

【INDONESIA】

Study and Research on Challenges in the Transportation and Tourism Sector in the ASEAN-India Region in 2022

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1. INTRODUCTION

In the ASEAN-India region, due to rapid economic growth, there have been improvements in infrastructure development and service levels of public transportation in the transportation sector. However, issues such as inadequate connectivity between different modes of transportation and insufficient safety awareness in public transportation have been observed. Additionally, the global spread of the COVID-19 pandemic has brought about new changes in passenger and cargo transportation.

Considering these circumstances, in the fiscal year 2022, a study was conducted on the challenges in the transportation and tourism sectors as a whole. Specifically, focusing on five countries in the ASEAN-India region that are of particular interest: Vietnam, the Philippines, Indonesia, Thailand, and India. Expert individuals with knowledge and experience were engaged in interviews to understand the challenges in the transportation and tourism sectors of these target countries, to identify the underlying causes of these challenges, and based on the results, to consider and organize approaches to addressing these issues. Additionally, since this year marks the first year of focus on the tourism sector, the collection of foundational information was also included in the scope of the investigation.

This report presents the background and challenges in the transportation and tourism sectors of Indonesia, along with discussing the direction of considerations for addressing these challenges.

2. Current Situation and Challenges in Transportation Sector

(1) Current Status of Transportation Infrastructure

① Roads

a) Restructuring of Logistics Hubs in the Jakarta Metropolitan Area

Since 2018, the Indonesian government has been progressing with the development of a new port in the eastern outskirts of Jakarta, near Patimban, which is home to the country's largest port, Tanjung Priok. In 2020, the automobile handling terminal of the new port started its operations. Consequently, it is anticipated that there will be a significant increase in traffic to the Patimban new port. However, the only access road to this port, National Road 1, is heavily congested and in poor pavement condition, making it unsuitable for transporting completed vehicles. As a result, the Patimban Access Highway, currently under construction, will become a crucial access route for consolidating cargo bound for Patimban port.



Source : NNA Global Navigation

Image: Location of Patimban Port

b) Road Pricing (ERP) in the Jabodetabek Area

In 2018, the economic loss due to traffic congestion in the Jakarta metropolitan area was estimated to be 100 trillion Indonesian rupiah (approximately 75 billion Japanese yen). To alleviate congestion, an Electronic Road Pricing (ERP) system has been planned for the Jabodetabek area. In 2021, Roatex Ltd. Zrt. from Hungary was awarded the procurement contract for the domestic toll road electronic payment system, utilizing a Multi-lane Free-Flow (MLFF) electronic payment system. This system employs the Global Navigation Satellite System (GNSS) to identify the location of vehicles through satellite communication, enabling the imposition of charges based on vehicle movements.

c) Localization of EV Vehicles and Battery Supply Chain

In order to achieve carbon neutrality by 2060, the Indonesian government has set ambitious targets. By 2035, the target for total four-wheeled vehicle production is 4 million units, with 30% of those being Low Carbon Emission Vehicles (LCEVs). Additionally, they plan to increase the number of public charging stations for Electric Vehicles (EVs), known as SPKLU, to 31,859 units and public battery exchange stations for electric two-wheelers (SPBKLU) to 67,000 units by 2030.

However, due to the higher cost of EVs, their sales have been relatively slow. To promote their adoption in the domestic market, automotive manufacturers have been conducting pilot projects to share EVs.

Indonesia boasts the world's largest reserves and production of nickel. Recognizing the growing demand for automotive lithium-ion batteries, the country established the state-owned Indonesia Battery Corporation (IBC) in 2021 with the aim of building a supply chain for EV batteries. This initiative aligns with Indonesia's rich nickel resources and their potential for use in battery production for electric vehicles.

②Railway

a) Transit-Oriented Development

In Jakarta, various entities have initiated Transit-Oriented Development (TOD) projects, which focus on

creating urban developments centered around public transportation. Indonesia's national railway company, KAI, has been working on expanding the transportation network, while the state-owned housing agency is developing high-rise residential buildings around train stations. The Master Developer for TOD along transit lines has been designated as MITJ, a subsidiary of MRT Jakarta, through a governor's decree. JAKPRO is leading TOD efforts in the Jakarta LRT project, and the Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development (JOIN) is also collaborating with Japanese companies on multiple TOD projects.

