Analysis of the tourism attractiveness of a itera reservoir, South Lampung

Nindita Kresna Murti 1*, Ria Ripardi Wahyu Lestari 2

- ¹Department of Architecture, Institut Teknologi Sumatera, Indonesia
- ² Animation Study Program, Sekolah Tinggi Multi Media "MMTC" Yogyakarta, Indonesia

Abstract: Unplanned tourist spaces often emerge from everyday community use rather than formal planning. This study examines the spatial transformation and tourism attractiveness of Embung A ITERA, a campus water reservoir that has organically developed into a local recreational destination. Using a descriptive qualitative approach, data were collected through six days of field observation, interviews with 15 informants, and documentation, and analyzed using the 4A framework (Attraction, Accessibility, Amenities, Ancillary Services). Quantitative observations show high average daily visitation (≈185 visitors/day), with the highest peak in the afternoon (111 visitors/hour), indicating strong community reliance on the site for exercise and leisure. The findings address research gaps regarding (1) unplanned tourism emerging from routine spatial practices, (2) the transformation of conservation infrastructure into recreational destinations, and (3) the limited integration of spatial–ecological–social perspectives in campus tourism studies. This study introduces Organic Campus Tourism, highlighting how eco-infrastructure within academic environments can evolve into multifunctional tourism spaces through community participation and spatial adaptation. The research contributes by expanding the 4A framework into eco-infrastructure contexts and offering practical guidance for managing multifunctional campus open spaces through inclusive design and sustainable visitor management.

Keywords: Community-Based Tourism, Eco-Infrastructure, Embung A ITERA, Spatial Adaptation, Unplanned Tourism

History Article: Submitted 16 October 2025 | Revised 21 November 2025 | Accepted 27 November 2025

How to Cite: Murti, N., & Ripardi, R. (2025). Analysis of the tourism attractiveness of a itera reservoir, South Lampung. International Journal of Applied Sciences in Tourism and Events, 9(2), 123-141.

Introduction

Tourism and travel have become integral components of modern life and global economic dynamics. The rapid growth of the tourism sector not only stimulates the emergence of new destinations and attractions but also encourages the development of supporting facilities and infrastructure (Saarinen, 2004). Amid the growing pace of urban life and occupational stress, Indonesia has witnessed an increasing public need for recreation and leisure as essential mechanisms of mental and emotional recovery (Laksono et al., 2023; Putra et al., 2024). This condition has led to a growing public demand for recreational and leisure activities as a means of mental and emotional recovery (Wang & Sim, 2025). This shift reflects a broader awareness that recreation is no longer a secondary demand but a vital element of individual well-being and life balance (Avecillas-Torres et al., 2025; Jiang et al., 2025). In this context, accessible public open spaces have become increasingly significant as venues that accommodate the community's recreational needs. Tourism, as a spatially embedded activity, has direct implications for the configuration and dynamics of space (Córdoba Azcárate, 2025). Beyond its economic implications and environmental transformations, tourism also shapes people's perceptions of culture, identity, and the environment (Akriningsih, 2013). Thus, sustainable tourism planning is crucial to ensure that its benefits are equitably distributed across different segments of society (Herlianti & Sanjaya, 2022).

One area that has undergone a notable transformation in land use is the Embung A reservoir at the Sumatra Institute of Technology (ITERA). Originally constructed as part of the

^{*}Corresponding Author: nindita.murti@ar.itera.ac.id

campus's water conservation system (Asirin et al., 2020), the site has organically evolved into a multifunctional public space due to the availability of jogging tracks, sports facilities, and appealing natural scenery. Today, Embung A is regularly visited by students, lecturers, and the surrounding community, particularly in the mornings and late afternoons, for physical activities and leisure. In addition to its eco-hydrological function, the area also includes the ITERA Arboretum—a two-hectare green space dedicated to plant conservation, environmental education, and open green space development. Hosting more than 1,000 plant species with barcode-based information labels (Pratami et al., 2025), the arboretum serves not only as a living laboratory for education and research but also holds substantial potential as an educational agrotourism destination (Baskara et al., 1998; Indriyanti et al., 2021). More broadly, South Lampung Regency is endowed with rich natural and cultural tourism assets such as beaches and waterfalls (Ani et al., 2013).

The transformation of Embung A ITERA is part of a broader phenomenon of unplanned or organically developed tourist sites in Indonesia. Locations such as Embung Manajar in Boyolali or several mountain viewpoints have similarly evolved into tourism destinations through community use and social media exposure rather than through formal planning (Nasqa & Darmawan, 2025). For instance, Embung Manajar was originally built to address agricultural water shortages in Samiran Village, but its scenic landscape has attracted visitors and gradually redefined the site as a tourist destination (Pradipta, 2021). This pattern demonstrates how collective behavior and digital culture can redefine the function of ordinary spaces into meaningful social and recreational destinations. In South Lampung, where many formal tourism sites suffer from accessibility and infrastructure constraints (Yusuf & Hadi, 2020). A lack of public facilities, high travel and entrance costs, and poor road conditions have prompted a shift in public preference toward affordable, easily accessible local destinations that still offer meaningful recreational experiences (Hafidzi, 2022; Sukardi et al., 2022). he emergence of community-driven destinations like Embung A ITERA offers an affordable and accessible alternative that responds directly to local needs.

At the same time, the transformation of a technical water infrastructure into a communityoriented tourism space raises important questions about the interaction between ecological design, public perception, and spatial adaptation. Understanding these processes is crucial for sustainable land use planning, especially in educational environments that combine ecological, social, and educational functions. This study, therefore, seeks to analyze the transformation of Embung A ITERA through the 4A tourism framework Attraction, Accessibility, Amenities, and Ancillary Services—to assess its potential as an organically emerging tourism site that aligns with community well-being and sustainability principles. Previous studies on unplanned or communitydriven tourism development have primarily focused on the social or digital factors that promote destination popularity (Nasga & Darmawan, 2025; Pradipta, 2021). Similarly, research on water conservation infrastructure has emphasized technical or hydrological functions rather than exploring the socio-spatial transformation of such structures into multifunctional public spaces (Asirin et al., 2020; Ioannou, 2002). Meanwhile, the phenomenon of campus-based tourism where academic environments evolve into open public destinations remains underexplored in Indonesian tourism studies (Pratami et al., 2025). These limitations reveal a lack of integrative understanding of how eco-infrastructure, community behavior, and spatial adaptation interact to generate new forms of local tourism.

Previous studies on unplanned tourism, such as the Embung Manajar case in Boyolali, have emphasized the social dynamics and digital promotion that trigger destination popularity (Nasqa & Darmawan, 2025; Pradipta, 2021). However, there remains a limited understanding of how eco-infrastructure, especially within university campuses, can organically transform into community-based tourism spaces through everyday use and social interaction.

