



To cite this article: Octaviani Gita Putri, Rahmat Ingkadijaya, Willy Arafah and Hera Oktadiana (2024). Tourism Development From 3a Aspects At Delingan Reservoir, Karanganyar, Central Java, Indonesia. International Journal of Education, Business and Economics Research (IJEER) 4 (5): 132-141

**TOURISM DEVELOPMENT FROM 3A ASPECTS AT DELINGAN RESERVOIR,  
KARANGANYAR, CENTRAL JAVA, INDONESIA**

**Octaviani Gita Putri<sup>1</sup>, Rahmat Ingkadijaya<sup>2</sup>, Willy Arafah<sup>3</sup> and Hera Oktadiana<sup>4</sup>**

<sup>1234</sup>Trisakti Tourism Institute  
IKPN Tanah Kusir street, Bintaro, South Jakarta, 12330, Indonesia

<https://doi.org/10.59822/IJEER.2024.4508>

**ABSTRACT**

Delingan Reservoir has various tourism potentials that can be further developed or enhanced to become a more popular and economically profitable tourist attraction. Therefore, it is important to understand the aspects that support tourism at Delingan Reservoir, such as the 3A Aspects: Attraction, Amenity, and Accessibility. Based on previous research, almost no studies have focused on Delingan Reservoir, especially concerning the 3A Aspects. Hence, it is necessary to identify these aspects and recommend tourism development strategies for the Delingan Reservoir Tourist Attraction in Karanganyar, Central Java. This study employs descriptive research methods with a qualitative approach, using observations conducted around the Delingan Reservoir. The data sources consist of primary data from direct field observations and secondary data from journal articles and other relevant references. Delingan Reservoir offers stunning natural attractions, good accessibility, and a variety of facilities in the surrounding area. Although it has great potential as a tourist destination, challenges such as the lack of development of additional attractions and limited accommodation may hinder its growth. However, with the right development strategies, Delingan Reservoir has the opportunity to increase tourist visits and support sustainable tourism growth.

**KEYWORDS:** - Accessibility, Amenity, Attraction, Reservoir, Tourism Development.

© The Authors 2024  
Published Online: September  
2024

Published by International Journal of Education, Business and Economics Research (IJEER) (<https://ijeber.com/>) This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

**1.INTRODUCTION**

Tourism development is considered an effective strategy to increase job growth and reduce poverty. International Donor Organizations and International Non-Governmental Organizations recognize that tourism has proven to be a driving force for economic growth and social development, as well as being successful in addressing poverty issues in rural areas of developing countries (Sukmana,

2018). In addition, the development of the tourism sector in the region has great potential to be an important contributor to increase regional income. The program of developing and optimizing tourism potential is expected to be a driving force for economic growth. The arrival of tourists to a Tourist Destination Area brings economic benefits and welfare to the local community (Nurhadi et al., 2014).

One of the areas in Indonesia with significant opportunities for tourism development is Karanganyar Regency, which is located to the east of Surakarta. This area is rich in natural potential and other tourist attractions or tourist destinations that can be developed well, supported by its regional identity known as "INTANPARI" (Industri - Pertanian – Pariwisata or Industry - Agriculture - Tourism). This potential is the main focus for development in Karanganyar Regency (Mawardi, 2009). With beautiful natural conditions, Karanganyar has many interesting tourist attractions to visit, one of which is nature tourism attraction. Among Karanganyar's natural tourism attractions is its reservoir.

A reservoir is a structure designed to store water from a river. The construction of reservoirs is undertaken because rivers in Indonesia, especially in Java, tend to have high water discharge during the rainy season and experience a drastic decrease during the dry season. The main purpose of the reservoir is to prevent flooding caused by the abundance of water during the rainy season and to provide a water supply for use during the dry season (Julia, 2017).

Karanganyar has several reservoirs spread across different areas, offering a unique and interesting holiday experience for visitors. One of them is the Delingan Reservoir, which was built during the Dutch colonial period and inaugurated by Mangkunegoro VII. It is located in Delingan Village, Karanganyar District, Karanganyar Regency, Central Java (Augusto et al., 2020).

