

Vietnamese ports: Capacity and development orientation

Phuoc Quy Phong Nguyen, Van Huong Dong

Ho Chi Minh University of Transport

Abstract: Up to now, Vietnam has had 160 harbors put into use, distributed in each area, the country, with the capacity of customs clearance of goods increasingly. By 2015, the cargo throughput of the whole Vietnam seaport system is estimated at over 600 million tons. In particular, the shipping industry is managing and exploiting 35 channels into national ports, dozens of channels into specialized ports and over 330 berths ... with a total length of up to 39,950 m, doubling In 1999, contributing to the productivity of cargo loading and unloading, clearance of goods of all types of Vietnam's seaport system up to regional countries. However, due to various reasons, both subjective and objective, the efficiency of using and exploiting the port system of our country is low, not commensurate with the potential and advantages. Currently, the majority of seaports still use backward management and exploitation technology, productivity is limited (only 45% - 50% of the world advanced level). Meanwhile, some ports, due to lack of vision, heavy on coping with local growth, are difficult to connect to establish a coherent national transport network. This not only led to many port and less cargo, but also weakened the capacity of customs clearance at large urban ports, but was under increasing population pressure and transportation infrastructure, degradation.

Keywords: port, shipping industry, development orientation.

1. Introduction

Seaports are an important link in the entire shipping chain and should be influenced by the shipping industry as well as the world economy. Considering and analyzing the development of the world seaports. We will study two key areas: Port infrastructure and equipment (hardware) and port management and operation. The port infrastructure and equipment are directly affected by cargo movements.

Situation of European countries and North America

In 1996 the total throughput of European ports was 894 million tons, compared to 847 million tons in 1992. The cargo throughput of these ports increased by 0.6% compared to 1995. The slowdown in growth is due to a decrease in the volume of imports from the region. European ports' cargo traffic is concentrated mostly at northern seaports. Total cargo volume of Rotterdam, Antwerp and Hamburg was about 461 million in 1996, and in 1998 this volume was even larger as the volume of Antwerp ports increased to 120 million tons in 1998. Container and The factors that cause growth are the slowing down of growth of these ports. Most of the department stores of the three major ports are containers. In 1996, the containerized rates of ports were Hamburg-84.2%, Rotterdam-57.8% and Antwerp-56.8%. However, the bulk cargo determines the port's output level. In 1996, bulk cargo accounted for 65% of the port's principal cargo.

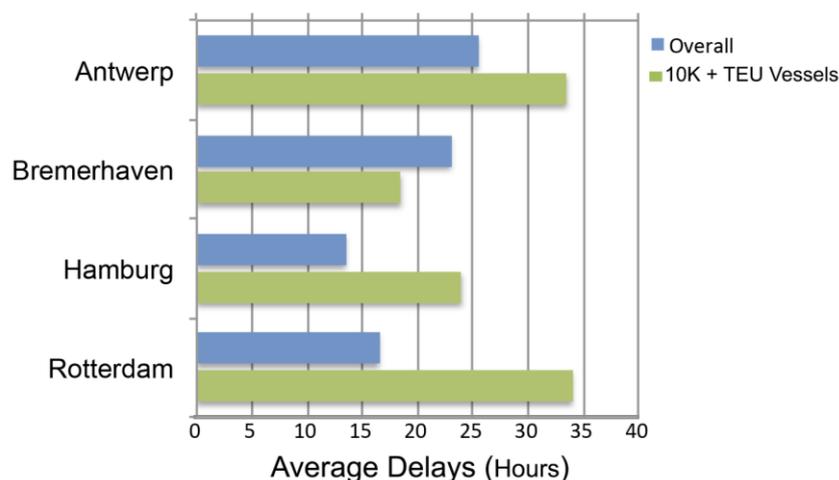


Figure 1. Four European Ports' performance, 2017 (Source: Cargosmart)

The container port of the world has shrunk by about 10 percent to 457.3 million TEUs in 2009. In particular, Chinese ports account for 23.3 percent of the total number of container ports in the world. According to UNCTAD's figures between 2004 and 2010, the ranking of underdeveloped countries only improved at one point. The average weight of underdeveloped countries in 2010 was 111, while for developing countries 78 and developed countries was 64. In addition, freight by road also increased by 7.8% in the period 2004-2008. Since 1990, due to the growing demand for containerized container cargo, the container has also been launched and developed seven times, most recently since 2009, the capacity of the container fleet has increased by 7. million DWT is equivalent to 5.6%, but due to the economic downturn at that time, we are now facing the overcapacity of many container vessels at ports, Load cargo flowed through the port.