Research on water conservation infrastructure has largely focused on technical or hydrological aspects (Asirin et al., 2020; Ioannou, 2002), while studies on campus tourism in Indonesia are still minimal and fragmented (Pratami et al., 2025). This study addresses these gaps by introducing the concept of "organic campus tourism", which examines how functional ecological structures evolve into inclusive public tourism areas driven by community participation. Theoretically, this research expands the 4A tourism model within the context of eco-humanistic design—linking ecological resilience, spatial adaptation, and human well-being. Practically, the

findings contribute insights for the management of multifunctional campus infrastructures that integrate environmental, social, and educational functions sustainably.

Although several studies have examined unplanned or community-driven tourism development, existing research largely focuses on either the social dynamics that trigger destination popularity (Nasqa & Darmawan, 2025; Pradipta, 2021) or the hydrological and ecological functions of water conservation infrastructure (Asirin et al., 2020; Ioannou, 2002). However, few studies have explored how campus-based eco-infrastructure can organically transform into a multifunctional tourism and recreational space. Likewise, research on campus tourism in Indonesia remains fragmented and has not yet integrated spatial, ecological, and community-based perspectives. Therefore, the unique contribution of this study lies in introducing and conceptualizing organic campus tourism as a form of spontaneous tourism development emerging from everyday community use of ecological infrastructure. This fills a theoretical gap in tourism studies and provides practical insights for campus planning, sustainability management, and community engagement.

This study addresses that gap by examining Embung A ITERA as a case of organic campus tourism—a phenomenon in which technical ecological infrastructure organically transforms into a tourism and recreation site driven by community engagement. It expands the theoretical application of the 4A tourism model within the context of eco-infrastructure adaptation, integrating social, spatial, and environmental perspectives that have rarely been combined in prior studies. From a theoretical standpoint, this research contributes to the discourse on community-based and unplanned tourism by conceptualizing the transformation of functional landscapes into participatory public spaces. It also provides an analytical framework that bridges the domains of tourism studies, environmental planning, and social geography. From a practical perspective, the findings offer insights for campus administrators, local governments, and urban planners in managing multifunctional ecological infrastructures. The study highlights how adaptive reuse of water reservoirs and green spaces can enhance sustainability, foster community interaction, and support educational tourism development with minimal intervention. Overall, this research introduces a new conceptual direction for understanding the spontaneous evolution of campus-based eco-tourism in Indonesia—demonstrating that sustainability and recreation can coexist within technical infrastructures when social participation and ecological design intersect.

Methodology

This research employs a descriptive qualitative design to obtain an in-depth understanding of the spatial and functional transformation of Embung A ITERA based on the experiences and perceptions of its users. The study site was purposively selected due to its rapid shift from a hydrological conservation facility into an emergent recreational landscape frequently used by students, campus staff, and nearby residents. Participant recruitment was conducted through purposive sampling, involving fifteen informants comprising seven active visitors, five local residents, and three campus management representatives. The inclusion criteria emphasized familiarity with daily activities around the site, willingness to participate, and the ability to articulate personal experiences clearly.

Data were collected through observations, semi-structured interviews, and documentation. Field observations were conducted across six non-consecutive days between May and July 2025, with two sessions per day in the morning (06:00–07:00) and afternoon (17:00–18:00). Each session lasted two to three hours and focused on documenting visitor density, spatial utilization patterns, movement flows, gathering areas, landscape preferences, and the condition of existing facilities. Visitor counts were additionally recorded in the morning, noon, and afternoon over five consecutive weekdays, as summarized in Table 1.

Semi-structured interviews were held with all fifteen informants, each lasting approximately thirty to forty-five minutes. Although flexible in structure, the interviews followed a standardized guide that explored visitor motivation, perceived attractions, accessibility and mobility patterns, the adequacy of amenities, and expectations regarding future site development. All interviews were audio-recorded with participant consent and transcribed verbatim. Documentation was carried out to complement primary data and included photographs, field sketches, and secondary sources such as campus planning reports and online publications.

Table 1. Number of visitors observed at Embung A ITERA (May–June 2025)

Day	Morning (06:00–07:00)	Noon (13:00–14:00)	Afternoon (17:00–18:00)	Total Visitors / Day
Monday	56	6	79	141
Tuesday	64	16	131	211
Wednesday	76	7	67	150
Thursday	42	8	185	235
Friday	90	3	94	187
Total (5 days)	328	40	556	924
Average per day	65.6	8.0	111.2	184.8

Source: Field Observation, 2025

Data analysis followed a thematic procedure consisting of reduction, classification, interpretation, and presentation. All transcripts and field notes were coded to identify meaningful statements related to the 4A tourism components: Attraction, Accessibility, Amenities, and Ancillary Services. The coded segments were then grouped into thematic categories encompassing spatial behavior, user motivations, environmental perceptions, and functional transformation. These themes were interpreted using theoretical perspectives on community-based tourism and the socio-ecological functions of urban water bodies. Findings were subsequently presented in descriptive form and supported by direct quotations, tables, and photographic evidence. Data collection continued until thematic saturation was reached, ensuring that no new insights emerged from additional observations or interviews. To enhance credibility, triangulation was implemented across observation, interview, and documentation data, and member checking was conducted by sharing synthesized findings with selected informants. Through this methodological design, the study provides a rigorous and contextually grounded understanding of how Embung A ITERA evolves as a multifunctional open space accommodating both ecological and social needs.

Table 2. Respondent profile at Embung A ITERA

Code	Gender	Age	Occupation	Visit Frequency	Visit Time	Purpose of Visit
R1	Female	19	University Student	2-4 times/week	Morning or	Exercise
					afternoon	
R2	Female	54	Housewife	3-4 times/week	Afternoon	Leisure walk, rest
R3	Male	16	High School Student	Daily	Afternoon	Running / exercise
R4	Female	24	Entrepreneur	Weekly	Morning /	Relaxation, enjoying
					Afternoon	scenery
R5	Male	38	Office Employee	Rarely	Afternoon	Leisure walk
R6	Female	39	Housewife	Occasionally	Afternoon	Relaxing with children
R7	Female	23	University Student	Daily	Morning	Exercise and relaxation

Source: Field Interviews, 2025

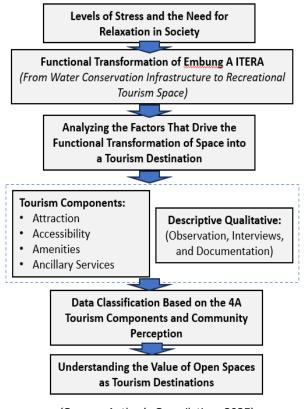
The characteristics of the visitor informants are presented in Table 2, which reflects a diverse demographic composition, ranging in age from 16 to 54 and representing students, housewives, office employees, and small-scale entrepreneurs. The table indicates that most respondents are female visitors particularly university students and housewives who frequent Embung A ITERA for exercise, relaxation, and family-oriented recreation. Visit frequency varies considerably, with several respondents visiting daily or multiple times per week, while others attend occasionally. The majority prefer visiting in the morning or late afternoon, which corresponds to cooler microclimatic conditions and established daily routines. These patterns collectively reinforce the role of Embung A as a local health and social hub that accommodates a wide spectrum of community needs. Representative quotations include:

"Saya sering ke sini pagi-pagi untuk jogging karena udaranya sejuk dan suasananya tenang" ("I often come here in the early morning to jog because the air is cool and the atmosphere is calm'' - R1).