The Delingan Reservoir area is a tourist attraction that has significant potential to be developed into a water tourism destination. First, it is a fairly large reservoir, namely with an area of 5 hectares, with a water capacity of 3,970,000 m<sup>3</sup>, plus an additional area of about 3 hectares; secondly, features a cool environment with hills and green trees surrounding the reservoir; thirdly, the topography around the Delingan Reservoir is contoured; fourthly, the location of the Delingan Reservoir in Karanganyar District is very strategic, as it is close to the Mount Bromo tourist attraction and is only 5 kilometers from the center of Karanganyar City (Mawardi, 2009).

Based on the background, it is evident that the potential of the Delingan Reservoir tourist attraction can be further developed into a reservoir tourist attraction that is a more desirable and economically productive destination. However, before being further developed into a developing reservoir tourist attraction, it is necessary to analyze several aspects that can support tourism, namely 3A aspects: Attraction, Amenity, and Accessibility.

Based on previous research, almost no one has studied the Delingan Reservoir, especially regarding the 3A aspects. Therefore, research is needed on the 3A aspects and tourism development strategies for the Delingan Reservoir in Karanganyar, Central Java.

## **2. RESEARCH METHODS**

This study employs a descriptive research method with a qualitative approach. It utilizes primary data sources collected through direct observation in the field around the Delingan Reservoir in Karanganyar, as well as secondary data from journal articles and other relevant references. The research was conducted over approximately one month, from April 5 to May 10, 2024. The data analysis method includes data collection through SWOT (Strength, Weakness, Opportunity, Threat) analysis, followed by data reduction, data presentation, conclusion drawing, verification, and final conclusions. SWOT analysis, a qualitative method, will evaluate internal factors (strengths, weaknesses) and external factors (opportunities, threats) (Abdillah, 2017).

## **3. RESULTS AND DISCUSSION**

### **3.1 Overview of Delingan Reservoir**

The Delingan Reservoir, which serves as a source of irrigation for an area of 2,410 hectares (Jonathan et al., 2021), is located in Delingan Village, Karanganyar Regency, Central Java Province. Its primary function is irrigation. This reservoir, constructed between 1920 and 1923, was managed by the Bengawan Solo River Basin Center, with design consultants and contractors from the government during the Dutch East Indies era (Augusto et al., 2020).

### **3.2 History of Delingan Reservoir**

The reservoir, originally known as Tirtomarto, was built in 1926. According to data quoted from Augusto et al. (2020) on Monday, April 4, 2022, this reservoir, with an area of 11.65 square kilometers, can accommodate 4.2 million cubic meters of water at a height of 179.1 meters above sea level. The construction of the Delingan Reservoir itself took place over three years from 1920 to 1923, with the first stone being laid on October 11, 1920. This information comes from an article about the Tirtomarto Reservoir published in the Dutch-language newspaper *De Indische Courant* on December 31, 1929. The reservoir was designed by the Dutch government and is now managed by the Bengawan Solo River Basin Center, also known as Balai Besar Wilayah Sungai Bengawan Solo (BBWSBS), as a source of irrigation for 2,410 hectares of land (Augusto et al., 2020).

Tirtomarto, also known as Delingan Reservoir, is undergoing rehabilitation as part of the Bengawan Solo Water Resources Development and Conservation Project. The construction was led by MN architect FE Wolff, with the supervision of construction and related works carried out by Krans. The project was completed in December 1923 but was not used for irrigation until September 1924. The Delingan Reservoir is believed to provide benefits to the local community, especially by increasing rice harvests (Senjaya et al., 2020).

### **3.3 Identify Attraction Aspect**

Before conducting an analysis and determining strategies for the development or expansion of tourism at the Delingan Reservoir, it is necessary to identify internal and external factors, including those related to the 3A aspects (Attraction, Amenity, and Accessibility). The first aspect of the 3A's is Attraction. Some indicators of the Attraction aspect, according to Muslim (2022), include what can be seen (something to see), what can be done (something to do), and what can be bought (something to buy).

