

【Vietnam】

Supporting the economic development of Vietnam: The ports of Cai Mep–Thi Vai and Hai Phong

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1. INTRODUCTION

In recent years, ASEAN has experienced remarkable economic growth and has gained increasing prominence as a region that supports the backbone of the global supply chain. Among them, Vietnam stands out due to its advantages in low labor costs, population density, and industrial locations. Moreover, Vietnam has a geographical advantage as it faces the South China Sea, making it easily accessible to the Pacific Ocean. Consequently, it has become a country of great interest to the global logistics community. In this circumstance, there has been a trend to use larger vessels and increasing in consolidation of port of calls in the world's shipping market lately. There are also deep-water container terminals have been constructed in Vietnam in the southern region of Cai Mep Thi Vai and the northern region of Hai Phong, enabling the calls of large vessels. Vietnam utilized Public-Private Partnership (PPP) that allowing foreign companies to enter the terminal operations sector for development, and Japanese companies are also participating.

In this report, we will provide an overview of Vietnam's ports and port administration, as well as recent developments including facility improvements and the operational status of Japanese companies in Cai Mep Thi Vai Port and Hai Phong Port. Lastly, we've summarized the characteristics and challenges of Vietnam's ports.

2. Overview of Vietnam's Ports

Vietnam has a metropolitan areas consisting of Hanoi, the capital in the north, and Ho Chi Minh City, the economic city in the south. In the northern region, the Hai Phong port which located approx. 150km to the east of capital city Hanoi and spreading to the cities around Hai Phong port making Hai Phong port to be the largest port

in northern Vietnam. In the southern region, Saigon Port (former name of Ho Chi Minh City) has been developed for long times. However, due to its shallow water depth as a river port and since it is close to urban areas, the expansion was difficult. Therefore, they're developing Cai Mep Thi Vai deep-water port which located approx. 100km to the southeast of the city.

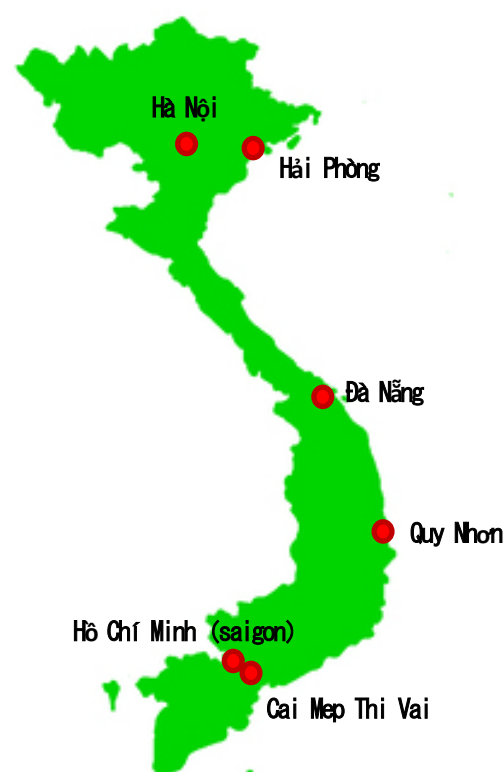


Figure1 : Location of major ports in vietnam

In terms of cargo volume at Vietnam's ports, in 2021, there was a total handling of approximately 20 million TEUs. Out of this, around 43% was handled by ports in the southern region, including Ho Chi Minh Port and its surrounding ports. 29% in approximate was handled by ports in the northern region, including Hai Phong Port and Cai

Lan Port. About 24% was handled by the outer port to the south of Ho Chi Minh City, which is Cai Mep Thi Vai Port. The remaining 4% was divided between ports in the central region, such as Danang Port and Quy Nhon Port.

Furthermore, as Vietnam has a long coastline from south to north facing the South China Sea, other than Hai Phong port in northern region, Saigon port and Cai Mep Thi Vai port in the southern region which are 2 core groups of ports in the north and south, there are also ports located in the central region, including the city of Danang and other main cities.