Another highlighted its family-oriented function: "Biasanya sore saya jalan santai di sini sambil lihat anak-anak main. Tempatnya enak buat istirahat" ("In the afternoon I usually take a walk here while watching my children play. It's a nice place to relax" – R6).

A third respondent emphasized routine physical activity and proximity: "Hampir tiap hari saya lari di embung ini. Pemandangannya bagus dan dekat dari rumah" ("I run here almost every day. The view is nice, and it's close to my home" - R3).

These qualitative insights complement the tabulated profile and further substantiate user perceptions captured during interviews and observations.



(Source: Author's Compilation, 2025) **Figure 1.** Research Framework

The conceptual framework of this study positions the functional transformation of Embung A ITERA within the broader context of increasing stress levels and the growing societal need for accessible spaces of relaxation. This transformation from a water conservation facility into an emergent recreational environment serves as the central phenomenon examined in the research. The analysis focuses on identifying and interpreting the factors that drive this shift, specifically how physical, social, and perceptual dimensions contribute to the site's evolution into a local tourism destination. To address these objectives, the study integrates the 4A tourism framework Attraction, Accessibility, Amenities, and Ancillary Services with a descriptive qualitative approach encompassing observation, interviews, and documentation. These components guide the systematic classification of data, allowing the researcher to organize empirical findings based on spatial attributes, user perceptions, and functional characteristics observed in the field. Through this analytical structure, user experiences and community perspectives are interpreted in relation to the tourism components, revealing how the site's natural landscape, ease of access, available facilities, and supporting services collectively shape visitor engagement. The final stage of the framework synthesizes these insights to develop a contextual understanding of the value of open spaces such as Embung A ITERA as everyday tourism destinations. This understanding highlights the growing role of multifunctional urban water bodies in fulfilling ecological functions while

simultaneously meeting recreational and social needs within rapidly developing urban environments.

Results and Discussions Results

The emergence of new tourist destinations is a phenomenon influenced by various interrelated contributing factors. Based on field findings and literature analysis, five key factors significantly contribute to the development of new tourist destinations: (1) natural attractions, (2) man-made attractions, (3) availability of tourism facilities, (4) accessibility to and within the tourist site, and (5) tourism promotion efforts, both formal and informal. In addition, organizing events or festivals in a particular area also holds great potential in creating new attractions that can trigger the rise of alternative tourism destinations. A distinctive and appealing tourism attraction is an essential element in drawing visitor interest. The unique characteristics of a place whether in the form of natural beauty, local cultural values, or authentic experiences can leave a lasting impression on visitors, thereby increasing the likelihood of repeat visits. The uniqueness of tourism attractions plays a pivotal role in shaping tourist perceptions and motivations in selecting a destination. In this context, tourism attractions are generally categorized into three main types: natural attractions, cultural attractions, and man-made attractions (Lahagu et al., 2023). These attraction types natural, cultural, and artificial form a strategic foundation for developing the tourism potential of a given area (Lintang et al., 2024).

Another interesting phenomenon is the emergence of unplanned or so-called "impromptu tourist attractions." These types of destinations typically develop from community interest or social media virality, where places previously not recognized as tourism sites suddenly become popular and heavily visited. This sudden popularity is often triggered by the uniqueness of the location, the presence of visually appealing photo spots, and massive media exposure. A concrete example of this phenomenon is Embung A ITERA. Initially constructed as a water conservation infrastructure within the campus of Institut Teknologi Sumatera (ITERA) in South Lampung, Embung A covers an area of approximately ± 1.95 hectares. It was designed primarily as a rainwater catchment facility to manage stormwater runoff during the rainy season and serve as a water reserve during dry periods. Ecologically, the embung also plays a crucial role in supporting campus environmental sustainability by providing green open space in line with the eco-campus concept (Asirin et al., 2020).

Over time, the attractive landscape and natural ambiance of Embung A ITERA began to draw attention from local residents and students, who started using it as an alternative recreational space. Informal activities such as relaxing, taking selfies, and cycling around the embung gradually transformed its original function into that of a local tourist destination. This functional transformation from technical infrastructure to public recreational space represents a form of spatial and social adaptation that enriches the dynamics of campus space. This case illustrates how tourism potential can emerge organically and participatorily, without necessarily relying on formal planning by authorities. Such phenomena align with the principles of community-based tourism and ecotourism, where the attractiveness and sustainability of a destination are determined by community involvement and the wise utilization of local resources. Therefore, the existence of impromptu tourist sites such as Embung A ITERA serves as a concrete example of how synergy between ecological, recreational, and social functions can give rise to new tourism spaces that are adaptive to both community and environmental needs.

Figure 2 illustrates various community activities taking place around the Embung A ITERA area, including relaxing, taking selfies, and cycling along the embankment path. These activities reflect the transformation of the site from a water conservation infrastructure into a recreational public space utilized organically by the local community. The social interactions observed at this location not only highlight the community's growing need for accessible green open spaces but also indicate the emergence of new values attached to the area namely, as a space for leisure, recreation, and social bonding. This phenomenon demonstrates how tourism attractions can develop organically based on actual community needs and the significant role of collective perception in shaping the function and identity of a space.



(Source: Personal documentation, 2025) **Figure 2.** Community activities at Embung A ITERA

In addition to serving as water conservation infrastructure, Embung A ITERA also functions as a multifunctional space integrated with the surrounding green open space. This integration transforms the embung area into an inclusive public space that serves not only ecological purposes but also social and recreational functions. The open space is utilized by various groups, including members of the ITERA academic community and the general public, as a place to gather, relax, and conduct outdoor learning and research activities. Embung A ITERA has evolved into one of the community's favorite locations for exercising and enjoying natural scenery, particularly during sunrise and sunset, which offer visually appealing landscapes. Activities such as jogging, cycling, taking selfies, or simply sitting and relaxing by the embung have become daily routines, reflecting the site's high appeal as an urban recreational space. This represents the practical implementation of ITERA's campus motto, Smart, Friendly, and Forest Campus, where aspects of technology, comfort, and environmental sustainability are holistically realized in campus spatial planning.

The presence of supporting facilities such as jogging tracks, outdoor gyms, seating areas, and pedestrian- and vehicle-friendly access further reinforces the multifunctional role of the embung area. These amenities not only enhance the visitor experience but also expand the site's social potential as a space for interaction and relaxation for various segments of society. The strategic location of Embung A ITERA, situated along a major road and near a toll road access point, is a crucial supporting factor in increasing the area's accessibility. This accessibility facilitates visits from both local residents and those from other regions, which is further amplified by social media exposure. The phenomenon of virality, marked by the widespread sharing of appealing photos and videos across digital platforms, has significantly contributed to the rising popularity of this area. Many visitors are driven by curiosity to experience firsthand what they have seen on social media, creating a domino effect that reinforces Embung A ITERA's position as a new community-based recreational destination. This phenomenon demonstrates that visual perception and digital narratives built through social media can significantly and rapidly transform the function of a place. It shows that tourism destination development is influenced not only by

formal planning but also by social dynamics, digital trends, and ease of access, all of which shape the perceived value of a space.