For indicators of what can be seen (something to see) in the Delingan Reservoir, based on the results of observations in the field, some of them are first, a large reservoir surrounded by a reservoir boundary wall; second, a wide expanse of rice fields, trees, and hills around the reservoir; third, the majestic view of Mount Lawu in the eastern part of the reservoir which can be seen when the weather is clear; fourth, the view of the sunset. This is consistent with Wahyutama (2022) that at the Delingan Reservoir, you can see vast expanses of rice fields, the charm of the majestic Mount Lawu when the weather is clear, and see the view when the sun sets in the afternoon.

For indicators of what can be done (something to do) in Delingan Reservoir, based on the results of field observations, some of them are first, jogging or cycling in the morning and afternoon when the sun is not too hot; second, relaxing by sitting on the edge of the reservoir or a shady seat around the reservoir while looking at the scenery or while eating and drinking; third, fishing on the edge of the reservoir; fourth, purchasing and consuming food and drinks sold in the reservoir area. This is to the description by Wahyutama (2022) that various activities that can be done at the Delingan Reservoir include jogging, cycling, fishing, sitting back while enjoying the view, or eating and drinking various snacks around the reservoir.

For indicators of what can be purchased (something to buy) at the Delingan Reservoir based on field observations and the Google Maps website (2024), some options include: first, there are various food and beverage cart vendors such as rolled egg cart vendor, Sempol cart vendor, Cilok cart vendor, various fried food cart vendor, various ice cart vendors such as Pejuang Nyoklat and so on; second, there are various restaurants and food stalls such as Bambu Sumilir Restaurant, Ibu Sri's Food Stall, Asy-Syifa Grilled Chicken Food Stall, Yuni's Food Stall, Tirta Bayu Food Stall, Mbah Mayor's Food Stall, Bang Negro's Food Stall, Avatar's Food Stall, Mas Jo's Food Stall, Wedangan Ngisor Talok Food Stall, Gendar Pecel Food Stall, Wedangan Saunge Mas El Food Stall, Nayla's Snack Shop, Omaha Pakde's Food Stall, Las Vegas Food Stall, Suparno HS Food Stall, Soto Waduk Food Stall; third, there are stalls or grocery stores such as Bu Dyah Tk Stall. As explained by Wahyutama (2022) that there are several food and beverage cart vendors around the Delingan Reservoir, such as rolled egg cart vendor, Sempol cart vendor, Cilok cart vendor, various fried food cart vendors, various ice cart vendors such as Pejuang Nyoklat, so on.

### **3.4 Identify Accessibility Aspect**

The second aspect of the 3A's is accessibility or access. When designing a place, it is important to consider ease of access for everyone, including those with mobility limitations. This can be achieved by considering the various modes of transportation available, along with their supporting infrastructure, such as toll roads, trains, terminals, airports, and parking lots (Chaerunissa & Yuniningsih in Herman et al., 2023). Therefore, it is necessary to address accessibility aspects, including different types of transportation and road access, as well as the management of private vehicle access, such as ticketing and parking spaces.

One indicator of the accessibility aspect is road access. Based on field observations and the Google Maps website (2024), the main highways are as follows: First, the main highway to the Delingan Reservoir has been paved and is about 11 meters wide. Second, local roads to the Delingan Reservoir have been paved and are about 4.5 meters wide. Third, neighborhood or village roads

around the Delingan Reservoir have been paved and are about 3.5 meters wide. Regarding the toll road aspect, based on field observations and the Google Maps website (2024), the closest toll roads are the Karanganyar Toll Exit and the Kebakkramat Toll Exit, which are approximately 15 kilometers from the Delingan Reservoir.

Another indicator of the accessibility aspect is transportation options. Based on field observations and the Google Maps website (2024), the closest train station is Palur Electric Rail Train Station, which is about 14 kilometers from Delingan Reservoir. Regarding the terminal aspect, the closest bus terminal is Bejen Terminal, located 2.4 kilometers from Delingan Reservoir. Concerning four-wheeled and two-wheeled vehicles, observations reveal: first, online vehicle services such as Gojek, Grab, and Maxim; second, local public transportation; and third, bus services for major roads. Regarding the airport aspect, based on field observations, Google Maps (2024), and several literatures, Adi Soemarmo Airport is situated on Jalan Bandara Adi Soemarmo, Boyolali Regency, Central Java, 14 kilometers from Solo City and 34 kilometers from Delingan Reservoir. This airport previously had international status, but as of April 2, 2024, it has been designated for domestic flights, although it still temporarily serves international flights (Khoirunnisa et al., 2022).