In 2008, however, ports in the world also increased significantly with a 4.5% increase to reach 508.4 million TEUs. In short, compared to 2008, 2009 was reduced to 10% of total tonnage throughput and 465.7 million TEUs. Traditional ports are understood to be primarily ports because they are considered as the gateway to which any export or import must go. However, in terms of development, the port also functions transhipped. Ports situation in Europe and North America: In 1996, total cargo throughput of European ports was 894 million tons compared with 847 million tons in 1992. The cargo throughput of these ports increased year on year. 1995 was 0.6%. The slowdown is due to the decline in regional imports. Europe's ports are mainly concentrated in the northern seaports. Total cargo volume of Rotterdam, Antwerp and Hamburg was about 461 million in 1996 and in 1998 this was even larger as Antwerp ports increased their cargo volume to 120 million tons in 1998. Container and This mainly led to the growth of these ports. Most of the main cargoes of the three major ports are containerized. In 1996 the containerized rates of ports were Hamburg -84.2%, Rotterdam -57.8% and Antwerp-56.8%. However, the bulk of the output determines the level of output of the port. In 1996, bulk cargo accounted for 65% of the port's principal cargo.

Asia ports

North Asia ports have very low cargo volumes. South Louisiana Port of America is the largest port in the United States with production through 1996 is 204 million tons followed by the port of Long Beach and Corpus Christi. As in previous years, Asia's ports continued to thrive. Of the nine large ports with high growth rates, Asia has seven ports, with Hong Kong as the largest port. Of the 46 ports with the largest cargo throughput in the world, 18 are in Asia. Singapore, Hong Kong and Kaoshiung are the three ports in the order of 1,2,3 (1998). In the period of 1991-1996, ports with double digit growth were Hong Kong (10.5), Kelang (13.5%) and Taichung (13.1%). The transshipment of goods in the Pacific region has made Hong Kong and Singapore ports the leading ports in the region. The growth of Hong Kong's port capacity is due to China's commercial potential. Singapore Port mainly serves Southeast Asian countries such as Indonesia, Thailand, Vietnam and Malaysia. Malaysia has a relatively high economic growth rate after China. In contrast, Japanese ports have grown relatively modestly in recent years. As in the years before 1990, Japan's seaports played a dominant role, now the position is gone. This is due to the fact that shipowners and shippers have more opportunities for port selection and the emergence of many other ports in the region are more efficient and productive. The largest cargo port in Japan was the Chiba port with 178 million tonnes in 1996. Compared with 1995, the port of Shanghai recorded an increase of 47.8 percent and reached 135.5 million tonnes in 1996, Shanghai occupies the dominant position among the largest ports in the world. Port production reflects China's economic growth and the growth of foreign trade.

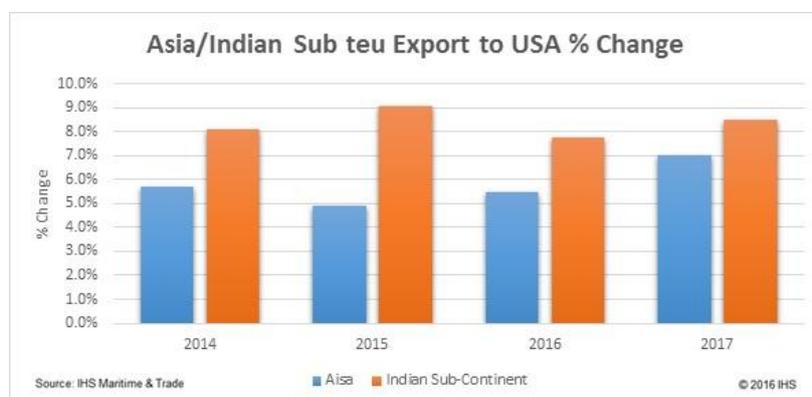


Figure 2. The increase of BDI in 2007, 2008

World container ports

According to ICY 1999 statistics, the total volume of containers of world ports reached 164 million TEUs in 1997, compared to 151 million TEUs in 1996. US, China, Singapore and Japan ports handled 47-48 Total container of the world. In the period 1991-1997, the average growth rate of container volume was 8.2%. Of these, 15 from Asia and 11 from Asia. The growth of these countries in the period prior to July 1997 was the main reason for that growth. This trend is likely to remain in the future as containerized cargo rates in countries such as China, Indonesia and Vietnam are rising. In 1995, 46% of container shipments were concentrated in Asian ports, 22.6% in Europe and 15.7% in the Americas. Port cargo volumes, especially major container ports including container containers and container transshipment, also increased rapidly. Transshipment container rates can be as high as 20% and will increase in parallel with the trend of containerized shipping by large vessels and only turning on container handling of some major ports, then transferring containers to feeders and Continue shipping. The volume of containers transported in the region, especially occupies an important position for Asian and European ports. The reason is mainly due to the intensity of trade in the area and the enormous volume of transshipment containers.

