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Identification of Inhibiting Aspects of the Operation of the Tanjung Lesung Special Economic Zone Based on Important Aspects of the Special Economic Zone

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Abstract

Special Economic Zones (SEZs) are development policy instruments aimed at encouraging economic growth through the provision of specific facilities and conveniences for investment and business activities. The success of SEZ operations is influenced not only by the designation of an area, but also by the readiness of infrastructure, human resources, and administrative control systems that support its activities. Tanjung Lesung is a tourism SEZ designated to encourage economic development in Pandeglang Regency; however, based on the report of the National SEZ Council, its development progress remains less than optimal. This study aims to identify aspects that hinder the operation of the Tanjung Lesung SEZ based on important aspects of SEZ implementation. The study employed a qualitative descriptive approach through document analysis and identification of existing conditions. The analysis synthesized regulations, SEZ implementation guidelines, and related literature to establish four key aspects: connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. The availability of elements within each aspect was then compared with the conditions required to support SEZ operations. The results indicate that the main challenges concern connectivity infrastructure, human resources, and administrative control systems. Connectivity to the area remains limited, while the functions of management institutions are not yet optimal. Administrative services also require strengthening to improve accessibility for investors, business actors, workers, and tourists. Meanwhile, tourism infrastructure is relatively well established but requires adequate connectivity and institutional support. These findings indicate that optimizing the Tanjung Lesung SEZ requires integrated improvements in connectivity, institutional capacity, and administrative services.

Keywords Special Economic Zone; Tanjung Lesung; Connectivity Infrastructure; Human Resources; Administrative Governance; Tourism Development

INTRODUCTION

Special Economic Zones (SEZs) are a government policy aimed at encouraging economic growth through the development of areas with specific economic functions and the provision of special facilities (Musolino et al., 2022). According to Law of the Republic of Indonesia Number 39 of 2009, SEZs are areas with specific boundaries within the territory of the Unitary State of the Republic of Indonesia designated to perform economic functions and obtain certain facilities. SEZ development is expected to encourage investment, create economic activity, and contribute to the social and economic development of the surrounding areas (Alcorta & Tesfachew, 2020). Therefore, the success of an SEZ is determined not only by the designation of the area's status, but also by the area's ability to provide conditions that support economic activity and its operations (Dyachkova et al., 2026a).

In the context of national regional development, Tanjung Lesung holds a strategic position because it has been designated as a flagship area through Government Regulation Number 26 of 2008 concerning the National Spatial Planning (RTRWN). This designation indicates that Tanjung Lesung is one of the areas whose spatial planning is prioritized because it has a significant influence at the national level, including in economic, social, cultural, and environmental aspects. This position is then strengthened through the designation of Tanjung Lesung as a Special Economic Zone (SEZ) for tourism. As a tourism SEZ, the development of Tanjung Lesung is not only related to the provision of tourist attractions and activities, but also requires infrastructure support, management resources, and a service system that allows activities within the area to take place effectively (Ramadhan et al., 2025; Ristya et al., 2022a).

However, designating an area as a Special Economic Zone (SEZ) does not automatically indicate that its development and operation have been optimal (Kongela et al., 2025a). The 2021 National SEZ Council Year-End Report shows that SEZ development in Indonesia can be categorized based on their level of development and progress: SEZs with optimal development, SEZs with suboptimal development, SEZs requiring special attention, and SEZs revoked due to lack of progress. The Tanjung Lesung SEZ is included in the group of SEZs with suboptimal development progress. This situation is important to examine because Tanjung Lesung has received government attention as a strategic area, but its development has not yet achieved the expected conditions.

These issues demonstrate that the success of a Special Economic Zone (SEZ) must be assessed not only from its designation status, but also from the readiness of various elements supporting its operations (González, 2020; Zhao & Tan, 2023a). The National SEZ Council Secretariat establishes criteria for SEZ operational readiness, which include infrastructure, human resources, and administrative control systems. Furthermore, the existence of supporting connectivity infrastructure is crucial because the area needs to be connected to surrounding areas and transportation networks (Kongela et al., 2025b; NGUYEN & TIEN, 2021a). For the Tanjung Lesung SEZ, which is being developed as a tourism area, this connectivity is even more crucial because regional activities are highly dependent on the ease of movement of tourists, workers, business actors, and goods to and from the area (Kusuma et al., 2023a).

Problems with the operation of SEZs extend beyond connectivity. Tourism areas require various supporting facilities to ensure comfortable and safe tourism activities (Widiartha & Ekayana, 2020). At the same time, the existence of management institutions and administrative service systems is essential to ensure effective services for businesses, investors, workers, and tourists (BAYEV et al.,

2022). Therefore, the operation of the Tanjung Lesung SEZ must be assessed through the interrelationship between the physical condition of the area, supporting tourism facilities, the capacity of the human resources managing the area, and the ease of administrative services.

In this study, these conditions are examined through four key aspects used as the basis for identification: connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. These four aspects are used to determine whether the elements necessary to support the operation of the Special Economic Zone (SEZ) are present under existing conditions and to identify any conditions that are inadequate or not yet met.

This issue becomes even more relevant because the Tanjung Lesung Special Economic Zone (SEZ) has been designated and operated as a strategic area, yet its development progress is still categorized as suboptimal. This situation raises questions about what aspects remain obstacles to supporting the area's progress. Identifying these obstacles is necessary so that the problem is not only understood based on the general assessment that the area's development is suboptimal, but can be traced to the elements that directly support the SEZ's operations.

Based on these problems, this study aims to identify aspects that hinder the implementation of the Tanjung Lesung Special Economic Zone (SEZ) based on the important aspects of the SEZ. Identification is carried out by comparing the existing conditions of the area with the elements required in each important aspect, then exploring the obstacles that arise based on the results of observations, interviews, and document studies. The results of the study are expected to provide an overview of the conditions of supporting aspects that still pose obstacles and serve as a basis for formulating policy responses to support the development and implementation of the Tanjung Lesung Special Economic Zone (SEZ).

RESEARCH METHODS

2.1 Research Design

This study uses a qualitative descriptive approach to identify aspects that hinder the implementation of the Tanjung Lesung Special Economic Zone (SEZ) (Brittain & Carrington, 2024; Stanley, 2023). The descriptive approach is used because the study focuses on describing the existing conditions of the area and identifying elements that are and are not yet available to support the operation of the SEZ. Meanwhile, a qualitative approach is used to understand conditions and problems that can be seen not only from the physical availability of an element, but also from information regarding functions, management, services, and obstacles that occur in its implementation (Brittain & Carrington, 2024; Stanley, 2023). This study does not aim to test the relationship between variables or measure the level of success of the SEZ quantitatively, but rather to gain an understanding of the conditions of the supporting aspects of the area and identify conditions that have the potential to hinder its implementation.

Identification was conducted through four important aspects of the Special Economic Zone (SEZ): connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. These four aspects were determined through a synthesis of SEZ implementation provisions and previous research on the elements required to support the area's operations. Each aspect was

then broken down into sub-aspects and indicators, which served as a basis for comparing the existing conditions of the Tanjung Lesung SEZ with the expected conditions. Data on existing conditions were obtained through observation, interviews, and document studies, allowing for cross-checking of information from multiple sources (Meydan & Akkaş, 2024a; Santos et al., 2020).