Discussions

Identification of Tourism Components at Embung A ITERA

The findings of this research show that the transformation of Embung A ITERA aligns with global patterns of organic tourism development, where public use, digital exposure, and everyday social interaction gradually redefine the meaning and function of space (Saarinen, 2004). Similar to Embung Manajar in Boyolali, the site evolved from water infrastructure into a recreational destination due to scenic landscape qualities and social media virality. However, compared to Embung Manajar, which later gained structured tourism management, Embung A ITERA remains in an early, informal stage of development with limited governance and facilities. The concept of organic campus tourism identified in this research highlights how ecological infrastructures can transform into inclusive public social spaces without top-down tourism planning. This contributes to theoretical discussions on community-based tourism and eco-humanistic spatial adaptation, showing that tourism landscapes may emerge from collective behavior and lived everyday practices rather than formal design. However, this spontaneity also creates tensions. Despite high visitor appreciation for scenery, tranquility, and accessibility, facility limitations, uneven infrastructure, and lack of inclusive access indicate risks of overuse and environmental wear, consistent with sustainability challenges identified in community-driven tourism models (Herlianti & Sanjaya, 2022). This suggests the need for structured management intervention to maintain ecological integrity and visitor safety while preserving the site's informal social character.

Table 3. Comparative matrix: Embung A ITERA vs Embung manajar vs international cases

Aspect	Embung A ITERA Embung Manajar (Lampung) (Boyolali)		Marina Barrage, Singapore	Cheonggyecheon Stream, Seoul	
Original Function	Campus water conservation infrastructure; retention basin for runoff control	Agricultural reservoir for irrigation and village water supply	Flood-control and freshwater reservoir infrastructure	Urban river restored from a concrete drainage channel	
Drivers of Tourism Transforma tion	Daily activities of students and residents; social media exposure; jogging track; attractive landscape	Merapi mountain landscape; sunrise panorama; local promotion and social media	High-tech public space design; accessibility; recreational programming	Public space revitalization; urban aesthetics; pedestrian corridors and cultural events	
Governanc e Model	Informal— campus-led; no formal tourism management; campus security- based oversight	Semi-formal; managed by village authorities and local government; ticketing and basic regulations	Highly formal; managed by PUB Singapore; technology-based management	Formal; managed by municipal government; strict zoning and visitor capacity control	
Facilities	Jogging track, outdoor gym, open green space; limited basic amenities; not yet inclusive	Gazebos, photo spots, parking area, local MSME stalls; more complete amenities	Rooftop garden, picnic areas, water features, water museum	Pedestrian pathways, seating areas, signage, CCTV monitoring	
Risks	Accidents along the pond edge without barriers; non-inclusive access; informal parking; erosion of embankments	Overcrowding; littering; commercialization pressure; spatial conflicts	Large crowds; slipping hazards; technological dependence	Overcrowding, event safety issues, urban flooding during extreme rainfall	

Response/	I Campus	security	Site	arrangement,	Real-time	monitoring	Capacity contro	ol, CCTV
nterventio	n and	basic	ticket	ting,	system,	safety	surveillance,	flow
S	maintena	nce;	comn	nunity	personnel,	water-level	monitoring,	activity
	absence	of zoning	moni	toring	sensors,	safe	zoning	
	and touri	sm SOPs			pathways			

Source: author's analysis, 2025

The comparative matrix demonstrates that Embung A ITERA and Embung Manajar share similar trajectories as unplanned tourism spaces emerging from community use and digital exposure. Both evolved from utilitarian water infrastructures into recreational destinations due to landscape attractiveness and social interaction. However, Embung Manajar has transitioned into a semi-formal tourism area managed by village authorities. In contrast, Embung A ITERA remains at an early, informal stage under campus governance, with limited visitor management mechanisms. International cases highlight that successful water-based recreational spaces such as Marina Barrage in Singapore and Cheonggyecheon Stream in Seoul incorporate structured governance, advanced safety technologies, zonation, and continuous surveillance systems. This stands in contrast to the spontaneous, minimally regulated nature of emerging sites like Embung A and Manajar.

The comparison between Embung A ITERA and Embung Manajar demonstrates a similar pattern of spontaneous transformation from hydrological infrastructure into community-driven recreational spaces. However, Embung A remains in an early informal stage, lacking structured governance, inclusive facilities, and systematic risk management. International examples such as Marina Barrage in Singapore and Cheonggyecheon Stream in Seoul illustrate how water-based recreational landscapes can function safely and sustainably when supported by zoning regulations, continuous monitoring, and low-impact safety technologies. These cases reveal a critical trade-off: increasing visitation enhances the social value of the space but simultaneously heightens safety risks and environmental pressure. To balance this dynamic, Embung A requires a hybrid management approach combining soft governance, low-intervention technologies, and zoning-based visitor management. Establishing functional zones, defining carrying capacity thresholds, and implementing layered surveillance systems would maintain the site's organic character while ensuring user safety and ecological integrity. This integrative strategy aligns with sustainability principles and supports the long-term development of Embung A as a multifunctional campus-based tourism space.

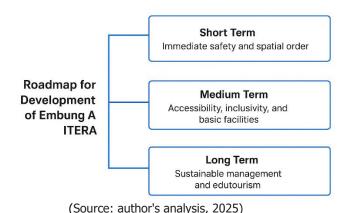


Figure 2. Roadmap for the short-, medium-, and long-term development of Embung A ITERA

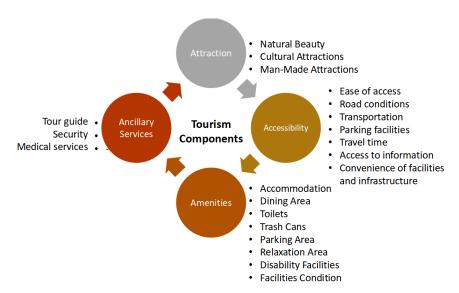
The development roadmap for Embung A ITERA is structured into short-, medium-, and long-term strategies to ensure a progressive transition toward a safe, accessible, and sustainable recreational—edutourism space. In the short term (0-1 year), priority actions focus on basic safety and spatial order, including the installation of low-profile edge barriers, safety signage at critical points, organized pedestrian pathways, and regulated temporary parking zones. Key performance indicators include a $\geq 50\%$ reduction in edge-related risks, safety signage installed at a minimum of ten strategic locations, full compliance with designated pedestrian routes, and a reduction of

informal parking to below 20%. These measures require coordinated action among campus administrators, local government support for safety standards, and community involvement in awareness initiatives. In the medium term (1-3 years), efforts shift toward enhancing essential facilities and improving accessibility and inclusivity through the construction of standard public toilets (including disability-friendly units), upgraded access routes, accessible pathways with ramps and non-slip surfaces, and comprehensive LED lighting along pedestrian corridors. Success is measured through operational public facilities, an ≥80% pedestrian comfort score, ≥70% pathway accessibility for persons with disabilities, and lighting coverage exceeding 90%. The long-term strategy (3-7 years) emphasizes functional zoning, ecological sustainability, and integrated monitoring. This includes establishing edutourism-recreation-conservation zones, developing active recreational areas with thematic landscapes, installing continuous water-quality monitoring systems, and adopting smart-management tools such as CCTV and visitor sensors. Performance indicators encompass zoning compliance above 80%, ≥85% edutourism satisfaction, stable multi-parameter water-quality records, and the full operation of an integrated management system. These long-term measures rely on collaborative governance involving the campus, local government, community groups, and SMEs to ensure Embung A ITERA evolves into a resilient, multifunctional, and sustainably managed open space.