However, due to the involvement of multiple entities, there have been criticisms of inadequate coordination and unclear objectives among these organizations.

b) Development of High-Speed Rail Network

The Jakarta-Bandung High-Speed Railway is planned for operational commencement in 2023; however, it has encountered a series of challenges including cost overruns, inadequate funding from the Indonesian side of the project consortium (KCIC), and issues related to station accessibility. Furthermore, the prospect of future extensions of the Jakarta-Bandung High-Speed Railway is uncertain.



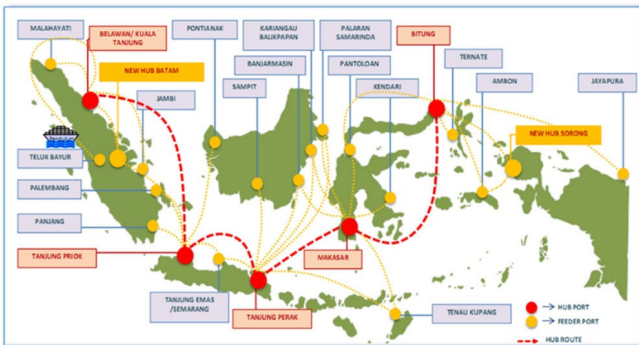
Source : <https://www.benarnews.org/english/news/indonesian/railway-01192021153111.html>

Image: Alternatives to High-Speed Rail and Semi-High-Speed Rail Networks

③Maritime Shipping

President Joko Widodo has introduced the maritime nation concept to enhance transportation efficiency in the relatively less developed eastern regions of Indonesia. To achieve this goal, the National Development Planning Agency has put forward the Sea Toll initiative. This initiative aims to connect regions through maritime

corridors and improve logistics infrastructure in order to reduce price disparities and promote economic development. To achieve this, a seamless network system is required that connects maritime shipping, road, rail, and aviation networks, thereby fostering a comprehensive transportation framework. In terms of port development, the Infrastructure Five-Year Plan includes the establishment of strategic ports and the development of ferry terminals, with numerous projects currently underway.



Source: Ministry of National Development Planning (BAPPENAS), 2015

Image: Major Shipping Routes in the Sea Toll Initiative

④ Airports

To accommodate the increase in tourism, regional airports are facing challenges such as insufficient runway length, narrow taxiways, and apron areas, as well as inadequate aviation security and control facilities. Despite

these issues, budget constraints have led to delayed measures. Considering this backdrop, in Indonesia, being an archipelagic nation, Unmanned Aircraft Systems (UAS) are also gaining attention.

⑤ Logistics

In recent years, the annual growth rate of the cold chain logistics market size has maintained an average of 6-7%, and responding to the rapid expansion of the cold chain market has become a major challenge. With the increasing use of e-commerce, changes in lifestyle due to the urban migration of young people, and heightened awareness of temperature-controlled distribution and the safety of fresh foods, cold chain logistics is experiencing a rise in demand from Business to Consumer (B to C) segments.

However, there are challenges such as inadequate standardization of systems and lack of consistency in work quality. As a result, efforts have been made in recent years to enhance work quality in logistics operations, with the government working towards standardization initiatives to address these issues.

(2) Challenges in Each Sector

The challenges extracted from expert interviews in each sector are presented below.