Other indicators that support the accessibility aspect include various management systems that regulate the entry and exit of visitors and vehicles. However, access to parking tickets or entrance tickets for the Delingan Reservoir has not been managed properly, as it is common for visitors to the Delingan Reservoir not to be asked for an entrance ticket or parking ticket, or these tickets may be provided for free.

### **3.5 Identify Amenity Aspect**

The third aspect of the 3A's is amenity. The quality of amenities in a tourist destination can be assessed by examining the various facilities available, such as accommodation, restaurant, entertainment venue, shop, and other services like bank, hospital, security, and insurance (Cooper et al., in Nugroho & Sugiarti, 2018).

For accommodation options based on field observations and the Google Maps site (2024), there are no accommodations around the Delingan Reservoir, including on local roads. The closest accommodation to the main road is Home Stay Sutantyo, which is 1.8 kilometers from the Delingan Reservoir.

For the provision of food and beverages, based on observations in the field and the Google Maps website (2024), the findings are as follows: First, there are various food and beverage carts, including cart vendor of rolled eggs, Sempol, Cilok, various fried foods, and ice, such as Pejuang Nyoklat, among others. Second, there are a variety of restaurants and food stalls, such as Bambu Sumilir Restaurant, Ibu Sri's Food Stall, Asy-Syifa Grilled Chicken Food Stall, Yuni's Food Stall, Tirta Bayu Food Stall, Mbah Mayor's Food Stall, Bang Negro's Food Stall, Avatar's Food Stall, Mas Jo's Food Stall, Wedangan Ngisor Talok Food Stall, Gendar Pecel Food Stall, Wedangan Saunge Mas El Food Stall, Nayla's Snack Shop, Omaha Pakde's Food Stall, Las Vegas Food Stall, Suparno HS Food Stall, and Soto Waduk Food Stall.



For entertainment venues based on field observations and the Google Maps website (2024), the following are noted: First, Sendang Bejen is located in Sendang Bejen Tourism Village, 8 kilometers from Delingan Reservoir. Second, Sondokoro Agro-Tourism is 7.7 kilometers from Delingan Reservoir. Third, Intanpari Waterpark is 4.7 kilometers from Delingan Reservoir. Fourth, Pancasila Park is 5.3 kilometers from Delingan Reservoir. Fifth, Karanganyar Square (Alun-alun) is 6.4 kilometers from Delingan Reservoir.

For marketplaces based on field observations and the Google Maps website (2024), the following are identified: First, there are stalls or grocery stores located at Delingan Reservoir, including Bu Dyah Tk's stalls or grocery stores. Second, there are minimarkets near Delingan Reservoir, less than 1 kilometer away, such as WN Mart, Nardi's Store, and Indomaret Delingan. Third, there is a supermarket located 6.2 kilometers from Delingan Reservoir, such as Mitra Department Store.

For other services such as bank, hospital, security, and insurance, based on field observations and the Google Maps website (2024), the following details are noted: First, the nearest health facility is the Karanganyar Health Center, which is 1.7 kilometers from the Delingan Reservoir. While there are several hospitals, they are located further away; specifically, the Inpatient Building of the Karanganyar Regency Hospital, Kartini Karanganyar Hospital, and the Karanganyar Hospital Emergency Room are approximately 5 kilometers away. Second, the nearest banks are as follows: Mandiri Bank is 5.9 kilometers away, Jateng Bank and Muamalat Bank are both 4.6 kilometers away, BRI Bank is 3.4 kilometers away, BTN Bank is 5.6 kilometers away, and DKI Bank is 4.2 kilometers away. Third, the closest security office is the Karanganyar Police Station, which is 5.8 kilometers from the Delingan Reservoir. Fourth, the nearest insurance office is 19 kilometers away, and there are no insurance offices closer than this.

Based on field observations and the Google Maps website (2024), the facilities at the Delingan Reservoir include public toilets provided by residents, the Al Manar Mosque, a vehicle parking area near the monument, and a gazebo above the reservoir stairs. According to Anggraeni (2023), the Delingan Reservoir also features public toilets, a prayer room, a parking area, and a gazebo.