In this study, obstacles are defined as existing conditions that do not align with the elements or indicators of important aspects of the Special Economic Zone (SEZ) that have been established based on theoretical foundations. These inconsistencies can include elements that are not yet available, facilities that are not yet connected or not functioning according to the area's needs, or institutions and service systems that do not function as required. With this definition, the identification of obstacles is not solely based on the presence or absence of a facility, but also considers the condition and function of these elements in supporting the implementation of the Tanjung Lesung Special Economic Zone. The identification results are then used to determine the aspects that are inhibiting and form the basis for discussing and formulating the research's policy implications.

The research area is the Tanjung Lesung Special Economic Zone (SEZ) in Tanjungjaya Village, Panimbang District, Pandeglang Regency, Banten Province. The area was selected based on the Tanjung Lesung Special Economic Zone (SEZ), which has been designated as a tourism SEZ but is still categorized as having suboptimal development progress. This condition serves as the basis for identifying aspects that could potentially hinder the area's progress.

2.2 Research Location

The research area is located in the Tanjung Lesung Special Economic Zone (SEZ), which is administratively located in Tanjungjaya Village, Panimbang District, Pandeglang Regency, Banten Province. The Tanjung Lesung SEZ is primarily a tourism area developed to stimulate economic activity through the development of tourism activities and facilities. These characteristics require the support of various elements, including infrastructure connecting the area to surrounding areas, tourism facilities, and management systems that support tourism and economic activities within the area.

The Tanjung Lesung Special Economic Zone (SEZ) was selected as the research area due to its development, which is still categorized as less than optimal by the National SEZ Council. Although the area has been designated as a tourism SEZ and has received attention in regional development, this situation indicates the need to further examine factors that may impact its performance. Therefore, the Tanjung Lesung Special Economic Zone (SEZ) was selected as the research location to identify the suitability of the area's existing conditions with the critical aspects required to support SEZ operations.

Spatially, the research focuses on the Tanjung Lesung Special Economic Zone (SEZ) and its supporting infrastructure and facilities. The scope of the location not only considers elements within the area's boundaries but also the connectivity that connects the SEZ to surrounding areas. This is particularly important in identifying connectivity infrastructure, as the success of a tourism area is influenced by its connectivity to transportation networks and supporting facilities outside the area. Therefore, the research location is understood as the Tanjung Lesung Special Economic Zone (SEZ) and its supporting elements that are functionally related to its operations.

2.3 Data Collection

Data collection in this study was conducted to obtain information on the conditions and implementation of the Tanjung Lesung Special Economic Zone (SEZ) development based on four main variables: connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. The collected data consisted of primary and secondary data tailored to the characteristics of each research variable.

Primary data were obtained through interviews and direct observation (Surawy-Stepney et al., 2023). Interviews were conducted with parties knowledgeable and involved in the management and development of the Tanjung Lesung Special Economic Zone (SEZ) to obtain information on infrastructure conditions, area management, human resources, and the implementation of administrative and licensing services. Meanwhile, observations were conducted to identify conditions directly, particularly those related to tourism infrastructure and supporting facilities available in the area.

Research informants were selected using purposive sampling supported by criterion sampling (Ahmad & Wilkins, 2025; Memon et al., 2024). Informants were selected based on their knowledge, involvement, or relevant information regarding the management and operation of the Tanjung Lesung Special Economic Zone (SEZ). This technique was used to obtain information that could describe the condition of the area from parties familiar with the management, services, and operations of the SEZ.

Secondary data were obtained through a document review of various documents and information relevant to the development of the Tanjung Lesung Special Economic Zone (SEZ) (Morgan, 2022). This data was primarily used to supplement information on the condition and development of connectivity and tourism infrastructure. The simultaneous use of primary and secondary data was conducted to obtain a more comprehensive picture of the area's condition.

The obtained data were then processed using coding and clustering (Piano et al., 2023). Coding was performed by grouping the results of interviews, observations, and document studies based on research variables and subvariables. Next, clustering was used to group information based on similar characteristics and conditions to identify patterns, problems, and conditions in each aspect of the Tanjung Lesung Special Economic Zone (SEZ) development.

Table 1. Variables, Types, Sources, and Data Analysis Techniques

Variables	Sub Variables	Data Types	Data retrieval	Analysis Techniques
Connectivity Infrastructure	Land Infrastructure	Primary and secondary	Interviews and document studies	Coding and clustering
	Air Infrastructure	Primary and secondary	Interviews and document studies	Coding and clustering
	Marine Infrastructure	Primary and secondary	Interviews and document studies	Coding and clustering
Tourism Infrastructure	Object	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Access	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Accommodation	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Facility	Primary and secondary	Interviews, document studies, and observations	Coding and clustering

	Transportation	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Catering Service	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Recreational Activities	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Spending	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Communication	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Banking System	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Health	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Security	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Cleanliness	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
	Places of Worship	Primary and secondary	Interviews, document studies, and observations	Coding and clustering
Human Resources	Administrator	Primary	Interview	Coding and clustering
	Management Business Entity	Primary	Interview	Coding and clustering
Administrative Control Devices	Licensing Service System	Primary	Interview	Coding and clustering
	One Stop Shop	Primary	Interview	Coding and clustering

Source: Processed by authors, 2026

2.4 Synthesis of Important Aspects and Indicators of SEZ

A synthesis of key aspects and indicators was conducted to determine the components used as a basis for identifying the conditions and obstacles to the operation of the Tanjung Lesung Special Economic Zone (SEZ). The synthesis was conducted by identifying concepts, provisions, and functions related to the implementation of the Special Economic Zone from theories, previous research, regulations, and guidelines related to the SEZ (Dyachkova et al., 2026b). The results from these various sources were then compared and grouped based on similar substance to obtain aspects and indicators relevant to the operational conditions of the Tanjung Lesung SEZ.

The synthesis results in four main aspects: connectivity infrastructure, tourism infrastructure, human resources, and administrative control tools (Caraka et al., 2023a; Zhao & Tan, 2023b). Connectivity infrastructure encompasses land, air, and sea connectivity that supports the movement of people and goods to and from the region. Tourism infrastructure encompasses tourist attractions and various supporting facilities for tourism activities. Human resources encompass the Administrator and Management Business Entity (BUP) institutions and their respective functions in managing the region. Meanwhile, administrative control tools include a licensing service system and a one-stop shop that supports ease of service in the region.

The synthesized aspects and sub-aspects were then used as a framework for data collection and analysis. During the availability identification stage, these aspects were used to compare the existing conditions of the Tanjung Lesung Special Economic Zone (SEZ) with the required conditions based on the study results. Meanwhile, in the interview analysis, these aspects served as the basis for grouping the open coding and clustering results to identify obstacles to SEZ operation.

Table 2. Synthesis of Important Aspects of SEZ

Aspect	Sub-aspects	Source
Connectivity Infrastructure	Land	Connectivity theory; ASEAN Guidelines; Law No. 39 of 2009; provisions of the National Council of Special Economic Zones
	Air	
	Sea	
Tourism Infrastructure	Object	Theory of tourism facilities and components
	Access	
	Accommodation	
	Facility	
	Transportation	
	Catering service	
	Recreational activities	
	Spending	
	Communication	
	Banking system	
	Health	
	Security	
	Cleanliness	
	Places of worship	
Human Resources	Administrator	SEZ institutional provisions
	BUP	
Administrative Control Devices	Licensing service system	One-stop service theory ; OSS; KEK service provisions
	One-stop shop	

Source: Processed by authors, 2026

2.5 Data Analysis

Data analysis was conducted to identify the availability of key aspects of the Tanjung Lesung Special Economic Zone (SEZ) and identify obstacles affecting the area's operation. The analysis focused on four main aspects: connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. Data obtained from interviews, observations, and document studies were analyzed in stages through availability identification, open coding, clustering, and cluster interpretation, which were further strengthened through source triangulation.

