

【Philippine】

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

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1. Introduction

In ASEAN-India region, rapid economic growth has led to advancements in transportation infrastructure and improved service levels for public transportation. However, there are also issues such as insufficient connectivity between modes of transportation and a lack of safety awareness in public transportation. Furthermore the outbreak of the Covid19 pandemic all over the world has brought new changes to passenger transport and freight transport.

In these circumstances, we've conducted a survey on challenges in overall transportation and tourism sectors in 2022. We particularly focused on 5 countries in ASEAN-India region which are Vietnam, Philippines, Indonesia, Thailand, and India as a target of the research. We conducted interviews with experts, scholars, and other knowledgeable individuals in these target countries to understand and to organize the causes of the local challenges in the transportation and tourism, then consider and arrange the approach strategies based on the results. As the research in tourism is just started in 2022, so we've collected the basis information of the tourism field as well.

This report provides an overview of the background and challenges in the transportation and tourism sectors in the Philippines, along with discussing potential directions for addressing these challenges.

2. Current Situation and Challenges in the Transportation Sector

(1) The Current Status of Transportation Infrastructure

① Roads

In Manila, buses are operated on existing routes, Point-to-Point (P2P) direct services, and the EDSA Carousel (BRT) and how to improving efficiency of the bus and business restructuring have been a major topic recently. In an effort to alleviate congestion on EDSA, regulations for provincial buses were introduced in 2019, resulting in additional transfer requirements for commuters traveling to the Manila Capital Region. Furthermore, the insufficiency of transportation interchange facilities and transfer services causing an additional burden of time and cost on users.

In 2022, there are 208 bus operators operating in Manila in total 35 routes with 4,581 vehicles. Bus route plans in the Manila is formulated by the Land Transportation Franchising and Regulatory Board (LTFRB) of the Department of Transportation (DOTr). When bus operators wish to operate new routes, they must consider factors such as citizen needs, feasibility, and profitability, as well as specifying details like the number of vehicles, operating hours, and frequency of service, etc. before apply to the LTFRB for permission.

② Railway

(a) The Revival of Freight Railways

The Philippine National Railways (PNR) once had a network of approximately 900 kilometers of routes from San Fernando in the northern part of Luzon to Legazpi in the south, including branch lines. However, but the company lost customers due to factors such as the Pacific War, the development of road network, and natural disasters. Since then, the Calamba-Sipokot

route is currently suspended.

The government has plans to invest in the revival of freight railways, including projects such as the Long Haul South Line (PNR Bicol Line), Mindanao Railway Phase 1, and Subic-Clark Railway. Additionally, the Philtrak Consortium is also working towards the revival of freight transport on the Panay Railway.

(b) Improvement of Freight Handling Facilities

In Manila, the limited road network and connectivity with other modes of transportation have constrained the transport of goods and services primarily to major urban areas. There is a need for the development of freight railways that connect agricultural, industrial, and economic zones to address this issue.

In 2015, the Laguna Gateway Inland Container Terminal (LGICT) commenced operations as the first domestic dry port, and it is expected to be connected with the railway transport in the future. In 2019, the National Economic and Development Authority (NEDA) implemented the North Philippine Dry Port Container Rail Transport Service to propose the adjustment of cargo terminals in Manila port and Balagtas in northern Luzon Island, to strengthen connectivity between port and the northern regions of Philippines.

Figure1: The railway network and freight railway projects across the Philippines.



Source) Philippine Department of Transportation

③Ports and Harbors

All land transport in the Philippines is by truck but with the approximately 7,000 islands, maritime transport is also essential, there are total of 249 ports within the country. The most commonly used ports in Manila are included the Manila International

Container Terminal (MICT) and Manila South Port for international transport, and the Manila North Port for domestic. The Philippines has been undergoing the privatization of its ports, with the North Harbor, MICT, and South Harbor operated by private sector. The Philippine Ports Authority (PPA) is responsible for the operation of local ports.