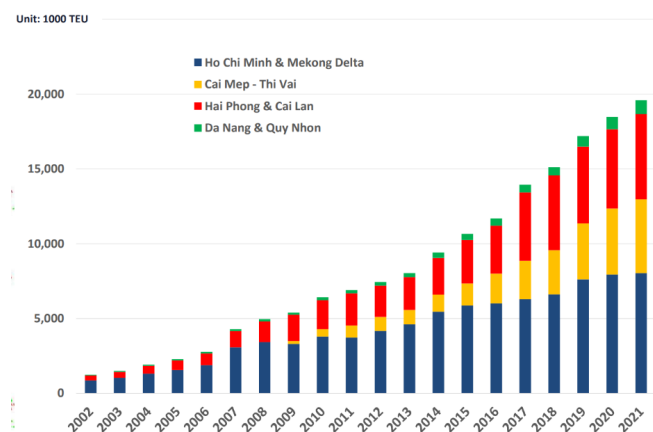


Figure2 : Volume of cargo handled at ports in Vietnam by region [TEU]

In addition, Vietnam's ports, such as Saigon Port and Cai Mep Thi Vai Port, are in proximity to major global chokepoints like the Malacca Strait and Singapore Strait. When ships pass through these straits and continue their journey towards East Asia or North America, these ports offer a strategic advantage as they are located close to the shortest route. Compared to other ports in the Indochina Peninsula, they provide quicker access, allowing for reduced transit time. This geographical advantage positions Vietnam's ports as important stopovers along the major shipping routes connecting Southeast Asia with East Asia and North America.

3. Overview of Vietnam's Port Management System

In Vietnam, the port administration is managed by VINAMARINE (Vietnam Marine Administration), which is an agency under the Ministry of Transport. VINAMARINE is responsible for the construction, own and maintenance of the fundamental facilities such as land, quays, and navigate routes. And for the operation of container terminals and the maintenance of container yards, quay facilities, and cargo handling equipment are operated by private

companies. However, for terminals operated by foreign capital, there are regulated that the majority of investment must be Vietnamese companies.

On the other hand, the Japanese government has provided technical cooperation to Vietnam in formulating technical standards for port facilities. Based on the Memorandum of Cooperation signed in March 2014 regarding cooperation in the establishment of national technical standards for Vietnam's port facilities, technical discussions and workshops have been conducted between research institutes from both countries (The National Institute for Land and Infrastructure Management in Japan and the Institute of Transportation Science and Technology in Vietnam) have collaborated to support the development of design standards for Vietnam's port facilities.

4. Overview of Cai Mep Thi Vai

Cai Mep Thi Vai port is a deep-water port located in Cai Mep-Thi Vai district of Ba Ria-Vung Tau Province which is closer to the open-sea. The port is constructed to handling the increasing cargo in Saigon port near Ho Chi Minh city which capable for loading a large vessel that heading to the United States and Europe. The development was supported by Japan's Official Development Assistance (ODA)'s loan scheme. After development, the terminal investments were made by various companies such as Hutchison (SITV) from Hong Kong, PSA (SP-PSA) from Singapore, Maersk affiliated APM Terminals (OMIT), and SSA Marine (SSIT) from the United States. TCIT (Tan Cang - Cai Mep International Terminal), the joint ventured terminal between Japanese company Mitsui O.S.K. Lines, Saigon New Port, Wan Hai Lines, and Hanjin is also located in Cai Mep Thi Vai's port.