The first stage is identifying availability. At this stage, the existing conditions of the Tanjung Lesung Special Economic Zone (SEZ) are identified based on indicators for each aspect obtained from the synthesis of theories and policy studies. Identification is conducted to determine whether each element necessary to support the SEZ's operation is available, missing, or does not meet the required conditions. Information regarding these conditions is obtained by comparing the results of observations and document studies with the established indicators. The identification results are then presented descriptively to provide an overview of the condition of each important aspect of the SEZ.

The second stage is open coding. This stage is conducted primarily on interview data to identify information indicating problems or obstacles in each aspect. Open coding is conducted by breaking down information or pieces of informant statements into meaningful units and then assigning codes that represent the core issues (Taylor, 2023). The codes do not have to use the informant's exact words, but are formulated based on the substance of the information conveyed. For example, an informant's statement regarding the difficulty of obtaining permits and land acquisition in airport construction could be coded as "obstacles to airport construction permits," "obstacles to land acquisition," and "uncertainty about the airport location." Thus, open coding is used to transform narrative interview data into more structured information that can be compared across informants.

The third stage is clustering. The codes resulting from open coding are then grouped based on similarity of meaning, related problems, or common causes. This grouping produces problem clusters with a more general scope. For example, codes related to airport construction permitting constraints, airport location uncertainty, and airport relocation may indicate a link to air infrastructure development issues. Meanwhile, codes related to dependence on government budgets and investment delays can be grouped into the budget/investment constraints cluster. The clustering process is carried out on each important aspect of the Special Economic Zone (KEK) to obtain more systematic groups of obstacles.

The fourth stage is cluster interpretation. Each cluster formed is then interpreted to explain the substance of the problem, the interrelationships between the problems, and how these problems can hinder the operation and development of the Tanjung Lesung Special Economic Zone (SEZ). Interpretation is carried out by linking the clustering results to the availability conditions identified in the previous stage. Thus, the analysis not only shows that an element is not yet available or does not meet the required conditions, but also explains the underlying obstacles to these conditions based on information from informants. The interpretation results are then used to formulate obstacles to SEZ operation in each aspect.

The final stage is triangulation. Triangulation is conducted to increase the credibility of the analysis results by comparing information obtained from various sources and data collection techniques (Meydan & Akkaş, 2024b). Information from interviews is compared with information from other informants, as well as observations and available document studies. For example, information regarding obstacles to airport development is not only examined from one informant, but also compared with information from the Regional Development Planning Agency (Bappeda), the Public Works and Housing Agency (DPUPR), and documents related to airport development. Through this process, information that is consistent across sources can strengthen the identification of obstacles, while disparate information can be further examined to understand differences in perspective or underlying conditions.

Overall, the research analysis process began with data from interviews, observations, and document studies, followed by identification of availability based on indicators of important aspects of the Special Economic Zone (KEK). The interview data were then analyzed through open coding to generate problem codes, and then related codes were grouped through clustering. Each cluster was then interpreted to identify the forms and causes of obstacles in each aspect. These results were then examined through triangulation of sources and techniques to increase the credibility of the findings. The final result of the analysis was the identification of obstacles to the operation of the Tanjung Lesung Special Economic Zone based on aspects of connectivity infrastructure, tourism infrastructure, human resources, and administrative control devices, which then became the basis for compiling conclusions and recommendations.

RESULTS

3.1 Condition of Connectivity Infrastructure in Tanjung Lesung Special Economic Zone

Connectivity infrastructure is a crucial aspect in supporting the operation of the Tanjung Lesung Special Economic Zone (SEZ), as the area requires connectivity to activity centers, transportation hubs, and interregional transportation networks (Amanda et al., 2020; Kusuma et al., 2023b). Based on the availability identification results, connectivity infrastructure to the Tanjung Lesung Special Economic Zone (SEZ) still shows limitations in several modes of transportation, particularly land, air, and sea connectivity. This situation indicates that access to the area is not fully supported by an integrated multimodal transportation system.

In terms of land connectivity, the highway to the Tanjung Lesung Special Economic Zone (SEZ) is available, but it is not yet optimally connected to other transportation hubs such as ports, train stations, and airports. Limitations are also evident in the toll road network. Of the three sections of the Serang–Panimbang Toll Road, in the conditions that form the basis of the study, only Section I Serang–Rangkasbitung has been operational, while Section II Rangkasbitung–Cileles is still under construction and Section III Cileles–Panimbang has not yet been implemented. These conditions mean that the Tanjung Lesung Special Economic Zone (SEZ) has not yet obtained alternative toll road access that directly supports connectivity to the area.

Similar limitations are found in the railway network. A rail network that could connect the areas surrounding the Special Economic Zone (SEZ) with urban centers and transportation hubs is not yet operational. The reactivation of the Rangkasbitung–Pandeglang line is still in progress, while the Pandeglang–Labuan line has not yet been implemented. Thus, land connectivity to the SEZ remains heavily dependent on the road network, while the integration between roads, toll roads, and railways has not yet been fully established.

In terms of air connectivity, the Tanjung Lesung Special Economic Zone (SEZ) boasts the advantage of Salakanagara Airport within the area and a heliport. However, Salakanagara Airport only serves charter flights and therefore does not yet function as a hub for domestic or international commercial flights. Furthermore, there is insufficient connectivity between the airport and other transportation infrastructure in the surrounding area. The planned development of South Banten International Airport also demonstrates that the need for larger-scale air connectivity remains a key component of the region's development.