regulations imposed by the government were eased, and

Point in Common	Road Sector	Airport Sector
<ul style="list-style-type: none"> • Securing Financing for Infrastructure Investment • Private investment and grants for development • Coherence of regulations and system across transportation sectors • Framework of regulators and operators • Improvement of fare and subsidy regulation system • Decentralization and Interconnectivity between Cities • Legal Basis for Local Implementation Obligations • Integration and Coordination of Cross-Sector Policies • Protection of user interests in advance technologies • Utilization of Digital Technologies and Blockchain • Super Hub Development (Integrated Mobility and Tourism) • Promotion of Green Transport (EV, Solar Power) • Influence of state-owned enterprises in infrastructure policy 	<ul style="list-style-type: none"> • The Necessity of an Agency for National-Level Coordination • Enhancing Implementation Capacity of Central Government and Ministry of Transportation • Coordination among Local Government Authorities • Management Framework for Automated Toll Collection on Toll Roads • Approach to Toll Fees on Expressways • Introduction of Advanced Transport Payment and Transaction Systems • EV (four wheel vehicles) Debate on Incentives for Electric Vehicles (Viability of Subsidy Programs for Private Electric Vehicles) • Reforming Policies in the Electric Vehicle Sector (Assessment of subsidies and taxation reforms) • Regulation and Reform of Informal Actors • Bus Subsidy System (BTS: Buy the Service System) 	<ul style="list-style-type: none"> • Development of International Transportation Hub Base (Kertajati Airport) • Involvement of State-Owned Enterprises and Foreign Investment in Airport Development • Roles and Collaboration between Central and Local Governments • Utilization of Government-Owned Assets and Private Sector Participation • Competition Environment between State-Owned Enterprise (Garuda Indonesia) and LCCs • Promotion of Asia Open Skies Initiative (established to International Airport) • Operational Capacity Gap due to Personnel Reassignment in Aviation Bureau • Restructuring of Aviation Networks due to New City Development • Expansion of Airport Functions in Jakarta Capital Region • Utilization of Assets in 500 Local Airports Nationwide • Formulation and Recommendations of Policies Based on Aviation Data Utilization
Harbor Sector	Railway Sector	Logistics Sector
<ul style="list-style-type: none"> • Development of International Transportation Hub Base (Pati unban Port) • Utilization of Government-Owned Assets (Pati unban Port) • State-Owned Enterprise Monopoly • Expansion and Restructuring of RORO Ships (Jakarta, Semarang, Surabaya, Bali Routes) • Imbalances in the Sea Toll Policy (Solving Single-Load Transport Between Regions of Different Sizes) • Decentralization to Promote Regional Development (Especially in Eastern Regions)) • Connectivity of Regional Ports and Establishment of Seamless Networks 	<ul style="list-style-type: none"> • Ensuring Financial Viability of Railway Projects • Extension of High-Speed Rail (Selection between North Line and South Line) • Implementation of Systems with Minimal Land Acquisition (such as LRT) • Integration with Commuter Routes and Bus Terminals • Integration of Digital Solutions and Transportation Apps • Promotion of Modal Shift through TOD (Public-Private Collaboration in Mangga Rai and Gambir TOD) • Operation of Tourist Trains in Central Java and Other Regions 	<ul style="list-style-type: none"> • Uncontrolled Expansion of Last-Mile Delivery (including regulations like vehicle quantity restrictions and increases in gasoline taxes.) • Data Integration through Single Platforms (Logistics System Integration among G20 Nations) • Balancing Prices between Urban and Rural Areas • Rapid Expansion of Metropolitan Logistics Needs due to E-Commerce Growth • Improvement of Island Airports and Development of New Routes • Integration of National Ports, Villages, and Airports • Utilization of Abundant Resources in Island and Rural Areas (Transport of Fish, Agricultural Products, Forest Products, etc.)

(3) Key Consideration Areas Based on Expert Interviews

① Background and Challenges in Aviation Network

a) Aviation Sector Growth Rate

In recent years, the growth rate of the aviation sector in the country was averaging around 30%, but due to the impact of the COVID-19 pandemic, aviation demand decreased to around 60% of pre-pandemic levels. During this period, the government provided direct support to the aviation industry by injecting 850 billion rupiahs (approximately 60 billion yen) into the state-owned Garuda Indonesia airline. In 2022, travel restrictions and entry

b) Indonesia's Aviation Policy

The 2010 plan (KM11) formulated with support from the Japan International Cooperation Agency (JICA) between 2000 and 2012 is still being followed today. Furthermore, the Directorate General of Civil Aviation (DGCA) under the Ministry of Transportation plans to allocate 1.22 trillion rupiahs for the development of seven airports to enhance regional connectivity in the fiscal year 2023. Additionally, a budget of 500 billion rupiahs is allocated for the promotion

of an air bridge program aimed at improving nodal connectivity. The government is also prioritizing budget allocations for projects outlined in the table below.