Figure 3 : Aspect of ICIT in Cai Mep Thi Vai port

TCIT started operations in 2011, features with navigational depth of 14m and 890m long quay with three berths. has a storage capacity of 46,500 TEUs in a 44ha container yard. The cargo handling volume at TCIT has steadily increased over the years. In 2011, it handled 294,000 TEUs, and by 2020, the volume had grown to 2.09 million TEUs,

approximately seven times increased in 10 years. The breakdown of cargo handling in 2020 consisted of 36% imports, 47% exports, and 17% transshipments. If we looking at the increasing of industrial production near Ho Chi Minh city as a background, port that facing South China sea is easier for large ships to call at port, also the geographical advantages of highly connected to domestic ports such as Hai Phong Port and Da Nang Port and Phnom Penh Port that runs along the Mekong River, the TCIT can acquired most of the transshipment cargo. Looking at the overall cargo volume of Cai Mep Thi Vai Port, it reached 794,000 TEUs in 2011 and has rapidly increased since 2014. By 2020, the total cargo volume had reached 4.412 million TEUs.

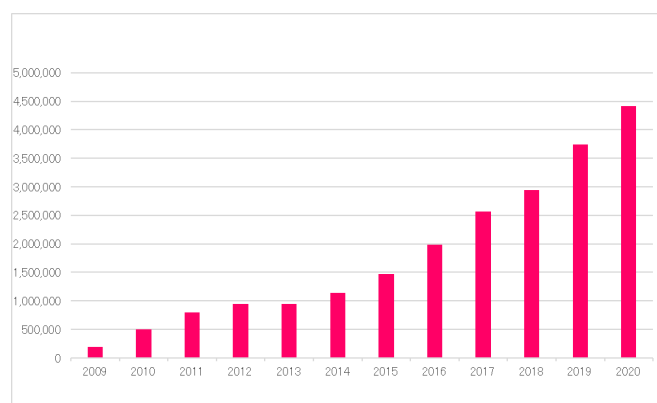


Figure 4 : Trend of Container Cargo Volume at Cai Mep-Thi Vai port

Furthermore, with the expansion of Vietnam National Highway 51 to six lanes and the completion of the Ho Chi Minh City – Long Thanh – Dau Giay Expressway have improved the inland transportation from Cai Mep Thi Vai Port to Ho Chi Minh City and other provinces.

5. Overview of Hải Phòng

Haiphong Port is in Haiphong City in northern Vietnam and has long served as a naval port and trading port. Since the capital city Hanoi is located approximately 120 km away from the coast, Haiphong Port plays an important role as the gateway for marine transportation and logistics in the metropolitan area.

The container terminals of Haiphong Port are situated along the southern side of the Cam River, which flows to the north of Haiphong City. The waterway depth is 7.0m, and the wharf depth is 7.5m, allowing vessels with a loading capacity of less than 2,000 TEUs to dock. On the other hand, with the rapid development of the Hanoi metropolitan area, the establishment of a deep-water port that allowing large vessels to dock had become necessary and in 2011, the

construction of a container terminal with a quay depth of 14m in the Lach Huyen area on Cat Hai Island began under the Japanese government's yen loan project. In May 2018, the first two berths, known as Berths 1 and 2, are officially operated under Hai Phong International Container Terminal (HICT).

Along with the port development, the construction of a highway connecting Hanoi and Hai Phong, as well as a coastal road connecting Cat Hai Island and Haiphong City is being developed to facilitate and ensures smooth transportation access between the hinterland and the export/import cargo handled in the Lach Huyen.

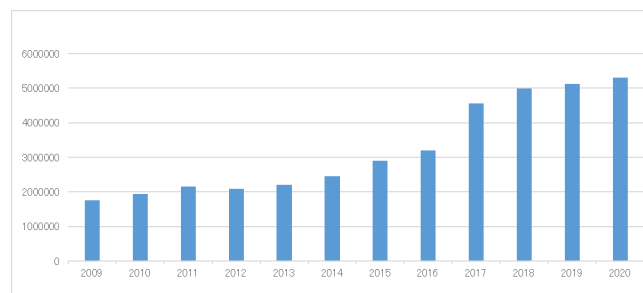


Figure5 : Trend of Container Cargo Volume at Haiphong port and Cai Lan Port

According to the port development plan, reclamation of land and facility development for the wharf will be carried out to the southeast of Lach Huyen area in phases. For currently in used Berth 1 and Berth 2 that are operated by HICT (owned by Saigon Port (51%), MOL (17.5%), Wan Hai (16.5%), and Itochu (15%)). And for cargo handling operations at HICT, they are using TOS (Terminal Operating System) for container yard planning as same as the system that is using in many of Japan's container terminals. Regarding cargo handling machine, conventional machinery with operators on board is implementing for loading and unloading operations. Automation and remote-controlled technology have not been implemented at HICT.