Cargo destined for the for the Laguna-Batangas in the southern part of Luzon Island where there are many industrial estates, after arriving at Manila Port, the cargo then transported to final consignee by land. In recent years, there has also been an increase in the use of Batangas Port for this purpose.

MICT has an annual handling capacity of 2.5 million TEU and its main import and export products are grains, raw materials, chemicals and related raw materials. Manila South Port has an annual handling capacity of 1.2 million TEU and its main import and export products are timber, ores, and chemicals. Manila North Harbor has an annual handling capacity of 860,000 TEU. In addition to handling general cargo and domestic container cargo, it also provides passenger transportation services.

In the pursuit of becoming a logistics hub, efforts are expected to focus on the improvement of port infrastructure, enhancing access to ports, and implementing 'smart port' initiatives incorporating information and communication technologies, including artificial intelligence..

Currently, the government has introduced the Port Terminal Management Regulatory Framework (PTMRF) with the aim of separating the regulatory and operational functions of the Philippine Ports Authority (PPA) in port terminal management. As a result, functions such as land facility ownership and operator regulation will be separated from the PPA, and the PPA will receive a fixed fee as stipulated in concession agreement. This initiative is believed to address concerns raised by the industrial and business sectors regarding unnecessary increases in logistics costs due to tariff hikes by the PPA. Additionally, the high logistics costs in the Philippines are influenced by factors such as

its geographical characteristics as an archipelago and inefficiencies in policies and administrative operations, including customs procedures.

④Aviation

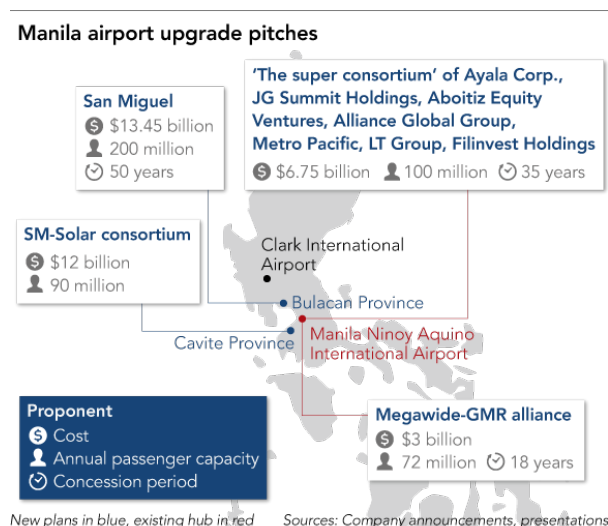
(a) Development of Capital Region Airports

Philippineserved by five airports (Ninoy Aquino International Airport (NAIA), Clark International Airport, Plaridel Airport, Sangley Point Airport, and Subic Bay International Airport) in Capital Region area. NAIA, in particular, faces capacity issues during peak hours due to its runway is built in cross structure.

In recent years, many efforts have been made to to cope with increased capacity at NAIA through privately funded airport development projects by allowing operations for media and aircraft operations (pilot training, navigation, aerial photography, communication, sightseeing flights, etc.).

The Bulacan New Airport, which is set to become the largest airport in the country and is also known as the New Manila International Airport, is currently being developed by San Miguel Aerocity Inc. (SMAI), the infrastructure division of the conglomerate San Miguel Holdings. The target is to start operation in 2027. Furthermore, Cavite-Sangley International Airport is the fourth international airport in the Philippines after NAIA, Clark International Airport, and Bulacan New Airport which is Samsung and a consortium of European companies have been awarded the contract for construction and expansion of the projects.

Figure2: Capital Region Airport Extension Plan



Source) Creating local media content based on various announcements.

(b) Development of Regional Airports

During the Duterte administration, 233 aviation sector projects were completed, including expansion and development of airports such as Bicol, Clark, Cebu, Bohol, General Santos, and Zamboanga. Additionally, Marcos administration aims on increasing airport facility capacity and ensuring compliance with ICAO regulations to enhance safety and security.