Accessibility in tourism refers to the ease, convenience, and safety provided for tourists to reach and enjoy a destination (Nopriana et al., 2024). It involves enabling access for all individuals, including people with disabilities, the elderly, children, or anyone with mobility limitations or special needs, to participate in tourism activities without unnecessary barriers. Accessibility encompasses transportation, infrastructure, amenities, and information systems that ensure inclusive tourism experiences. The importance of accessibility includes increasing tourist interest (Antika et al., 2024), supporting sustainable tourism by involving all societal segments, creating positive and memorable visitor experiences, and expanding economic opportunities for local communities. A destination that emphasizes accessibility is likely to become more inclusive, attractive, and sustainable (Octaviana & Kesuma, 2024).

Amenities in tourism refer to the infrastructure and facilities provided to enhance the tourist experience, both within and around the destination. These include accommodations, restaurants, transportation services, public facilities, and tourism attractions. Amenities are not the main reason people travel, but are essential for ensuring comfort, safety, and satisfaction during travel or vacation (Munir et al., 2025). Quality amenities serve as the foundation that supports tourism activities by making destinations practical, pleasant, and visitor-friendly. Well-developed and adequate tourism amenities are a key factor in advancing the tourism sector of a region. They not only improve convenience for tourists but also strengthen the overall appeal and positive image of the destination (Rainanto et al., 2025). Ancillary Services are supplementary services or products that enhance the tourism experience by offering added convenience, comfort, or value. These supporting services may not be the primary motivation for travel, but they significantly contribute to the overall satisfaction and may generate additional revenue for tourism providers. Ancillary services complement the core tourism activities and help improve the overall quality of a destination.

Embung A ITERA was initially constructed as part of a campus-based water conservation system. Over time, however, increasing community demand for accessible green open spaces encouraged local residents to visit the area and engage with its scenic landscape. This spontaneous use gradually intensified through word-of-mouth dissemination, leading to wider public recognition and transforming Embung A ITERA into an emerging recreational destination. This transformation reflects the fundamental components of tourism development as conceptualized in the 4A framework proposed by Cooper (1995), which includes attractions, accessibility, amenities, and ancillary services, as illustrated in Figure 4. Furthermore, the specific factors driving the emergence of Embung A ITERA as a new tourism site ranging from natural and man-made attractions to supporting facilities, accessibility, digital promotion, and social activities are systematically categorized and contextualized in Table 4. Together, these elements demonstrate how an infrastructure-oriented facility can evolve into a tourism space through incremental social use and supporting environmental and spatial qualities (Izwar & Kristanti, 2023).



Source: Cooper (1995), adapted by the author, 2025 **Figure 3.** Tourism development components

Table 4. Categorization of factors triggering the emergence of new tourism sites (Case study:

Category of Factor	Description	Example at Embung A ITERA	
Natural Attractions	Scenic landscape, natural ambiance, ecological conditions that support recreation.	Sunrise and sunset views, artificial lake with surrounding vegetation.	
Man-Made Attractions	Infrastructure and human- made elements that enhance the function of tourism space.	Jogging track, outdoor gym, seating areas, reservoir functioning as a multifunctional pond.	
Supporting Facilities	Availability of amenities that ease and enrich the tourism experience.	Pedestrian paths, parking area, rest spots, connection to green open spaces.	
Accessibility	Ease of access to the tourist site through various modes of transportation.	Location on the main road and near the ITERA toll gate.	
Digital Promotion and Virality	Dissemination of information through social and mass media that boosts visits.	Viral photos and videos on platforms like Instagram and TikTok, visitor reviews and referrals.	
Events and Social Activities	Community events, sports, and informal activities shaping the image of the area.	Daily exercise by the community, social interaction space for residents and students.	

Source: Author's Analysis, 2025

Attraction of Embung A ITERA, South Lampung

In the context of tourism development, attraction is a fundamental element that influences tourists' motivation to visit a destination. Embung A ITERA offers a primary attraction that combines the aesthetic appeal of a man-made landscape with the serenity of a natural environment. Covering approximately ± 1.95 hectares, the embung is strategically located at the front section of the Institut Teknologi Sumatera (ITERA) campus, providing easy access for both the academic community and the general public. The visual appeal of Embung A is evident in the

expansive artificial pond framed by lush trees and surrounding green open space. This landscape creates a cool and calming natural ambiance, ideal for relaxation and recreational activities. The site's allure is heightened by the picturesque views of sunrise in the morning and sunset in the evening, which serve as a strong attraction for visitors. Interviews with several visitors indicate that the natural scenery is their main motivation for visiting, with the location's aesthetic qualities prompting them to capture the moment through photography and videography.

Beyond its scenic value, Embung A also holds social and educational significance. It is situated near the ITERA Arboretum, a public conservation area that houses diverse flora. The presence of the arboretum not only enhances the site's biodiversity but also enriches its educational and environmental conservation functions. This proximity expands the site's appeal to include recreational, educational, and research activities. For the local community particularly families with children Embung A serves as an ideal space for exercise, leisure, and outdoor play in a safe and pleasant environment. Features such as grassy areas, pedestrian pathways, and minimal vehicle traffic make the site child-friendly and inclusive. According to a visitor interviewed during the study, regular weekend visits with family are common due to the site's cleanliness, tranquility, and suitability for fitness-related activities.



(Source: Author's Documentation, 2025) **Figure 4.** View of embung A ITERA

This phenomenon indicates that the attraction of Embung A is not only visual or ecological in nature but also carries social and psychological value. The natural beauty, serene atmosphere, and availability of public facilities make Embung A an important space for social interaction amidst the development of the urban and campus area. The embung has transformed into a multifunctional public space that integrates aesthetic, educational, and health values, aligning with the principles of sustainable development and nature-based tourism. With the increasing number of visitors and its viral presence on social media, Embung A ITERA holds significant potential to be further developed as a community-based tourism destination integrated with ecotourism and environmental education concepts. This uniqueness further strengthens ITERA's image as a campus that supports the motto: "Smart, Friendly, and Forest Campus."