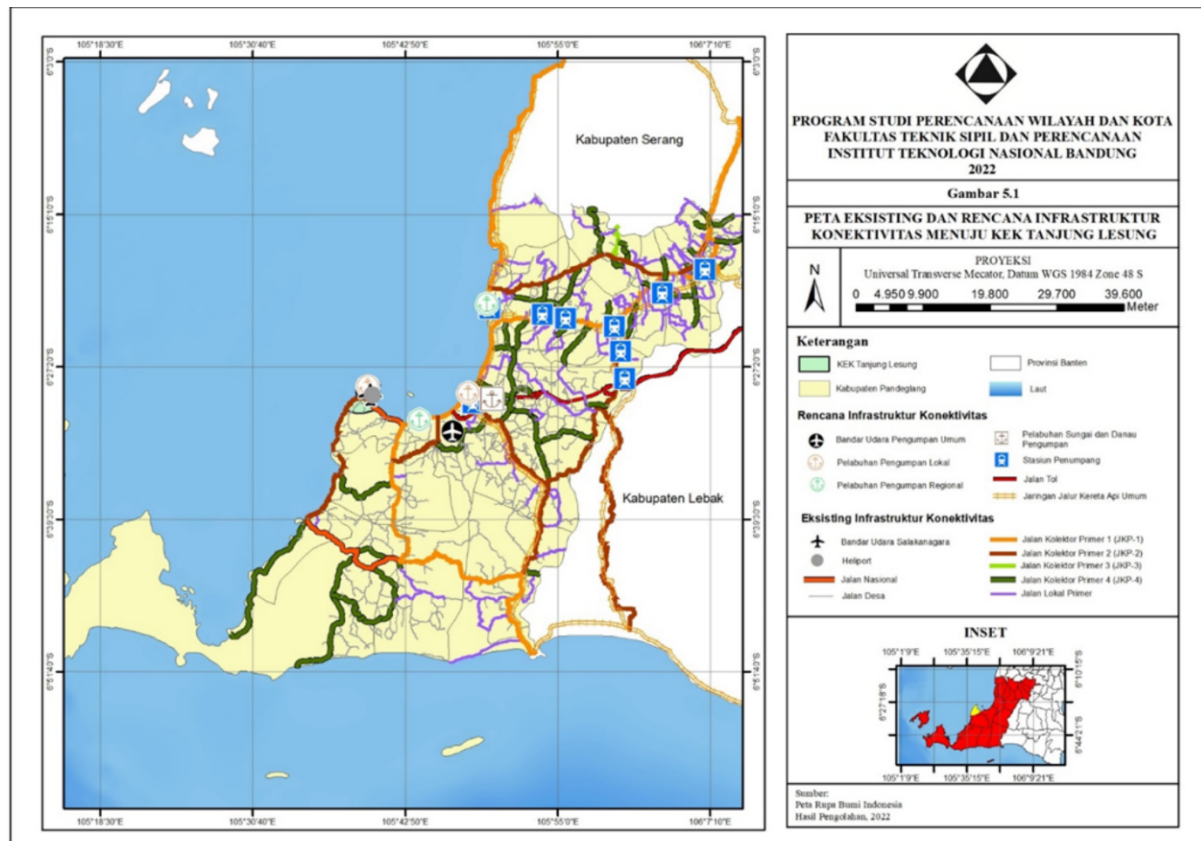
Meanwhile, in terms of maritime connectivity, a port capable of handling the movement of people and logistics within the area is currently unavailable. Plans for the development of a marina port are still underway and cannot yet function as part of the region's transportation system. The absence of a port integrated with the road and rail networks further demonstrates the lack of a multimodal connectivity system in the Tanjung Lesung Special Economic Zone (SEZ).

Thus, the identification results indicate that connectivity remains an unmet need. Although some basic infrastructure is available, such as roads leading to the area, Salakanagara Airport, and a heliport, these infrastructures are not yet integrated with the overall regional transportation network. This situation has the potential to impact the mobility of tourists, workers, investors, and the distribution of goods to and from the Tanjung Lesung Special Economic Zone (SEZ).

Table 3. Summary of Connectivity Infrastructure Availability in Tanjung Lesung Special Economic Zone

Fashion	Available	Not yet available	Main conditions
Land	The road to the SEZ	Direct toll road, train integration	Access is still predominantly via highways
Air	Charter airport, heliport	Domestic/international commercial flights	Airport available but limited functionality
Sea	—	Logistics/human port	Marina is still in the plans
Multimodal	—	Road–rail–port–airport integration	The system is not yet integrated

Source: Processed by authors, 2026

**Figure 1.** Map of Existing and Planned Connectivity Infrastructure to the Tanjung Lesung SEZ. Source: Processed by authors, 2026

3.2 Condition of Tourism Infrastructure in Tanjung Lesung Special Economic Zone

As a Special Economic Zone (SEZ) focused on tourism development, the availability of supporting infrastructure for tourism activities is a crucial aspect of the Tanjung Lesung SEZ's operation (Kok & Siripipattanakul, 2025). Identification results indicate that most of the basic elements of tourism infrastructure are already in place within the area. This includes tourist attractions, internal access, accommodations, supporting facilities, recreational activities, communications, sanitation, banking, healthcare, and security.

In terms of tourist attractions, the Tanjung Lesung Special Economic Zone (SEZ) offers diverse potential, including coastal tourism, nature and adventure tourism, cultural tourism, and land, sea, and air sports. This diversity demonstrates that the region offers more than just one type of attraction,

but a variety of activities that can support the development of a tourism destination (Catherine et al., 2024).

In terms of internal accessibility, roads within the area are available and connect the various sections or plots of the Special Economic Zone (SEZ). Parking is also available and free of charge. This indicates that the basic needs of tourists moving within the area have been relatively met. However, this situation must be distinguished from accessibility to the area, which previously showed limited external connectivity.

The availability of accommodations and tourist activities also relatively supports the area's operations. There are 10 accommodations and various recreational activities such as Lalassa Beach Club, New Rhino Aqua Splash, Dive Center, Ladda Beach, Golf Academy, and Nelayan Restaurant. In addition, there are five restaurants and one shopping center. These conditions demonstrate that the area has the basic components to support tourist activities within the SEZ.

Various tourism support facilities are also available. These include an information center, health facilities, fire extinguishers, hydrants, information signs, security personnel, sanitation facilities, and communication facilities. The communications infrastructure is relatively robust, as the area has a fiber optic network and base stations, enabling cellular phone signals and internet access.

However, the identification results also revealed several limitations. Convenient and varied local transportation is not yet available to connect access points to various parts of the area. The transportation provided by the management primarily serves trips from Soekarno-Hatta Airport and Merak Port. Therefore, tourists already in the area still have limited local transportation options.

Other limitations include banking facilities and places of worship. Banking facilities are limited to ATM Bersama and BRI ATMs, while the only available place of worship is a prayer room. These facilities meet basic needs, but the variety of supporting facilities is still relatively limited compared to the tourism service components identified in the theoretical synthesis.

Overall, the tourism infrastructure aspect is relatively more prepared than the connectivity aspect. Most basic facilities for tourism activities are already available within the area. Therefore, the main issue is no longer simply the lack of tourism facilities, but rather the area's connectivity to external transportation networks and the availability of certain supporting facilities.

Table 4. Summary of Tourism Infrastructure Availability in Tanjung Lesung Special Economic Zone

Component	Condition	Main findings
Tourist attractions and activities	Available	Beaches, nature, culture, sports and recreation
Internal access	Available	Roads and parking are available
Accommodation	Available	10 accommodations
Food and Drink	Available	5 restaurants
Supporting facilities	Mostly available	Information, health, safety, cleanliness
Local transportation	Not yet available	Internal transportation options are limited
Communication	Available	Fiber optic and BTS
Banking	Limited	ATM together and BRI
Worship	Limited	prayer room