Improving Interregional Connectivity (7 Airports)	Banggai Laut Airport, Pahuwato Airport, Bolaang Mongondow Airport, Sobaham Airport, Singkawang Airport, Mandailing Natal Airport, Siboru Fakfak Airport
Air Bridge Program	Long Bawan Airport, Tebelian Airport, Depati Paribo Airport, Nunukan Airport, Letung Airport, New Mentawai Airport etc.
Development of Airports in Border Areas, Remote Islands, and Disaster-Prone Regions (18)	Labuan Bajo, Matahora Airport (Wakatobi), Sibisa Airport (Lake Toba), and Pitu Airport (Morotai)
Airport Facility Improvement in Strategic Tourism Areas (4)	Domine Eduard Osok Airport for Sorong SEZ, Malikussaleh Airport for Arun Lhokseumawe SEZ, Mutiara Palu Airport for Palu SEZ
Priority Projects (New Construction: 10, Improvement: 9)	Siau Airport, Tambelan Airport, New Nabire Airport, New Siboru Airport, New Mentawai Airport, New Mandailing Natal Airport, New Pahuwato Airport, New Bolaang Mongondow Airport, New Banggai Laut Airport, New Singkawang Airport, Ende Airport (NTT), Waingapu Airport (NTT) Terminal, Timika Airport Terminal (Papua), Karimunjawa Airport (Central Java) Terminal, Tumpa Padang Airport (West Sulawesi) Terminal, Malinau Airport Terminal, Tolitoli Airport Terminal, Mulia Airport (Papua) Terminal, Ewer Airport (Papua) Terminal.

Image-Indonesia's Airport Development and Improvement Plans

The construction of a new capital city is a flagship policy of President Joko Widodo, and it necessitates considerations for the restructuring of the aviation network centered around the new capital.

② Background and Challenges of Port and Maritime Policy

a) Sea Toll Initiative

The Sea Toll Initiative's significant element is the development of pioneer routes connecting underdeveloped regions through regular maritime routes. The government takes charge of port infrastructure development and vessel procurement required for operation, entrusting the operation to maritime companies. The estimated total infrastructure development budget required for realizing this initiative (combining public and private investments) is around 700 trillion Indonesian Rupiah.

For the utilization of pioneer routes, the government

had plans to construct vessels, but due to budget constraints, the number of vessels to be built was significantly reduced. By the end of 2017, the expected delivery of vessels, including containers and cargo-passenger ships, was limited to approximately 100 vessels. Pioneer cargo routes are operated by PT PELNI and other appointed operators through bidding.

Due to the slower industrial development in regions outside of Java, one-way cargo transport has emerged, leading to substantial subsidies being provided to compensate for transport costs. Consequently, the Sea Toll plan has faced a scale-down due to budget limitations.

(4) The challenges in the transportation sector of Indonesia

○ Method of developing public transportation infrastructure projects and subsidy system

In the same country, despite the need for substantial infrastructure investments to maintain an annual economic growth rate of 8-12%, securing financial resources to meet these demands is a challenge. Amid active discussions on promoting private sector investments through institutional reforms and determining the appropriate fare and subsidy regulations, it is necessary to examine the methods of development and subsidy systems.

○ In the context of constructing a new capital city

the restructuring of the aviation network is being considered. With numerous airport sector initiatives such as enhancing interregional connectivity and implementing air bridge programs, it is essential to utilize the comprehensive database within the country's aviation sector. This will facilitate the necessary examination of the configuration of the aviation network in relation to the construction of the new capital city.

○ In the context of the Sea Toll policy

the issue of regional imbalance arises. While substantial subsidies are being provided for compensating for one-way cargo, discussions have included proposals to maintain balance by having the financially larger side bear a larger portion of the fees. Regarding routes with regional

disparities, it is essential to consider policy options while also taking into account examples from other countries.

3. Basic Information about the Tourism Sector"

(1) Outline

The number of foreign visitors to Indonesia saw a steady increase from 7.65 million in 2011 to 15.44 million in 2019. Among the top countries of origin for foreign visitors in 2019, Malaysia contributed the highest number, followed by Singapore, China, and Japan. Additionally, the total expenditure by foreign visitors in 2019 reached \$14.3 billion.

However, due to the impact of the COVID-19 pandemic, the number of foreign visitors sharply declined in 2020 and beyond. In 2020, there were 3.9 million visitors, and in 2021, the number further decreased to 1.49 million. Correspondingly, the expenditure by foreign visitors dropped to \$4 billion in 2020 and \$1.5 billion in 2021.

On the other hand, following the easing of travel restrictions from 2022 onwards, it is projected that by 2025, the expenditure by foreign visitors will surpass that of 2019, reaching \$21.1 billion by 2027.