The government has announced plans to invest over 1 trillion PHP in development and expansion of regional airports to serve as gateways for tourists and stimulate tourism throughout the country

⑤Maritime Transportation

In capital city, Manila, where traffic congestion is serious, the utilization of water-based transportation, specifically the Pasig River Ferry System (PRFS), is under consideration. The PRFS is owned and operated by the Metropolitan Manila Development Authority (MMDA) and connects seven cities between Manila and Marikina. In 2018, the Department of Budget and Management (DBM) planned for the renovation of PRFS and proposed private sector management. On the other hand, the Department of Transportation (DOTr) is proceeding the development of the Pasig River Expressway (PAREX) but due to concerns about potential competition with PRFS, DOTr has initiated stakeholder conference regarding PRFS and has asked MMDA to invest in improvements to enhance the convenience for daily commuters. Additionally, the Department of Tourism (DOT) is planning to utilize water-based transportation as part of domestic tourism promotion. In a forum held in September 2022 in collaboration with the Maritime Industry Authority (MARINA), DOT announced the introduction of 'Hop-On, Hop-Off' services and the revival of activities in Manila Bay Cruise in a short term. Furthermore, they are exploring strategies with private businesses to encourage tourist usage, particularly among those visiting cultural heritage sites like Intramuros.

Figure3:The Pasig River Ferry System



(Source) The Pasig River Ferry System Operator

(2) Challenges in Each Field (See Table Below)

(3) Key consideration areas based on expert interviews

General	Road field	Aviation field
<ul style="list-style-type: none"> • Clarification and integration of planning authority in DOTr. • Adjustment of integrated inter-agency budget allocation and related regulations. • Consistent development plans and maintenance projects that go beyond the administrations. • Introduction of project evaluation based on lifecycle cost • The nature of government subsidies in PPP projects • Enhancement of planning and policy-making capacity in local government • Technological development related to the measurement of transportation big data. • Integration of land and water transportation in Western Visayas Region. • Research on Panay Island tourism and regional transportation. 	<ul style="list-style-type: none"> • Discussion on the privatization of EDSA Carousel (BRT) • Improvement of Convenience and Connectivity of EDSA Carousel (BRT) • Traffic regulations on Pasig River Expressway (PAREX) • Traffic Behavior Analysis of Two-Wheeled Vehicles (Motorcycles) • Development of a Roadmap for Mindanao Island Road Infrastructure Improvement. • Improvement of Efficiency through Integrated Bus Operations Management. • Fare System Accessible to a wide range of income groups. • Research on Ride-Hailing Services. 	<ul style="list-style-type: none"> • Discussion on the Privatization of the Civil Aviation Authority of the Philippines (CAAP) focusing on practical perspective. • NAIA capacity shortage and the development of a new airport in the capital region. • Consistency in the new airport development plan. • Conflict between the Civil Aeronautics Board (CAB) and the Department of Transportation (DOTr). • Integration of ICT (Information and Communication Technology) between airport operations and airlines. • Overcapacity at Manila capital region airports. • Enhancing international airport facilities in Cebu and Davao. • Lack of aviation researchers and challenges in obtaining data.
Port and Harbor Field	Railway Field	Logistics Field
<ul style="list-style-type: none"> • Overcrowding at Manila Port and persistent traffic congestion on access roads. • Promotion of development and improvement of both Batangas and Subic Ports. • Improving connectivity to promote the utilization of regional ports. • Introduction of Chassis Roll-on/Roll-off System. • Development of roadmap for port infrastructure development in Mindanao Island. • Enhancing the convenience and promoting the utilization of Maritime Transportation. 	<ul style="list-style-type: none"> • Improvement Measures for the convenience of Davao City Monorail Plan. • Regularly updating input data for Demand Forecasting Models. • Increase in station users due to enhancement of Last Mile Transportation. • Modal shift from private transportation to public transportation. • Promoting the use by introducing premium trains and vehicles. 	<ul style="list-style-type: none"> • Coordination between freight transport and other modes of transportation. • Development of logistics hubs in the Manila capital region suburbs. • Introduction of container transport using articulated trailers. • Improvement of logistics between northern and southern Philippines. • Policies to manage overloaded vehicles of private operators.