### **3.6 SWOT Analysis**

It is important to understand the various strategies or recommendations for tourism development at Delingan Reservoir. To determine these, we can start with a SWOT (Strength, Weakness Opportunity, Threat) analysis of the Delingan Reservoir destination, focusing on the strengths, weaknesses, opportunities, and threats related to the aspects of attraction, accessibility, and amenity. Based on this analysis, the results of the SWOT analysis concerning the 3A aspects of the Delingan Reservoir are obtained.

In terms of attraction, Delingan Reservoir has several significant strengths. The vast and beautiful natural surroundings, including the expansive rice fields, trees, and the charm of Mount Lawu, provide a strong attraction for visitors. Additionally, the variety of activities available, such as jogging, cycling, fishing, and enjoying local cuisine, also enhances its appeal. However, a potential weakness is the lack of variety in the landscape, which might cause visitors to feel bored if they visit repeatedly.

In terms of accessibility, Delingan Reservoir benefits from relatively good access via highways, trains, and nearby bus terminals. However, its location, which is quite distant from major transportation facilities such as train stations or toll roads, can be an obstacle for some visitors, especially those who do not use private vehicles. Additionally, the entrance ticket and parking facilities, which have not been properly managed, can disrupt the tourist experience and cause inconvenience.

On the amenity side, Delingan Reservoir offers a variety of adequate amenities such as dining options, entertainment venues, and nearby health services. However, a notable shortcoming is the limited availability of accommodation around the reservoir, which could restrict longer stays for visitors seeking a more immersive tourism experience.

Overall, Delingan Reservoir has great potential as an attractive natural tourism destination with stunning views and relatively easy accessibility. However, to enhance its competitiveness, efforts must be made to diversify attractions, improve access to major transportation facilities, and increase the availability of reviews around the tourist area. By identifying and leveraging opportunities and addressing existing challenges, Delingan Reservoir can become a more appealing and competitive destination in the tourism market.

### **3.7 Recommendations for the Delingan Reservoir Tourism Development Strategy**

Tourism development begins with strategic planning, which is an essential system to provide clear direction regarding the necessary steps. This ensures integration among stakeholders in the area to be developed to achieve the desired tourism development goals (Agus et al., 2021). Based on the SWOT analysis, strategies were identified, including SO, WO, ST, and WT strategies. Therefore, the recommended strategies for enhancing tourism at the Delingan Reservoir are the SO Strategy, WO Strategy, ST Strategy, and WT Strategy.

#### **3.7.1 SO Strategy (Strengths-Opportunities)**

- a. Utilizing beautiful natural scenery to develop educational tourism and agro-tourism;
- b. Diversifying various tourist attractions, such as water tourism, cultural tourism, and culinary tourism;
- c. Improving the quality of existing facilities, such as places to eat, entertainment venues, and health services;
- d. Conducting effective promotions to increase awareness of the Delingan Reservoir.

#### **3.7.2 WO Strategy (Weakness-Opportunity)**

- a. Distributing attractive and affordable tour packages to attract tourists with limited time and budget;
- b. Cooperating with travel agents to promote Delingan Reservoir to domestic and foreign tourists;
- c. Improving the quality of existing accommodations and building new ones around the tourist area;
- d. Improving accessibility to major transportation facilities, such as train stations and toll roads.

### 3.7.3 ST Strategy (Strength-Threat)

- a. Promoting educational tourism and agro-tourism to capitalize on tourists' interest in nature tourism;
- b. Improving the quality of facilities and infrastructure around the Delingan Reservoir to enhance competitiveness with other tourist destinations;
- c. Conducting effective promotions to attract tourists interested in nature tourism and educational tourism;
- d. Building an integrated and efficient system for managing entrance tickets and parking.

### 3.7.4 WT Strategy (Weakness-Threat)

- a. Increasing public awareness of the importance of protecting the environment to prevent environmental pollution.
- b. Implementing a disaster mitigation system to minimize the risk of natural disasters.
- c. Cooperating with the government and related institutions to address the risk of threats in the Delingan Reservoir.
- d. Mentioning adaptive marketing strategies to address changes in market conditions and existing threats.

