23. Al Khalidy D, Putra AK, Fuddin H, Rafani JR, Haswin A, Sumantri B. Innovation of virtual reality: Supporting the Tengger Heritage Journey development as sustainable village tourism promotion in Tosari. *Jati Emas (Jurnal Apl. Tek. dan Pengabd. Masyarakat)*. 2023;7(3):75–82.
 24. Benhamou F. Heritage. In *Handbook of Cultural Economics* (3rd ed). Edward Elgar Publishing. 2020;279–286.
 25. Dhamayanty S, Muhamad BGA, Andriani NN, Ilahi FW. Planning heritage tourism travel patterns in Cirebon City and Regency. *Journal of Event, Travel and Tour Management*. 2022;2(2):45–54.
 26. Umam C. Menggali Potensi Heritage Kampung Wisata Sukadiri sebagai Daya Tarik Wisata. *Jurnal Manajemen dan Bisnis*. 2023;5(1):11-21.
 27. Aidin A, Akil A, Wikantari R. Urban heritage tourism development strategy in Makassar City. *Plano Madani: Jurnal Perencanaan Wilayah dan Kota*. 2022;11(1):68–83.
 28. Sinaga K, Nasution MA, Dewi AT. Implementasi kebijakan pengembangan pariwisata berbasis pemberdayaan masyarakat. *Publik*. 2021;8(1):79-90.
 29. Rimmer MA, Sugama K, Rakhmawati D, Rofiq R, Habgood RH. A review and SWOT analysis of aquaculture development in Indonesia. *Reviews in Aquaculture*. 2013;5:255-279. Available: <https://doi.org/10.1111/raq.12017>

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