① Challenges and background regarding bus operations mainly in the Manila capital region

In EDSA, buses being strung together has become a regular manner, making it difficult for buses to run smoothly. Therefore, considerations are being made regarding internal bus guidance and information provision at bus stops under the Public Utility Vehicle Modernization Program (PUVMP) proceeding.

Bus schedules are determined by bus operators based on user demand. On the other hand, in terms of operations management, while all buses are equipped

with GPS, the analysis of data and its reflect in the operational planning depends on the operators themselves, therefore further effective utilization is needed.

In the Manila Capital Region, route planning is conducted by the Land Transportation Franchising and Regulatory Board (LTFRB), while route planning in other regions and provinces is delegated to local government units (LGUs). LGUs are expected to rationalize existing routes and identify by developing their own Local Public Transport Route Plans (LPTRP) based on passenger demand, road hierarchy, and road capacity. However, there is a limitation in human resources within the relevant agencies, and the challenge is to develop human resources who can continuously formulate and review route plans. Additionally, despite bus operators having access to route information and operational data, they are not directly involved in the planning and revision process, resulting in the lack of operation plans that align with the actual situation.

Currently, guidelines are being formulated with the aim of reforming the country's public transport industry, including regulatory reforms and the issuance of franchises for land transportation. Although the LTFRB has initiated the Service Contracting Program, progress has not been proceeding as planned, and the development of service contracts, including incentives, remains an issue.

It is also necessary to optimize the entire transportation mode in the Manila capital region, including the development of transportation hubs to facilitate smooth transfers with railways and other modes of transportation

② Challenges and Background regarding the improvement of connectivity between the capital region and regional areas.

On January 1, 2023, a situation arose at NAIA where a significant number of flights, particularly those departing from and arriving in Manila, were suspended due to a power outage issue at the airport's air traffic control facilities. The air traffic control system had

experienced approximately half of its intended service life, prompting the Civil Aviation Authority of the Philippines (CAAP) to emphasize the urgent need for its modernization. On the other hand, since CAAP is responsible for both regulatory and operational, there have also been suggestions that, operational and inspection functions should be separated from CAAP as a result relevant to air traffic control troubles. Based on these discussions, there is ongoing consideration of establishing a system that separates the regulatory authority from the operational authority.

Furthermore, President Marcos is advocating for strategic foreign currency acquisition by increasing inbound tourism through the development of the "Philippine Brand", he has also outlined infrastructure development, increased flight frequencies, and digitalization of information as his main policy. Particularly, the Department of Public Works and Highways (DPWH) and the Department of Tourism (DOT) are collaborating to create a high-quality transportation network that connects land, sea, and air, and they are also working on promoting barrier-free tourism. However, it is necessary to consider the perspective of local residents and transportation service providers when developing a sustainable transportation network.

③Challenges and Background on Logistics Congestion in the Philippine Capital Region

Logistics challenges including difficulties in managing lead times due to overcrowding at Manila port and chronic traffic congestion on access road, promotion of both Batangas and Subic ports the development and improvement, establishment of logistics hubs in the suburbs of the Metro Manila, and the need for future connectivity with railway transport are notable. Furthermore, addressing issues such as digitalization and the enhancement of cargo handling facilities should be part of the solution.

According to a World Bank study in 2017, the quality of port infrastructure in the Philippines ranked is quite low, it is at 113th out of 136 countries for which statistics were available. Approximately 70% of import and export cargo is centralized at the Manila port,

leads to congestion at port and because lack of water depth for large vessels to enter the port, these large vessels need to be transshipped to smaller vessels in neighboring countries.