## 4. CONCLUSION

The main strengths of Delingan Reservoir include its beautiful natural scenery, diverse tourist activities, easy accessibility, and adequate facilities. However, weaknesses such as a lack of tourist attractions, limited accommodation options, and its distance from major transportation facilities need to be addressed. Opportunities lie in increasing tourist interest in nature, developing transportation infrastructure, promoting educational and agro-tourism, and securing support from both the government and private sector. Threats include competition from other destinations, natural disasters, and environmental pollution.

Based on the research results, the recommended strategy for developing tourism at Delingan Reservoir includes utilizing the natural beauty for educational and agro-tourism; diversifying tourist attractions to include water, cultural, and culinary experiences; improving facilities such as dining and entertainment venues; developing affordable tour packages; collaborating with travel agents; enhancing the quantity and quality of services; increasing transportation accessibility; developing infrastructure for educational tourism; implementing integrated ticketing and parking management; raising environmental awareness; preparing for disaster mitigation; cooperating with the government; and employing adaptive marketing strategies to ensure the sustainable development of tourism at Delingan Reservoir.

## REFERENCES

- [1] Abdillah, D. M. (2017). Analisis Faktor Pendorong dan Penarik Motivasi Wisatawan Berkunjung ke Bali Utara an Analysis of Push and Pull Motivational Factors of Tourists to North Bali. *Jurnal Kepariwisata Indonesia*, 81–111.
- [2] Agus, Mardhatillah, Faisal, Goeltom, A. D. L., Muh Yahya, & Muh Kasim. (2021). Bentuk Clustering Pengembangan Kawasan Wisata Malino. *Jurnal Kepariwisata: Destinasi, Hospitalitas Dan Perjalanan*, 5(2), 96–109. <https://doi.org/10.34013/jk.v5i2.413>