Accessibility of Embung A ITERA

Accessibility is a fundamental aspect that supports the development of tourism destinations, as it is directly related to the ease with which visitors can reach and enjoy a site. Good accessibility is not only determined by proximity and travel time but also by the quality of road infrastructure, availability of transportation modes, as well as the comfort and safety of road users (Nopriana et al., 2024; Octaviana & Kesuma, 2024). Embung A ITERA is located on Jalan Terusan Ryacudu, Jati Agung District, South Lampung Regency, directly in front of the main gate of Institut Teknologi Sumatera (ITERA). Its strategic location near the Kota Baru Toll Gate facilitates access for visitors both from within and outside Bandar Lampung City. The distance from the city center to Embung A is approximately ± 8.4 km, with an estimated travel time of ± 16 minutes by land. This makes Embung A a nearby and affordable recreational area for both local residents and members of the campus community, including students and staff.

In terms of infrastructure, the road leading to Embung A is considered to be in good condition. The main road is paved with concrete and equipped with street lighting and traffic signs, ensuring user comfort and safety. Although the road experienced significant damage in 2022 due to heavy vehicle traffic, it has since been repaired and is currently in relatively smooth condition. However, the close proximity to the toll access results in high traffic volume and vehicle speeds, posing potential risks for pedestrians and two-wheeled vehicle users. This concern should be addressed in future planning, for instance, by providing crosswalks, speed limiters, or dedicated pedestrian paths. Regarding transportation modes, most visitors use private vehicles, including cars and motorcycles. Ride-hailing services such as motorcycle taxis and online taxis are also popular alternatives, especially for students and visitors without personal vehicles. However, regular public transportation that directly serves the Embung area is not yet available, making private transport the primary means of access.



(Source: Google Maps, 2025) **Figure 6.** Location of embung A ITERA

The availability of parking space remains a critical issue. Currently, visitors tend to park their vehicles along the roadside near the embung, forming informal parking areas. Although there are no official parking attendants, local residents have stated that visitors' vehicles generally remain safe. However, the lack of an organized and formal parking facility can create problems, especially during peak visitation periods such as weekends or public holidays. Therefore, an integrated parking plan is necessary to accommodate visitor needs without disrupting traffic flow on the main road. Overall, accessibility to Embung A ITERA is considered adequate, but there is still room for improvement, particularly regarding user safety and the provision of formal parking facilities. Enhancing accessibility would strengthen the site's attractiveness and support the sustainability of community-based and educational institution—supported tourism management.

Tourism Facilities at Embung A ITERA

The availability and quality of facilities are key elements in the development of tourist destinations, as they directly contribute to enhancing visitor comfort, satisfaction, and length of

stay. Adequate facilities support various types of recreational and sporting activities while creating enjoyable and memorable visitor experiences. Originally designed as a water conservation infrastructure, Embung A ITERA has now evolved into a multifunctional public space with strong potential as a nature- and wellness-based tourism area. One of the main facilities available is a jogging track that circles the embung pond. This track is actively used by people from various backgrounds and age groups, ranging from children and teenagers to adults and the elderly. Common activities include walking, jogging, and running, especially during the cool morning and evening hours when the area is particularly pleasant and lush. In addition to the jogging track, there is also an outdoor gym facility that allows visitors to engage in light physical exercise in an open-air setting. The presence of this gym equipment adds variety to the available activities and reinforces the image of Embung A as a natural, low-cost, and easily accessible outdoor sports space for the general public.

However, field observations and interviews with visitors indicate that the facilities at Embung A ITERA are not yet fully inclusive for groups with special needs, such as persons with disabilities, the elderly, and children. Several key issues were identified, including the lack of vertical accessibility, such as ramps or sloped pathways, to reach the embung area, which makes it difficult for wheelchair users or individuals with limited mobility to access the main jogging track. The staircase leading to the embung is also too steep and high, creating challenges even for visitors with normal physical conditions and posing potential safety risks, especially during wet or slippery weather. In addition, the absence of safety fences or barriers at several points near the water body presents risks, particularly for small children who may play without close supervision.

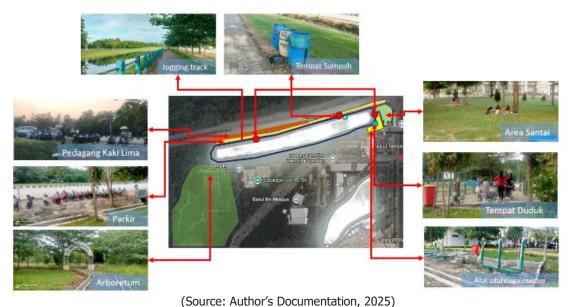
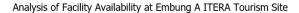


Figure 7. Tourism facilities at Embung A ITERA

The absence of inclusive infrastructure constitutes a significant shortcoming that must be addressed in the future development of facilities. The addition of universal accessibility features, such as sloped pathways, handrails, sheltered seating areas, and disability-friendly toilets, is essential to ensure that Embung A ITERA functions as a truly public space accessible to all segments of society in an equitable manner. Thus, while the current recreational and sports facilities are generally sufficient for the general public, further development must incorporate the principles of universal design and access equity to support the transformation of Embung A into an inclusive and sustainable nature-based tourism space.



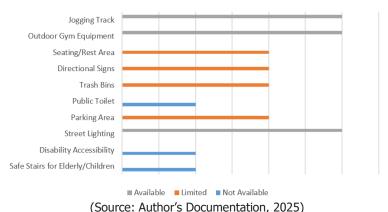


Figure 8. Analysis of tourism facility availability at Embung A

Ancillary Services at Embung A ITERA

Ancillary services play a crucial role in supporting a safe and comfortable tourism experience for visitors. One such service available in the Embung A ITERA tourism area is the presence of a security post. This facility serves a vital function in maintaining order and ensuring environmental safety around the embung, especially given that the area is frequented not only by students and academic members of ITERA, but also by the general public. Field observations indicate that the security post within the ITERA campus serves as both a monitoring center and a first point of contact in the event of emergencies. In addition to its primary security function, the post is often used as an information hub, offering directions or assistance to visitors in need. Its presence contributes positively to the perception of safety in the Embung A area and represents a tangible example of institutional infrastructure supporting the development of community- and education-based tourism. In this regard, safety and comfort are key indicators in the creation of sustainable and inclusive tourist destinations. Thus, although the number of ancillary services remains limited, the presence of the security post provides a significant contribution to the overall positive visitor experience at Embung A ITERA and can be further developed as part of an integrated destination management system.

Table 4. Tourism Components of Embung A ITERA

	Table 4. Tourism Components of Emburg ATTERA
Component	Description
Attractions	- Scenic water reservoir with natural beauty and serene atmosphere
	- Jogging track and outdoor gym facilities
	- Nature-based recreational area supporting health and wellness activities
	- Strategically located near Kota Baru Toll Gate
Accossibility	- ±8.4 km from Bandar Lampung city center
Accessibility	- Paved roads with street lighting and traffic signs
	- Accessible by private vehicles and online transportation services
	- Jogging track around the reservoir
	- Outdoor gym equipment
Amenities	- Open space for community activities
	- Limited seating and shaded areas
	- Absence of inclusive infrastructure for elderly and disabled visitors
Ancillary Services	- Security post (satpam) for visitor safety
	- Informal roadside parking area
	- No official tour guides or information center yet

Source: Author's Analysis, 2025

In the context of developing a tourism area based on ecotourism and humanistic approaches, Embung A ITERA demonstrates a functional integration between three core tourism

components and ancillary services. The natural attractions of the artificial reservoir offer visual appeal through scenic beauty, a serene atmosphere surrounded by trees, and captivating moments such as sunrise and sunset, further enriched by the ecological and educational value of the ITERA Arboretum. In terms of accessibility, the site is strategically located along Ryacudu Street and near the Kota Baru Toll Gate, making it easily reachable by private vehicles and online transportation services, with recent road improvements further enhancing access. Meanwhile, tourism facilities such as jogging tracks, outdoor gym equipment, green open spaces, and shady trees support recreational and fitness activities while providing comfort for visitors of all ages, reinforcing the site's function as a multifunctional public space.