Source: Processed by authors, 2026

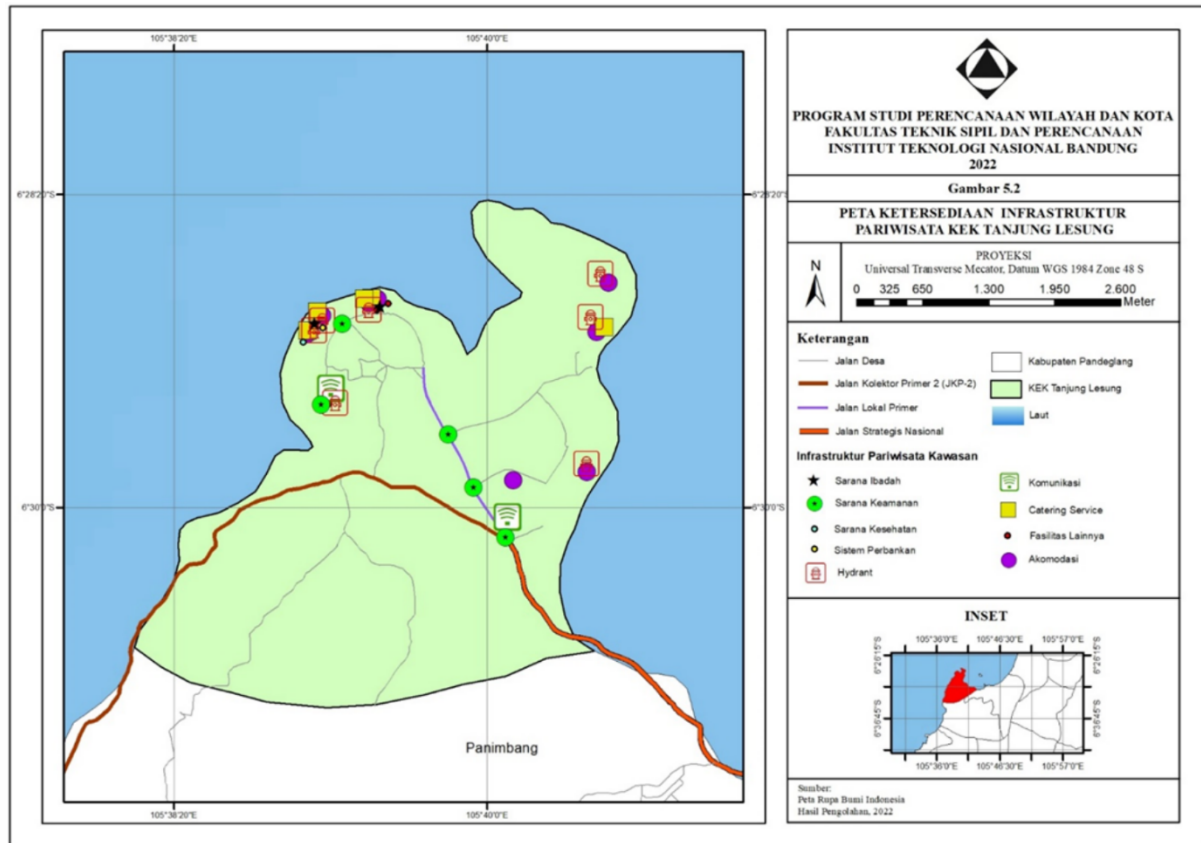


Figure 2. Map of Tourism Infrastructure Availability in the Tanjung Lesung SEZ. Source: Processed by authors, 2026

3.3 Human Resource Conditions in SEZ Management

The human resources in this study encompass two institutions that play a direct role in SEZ management: the SEZ Administrator and the Managing Business Entity (BUP). Identification of these two institutions reveals differences in the conditions under which they fulfill their management functions.

Regarding the SEZ Administrator, a formal administrative institution has been established, but the administrator's function in managing the area is not functioning according to the established indicators. The National SEZ Council has taken over the administrator's duties, resulting in the administrator losing some of his management functions. This situation has impacted the implementation of service and oversight functions at the regional level (Khozin et al., 2026).

The administrator's role in facilitating licensing, registration, and services within the Special Economic Zone (SEZ) is also unfulfilled. Although licensing can be obtained through the offline Public Service Mall or the online OSS (Overseas Business Access), these services are not directly available within the zone. This situation indicates that the existence of an administrative licensing system is not fully synonymous with the availability of easily accessible administrative services for businesses within the zone.

The oversight function of compliance with the SEZ legal framework has also not been directly implemented by administrators, as oversight is carried out by the SEZ National Council. Thus, there is a mismatch between the expected institutional structure and the implementation of institutional functions on the ground (Peters, 2024).

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Unlike administrators, the Managing Business Entity (BUP) is already in place and carries out a number of area management functions. The BUP has carried out functions related to planning and land preparation, as well as area management. This finding indicates that the BUP is relatively more heavily supported by the operational functions of the area, while the administrator's function, which should be one of the SEZ service and oversight instruments, has not been functioning optimally.

This condition is crucial because the success of a Special Economic Zone (SEZ) is determined not only by the availability of physical infrastructure but also by the institutional capacity of the area's management functions (Hidayat & Negara, 2020). Mismatched administrative functions can create institutional barriers, particularly if services, oversight, and investment facilitation still rely on institutions outside the area.

Table 5. Institutional Conditions of Tanjung Lesung Special Economic Zone Management

Institutional	Main function	Condition
Administrator	Licensing and registration	Not optimal
Administrator	Services in the area	Not yet available
Administrator	Compliance monitoring	Conducted by the National KEK Council
BUP	Area management	Available
BUP	Land preparation	Available

Source: Processed by authors, 2026

3.4 Condition of Administrative Control Devices

Administrative control instruments are aspects related to the ease of licensing services, business registration, and administrative processes that support investment and operational activities in SEZs (Pellicanò & Trecozzi, 2022a). Identification results indicate that some administrative functions are in place, but not all meet the characteristics of easily accessible and integrated services within the area.

Regarding the delegation of licensing authority, authority has been delegated to administrators from various government agencies, and licensing standards have been established. This demonstrates that a regulatory framework exists to facilitate licensing for business activities in SEZs.

However, there are limitations in the location of licensing and customs services. Although business licensing and customs procedures have been simplified, there are no licensing and customs service offices within the area. Businesses must obtain services offline at the Pandeglang Public Service Mall, which is located relatively far from the Special Economic Zone (SEZ). Thus, the ease of procedures has not been fully matched by ease of access to service locations (Kongela et al., 2025c; Streltsov et al., 2020).

Limitations were also identified in the implementation of the One Single Submission (OSS). The OSS is available as an online licensing service system, but it is not yet accessible offline. Furthermore, the OSS primarily facilitates licensing related to location, environment, buildings, businesses, and operations, so it does not yet cover all the services expected in the research indicators, particularly services related to immigration and visitor visas (Lodhia et al., 2018).

On the other hand, the BUP's functions in regulating regional financing, providing and maintaining infrastructure, security, additional services, and marketing are already in place. This indicates that the

administrative control system is not completely problematic across all aspects, but rather that there are gaps, particularly in the integration of administrative services and ease of access for businesses.

Marketing aspects also require attention. Although the Regional Development Planning Agency (BUP) has been implementing regional marketing functions, several parties, including the Regional Development Planning Agency (BAPPEDA) and the National Special Economic Zone Council (KEK), believe that regional marketing is not yet optimal. This situation indicates that the existence of a marketing function does not automatically result in optimal marketing performance.

Overall, the identification results indicate that administrative control tools are available formally and digitally, but they do not yet fully provide integrated, accessible services that meet the operational needs of the area. Therefore, administrative obstacles to the operation of the Tanjung Lesung Special Economic Zone (SEZ) are better understood as issues of implementation and access to services rather than the absence of regulations or a licensing system.

3.5 Synthesis of the Results of Identification of Aspects Inhibiting Operations of the Tanjung Lesung Special Economic Zone

Based on the identification of four important aspects of the Special Economic Zone (SEZ), it was found that the level of fulfillment of operational support elements in the Tanjung Lesung SEZ varies across aspects (Kongela et al., 2025d; Leonov, 2020). Tourism infrastructure is the most readily available aspect, as most basic tourism facilities are already located within the area. Conversely, the most prominent limitations were found in connectivity infrastructure, particularly the integration of land, air, and sea transportation with the area. Obstacles were also identified in the institutional aspects of human resources and administrative control systems.