- [3] Alvianna, S., Patalo, R. G., Hidayatullah, S., & Rachmawati, I. K. (2020). Terhadap Kepuasan Generasi Millennial Berkunjung ke Tempat Wisata. *Jurnal Kepariwisata: Destinasi, Hospitalitas Dan Perjalanan*, 4(1), 53–59. <https://doi.org/10.34013/jk.v4i2.41>
- [4] Anggraeni, I. D. (2023, February 25). Waduk Delingan Karanganyar. *Salsawisata.Com*. <https://salsawisata.com/waduk-delingan-karanganyar/>
- [5] Augusto, E., Ikhsan, C., & Hadiani, R. (2020). The Assessment of Physical Condition of Delingan Dam in 2019 as an Evaluation on Dam Maintenance. *IOP Conference Series: Materials Science and Engineering*, 858(1). <https://doi.org/10.1088/1757-899X/858/1/012003>
- [6] Dewantara, M. H. (2020). Peran Gojek Sebagai Akses Publik Wisatawan di Bali dan Pelopor Ekonomi Kreatif. *Jurnal Master Pariwisata (JUMPA)*, 541. <https://doi.org/10.24843/jumpa.2020.v06.i02.p14>
- [7] Djuwendah, E., Hapsari, H., Deliana, Y., Opan, D., & Suartapradja, S. (2017). Potensi Ekowisata Berbasis Sumberdaya Lokal di Kawasan Waduk Jatigede Kabupaten Sumedang Potential Ecotourism Based on Local Resources In the Jatigede Reservoir at Sumedang Regency. *Paspalum : Jurnal Ilmiah Pertanian*, 5(2).
- [8] Fauziah, S. M., & Laily, A. N. (2015). Identifikasi Mikroalga dari Divisi Chlorophytadi Waduk Sumber Air JayaDusun Kreet Kecamatan Bululawang Kabupaten Malang. *Jurnal Bioedukasi*, 8(1), 20–23.
- [9] Herman, Rizkiyah, P., Widjaja, H. R., & Junaid, I. (2023). Determinant Factors in Managing Tourism Village. *Jurnal Kepariwisata: Destinasi, Hospitalitas Dan Perjalanan*, 7(1), 67–80. <https://doi.org/10.34013/jk.v7i1.1129>
- [10] Jonathan, A., Yudianto, D., & Sanjaya, S. (2021). Penentuan Pola Operasi Pintu Pelimpah dalam Rangka Pengendalian Banjir Bendungan Delingan, Jawa Tengah. *Jurnal Teknik Hidraulik*, 12(2), 93–106. <https://doi.org/10.32679/jth.v12i2.662>
- [11] Julia, H. (2017). Signifikansi Skenario Pembangunan Check Dam dalam Menahan Laju Sedimentasi di Waduk Sempor. *Agrium: Jurnal Ilmu Pertanian*, 21(1), 78–89.
- [12] Khoirunnisa, S., Putri Astutik -Sekolah Tinggi Teknologi Kedirgantaraan Yogyakarta, S., Putri Astutik, S., Transportasi Udara, M., & Tinggi Teknologi Kedirgantaraan Yogyakarta, S. (2022). Analisis Tingkat Kepuasan Penumpang di Terminal Domestik Bandar Udara Internasional Adi Soemarmo Boyolali Dengan Metode Customer Satisfaction Index. *Jurnal Kewarganegaraan*, 6(1).
- [13] Kholis, A., Nugroho, M. S., & Ma'ruf. (2023). Evaluation of Tourism Development Using the TALC Approach. *Jurnal Kepariwisata: Destinasi, Hospitalitas Dan Perjalanan*, 7(1), 35–50. <https://doi.org/10.34013/jk.v7i1.821>
- [14] Mawardi. (2009). Tugas Akhir Dasar Program Perencanaan dan Perancangan Arsitektur (DP3A) Water and Adventure Sport Area. Universitas Muhammadiyah Surakarta.
- [15] Muslim, M. B. C. (2022). Pengaruh Atraksi, Aktivitas, Amenitas dan Aksesibilitas Terhadap Kepuasan Wisatawan di Taman Nusa Bali. *Jurnal Visi Manajemen*, 8(1), 74–87.
- [16] Nugroho, W., & Sugiarti, R. (2018). Analisis Potensi Wisata Kampung Sayur Organik Ngemplak Sutan Mojosoongo Berdasarkan Komponen Pariwisata 6A. *Cakra Wisata Jurnal Pariwisata Dan Budaya*, 19(2), 35–40.
- [17] Nurhadi, F. D. C., Mardiyono, & Rengu, S. P. (2014). Strategi Pengembangan Pariwisata oleh Pemerintah Daerah Terhadap Pendapatan Asli Daerah (Studi pada Dinas Pemuda, Olahraga, Kebudayaan dan Pariwisata Kabupaten Mojokero). *Jurnal Administrasi Publik*, 2(2), 325–331.

- [18] Putri, O. G., & Asmara, D. (2022). Pengembangan Potensi Pariwisata di Karanganyar dari Kompenen 3A. *Jurnal Ilmiah Pariwisata*, 18(3), 1411–5077.
- [19] Richset Riwukore, J., Habaora, F., Yustini, T., Jenderal Sudirman, J., Palembang, K., & Selatan, S. (2021). Existing Condition of Lasiana Beach Tourism Destination, Kupang City Based On Attractions, Accessibility, Facilities, Institutions, and Tourism Ecosystems.
- [20] Senjaya, T., Yudianto, D., Yuebo, X., & Adidarma, W. K. (2020). Application of TRMM in the Hydrological Analysis of Upper Bengawan Solo River Basin. *Journal of the Civil Engineering Forum*, 6(3), 309. <https://doi.org/10.22146/jcef.57125>
- [21] Sukmana, O. (2018). Strategy for The Acceleration of The Work Field and Poverty Reduction Through Tourism Development Policy (Vol. 4, Issue 03). *Kesejahteraan Sosial*.
- [22] Wahyutama, L. (2022, February 2). Waduk Delingan Tiket Murah Cocok Untuk Bersantai. [https://Travelspromo.Com/Htm-Wisata/Waduk-Delingan-Karanganyar/#google\\_vignette](https://Travelspromo.Com/Htm-Wisata/Waduk-Delingan-Karanganyar/#google_vignette).  
[https://travelspromo.com/htm-wisata/waduk-delingan-karanganyar/#google\\_vignette](https://travelspromo.com/htm-wisata/waduk-delingan-karanganyar/#google_vignette)