The employment trends in the tourism industry also demonstrated an increasing pattern up to 2019, accounting for around 9.5% of the total employed population, approximately 12 million individuals. Furthermore, the contribution of the tourism industry to the GDP was 5.6% (about \$65.4 billion) in 2019, maintaining a range in the 5% area from 2011 to 2019. Among the five countries surveyed (Indonesia, India, Philippines, Thailand, Vietnam), Indonesia had the lowest share of tourism industry contribution to GDP.

(2) The organizational structure of government agencies in the tourism sector

In the central government of Indonesia, the main authority responsible for tourism is the Ministry of Tourism and Creative Economy. Underneath this ministry, there are local tourism agencies (e.g., Bali Government Tourism Office) and promotional body established.

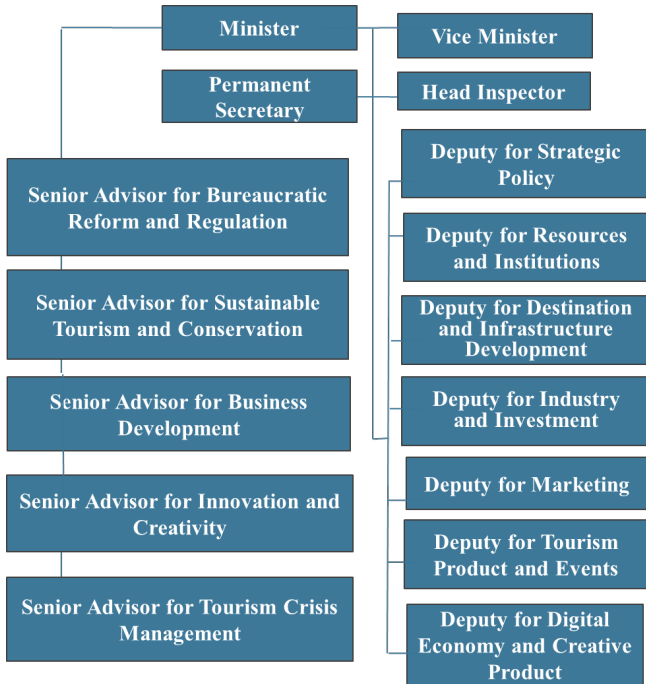


Source: Ministry of Tourism and Creative Economy, Bali Government Homepage

Image: Organizational Structure of Government Agencies in Indonesia's Tourism Industry

The Ministry of Tourism and Creative Economy formulates a tourism strategy based on seven policy directions in accordance with the regulations of the Republic of Indonesia. These policy directions are:

- ① Development of value-added and competitive tourist destinations and products within the creative economy (referring to an economic sphere formed through the utilization of intellectual property rights and similar means).
- ② Execution of tourism and creative economy marketing based on strategic partnerships.
- ③ Integrated development of the tourism industry and the creative economy.
- ④ Human resources management for cultivating skilled and competitive talents, along with the administration of tourism and creative economy systems.
- ⑤ Promoting the creative economy for the benefit of future generations.
- ⑥ Encouraging policies that enhance research, innovation, technology adoption, and the added value of tourism and the creative economy.
- ⑦ Administrative Reforms and Professionalization within the Ministry.



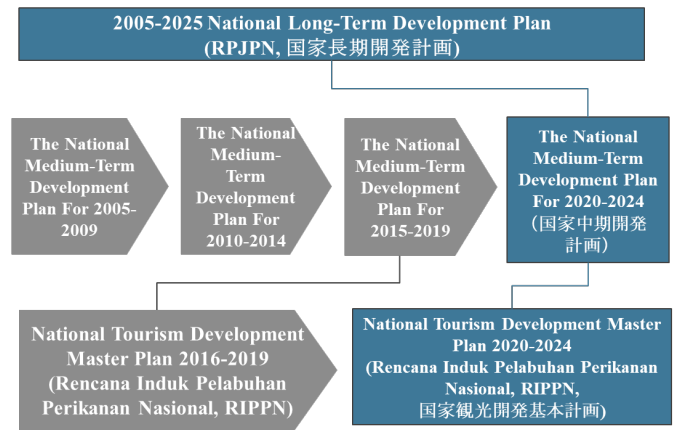
Source: Ministry of Tourism and Creative Economy structure

Image : Ministry of Tourism and Creative Economy organization chart

The Ministry of Tourism and Creative Economy has affiliated organizations dedicated to workforce development and the preservation of tourist destinations. The ministry operates universities (such as Bali Tourism Polytechnic and five other universities and research institutions) that offer degrees and manage programs related to tourism and hospitality. Additionally, preservation, planning, management, and development activities for tourist destinations requiring conservation are carried out through affiliated organizations like the Borobudur Authority Board and three other institutions.