In case of imports, even though Batangas Port and Subic Port can be used as alternative to Manila Port and possible to be used to deliver to final destination on land transport, but substitution from Manila Port has not progressed due to handling capacity of Batangas Port is small, also there are only few logistics companies that transport cargo from Manila Port to Metro Manila, Cavite and Laguna regions where many Industrial Estates are placed, as well as high truck transportation cost and.

④ Challenges in transportation sector in the Philippines

○Introduction of Integrated Bus Operation Management and Incentive Schemes for Bus Businesses.

Transport authorities in various countries have established quality incentive contract systems based on monthly penalty and bonus schemes to provide more reliable services. To mitigate the phenomenon of bus bunching, several approaches are being proposed, such as exempting buses from stopping at the bus stop and adding time for buses to wait at control points. Collaborating with local experts to research these bus operation management solutions can be effective.

○Optimizing the Function Allocation of Multiple Airports in the Philippine Capital Region and Ensuring Airport Access

Regarding the five airports undergoing development in the vicinity of Manila, it is essential to consider the allocation of functions among these airports in the capital region from various perspectives, including capacity, service routes, international flight transfer hub, and accessibility to the city center. Based on the case studies of metropolitan areas that have multiple airports within the same urban region, we conduct a research aiming at achieving harmonious airport operations within a group of airports, improving airport access and connect the existing urban railways to the airports. Also accessibility to each airport in

the capital region should also be considered

○Logistics Improvement at Port in Philippine Capital Region

It is necessary to assess and improve logistics and lead time management in port considering various aspects including customs efficiency, infrastructure quality, ease of international shipments, quality of logistics services, tracking capabilities, and timeliness aligned with logistics performance indicators. Furthermore, consideration should be given to initiatives such as the enhancement of the metropolitan and surrounding highway networks, the development of utilization of Subic Port and Batangas Port, and transferring of some logistics functions to address the logistics challenges effectively.

3. Basic information on the current situation and challenges in the tourism

(1) Basic information of tourism

①Outline

The number of international visitors to the Philippines has steadily and significantly increased from 3.7 million in 2011 to 8.2 million in 2019. As of 2019, South Korea accounted for the highest number of international visitors, followed by China and the United States. Additionally, international visitors spent approximately \$11.4 billion in 2019.

However, since the outbreak of the pandemic in 2020, the Philippines experienced one of the world's longest lockdown periods, leading to the steepest declines in tourist arrivals. As a result, the number of international visitors plummeted from 1.4 million in 2020 to 150,000 in 2021, and the expenditures of international visitors also significantly decreased from \$2.6 billion in 2020 to \$300 million in 2021.

With the resumption of international tourist arrivals in April 2022, the number of international visitors is expected to start increasing again in 2026, exceeding the number of international visitors in 2019, and reaching 8.8 million in 2027.

The employment in the tourism industry also showed growing trend from 2019, accounting for approximately

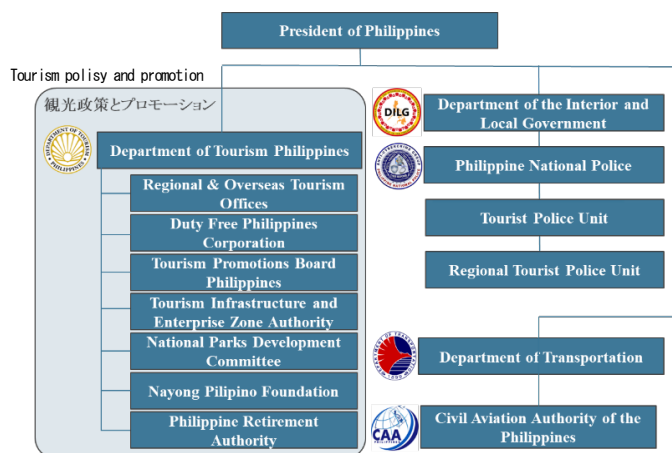
22.7% of total employment in 2019, or approximately 9.5 million people. Furthermore, the tourism industry's share in GDP has been on the rise, with an average annual growth rate of 8.7% from 2011 to 2019. And it accounted for 22.5% of the GDP in 2019.

