



Strategy for strengthening infrastructure and transportation facilities to support tourism development in Southeast Sulawesi Province

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ABSTRACT

The aims of the research is to identify the obstacles were faced in encouraging tourism development in Southeast Sulawesi Province and finds Strategy in Strengthening Infrastructure and Transportation Facilities to Support Tourism in Southeast Sulawesi Province. The method used in this research is exploratory descriptive, utilizing primary and secondary data as sources of information. Based on the research results, it can be concluded that several obstacles were faced in encouraging tourism development in Southeast Sulawesi Province include damaged roads and limited connectivity, inadequate sea transportation and local ports, the unoptimized role of airports in several districts/cities in Southeast Sulawesi Province to support tourism development, limited transportation modes for many existing tourist destinations, and limited supporting tourism infrastructure in several tourist destinations in Southeast Sulawesi Province

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INTRODUCTION

Tourism has a multiplicative effect on the local economy through job creation, increased community income, and boosting supporting sectors such as transportation, accommodation, culinary arts, and the creative industry (Saksono et al., 2022; Simanjuntak & Manalu, 2019). Furthermore, the tourism sector can encourage the preservation of local culture by promoting arts, traditions, and local wisdom as tourist attractions (Surata et al., 2024; Trisoko et al., 2024). As a strategic sector with a high multiplier effect, tourism contributes significantly to job creation and improved local community welfare (Icoz & Icoz, 2019; Livandovschi, 2022; Novandi & Adi, 2021). Furthermore, tourism serves as a medium for promoting regional identity, including culture,

cuisine, arts, and natural resources, to a wider audience, both nationally and globally (Ivona, 2021). Analysis shows that when local potential is professionally packaged as tourist attractions, it can build a regional image and enhance the destination's competitiveness. However, these benefits can only be achieved if tourism development is carried out in a planned, inclusive, and long-term manner, taking into account the balance between economic, social, and ecological aspects.

It must be acknowledged that environmental and socio-cultural sustainability aspects in island regions like Southeast Sulawesi are often under-prioritized from the initial planning stages of tourism infrastructure development. Despite efforts to involve local communities and conduct environmental impact assessments (AMDAL), their implementation has been suboptimal. Development often focuses on short-term economic growth without considering the carrying capacity of coastal and marine ecosystems and the sustainability of local culture. This risks environmental degradation and the loss of cultural identity.

This research is based on the fact that tourism infrastructure in Southeast Sulawesi Province still lags behind that of Maluku or Nusa Tenggara, particularly in terms of transportation connectivity, accommodation, and supporting facilities. Inter-island access remains limited and lacks an efficient transportation network. Furthermore, private investment and destination promotion are minimal. Meanwhile, Nusa Tenggara, particularly Labuan Bajo, has experienced accelerated development thanks to central government support. Southeast Sulawesi requires integrated planning and improvements to its basic infrastructure to compete regionally.

The integration of tourism development and spatial planning is not only important from an aesthetic and functional perspective, but also a strategic effort to create a balance between economic growth and environmental sustainability (Liang et al., 2022). Proper zoning allows for functional spatial division – which areas are used for tourism, which areas should be protected as conservation areas, and which areas can be developed for supporting infrastructure such as roads, accommodations, and public facilities. This prevents development from exploitative practices that can damage local ecosystems.

Furthermore, good spatial planning also plays a role in mitigating conflicts between local communities, investors, and the government, particularly regarding land use (Solly, 2021). When zoning is developed in a participatory manner, communities feel ownership and participate in maintaining the area. Furthermore, the quality of infrastructure integrated into spatial plans – such as transportation systems, waste management, clean water, and electricity – will significantly impact the quality of the tourist experience and their level of satisfaction (Achmad et al., 2023; Kanwal et al., 2020; Ramyar & Halim, 2020).

Southeast Sulawesi Province has enormous tourism potential that can be utilized as a source of economic growth, increasing regional income, and boosting community welfare (Nur et al., 2024). Destinations such as Wakatobi, Labengki Island, and Nirwana Beach are prime assets that can attract both domestic and international tourists. If optimally managed, this sector can become a new driving force for regional economic growth, given its multiplier effect on other sectors such as MSMEs, transportation, hospitality, and the creative economy. However, to make tourism a leading sector, a strategy is needed to strengthen basic infrastructure and inter-regional connectivity, given Southeast Sulawesi's geographical location, which consists of islands. The development of ports, airports, roads, and other supporting tourism facilities is crucial to improving accessibility and comfort for tourists (Lousada & Castanho, 2022). Furthermore, involving local communities in tourism management is also key. When communities are involved as actors, not simply spectators, economic benefits will be more equitable and sustainable (Yanes et al., 2019). With planning based on local potential, appropriate spatial planning, and cross-sector synergy, Southeast Sulawesi has a significant opportunity to make tourism the backbone of an inclusive and competitive economy.