Table 6. Synthesis of Operational Inhibiting Aspects of Tanjung Lesung Special Economic Zone

Aspect	Main conditions	Inhibiting aspects
Connectivity infrastructure	Some basic networks are available, but not yet integrated.	Limitations of multimodal connectivity
Tourism infrastructure	Most of the tourist facilities are available	Local transportation and some facilities are still limited.
Human Resources	BUP is available, administrator function is not optimal	Ineffectiveness of the institutional function of administrators
Administrative control devices	The licensing system is available, but services are not yet integrated in the area.	Access and integration of limited administrative services

Source: Processed by authors, 2026

Of these four aspects, connectivity infrastructure is a major obstacle, as limited external transportation networks can impact SEZ connections with economic activity centers and regional transportation hubs(NGUYEN & TIEN, 2021b; Zeng, 2021). While access to the region is readily available, it lacks a direct toll road network, an operational railway network, or a port capable of handling the movement of people and logistics. The presence of Salakanagara Airport and its heliport offers alternative connectivity options, but the airport's limited role in charter flights precludes widespread commercial air connectivity.

Meanwhile, tourism infrastructure is relatively well prepared. The availability of tourist attractions, accommodations, restaurants, healthcare facilities, security, communications, sanitation, and recreational activities demonstrates that the region has the necessary components to support tourism activities. However, limited local transportation options indicate that the readiness of internal facilities

is not yet fully supported by the ease of tourist mobility within the region (Miravet et al., 2021; Tleuberdinova et al., 2026).

In terms of human resources and institutions, the main obstacle lies not in the absence of an institution, but in the implementation of the SEZ Administrator's function. While an Administrator has been established, some management and oversight functions are carried out by the SEZ National Council. This situation has the potential to reduce institutional effectiveness at the regional level, particularly in licensing, registration, and compliance monitoring.

Furthermore, regarding administrative control measures, the licensing system is available through the Online System for the Development of the Economy (OSS) and offline services, but it does not fully meet the principle of ease of service within the zone. Businesses still need to obtain some services outside the zone, while the OSS does not yet cover all services identified as SEZ administrative control needs. Thus, administrative barriers are more related to the affordability, integration, and comprehensiveness of services than to the lack of a licensing system.

Overall, these results indicate that the suboptimal operation of the Tanjung Lesung Special Economic Zone (SEZ) is a multidimensional issue (Frick et al., 2019a; Ristya et al., 2022b). Obstacles stem not from a single infrastructure aspect, but from a combination of limited external connectivity, limited tourism support facilities, suboptimal administrative institutional functions, and a lack of integration of administrative services within the area. Therefore, improving SEZ operations requires an approach that focuses not only on physical development but also on institutional strengthening and streamlining of administrative services.

3.6 Directions for Handling Barriers to the Operation of the Tanjung Lesung SEZ

Based on the identification of existing conditions and analysis of obstacles, several conditions were identified that still limit the implementation of the Tanjung Lesung Special Economic Zone (SEZ). These obstacles relate not only to the availability of physical infrastructure but also to interconnectedness, management institutions, and administrative service mechanisms within the area. These conditions indicate that the presence of supporting elements within the SEZ is not always accompanied by optimal connectivity and functionality in supporting area activities (Caraka et al., 2023b; Kongela et al., 2025e).

Based on these findings, this study formulated management guidelines aimed at addressing obstacles in aspects that do not support the optimal operation of SEZs. These guidelines were formulated based on the relationship between existing conditions, obstacles identified through interviews, and key SEZ aspects derived from the synthesis (Frick et al., 2019a; Muringa et al., 2025). Therefore, the guidelines are recommendations based on the research findings, not identification of policy responses already implemented by the government.

In general, the obstacles identified can be grouped into four groups: the lack of integration of land, sea, and air connectivity; the suboptimal function of the Special Economic Zone (SEZ) Administrator; the lack of direct administrative services within the area; and the lack of integration of all SEZ service needs into the digital system (NAJAFZADE, 2025; Russo et al., 2022). Each obstacle has different characteristics and requires different management. A summary of the obstacles and their respective directions are presented in Table 7.

Table . Synthesis of Operational Inhibiting Aspects of Tanjung Lesung Special Economic Zone

Obstacle	Handling Instructions
Land, sea and air connectivity is not yet integrated	Ensuring the development and connectivity of intermodal connectivity infrastructure
The function of the KEK Administrator is not yet optimal	Strengthening the Administrator function on a regional scale
Licensing services are not yet available directly within the area	Providing administrative and licensing services within the area
OSS does not yet cover all KEK service needs	Integrating relevant KEK service needs into the digital service system

Source: Processed by authors, 2026

3.6.1 Strengthening Connectivity Infrastructure

Connectivity is a key aspect directly related to the success of the Tanjung Lesung Special Economic Zone (SEZ), as the area requires strong connections to economic centers and a broader transportation network (Caraka et al., 2023b, 2023c). Identification results indicate that land access to the area is readily available, primarily through a road network connecting the area to its surrounding areas. However, this access does not yet fully demonstrate the formation of an integrated connectivity system. The region's connectivity to other modes of transportation, particularly rail, ports, and air transportation, remains limited.

These conditions mean that SEZ connectivity remains heavily dependent on the land road network. Meanwhile, several infrastructures that could support broader regional connectivity are either unavailable, not yet operational, or lack direct connections to the region. These limitations are crucial because SEZ activities involve not only the movement of tourists but also the mobility of investors, workers, and the distribution of goods and business needs. Therefore, connectivity issues are not solely related to the presence or absence of infrastructure, but also to how various modes of transportation are interconnected and form a network that supports the region's functions (Caraka et al., 2023c; Li et al., 2023).

Based on these conditions, the management direction is directed at strengthening intermodal connectivity between land, sea, and air infrastructure. The development or improvement of connectivity infrastructure must be considered in conjunction with other transportation networks, so that it does not stand alone. This approach is necessary to ensure that the Tanjung Lesung Special Economic Zone (SEZ) has better connections with economic activity centers, transportation hubs, and supplier and market areas related to the region's activities.

3.6.2 Strengthening Administrator Institutions

In terms of human resources, the obstacles identified were not primarily related to the number of workers, but rather to the institutional structure and implementation of the SEZ Administrator's functions. The Administrator holds a crucial position in SEZ administration, serving as one of the parties directly involved in providing services, facilitating, and overseeing activities within the area. Therefore, the existence of the Administrator's institutional structure needs to be assessed not only based on its formal status but also on the extent to which it can effectively carry out these functions (Frick et al., 2019b; Pellicanò & Trecozzi, 2022b).

Interview results indicate changes in the implementation of the Tanjung Lesung Special Economic Zone Administrator's functions. Several functions previously performed by the Administrator are no longer fully implemented within the service structure within the area due to changes in the division

of authority and the takeover of certain functions by the National Special Economic Zone Council. This situation results in the Administrator's presence not being fully perceived as an institution providing direct services and facilitation within the area.

These conditions impact the relationship between area users and the management agency. When administrative, service, and supervisory functions are not located close to the area, coordination processes can be lengthy, requiring users to communicate with agencies outside the SEZ (Pellicanò & Trecozzi, 2022c). This can also diminish the Administrator's role as a liaison between business actors in the area and the government and relevant agencies.

Based on these conditions, the management direction is directed at reinforcing the Administrator's function at the regional level. This strengthening is not merely through additional personnel, but primarily through clarifying duties, functions, and authorities that can be directly implemented. The Administrator needs to have the capacity to facilitate services, assist with the licensing process, coordinate with relevant agencies, and carry out supervisory functions within their authority (Kongela et al., 2025f; Pellicanò & Trecozzi, 2022d). Thus, the Administrator can once again function as a coordination point that brings service and management processes closer to activities taking place within the region.