Among the five countries in which this survey was conducted (Vietnam, Philippines, Indonesia, Thailand, and India), the tourism industry in Philippines stands out with both the highest share of tourism in GDP and employment, indicating the significance of the tourism sector as a core industry in the country's growth.

② Government organization structure in Tourism Section

The main government agencies related to tourism in the Philippines include the Department of Tourism (DOT) and its subsidiary, the Tourism Promotions Board Philippines (TPB), as well as the Civil Aviation Authority of the Philippines (CAAP) under the Department of Transportation, and the Tourism Police Department under the Philippine National Police.

Figure4 : Organizational Chart of Government Agencies in the Philippine Tourism Sector



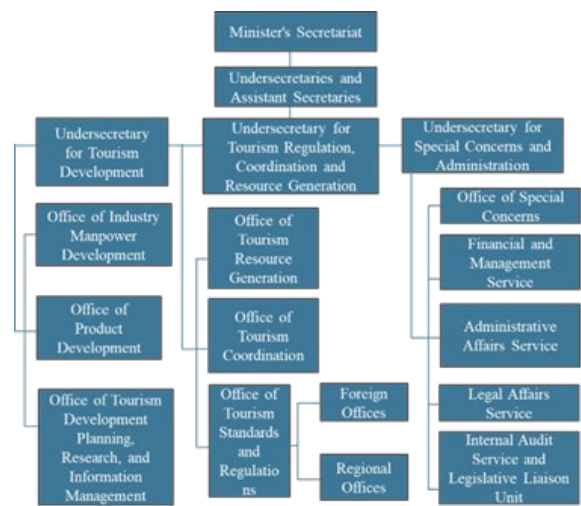
Source) Department of Tourism PhilippinesHP
(Created byJTTRI-AIRO)

Furthermore, the Department of Tourism (DOT), responsible for tourism policy, serves as the government agency that promotes the Philippines as a tourist destination and attracting international and domestic tourists. It engages in activities such as marketing and promotion, tourism infrastructure

development, implementation of tourism policies, provision of tourism information, and collaboration with local government, private organizations, and other tourism industry entities. In order to promote and develop the tourism industry in the Philippines. Tourism Promotions Board Philippines (TPB), a subsidiary of DOT, is responsible for formulating and implementing integrated promotion and marketing programs, with the aim of promoting the Philippines as a top tourism and MICE (Meetings, Incentives, Conferences, and Exhibitions) destination both internationally and domestically.

As for the government's statutory plans regarding tourism, the Tourism Act of 2009 was enacted in 2009, serving as the pillar of Philippine tourism policy to stimulate the development of the domestic tourism industry. Additionally, The National Tourism Development Plan 2016-2022 outlines specific strategies and action plans for the development of various tourism sectors, including ecotourism, cultural tourism, and medical tourism, and others.

Figure 5: Department of Tourism Organization Chart



Source) Department of Tourism Philippines HP
(Created byJTTRI-AIRO)

DOT also has offices in 19 countries worldwide, including the United States, Russia, Germany, Spain, the United Kingdom, France, Italy, the UAE, India, Thailand, Vietnam, Malaysia, Singapore, Taiwan, South Korea, Japan, China, Indonesia, and Australia. These offices play a important role in implementing overseas

promotion strategies aimed at promoting tourism in the Philippines.

(2) The results of expert interviews and challenges in the tourism sector

Since the Philippines is an island country, it faces the critical challenge of improving air connectivity to attract more tourists. Challenges also including insufficiency of promotional budget, labor shortages, and infrastructure congestion.

Major challenges facing the Philippine tourism industry as a whole include the decline in Chinese tourists, inadequate of international routes, the need for medical service support for international tourists, and the implementation of new tourism programs.