RESEARCH METHOD

The method used in this research is exploratory descriptive, utilizing primary and secondary data as sources of information. This approach is characteristic of qualitative research, which focuses on exploring, explaining, and describing knowledge comprehensively through etic and emic perspectives. According to Creswell (2015), data in qualitative research can be either oral or written. Primary data is obtained from interviews and direct observations of the actors involved, while secondary data is obtained through a review of scientific literature such as journals and books relevant to the research topic. This research process was conducted from July to August 2025.

The types of triangulation used in this research are source and method triangulation. Method triangulation is used because the research is based not only on interviews with informants but also on field observations and documentation studies. Source triangulation is used because more than one informant was interviewed to ensure the validity of the interview results.

The informants for this research are described in Table 1 below.

Table 1. Research Informants

No	Name	Position
1	Dr. Muhamad ST.,M.Si	Rajulan, Head of Department of Transportation of Southeast Sulawesi Province
2	H.Belli, SE.,M.Si	Head of Department of Tourism of Southeast Sulawesi Province
3	Muh. Ammarie Amrin, S.STP, M.Si	Head of the Destination and Tourism Industry Development Division, Department of Tourism of Southeast Sulawesi Province
4	Andi Syahrir, S.TP.,M.Si	Head of the Marketing Development Division, Department of Tourism of Southeast Sulawesi Province

Source : Primary Data (2025)

This study did not take specific samples of tourist destinations in Southeast Sulawesi Province but took general samples of several tourist destinations such as Wawonii Island, Labengki Island, Hoga Island, Bokori Island and several other tourist destinations in Southeast Sulawesi Province.

RESULTS AND DISCUSSIONS

From the results of interviews and observations in the field, several research results were found as follows:

- a. Main Obstacles in Tourism Development in Southeast Sulawesi Province Some of the main obstacles faced in encouraging tourism development in Southeast Sulawesi Province in terms of infrastructure and transportation facilities include:

- 1) Damaged road conditions and limited connectivity

Poor road quality, particularly in remote areas and access to key tourist attractions, is a significant obstacle to tourism development (Odeku, 2020). Many prime destinations in Southeast Sulawesi are accessible only by land, often with damaged or unpaved roads, making it difficult for tourists to visit and increasing logistics costs. Connectivity between districts and between tourist destinations remains weak, making the potential for developing integrated tourism packages difficult to realize. The lack of investment in road construction and maintenance also demonstrates

a lack of prioritization of the tourism sector. Therefore, improving the quality and expanding the road network is crucial for easily, comfortably, and efficiently accessible tourist destinations, ultimately driving increased tourism visits and overall local economic growth.

2) Sea transportation and local ports are less supportive

As an archipelagic region, maritime transportation should be the backbone of inter-island connectivity in Southeast Sulawesi. However, local port infrastructure remains inadequate in terms of capacity, security, and service. Many small ports lack basic facilities such as proper docks, passenger terminals, navigation systems, and adequate security. Furthermore, the irregular frequency and schedule of inter-island vessels complicate tourist mobility and the distribution of tourism logistics (Timothy, 2022). This situation prevents optimal access to many potential marine tourism destinations and exotic islands. Improving the quality and number of ports, including the integration of maritime transportation with land and air, is crucial to opening up access to tourist destinations and supporting the development of coastal areas as new tourism growth centers.

3) The role of airports in several districts/cities in Southeast Sulawesi Province has not been optimized to support tourism development.

Although Southeast Sulawesi has several airports spread across various regencies/cities, their utilization to support tourism remains very limited. Many airports lack direct flights from major cities, have low flight frequencies, and lack supporting infrastructure, such as terminals, passenger services, and tourism information. Consequently, tourists wishing to visit certain areas must undertake long and tiring journeys, which diminishes the attractiveness of the destinations. Optimizing airports through increased capacity, promoting direct flights, and collaborating with airlines and travel agents is essential (Rodríguez-Sanz & Rubio-Andrada, 2022). Furthermore, airports need to be designed as entry points for tourism, showcasing information, local culture, and connecting transportation services to key tourist attractions to truly support the growth of the region's tourism sector (Dileep & Pagliara, 2023).