3.6.3 Provision of Administrative Services within the Area

Ease of administrative services is one of the characteristics expected to support the attractiveness and ease of doing business in SEZs (Pellicanò & Trecozzi, 2022e). Research results indicate that administrative and licensing services are already available through several mechanisms, primarily the Online Single Submission (OSS) and direct services through the Public Service Mall (MPP). This means that the problem identified is not entirely a lack of a service system, but rather a matter of the location, scope, and connectivity of services to user needs within the area.

Under existing conditions, some SEZ users still need to access services outside the area when requiring specific services. This situation indicates a gap between the concept of integrated services and the service conditions received directly by area users. For investors and businesses, the need to access multiple services in different locations can add additional coordination steps (Wang & Sun, 2025). Meanwhile, for workers and tourists, specific service requirements, such as immigration or visas, also require access to authorized institutions.

This situation is becoming increasingly relevant because the characteristics of Special Economic Zones (SEZs) place ease of service as a crucial element in supporting economic activity. While the OSS (Online Service Provider) can reduce the need for face-to-face services for certain types of permits, not all service requirements can be handled through a single digital system. Some services still require the involvement of sectoral agencies with their respective authorities.

Therefore, the management direction is focused on providing administrative and licensing services that can be accessed directly within the area. The type of service can be tailored to the needs and authority of each agency, including services related to business licensing, customs, immigration, and visitor visas. The presence of services within the area is expected to reduce the need for users to move to service locations outside the area while strengthening the area's function as a location for economic activity with easy access to services.

3.6.4 Digital Integration of Licensing Services

In addition to limitations in direct services, the study also found limitations in the scope of digital services. The OSS (Online Shopping Center) has become a key instrument in supporting online licensing services, but interviews revealed that the system does not yet cover all service needs arising from Special Economic Zone (SEZ) activities. This situation is related to the characteristics of SEZs, which involve diverse activities and service needs from multiple agencies.

These limitations mean that services for certain needs must still be handled through different mechanisms or institutions. Thus, even though some licensing processes have been digitized, users still don't have a fully integrated service experience within a single system. This fragmentation has the potential to increase administrative steps, especially when a single activity requires services from multiple agencies with different systems (Sariwulan et al., 2024).

Based on these conditions, the management direction is directed at strengthening the integration of SEZ services into digital systems. Integration can be directed at providing information, procedures, and service mechanisms related to SEZ needs in a single, easily accessible system. Service requirements such as customs, immigration, and visitor visas can be considered for integration in accordance with the authority and mechanisms applicable to each agency.

Thus, strengthening administrative services is not only directed at increasing physical services within the region, but also at developing a digital service system capable of connecting various user needs. Physical and digital services are seen as two complementary mechanisms, especially since not all services can be provided online and not all user needs require face-to-face service. The combination of the two can be a guideline for reducing the fragmentation of services found in existing conditions.

DISCUSSION

The results show that the success of the Tanjung Lesung Special Economic Zone (SEZ) depends on more than the facilities inside the zone. Its links to the transportation system, the capacity of its management institutions, and the ease of its administrative services matter as much. Of the four aspects analyzed, namely connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems, tourism infrastructure is the most established. The zone already has tourist attractions, accommodation, restaurants, recreational facilities, communication, health, security, sanitation, and banking services, along with other supporting facilities. These internal facilities, however, are not matched by adequate external connectivity. Roads lead to the zone, but its links to toll roads, railways, ports, and scheduled flights remain weak.

This pattern places Tanjung Lesung within a wider body of evidence on the role of access in SEZ and tourism performance. Studies of SEZs in Campania found that accessibility shapes how well zones are integrated into regional planning (Buonocore et al., 2023), while an analysis of 153 Chinese cities showed that transportation connectivity strategies are linked to the strength of regional tourism economies (Chen et al., 2022). Research on transport integration in the Yangtze River Delta points in the same direction, tying the coordination of

regional transport networks to the quality of economic development (Li et al., 2023). Read against these studies, the Tanjung Lesung case suggests that a zone can be well equipped on the inside and still be cut off from the centers of economic activity and the regional transport network that its tourism and investment functions depend on.

The connectivity problem is also a matter of intermodal integration. Salakanagara Airport and the heliport show that some connectivity infrastructure already exists in the area. Neither has replaced the need for a regional transport network that serves the movement of tourists, investors, and workers and the distribution of goods. Strategic planning studies on regional airports stress that an airport adds value only when it is planned together with the wider transport system and the demand it is meant to serve (Kok & Siripipattanakul, 2025), and research on tourist mobility shows that visitors' travel choices at a destination depend on the transport options available to them (Miravet et al., 2021). The SEZ literature likewise treats infrastructure and connectivity as core components of an environment that supports regional economic activity (Buonocore et al., 2023; Caraka et al., 2023). For Tanjung Lesung, this means that strengthening internal facilities will not be enough; the zone needs better connections with transportation systems outside its boundaries.

Institutional and administrative services form the second major obstacle. The SEZ Administrator has been established, but it does not yet perform its functions as the institutional indicators require, because the SEZ National Council has taken over part of the management and supervisory functions. A formally established institution, in other words, does not guarantee effective management of the zone. Studies of resource governance have reached a similar conclusion, showing that formal institutions can exist without being effective when their roles overlap with other actors or lack the authority to act (Dang et al., 2017; Gordon et al., 2022). Work on policy implementation explains this gap through institutional arrangements, in which the design of authority and the relations between organizations can cause implementation to fail even when the formal structure is in place (Peters, 2024). Evidence from Indonesia supports this reading. Hidayat and Negara (2020) argue that Indonesian SEZs need proper governance to perform, and stakeholder analysis of the Kendal SEZ shows that the distribution of roles between actors shapes how a zone develops (Ramadhan et al., 2025). In Tanjung Lesung, the problem is less the absence of an institution than the displacement of its functions.

This institutional problem extends to administrative control instruments. Licensing services are available through the Online Single Submission (OSS) system and the Public Service Mall (*Mal Pelayanan Publik*), but not all services can be accessed inside the zone. Some services must still be completed outside the zone, and the OSS does not yet cover every need related to SEZ activities, including customs, immigration, and visitor visas. Studies on administrative simplification in SEZs argue that ease of doing business depends on how close, integrated, and complete the services are for zone users (Pellicanò & Trecozzi, 2022). Research on one-stop approval systems shows that integration across agencies, not the existence of a single portal, determines whether such systems reduce the burden on

applicants (Lodhia et al., 2018). Studies on permit services and access to licensing information reach a related conclusion, finding that service quality improves when applicants can reach the information and procedures they need without moving between institutions (Sariwulan et al., 2024; Yan et al., 2026), and digital certification mechanisms are being developed to make electronically issued documents verifiable (Agarwal et al., 2026). Ease of access in an SEZ should therefore be judged by the proximity, integration, and scope of the services that zone users receive, in addition to the existence of a licensing system.

Connectivity, institutions, and administration are tied to one another, so the obstacles facing the Tanjung Lesung SEZ are multidimensional. Weak connectivity makes the zone harder to reach, while an Administrator that does not perform its full role and administrative services that are only partly available inside the zone raise the barriers for investors and businesses. At the same time, the relatively strong tourism infrastructure shows that the zone already has an internal base that can be developed further. This combination fits the view of SEZs as systems in which several conditions must be met together. Comparative work using Porter's diamond model explains SEZ performance through the interaction of factor conditions, related industries, demand, and the role of government (Zhao & Tan, 2023), and research on facilities management in Tanzanian SEZs links effective operations to management capacity as well as physical assets (Kongela et al., 2025). The condition of the Tanjung Lesung SEZ is therefore better described as a question of ecosystem readiness than as a shortage of tourism facilities, and the central task is to connect the internal facilities with the transportation, institutional, and service systems that support activity in the zone.