From the perspective of ancillary services, the presence of a security post serves a dual function as a surveillance hub and as an information center providing a sense of safety and assistance for visitors. Furthermore, although formal parking management has yet to be implemented, the presence of informal, self-organized parking areas around the reservoir has facilitated visitor convenience in accessing the site. This systemic relationship indicates that the success of a tourism destination is not solely dependent on its core visual or physical attractions, but also heavily relies on the availability of support services that ensure safety and comfort. Such integration reflects the practical embodiment of the smart, friendly, and forest campus concept promoted by Institut Teknologi Sumatera (ITERA), which places comfort, security, and environmental sustainability as fundamental elements in the development of nature-based tourism destinations

Management and Sustainability Implications

To strengthen sustainability, the management of Embung A ITERA should be developed through collaborative governance involving the university, local government, and community organizations. Key strategies include establishing basic zoning to balance ecological functions and tourism use, providing inclusive infrastructure such as ramps, shaded seating, and adequate sanitation, implementing visitor flow and carrying capacity guidelines, encouraging community-run micro-enterprises including local vendors and guided walks, and integrating environmental education programs connected to the ITERA Arboretum. Through these approaches, recreation, conservation, and learning can coexist, reinforcing Embung A ITERA as a sustainable campus-based public open space.

Conclusions

Embung A ITERA has organically transformed from a campus water reservoir into a multifunctional public recreational space shaped by community activities and social interaction. Its scenic landscape and accessibility serve as primary attractions, while jogging tracks and open spaces support daily exercise and social gathering. However, this organic development also presents sustainability challenges, particularly regarding facility maintenance, accessibility for vulnerable groups, and unregulated visitor patterns. Strengthening management through collaborative governance and inclusive infrastructure development is essential to ensure that Embung A ITERA can continue to function as an ecologically sustainable, socially inclusive, and educationally valuable public space. This research contributes to the understanding of organic campus tourism and provides a conceptual and practical basis for managing multifunctional eco-infrastructure in academic environments.

Acknowledgement

The author would like to express sincere gratitude to all parties who contributed to the completion of this research. Special thanks are extended to the visitors of Embung A ITERA who kindly participated in interviews and provided valuable information for the enrichment of the data.

References

Akiriningsih, T., & Sari, J. A. (2009). Pentingnya pemahaman lintas budaya dalam pariwisata. *Jurnal Pariwisata Indonesia*, 5(1), 48–53.

- https://jurnal.stpsahidsurakarta.ac.id/index.php/JPI/article/view/67
- Antika, N. M., Ernawati, S., & Purnama, I. (2024). Pengaruh aksesibilitas dan destination image pada minat berkunjung di Taman Wisata Panda. *ECo-Buss*, 7(1), 261–270. https://doi.org/10.32877/eb.v7i1.1431
- Asirin, A., Pertiwi, N. K., & Ibad, M. Z. (2024). Faktor kesuksesan implementasi rencana kolam retensi multiguna di perguruan tinggi di Indonesia: Pelajaran dari Institut Teknologi Sumatera. *Jurnal Wilayah dan Kota*, 10(02), 74–96. https://doi.org/10.34010/jwk.v11i02.13576
- Avecillas-Torres, I., Herrera-Puente, S., Galarza-Cordero, M., Coello-Nieto, F., Farfán-Pacheco, K., Alvarado-Vanegas, B., Ordóñez-Ordóñez, S., & Espinoza-Figueroa, F. (2025). Nature tourism and mental well-being: Insights from a controlled context on reducing depression, anxiety, and stress. *Sustainability (Switzerland)*, 17(2), 3–6. https://doi.org/10.3390/su17020654
- Azcárate, M. C. (2025). Tourism, space, and place: Bridging past, present and future research. *Tourism Geographies*, 27(3–4), 735–755. https://doi.org/10.1080/14616688.2024.2404644
- Baskara, M., Munandar, A., & Samingan, T. (1998). Perencanaan lanskap Arboretum Sumber Brantas sebagai obyek wisata alam (Landscape planning for Sumber Brantas Arboretum as outdoor recreation area). *Buletin Taman dan Lanskap Indonesia*, 1(3).
- Fiantika, F. R., Wasil, M., Jumiyati, S., Honesti, L., Wahyuni, S., Mouw, E., Jonata, M., Ashudi, I., Hasanah, N., Maharani, A., Ambarwati, K., Noflidaputri, R., Nuryami, & Waris, L. (2022). Metodologi penelitian kualitatif (Y. Novita, Ed.; 1st ed., Issue March). PT Global Eksekutif Teknologi.
 - https://www.researchgate.net/publication/359652702_Metodologi_Penelitian_Kualitatif
- Hafidzi, A. M. (2022). Pengaruh harga dan sarana pariwisata terhadap minat wisatawan berkunjung di Taman Nasional Tanjung Puting Kotawaringin Barat Kalimantan Tengah. *Gemawisata: Jurnal Ilmiah Pariwisata*, 18(2), 66–79. https://doi.org/10.56910/gemawisata.v18i2.214
- Handayani, V. R. (2017). Karakteristik fisik lingkungan dan bangunan perumahan tepi Sungai Kahayan (Issue 78). http://repository.unpar.ac.id/bitstream/handle/123456789/3856/Cover%20-%20Bab1%20-%204211015sc-p.pdf?sequence=1&isAllowed=y
- Hasna, F. N. (2025). Analisis dampak objek wisata terhadap kesejahteraan ekonomi masyarakat lokal (studi kasus wisata alam Rowo Gembongan). *Global Research and Innovation Journal* (GREAT), 1(3), 2073–2077. https://journaledutech.com/index.php/great/article/view/663
- Herlianti, E. V., & Sanjaya, R. B. (2022). Dampak positif pariwisata terhadap budaya, ekonomi, dan lingkungan di Kasepuhan Cipta Mulya. *Kritis*, 31(2), 132–149. https://doi.org/10.24246/kritis.v31i2p132-149
- Indriyanti, S. Y., Sardjono, M. A., & Saragih, B. (2021). Attractor potential of Puriduta Arboretum Sempaja as media of environmental education. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan*, 7(2), 101–112. https://doi.org/10.20886/jped.2021.7.2.101-112
- Ioannou, B. (2002). Tourist development impacts on the spatial transformation of the Greek islands: The case study of Kos insular area. *In 42nd Congress of the European Regional Science Association: From Industry to Advanced Services Perspectives of European Metropolitan Regions* (pp. 1–13). https://www-sre.wu.ac.at/ersa/ersaconfs/ersa02/cd-rom/papers/130.pdf
- Izwar, & Kristanti, D. (2023). Implementasi konsep 4A dan carrying capacity dalam pengembangan Pulau Reusam menjadi kawasan ekowisata berbasis syariah. *Journal on Education*, 5(2), 3554–3571. https://doi.org/10.31004/joe.v5i2.1038
- Jiang, Y., Lyu, C., & Balaji, M. S. (2025). Progress in research on tourists with mental disorders: A critical review and the way forward. *Tourism Management*, 107, 105083. https://doi.org/10.1016/j.tourman.2024.105083
- Lahagu, A., Fauziyah, E., & Ariyani, A. H. M. (2023). Persepsi masyarakat terhadap rencana pengembangan wisata di Desa Tlontoraja Kecamatan Pasean Kabupaten Pamekasan. *Journal Agriscience*, 4(2), 255–277. https://journal.trunojoyo.ac.id/agriscience/article/view/21009/pdf