(3) System of Government's Statutory Plans Regarding Tourism

Based on the Tourism-Related Law (Law of R.I. No. 25/2004 concerning National Development Planning), tourism development plans are formulated as follow



Source: Ministry of Tourism and Creative Economy、 Bali Government Homepage

Image: Diagram of Tourism Development Plans in Indonesia

In the "National Tourism Development Master Plan 2020-2024" of Indonesia, there are 19 strategic performance objectives outlined for tourism. Among them, with regard to inbound measures, the following targets are set:

For the number of foreign visitors, the goal is to achieve 13 to 14.5 million visitors in 2023 and 16 to 17 million visitors in 2024. Per capital foreign visitor total spending is aimed at \$1,303 in 2023 and \$1,345 in 2024.

Furthermore, Indonesia has established 21 overseas offices (2 in South Korea, 3 in China, 3 in Australia, and 2 in India) as of June 26, 2023. These offices are dedicated to conducting overseas promotions aimed at boosting Indonesian tourism. The target countries for these offices include Japan, South Korea, China, Hong Kong & Macau, Australia, Singapore, Malaysia, India, Russia, UAE, Saudi Arabia, France, the UK, the Netherlands, and Germany.

4. Results of Expert Interviews and Challenges in the Tourism Field

While Indonesia's tourism industry is gradually recovering, it faces challenges such as a lack of airports and infrastructure, a shortage of skilled personnel in the tourism sector, and adapting to changing tourist preferences. Particularly, the economy of Bali heavily relies on tourism, making it highly vulnerable to the impact of COVID-19. Many tourism-related businesses had to close, and the number of foreign tourists significantly decreased.

In 2022, Bali reopened for inbound tourism, but the challenges lie in efforts towards tourism recovery and addressing the need for an increase in foreign tourists.

Furthermore, during the interviews, other major challenges were highlighted, including traffic congestion, air pollution, promotion of public transportation, restrictions on airline routes, negative perception due to air travel accidents, inadequate collaboration with airlines, insufficient marketing budgets, inadequate promotion for ASEAN countries and digital nomads, and the issue of overconcentration of tourists in the central area of Bali.

5. Approach to Challenges

(1) Infrastructure and Readiness Enhancement:

The inadequate state of infrastructure, such as airports and hotels, and insufficient readiness on the receiving end remain significant challenges. Addressing these challenges requires responsive measures.

On the other hand, the central government is supporting MICE (Meetings, Incentives, Conferences, and Exhibitions) activities in Bali by holding various ministry-level conferences on the island. These initiatives aim to foster an environment where a multitude of domestic travelers visit Bali. The Ministry of Tourism and Creative Economy recognizes the advantages and significance of Bali as a tourist destination, and thus is implementing supportive measures to attract tourists. In line with these efforts, local governments in Bali have also launched support programs to aid tourism-related businesses.

These initiatives reflect a coordinated approach to addressing the challenges, involving collaboration between central and local governments, as well as ministries and agencies, to enhance Bali's tourism infrastructure and boost its attractiveness as a destination.

(2) Connecting Flights

One of the challenges is that many major airlines only have connections to Jakarta, making it time-consuming and costly to visit other tourist destinations such as Bali. Additionally, while public transportation has improved based on new standards, there are still challenges in encouraging individual travelers to use public

transportation instead of cars. Responsive actions are needed to address these issues.

(3) Lack of promotion budget

The shortage of promotion budget has been identified as an issue, requiring adjustments in promotional strategies to align with changes in tourist behavior and demand. Following the period of the pandemic, tourists tend to seek more seamless experiences, sustainable tourism, higher-quality experiences, and environmentally friendly options. In Indonesia, as in other countries, efforts are being made to promote sustainable and high-quality tourism that integrates nature and culture. However, further actions are deemed necessary for the future.

Additionally, concerning ASEAN countries, while Indonesia has already waived visas for nine ASEAN member countries, a lack of promotional campaigns remains a challenge. Implementing such initiatives is believed to serve as an incentive for attracting more tourists to Indonesia.

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