The findings agree with the literature and with SEZ development guidelines that treat infrastructure, institutions, governance, and services as critical to a zone's success. The SEZ literature stresses the need for an enabling environment that allows a zone to operate effectively (Frick et al., 2019; Zeng, 2021), and the ASEAN Guidelines for Special Economic Zones make the same point. Studies of the Mandalika SEZ, another Indonesian tourism SEZ, also link its development benefits to connectivity and to the events and activities that bring visitors to the area (Cantika Yuli et al., 2025; Caraka et al., 2023). The resource-based approach to tourism-oriented SEZs adds support, showing that the resources a zone holds can help reduce regional disparities when they are put to productive use (Tleuberdinova et al., 2026). Tanjung Lesung has these resources in the form of tourism infrastructure, yet its weak connections and incomplete institutions limit how far they can be used.

The findings also depart from several strands of the literature. First, a large part of SEZ research measures success through economic outcomes such as investment, employment, exports, or foreign direct investment (Alcorta & Tesfachew, 2020; González, 2020; Nguyen & Tien, 2021). This study does not measure a causal link between obstacles and economic performance. It identifies existing conditions using indicators for the key SEZ aspects, derived from a synthesis of theory and regulation, and then points to the elements that are missing or not yet working as the indicators require. Second, another strand gives fiscal incentives and state financial support a central place in SEZ development (Dyachkova et al., 2026;

Najafzade, 2025). The Tanjung Lesung case suggests that incentives alone cannot make up for weak access, displaced institutional functions, and services located outside the zone, because investors and visitors first have to be able to reach the zone and complete their procedures there. Third, studies that treat SEZs as growth poles or industrial hubs tend to assume that concentrated investment will spread benefits to the surrounding area (Leonov, 2020; Streltsov et al., 2020), while work from South Africa questions this assumption and finds equity gaps in local economic development around SEZs (Muringa et al., 2025). This study does not test the distribution of benefits, but its findings show that a zone with weak operational foundations is unlikely to act as a growth pole. Finally, earlier research on Tanjung Lesung itself has examined tsunami resilience (Ristya et al., 2022), the governance of cultural ecosystem services (Kusuma et al., 2023), and the contribution of beach tourism to local communities (Amanda et al., 2020). These studies focus on the physical environment, resources, and community outcomes, whereas this study looks at the operational readiness of the zone across connectivity, institutions, human resources, and administration.

The novelty of this study lies in three points. First, it introduces an indicator-based diagnosis of SEZ operational readiness. The indicators are drawn from a synthesis of theory and regulation and are used to locate missing or underperforming elements, instead of measuring success only through economic outcomes. Second, it brings to light two gaps that outcome-based studies tend to miss. One is a gap between internal facilities and external connections, in which a zone is well equipped inside but weakly linked to the regional transport network. The other is a gap between formal and functional institutions, in which an Administrator exists on paper while part of its role is carried out by the SEZ National Council and key services remain outside the zone or outside the scope of the OSS. Third, it extends research on Tanjung Lesung, which has so far focused on disaster resilience, ecosystem services, and community benefits, to the question of whether the zone is ready to operate as an SEZ.

The study contributes in three ways. Theoretically, it frames SEZ success as the readiness of an ecosystem in which connectivity, tourism infrastructure, human resources, and administrative control systems must function together, and it shows that the formal existence of facilities and institutions should be separated from their actual functioning. Methodologically, it offers a missing-element diagnostic that can serve as a first evaluation stage before studies that link SEZ conditions to investment, employment, or tourist numbers. Practically, it gives the government and SEZ managers a clear list of priorities for Tanjung Lesung: external connectivity and intermodal integration, the full functioning of the Administrator, and administrative services, including customs, immigration, and visitor visas, that can be completed inside the zone.

IMPLICATIONS POLICY

The study finds that a Special Economic Zone (SEZ) succeeds when several aspects support one another, and the presence of the zone and its facilities is only one of them. Studies of SEZ performance describe connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems as elements with distinct functions that depend on each other to keep a zone operating (Cantika Yuli et al., 2025; Chen et al., 2022). Our findings show that a zone with fairly adequate tourism infrastructure can still run into operational problems when its external connectivity, management institutions, and administrative services are weak. An evaluation of SEZ performance should therefore look at the zone's links to the transportation system, the capacity of its institutions, and the ease of its administrative procedures, in addition to its internal facilities.

For practice, the findings offer an initial framework for evaluating SEZ performance by listing the elements a zone needs. A simple review of existing conditions and indicators for the key SEZ aspects is enough to show which elements are missing or underperforming. The government and SEZ managers can run this review as a first evaluation step, before commissioning detailed studies on how these barriers affect investment, tourist numbers, business activity, and regional economic performance. The review results then tell them which aspects need further intervention.

The main policy implication is that the Tanjung Lesung SEZ needs integrated development across connectivity, institutions, and administrative services. Any new tourism facility inside the zone should come with better access to the zone, so that visitors can reach the tourism potential it already has. On the institutional side, the government should strengthen the Administrator so that it can deliver services, issue licenses, and supervise activities at the regional level. The administrative system should provide services on site and connect them with digital services through the Online Single Submission (OSS) system. Policy priorities should cover institutional capacity and administrative facilitation as part of the SEZ ecosystem, alongside physical development. An SEZ stimulates economic activity when businesses in the zone have easy access, institutional certainty, and efficient services; land and internal infrastructure on their own do not achieve this goal (Caraka et al., 2023).

CONCLUSION

This study aims to identify aspects that hinder the implementation of the Tanjung Lesung Special Economic Zone (SEZ) based on important SEZ aspects, including connectivity infrastructure, tourism infrastructure, human resources, and administrative control systems. The results indicate that most elements of tourism infrastructure are already available within the area, so these aspects are not a major obstacle to the SEZ's implementation.

In contrast, the main obstacles were identified in connectivity infrastructure, human resources, and administrative control systems. In terms of connectivity, these obstacles were identified by the lack of integration of the road network with other transportation infrastructure, the lack of a railway and port network supporting the region, and the lack of regular domestic and international flight connectivity. In terms of human resources, the main obstacles were related to the suboptimal function of the Special Economic Zone (SEZ) Administrator in providing services, licensing, and supervision within the region. Meanwhile, in terms of administrative control systems, licensing services were not yet fully

available within the region, and the OSS (Overseas Online System) did not yet cover all SEZ service needs.

These findings indicate that the obstacles to the Tanjung Lesung Special Economic Zone (SEZ)'s success are multidimensional, encompassing not only a lack of physical infrastructure but also institutional and administrative aspects. Therefore, SEZ development requires an integrated approach, focusing on infrastructure connectivity, the effectiveness of management institutions, and ease of service for investors, businesses, workers, and tourists.

Recommended policy responses include strengthening land, sea, and air connectivity; re-establishing a regional-scale Administrator; providing licensing services within the region; and expanding the integration of customs, immigration, and visitor visa services into the OSS (Online Shopping Center). Fulfilling these aspects is expected to reduce operational barriers and support the Tanjung Lesung Special Economic Zone (SEZ) in more optimally performing its regional functions.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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