- Laksono, R. D., & Sanusi, A. (2023). Work stress and well-being in Indonesia: The role of social support and healthy life. *Seybold Report*, 18(12), 1432–1445. https://doi.org/10.5281/zenodo.10441858
- Li, S., & Seale, C. (2007). Learning to do qualitative data analysis: An observational study of doctoral work. *Qualitative Health Research*, 17(10), 1442–1452. https://doi.org/10.1177/1049732307306924
- Lintang, S., Astuti, W., & Krisnanda, R. (2024). Pengaruh attraction, accessibility, amenity, ancillary terhadap minat berkunjung kembali wisatawan di destinasi wisata Pantai Gemah Kabupaten Tulungagung. *Jurnal Pariwisata Tourista*, 4(1), 27–40. https://doi.org/10.26905/jt.v4i1.13742
- Munir, S., Haq, I. ul, Cheema, A. N., Almanjahie, I. M., & Khan, D. (2025). The role of tourists, infrastructure and institutions in sustainable tourism: A structural equation modeling approach. *Sustainability (Switzerland)*, 17(7), 1–20. https://doi.org/10.3390/su17072841
- Nasqa, R. A., & Darmawan, D. (2025). Pengaruh lokasi terhadap minat berkunjung di wisata: Literature review (The influence of location on interest in visiting tourism: Literature review). Jurnal Entrepreneur dan Bisnis (JEBI), 4(1), 1–11. https://jurnal.umitra.ac.id/index.php/JEBI/article/view/1816
- Nopriana, A., Valeriani, D., Kurniawan, K., & Sugeng, N. W. (2024). The influence of attractions, facilities and accessibility on tourist satisfaction at Parai Tenggiri Beach, Bangka Regency. *TRJ Tourism Research Journal*, 8(2), 336. https://doi.org/10.30647/trj.v8i2.202
- Octaviani, L. K., & Kesuma, W. P. (2024). The effect of attractions, amenities, accessibility on tourist satisfaction at Garuda Wisnu Kencana Bali. *Jurnal Hospitaliti dan Pariwisata*, 5(2), 81–93. https://doi.org/10.31334/jd.v5i2.3722
- Pradipta, M. P. Y. P. (2021). Analisis daya tarik wisata Embung Manajar di Kabupaten Boyolali Jawa Tengah. *Sabbhata Yatra: Jurnal Pariwisata dan Budaya*, 2(2), 134–145. https://doi.org/10.53565/sabbhatayatra.v2i2.357
- Pratami, M., Sahid, S., Mustofa, A. N. A., Refaldy, M. A., & Rahman, K. Z. (2025). Pengembangan zonasi eduwisata di kawasan pendidikan Institut Teknologi Sumatera (ITERA) untuk mendukung pariwisata berkelanjutan. *Ranah Research: Journal of Multidisciplinary Research and Development*, 7(2), 1417–1432. https://doi.org/10.38035/rrj.v7i2.1351
- Putra, F. B. A., Yaser, M., & Saputra, F. (2024). Hubungan beban kerja, lingkungan kerja dan shift kerja terhadap stres kerja karyawan di PT. Generasi Muda Bersatu Kecamatan Simpenan, Kabupaten Sukabumi tahun 2023. *Journal of Public Health Education*, 3(4), 162–169. https://doi.org/10.53801/jphe.v3i4.230
- Rainanto, B. H., Wiranti, P., Sri Pujiastuti, Valentina, C., Suryanti, S., Bon, A. T., Melle, J. van, & Rudyanto, B. (2025). Tourist attraction development after revitalization of Taman Mini Indonesia Indah. *Global Research on Tourism Development and Advancement*, 7(1), 13–30. https://doi.org/10.21632/garuda.7.1.13-30
- Ratnaningtyas, E. M., Ramli, Syafruddin, Saputra, E., Suliwati, D., Nugroho, B. T. A., Karimuddin, Aminy, M. H., Saputra, N., & Jahja, A. S. (2022). Metodologi penelitian kualitatif (N. Saputra, Ed.). *Yayasan Penerbit Muhammad Zaini*. https://www.researchgate.net/publication/370561417_Metodologi_Penelitian_Kualitatif
- Rostiyati, A. (2013). Potensi wisata di Lampung dan pengembangannya. *Patanjala: Jurnal Penelitian Sejarah dan Budaya*, 5(1), 148–162. https://doi.org/10.30959/patanjala.v5i1.185
- Saarinen, J. (2004). "Destinations in change": The transformation process of tourist destinations. *Tourist Studies*, 4(2), 161–179. https://doi.org/10.1177/1468797604054381
- Safari, A., Edison, E., & Gita, V. (2025). Pengaruh daya tarik wisata dan aksesibilitas terhadap minat berkunjung di Kampung Cakrawala Kabupaten Sukabumi (The effect of tourist attractions and accessibility on visiting interest in Cakrawala Village, Sukabumi Regency). *Manajemen dan Pariwisata*, 4(1), 135–156. https://doi.org/10.32659/jmp.v4i1.416
- Sukardi, A. A. R., Kusuma, H. E., & Riska, A. S. (2022). Hubungan antara pendapatan dan pola kunjungan pada kawasan wisata kuliner di Indonesia. *Jurnal Lingkungan Binaan Indonesia*, 11(1), 39–46. https://doi.org/10.32315/jlbi.v11i01.71
- Wicaksono, A. (2021). Penerapan protokol CHSE di kawasan wisata Kecamatan Dlingo Kabupaten Bantul. *Kepariwisataan: Jurnal Ilmiah*, 15(2), 79–88.

http://dx.doi.org/10.47256/kji.v15i2.92

Yusuf, I., & Hadi, T. S. (2020). Dampak pengembangan pariwisata terhadap perubahan lahan. *Pondasi*, 25(2), 157–183. https://doi.org/10.30659/pondasi.v25i2.13041