2. Vietnamese port system

Vietnam is a coastal country with over 3200 km of coastline, which has many advantages for developing marine economy. The Party and State have given much priority to the development of the marine economy and are reflected in the Document of the IX National Congress. Regarding the orientation of marine economic development in the market economy, the document clearly states: "... Improving the quality, increasing the volume and safety of transportation of passengers and goods on all kinds of goods. Transport ... Increasing the market share of international transport by air, sea ..., the volume of goods circulation increased from 9-10% per year, passenger rotation increased from 5-6% male...". On infrastructure development: "... To complete the renovation, upgrading, expansion or new construction under the planning of Cai Lan, Hai Phong, Nghi Son, Cua Bac, Tien Sa, Dung Quat and Lien Chieu ports. , Chan May, Quy Nhon, Nha Trang, Thi Vai, Can Tho ... "

On October 12, 1999, the Prime Minister approved the "master plan for the development of Vietnam's seaport system up to 2010" by Decision No. 202/1999 / QĐ-TTg, of which 114 seaports of all kinds Water is divided into 8 groups: Northern Port Group, North Central Port Group, Central Central Port Group, South Central Port Group, Ho Chi Minh City - Dong Nai - Vung Tau Port. and the West Island Port Group. Ports included in the master plan include 10 national general ports, 35 general ports, 69 specialized ports. Decision No. 885/QĐ-TTg dated 12/8/2004, 2619/QĐ/BGTVT dated 8 September 2003, 1022/QĐ-TTg dated 26 September 2005, 861/QĐ-TTg dated 6 September 2003, 4/2004, 791/QĐ-TTg dated 12/8/2005, 1024/QĐ-TTg dated 27/9/2005, 306/QĐ/BGTVT dated 16/2/2004 on approving detailed master plan of port groups By 2010, the Decision No. 202 of the Prime Minister was concretized. The planning of Vietnam's seaport system, in addition to its strategic orientation for the country's economic development and for the maritime sector, is also a direct indicator of port development in a subjective and investment way. rampant wastes resources of society. Through planning and serving the regional economic development strategy that the Party and State have pointed out, these are the three key economic areas. The northern key economic area is concentrated in the triangle Hanoi - Hai Phong - Quang Ninh. The southern key economic areas are Ho Chi Minh City, Dong Nai and Ba Ria - Vung Tau provinces. The central economic zone is concentrated mainly in Da Nang and Dung Quat industrial zones. In order to meet the economic development of each region as set by the Government, the seaport system is planned on the basis of serving the economic development strategy of each region, namely the development of the northern port complex, Southern port cluster and Central port cluster. In each area, focus on master planning, development of specialized ports suitable to economic characteristics as well as natural conditions in each region.

Hai Phong port

Hai Phong port is in Hai Phong city, on the right bank of the Cam River. The port is located 36 km from the buoy "0". Hai Phong Port is a general port of 2,366 m located on the right bank of the Cam River in Hai Phong city. According to the designed capacity of 5 million tons per year, the actual capacity of the port now exceeds the design and other port forecasting data. The access to the harbor reaches a depth of 8.4 m allowing 10,000 DWT vessels to enter and exit. Hai Phong port is divided into 4 main areas: Main port, Vat Cach port, Doan Xa port and Chua port. In addition, Hai Phong port also has Tra Bau, Hon Gai, Hon Mot and Bach Dang transshipment areas for ships of 20,000 DWT or more.

- The main port area was established in 1876, which is the center of the port located in the center of the city, 7 km far away from the port. Over the past several years the main port has taken on a large volume of cargo

accounting for 60% of all cargo through the port. The main port consists of 11 berths (1,722 m) belonging to the Hoang Dieu Loading and Unloading Enterprise.

Chua Ve port area was built in 1965, located downstream of Cam river, 4 km from the main port. This is the second focus port and the largest container terminal in the North.

- Vien Cach Port is located upstream of Cam river, 7 km far from the center of the city in Do Dau ward. Vien Cach Port was built in 1974, consists of 3 terminals, 314 m long, specializing in loading and unloading of steel, bulk goods, department. At present, the port is heavily sedimented, with a depth of only 3 m, allowing barges and ships of less than 1,500 DWT to enter the port.

- Doan Xa Port is located between the main port and Chua Ve port. This is generally a small port, mainly used for small tonnage vessels. Port facilities are also backward, low throughput.