4) Limited modes of transportation for many existing tourist destinations

Limited public transportation to and around tourist destinations is a major obstacle to tourism development in Southeast Sulawesi (Raad, 2019). Many tourist destinations lack adequate public transportation options, in terms of number, routes, and comfort. Tourists often have to rent private vehicles at high costs, ultimately reducing the destination's competitiveness. This is exacerbated by the lack of an integrated transportation system that efficiently connects airports, ports, and tourist attractions. To encourage inclusive and sustainable tourism, local governments need to develop a tourism transportation system based on local needs, such as shuttle buses, integrated tourist transportation, or shuttle services from key access points to tourist attractions. Furthermore, collaboration with the private sector in providing tourism transportation can be a medium- to long-term solution.

5) The supporting infrastructure for tourism is still limited in several tourist destinations in Southeast Sulawesi Province.

The limited availability of infrastructure, such as public restrooms, parking lots, tourist information centers, places of worship, pedestrian paths, and disability-friendly facilities, remains

a problem in many tourist destinations in Southeast Sulawesi. These basic facilities are crucial for ensuring the comfort and safety of tourists, especially families and international travelers. The absence of supporting infrastructure often makes tourists feel uncomfortable and reluctant to return. Furthermore, this lack of infrastructure also negatively impacts the image of regional tourism management (Almeida & Machado, 2021; Yan et al., 2022). Local governments need to prioritize the development of supporting infrastructure in their tourism development master plans, while still considering aspects of sustainability and local wisdom. Community involvement in maintaining and managing public facilities is also crucial to foster a sense of ownership and shared responsibility in supporting the advancement of the regional tourism sector (Rahman & Baddam, 2021).

b. Analysis of Internal and External Factors in Strengthening Infrastructure and Transportation Facilities to Support Tourism in Southeast Sulawesi Province .The internal factors are as follows:

1) Strength

a) Potential for Marine Class Tourism

Southeast Sulawesi Province boasts several world-class tourist destinations, such as Hoga Island, Labengki Island, and Bokori Island. These destinations boast extraordinary biodiversity, attracting international tourists and serving as key icons for Southeast Sulawesi's tourism promotion on the global stage (Larisu et al., 2022).



Figure 1 The beauty of Wakatobi Island

Source : Ministry of Tourism and Creative Economy of the Republic of Indonesia (2025)

b) The existence of airports in several districts/cities

Accessibility through airports and ports provides a strong foundation for developing interregional tourism connectivity, while accelerating the influx of tourists and the logistics needed by the regional tourism industry (Bergantino et al., 2023). This is evident at Betoambari Airport in Baubau and Sangia Nii Bandera Airport in Kolaka.

c) Local government commitment to promoting tourism

The regional government demonstrates real commitment through regulation, promotion, and budgeting of the tourism sector and supporting infrastructure as a priority in the regional medium-term development plan (RPJMD).

d) Cultural and natural diversity as a tourist attraction

Southeast Sulawesi Province has a unique diversity of ethnicities, traditions, and natural landscapes, which are an added value for the development of sustainable culture- and nature-based tourism.

2) Weakness

a) The quality of roads to tourist destinations is still largely damaged.

Southeast Sulawesi Province has a unique diversity of ethnicities, traditions, and natural landscapes, which are an added value for the development of sustainable culture- and nature-based tourism.

b) Inter-island transportation is not yet optimally integrated.

The lack of coordination and frequency of sea transportation hampers connectivity between tourist islands, making potential destinations difficult to reach for tourists, especially those from outside the region.

c) Several airports are not yet at their maximum capacity

Several airports in Southeast Sulawesi Province are still limited in their routes and flight frequencies, are not yet equipped with tourism promotion facilities, and do not yet function as main entry points to surrounding destinations (Astuti, 2021).

d) There is still a lack of public transportation facilities to tourist attractions.