In Additional, like many other countries, the Philippine tourism industry has been significantly impacted by the pandemic, resulting in challenges such as support for small and medium-sized enterprises (SMEs), decline in employment and skilled workers, and decline in demand for tourism. Proposed solutions include promoting domestic tourism, supporting the tourism industry by waiving membership fees for the Tourism Promotion Board, providing subsidies and loans, upskilling employees, and establishing new holidays.

Furthermore, it faces several challenges, including lack of hotel development in new tourist destinations, a lack of coordination between government agencies in infrastructure development, accessibility issues, and a lack of development in the East Asia market. Another issue is that about 95% of travelers visit for leisure, and less for business purpose, and there is also need to attract more group tourists.

In terms of tourism promotion, the following issues such as lack of distinctive Filipino products, the need for brand power and PR, the balance in luxury and mass tourism, difficulty of attracting tourists from India and China, difficulty of attracting digital nomads and TPB budget reduction are notable.

(3) Approaches to Addressing the Challenges

To maximize the impact within a limited budget, it's essential to develop strategies that attract private sector sponsors. The TPB should work collaboratively

with the Philippine government to comprehensively

Figure 6: Department of Tourism Organization Chart



Source) Tourism Promotions Board Philippines
<https://www.tpb.gov.ph/about/organizational-chart/>
 (Created byJTTRI-AIRO)

promote diverse approaches while involve with private sector, and implement medium to long term strategies focused on post-pandemic era and efforts to raise sufficient funds to support.

① Infrastructure development and funding.

The challenge of securing substantial funding for new infrastructure construction is being addressed. For this reason, the Philippine government is promoting infrastructure investment through public-private partnerships, establishing Tourism Development Areas (TDAs), and formulating a National Tourism Development Plan. Also considering other measures such as financial support for small and medium-sized enterprises (SMEs) and offering incentives like waiving membership fees and providing discounts on training participation fees through the TPB.

②Developing tourism products that capitalize on the attractions of the Philippines

There is a lack of travel products and experiences that embody the essence of the Philippines, and there is a need to enhance the brand identity and slogan recognition of the Philippines as a destination. Additionally, attracting digital nomads and improving brand awareness are also important challenges. To address these issues, the Philippine government has proposed initiatives to enhance the appeal of the

Philippines, promote high-quality tourism, and differentiate tourism destinations from mass tourism.

【References】

- 1) The Department of Transportation in the Philippines.
<https://dotr.gov.ph/>
- 2) JICA 「Information Gathering and Verification Survey on Improving the Metro Manila Public Transportation System」
<https://openjicareport.jica.go.jp/pdf/12369823.pdf>
- 3) Port Magazine 2018 Year December Edition 「Maritime and Rail Transport of Containers in the Manila Port Hinterlands」
- 4) Cooperative Association of Japan Shipbuilders・Japan Ship Technology Research Association 「Research on the Current State and Future Trends of the Maritime Industry in the Philippines」
<https://www.jstra.jp/PDF/40ed17f98feaaad0b1c5aa03ca785ecf2e37faa2.pdf>
- 5) JETRO Manila office 「Logistics infrastructure in the Philippines」
https://www.jetro.go.jp/ext_images/_Reports/02/6568c95466f2a9bb/honbun.pdf
- 6) Department of Tourism 「National Tourism Development Plan 2016 - 2022」
[https://docslib.org/doc/10026062/national-tourism-development-plan-2022](https://docslib.org/doc/10026062/national-tourism-development-plan-2016-2022)
- 7) Department of Tourism 「THE PHILIPPINE TOURISM SECTOR AMID THE PANDEMIC: Developments and Prospects」
https://www.bsp.gov.ph/Media_And_Research/Publications/EN22-02.pdf
- 8) Euromonitor International,
<https://www.portal.euromonitor.com/portal/statisticsevolution/index>
- 9) WTTC, <https://wtcc.org/research/economic-impact>
- 10) Department of Tourism Philippines
<http://www.tourism.gov.ph/Default.aspx>
- 11) The Tourism Promotions Board <https://www.tpb.gov.ph/>