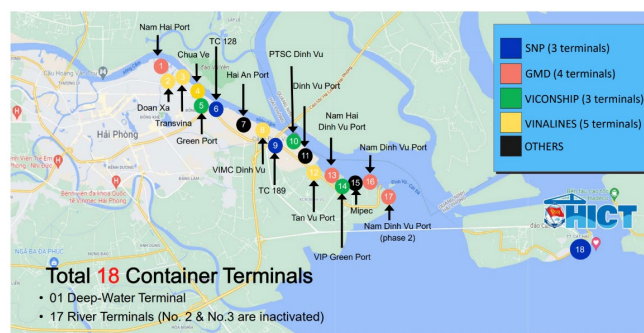


Figure6 : Location of terminals in Hai Phong port (Data from HICT)

As of December 2022, the development of berths 3, 4, 5, and 6 is under construction. Hai Phong Port Company is planned to operate berths 3 and 4 (operator operating at Hai Phong Port), while berths 5 and 6 will be operated by HATECO Group (real estate company) as terminal operators. Additionally, there are future plans to further extend the port offshore.



Figure7 : Aspect of HICT at Hai Phong port

6. The Challenges of Vietnamese ports.

From the perspective of comparing between ports in the southern and northern regions of Vietnam, the southern ports such as Saigon Port and Cai Mep Thi Vai Port have a geographical advantages for North American routes to call at port. As a result, they have become the gateway ports that handling approximately 60% of Vietnam's import and export cargo. On the other hand, Hai Phong Port in the north region has a slightly shallow water depth and constrained such as in order to depart or call at port, bypass China's Hainan Island is a must. However, it still accounts for approximately 25% of Vietnam's import and export cargo, and as it is close to the capital Hanoi and high manufacturing productivity, both import and export activities are strong, the increasing cargo volume in the future can be expected.

Vietnam has a population of approximately 97 million people, and with the recent progress in industrial development and increasing in shipment of manufactured goods, both import and export cargo volumes have been steadily increasing. Base on these factors, when comparing Vietnam's ports with neighboring countries' ports such as Laem Chabang Port in Thailand, which is also located in the inner part of the bay on Indochina Peninsula, Vietnam's ports are expected to have the potential to become the center of Southeast Asian logistics due to their geographical advantages, low labor costs, and price levels. Logistics professionals in Thailand also express their views that Vietnamese ports may become strong rivals in the next 10 years, and

it is necessary to keep close eyes on the future economic development in Vietnam and port policies.

On the other hand, countries in Southeast Asia such as Singapore, Malaysia, Thailand and Indonesia have been advancing in terms of remote operation of cargo handling equipments and information sharing platforms. In Vietnam, there has been introducing in information technology for cargo import and export management, particularly in companies like Hai Phong Port. However, there are no signs of introducing remote operation or automation in cargo handling equipment yet. The main reason is that labor costs and price levels in Vietnam are lower compared to neighboring countries, and introducing technology such as remote operation costs are higher than traditional port handling by workers. Therefore, there is a tendency to continue with conventional cargo handling. However, considering Vietnam's future economic development along with the rise in wage levels, the progress of informationization of shippers and shipping companies, as well as the decreasing in the cost of setting up information technology, it can be expected that there will be at some stages where the introduction of remote operation and automation technologies in Vietnam's port sector will be promoted. Therefore, it is necessary to keep an eye on such developments.

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