The lack of public transportation such as shuttles, tour buses, or regular public transportation to destinations makes tourists dependent on private transportation with high costs and limited access. The external factors are as follows

3) Opportunities

a) National strategic projects supporting for infrastructure

The central government is paying attention to the development of underdeveloped regions through infrastructure projects, which the Southeast Sulawesi Provincial Government can utilize to strengthen accessibility to key tourist destinations.

b) Opportunities for collaboration with private investors

The public-private partnership model can accelerate the development of transportation and tourism facilities, while reducing the burden on regional budgets and improving the quality of tourism services in various regions.

c) The trend of marine tourism and ecotourism is increasing

Tourist interest in marine destinations, diving, and nature-based experiences is increasing, opening up significant opportunities for Southeast Sulawesi Province to strengthen its marine tourism branding and products.

d) Development of transportation technology and digitalization of tourism

Digital innovations such as online transportation booking systems, tourist ticket integration, and digital promotions can help accelerate tourism connectivity and expand market reach.

4) Threats

a) Risk of environmental damage due to massive development

Environmentally unfriendly infrastructure development can damage natural ecosystems, especially in coastal areas and small islands that are the mainstay of natural tourism in Southeast Sulawesi Province.

b) Climate change and natural disasters

Natural phenomena such as abrasion, flooding, and extreme weather can damage infrastructure and reduce tourist interest, while increasing the maintenance costs of transportation facilities.

c) Competition with other tourism destinations in Indonesia

Earlier-developed destinations like Bali, Lombok, and Labuan Bajo are becoming tough competitors. Without adequate accessibility and facilities, Southeast Sulawesi Province could lose out.

d) Fluctuations in policies and regional budget limitations

Changes in policy direction, fiscal limitations, and slow bureaucracy can hinder the realization of consistent and sustainable tourism infrastructure development.

So the strategies recommended in this research include:

1) S-O Strategy

a) Utilization of marine and cultural tourism potential through support for national strategic projects

With world-class marine tourism potential (such as Wakatobi) and its rich cultural heritage, the Southeast Sulawesi Provincial Government can optimize support for national infrastructure projects to improve road, airport, and port access to key tourist destinations.

b) Development of airports as digital nodes and gateways for marine tourism

Airports already available in several districts/cities can be modernized and integrated with digital tourism technology and marine tourism promotion, in line with ecotourism trends and advances in transportation technology.

2) S-T Strategy

- a) Implementation of sustainable tourism principles to protect the environment from massive development

With the commitment of local governments and the cultural and natural diversity they possess, the government can implement strict environmental regulations in infrastructure development so as not to damage the tourism ecosystem.

- b) Promote local excellence to compete with other national destinations

The uniqueness of Southeast Sulawesi's marine tourism and distinctive culture must be strongly branded so that it can compete with Bali, Lombok, or Labuan Bajo in attracting national and international tourists.

3) W-O Strategy

- a) Integrating inter-island transportation with the support of private sector cooperation

With the opportunity for private investor cooperation, the government can build an integrated sea transportation system between tourist destinations using fast boats, modern ferries and tourist ports.

- b) Optimization of airports and public transportation based on digital tourism

Advances in transportation technology have enabled the use of digital applications for booking, promoting, and managing public transportation logistics to previously inaccessible tourist destinations.

4) W-T Strategy

- a. Infrastructure planning based on environmental carrying capacity and disaster mitigation

To avoid environmental damage and the impacts of climate change, the development of roads, ports and airports must be designed based on studies of regional disaster risk and carrying capacity.

- b. Strengthening central-regional collaboration to address budget and policy fluctuations

Weaknesses in infrastructure and transportation can be reduced through harmonization of central-regional policies, preparation of joint master plans, and diversification of development financing sources (for example through CSR or village tourism funds). The strategy recommended in this study is the S-O strategy which consists of utilizing the potential of marine and cultural tourism through supporting national strategic projects and developing airports as digital nodes and gateways for marine tourism.

CONCLUSION

Based on the research results, it can be concluded that several obstacles to the development of the transportation sector include damaged roads and limited connectivity, inadequate sea transportation and local ports, the unoptimized role of airports in several districts/cities in Southeast Sulawesi Province to support tourism development, limited transportation modes for many existing tourist destinations, and limited supporting tourism infrastructure in several tourist destinations in Southeast Sulawesi Province.

The recommended strategy to encourage tourism development in Southeast Sulawesi Province, based on infrastructure and transportation support, is the S-O strategy, which consists of leveraging the potential of marine and cultural tourism through support for national strategic projects and developing airports as digital hubs and gateways for marine tourism. The implications of the recommended strategy are to encourage the improvement of destination image, diversify tourist attractions, improve transportation access to tourist destinations and empower local communities, thus creating a strong differentiation compared to Bali or Labuan Bajo.

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