Cai Lan port

Cai Lan port is located in Bai Chay, Ha Long City, Quang Ninh Province, 150 km east of Hanoi, 50 km southeast of Haiphong. The port is located on Bai Chay Bay with a total area of 33 km², at the Luc entrance, 2 km southeast of the port. The population center in Bai Chay and Ha Long City is opposite the Luc Gate. The tourist and social center is located around Ha Long Bay. The industrial centers are located in the North and North West ports, namely the Gieng Day area, the B12 petroleum depot, industrial parks and shipyards. To connect Cai Lan port area with domestic economic zones via national highway 18 which has been upgraded and upgraded up to highway standards.

In the master plan for port development approved by the Prime Minister, Cai Lan port will be developed into an integrated port with seven piers, capable of reaching 14 million tons per year in the year. 2010 created an economic triangle of Ha Noi - Hai Phong - Quang Ninh, reducing the stress level for Hai Phong port to balance goods between two regions.

Cai Lan port entrance from the entrance (Hon Sam) to wharf is about 33 km, the depth of the channel is very different, with a depth of 22.5 m, but only reach depth - 6.8 m. The width of the channel is quite favorable, the narrowest crossing of Bai Chay bridge is 80 m wide.

Other ports

Apart from national general ports, there are also some specialized ports in the north, mainly loading and unloading of containers, bulk cargoes and liquefied goods such as Cua Ong, Cam Pha loading and unloading stations, B12 port specializing in petroleum transport for the northern region, Dinh Vu, Transimex. Ports in the central region. The central region, where the coast is long, natural conditions are favorable for the development of the port. Characteristics of the central coast is deep sea, short river is quite favorable for the development of deep water port. Central ports can be divided into the following three basic groups:

North Central ports, including ports from Thanh Hoa to Ha Tinh.

- The national port includes ports of Nghi Son (Thanh Hoa), Cua Lo (Nghe An) and Vung Ang (Ha Tinh). The general characteristics of these ports are small scale, the condition of inlet and outlet channels is not favorable except Vung Ang seaport with depth of canal - 8 m convenient for vessels with less than 40,000 DWT.

- Specialized ports: Nghi Son Cement, Nghi Son Oil, Hung Hoa Petrol ...

Central Vietnam ports, including ports from Quang Binh to Quang Ngai. Most of the ports here are small, except for Danang. Portability of these ports is less than 1 million tons per year. In order to focus on developing and developing focal points to serve the economic development strategy in the Central of Central Vietnam, in the Master Plan approved by the Government, the Da Nang port will be expanded and expanded.

Da Nang currently has 1705 m of piers, relatively good (-10 m) canal depths, which can allow vessels of up to 25,000 DWT to enter the port. The port area is less prone to current conditions, so maintenance of the port is less expensive than other ports. Danang Port currently consists of two main areas: Tien Sa and Han River.

- Tien Sa area consists of 4 berths 732 m long mainly loading and unloading of department stores. This area is quite ideal for container handling, but due to limited cargo, so far Tien Sa port has just stopped at the general port in combination with container handling.

Han River consists of 6 berths of 973 m in length, the depth of this channel restricted (- 3.7 to 6 m) only allow ships with a tonnage of less than 5000 DWT to enter the port. Currently, this area is only used for loading and unloading cargo, for small vessels.

South Central ports from Binh Dinh to Binh Thuan. This area is very potential in the construction and development of seaports. At present, this area has two major ports, Quy Nhon port and Nha Trang port. These two ports are all ports with a capacity of about 1 million tons per year. Quy Nhon port, with over 300 m of piers, depth of channel - 9.0 m, is suitable for ships under 25,000 DWT. At present, the loading and unloading capacity of the port is 1.1 million tons / year.

Nha Trang harbor with 172 m of piers mainly loading and unloading of goods for consumption in the area. The condition of the access channel to the restricted port only allows vessels with a tonnage of less than 5,000 DWT to enter the port. Portability is currently only 0.4 million tons per year.

In addition to large general ports, there are also small local ports under management and some specialized ports such as Quy Nhon petrol port, Mui Chinh petrol, Dam Mon sand port ... In particular, the Prime Minister The government has decided to plan the Van Phong deep-water port to develop into an international container transshipment port. This is a port with favorable natural conditions both in the canal, international container shipping route. The potential of Van Phong port is very large and clear. After going into research and development, it will end the current rampant investment in port construction, develop Vietnam's maritime economic advantages and save significant capital and resources of society.

3. Conclusion

Most of the major ports are deep in the land, far away from buoy 0. Saigon is 90 Km, Hai Phong is 36 Km, Can Tho is 110 Km far from the buoy 0. The depth of the access channel to ports is mostly restricted and heavily burdened, such as Haiphong port with a depth of only 4.5 meters and Saigon port reaching 8.5 meters. The cost of maintenance, dredging is extremely expensive, some ports are at risk of being unusable. Vietnamese ports are unevenly distributed. On the one hand, due to natural conditions, the North and the South have developed economically but few ports. Central economic development is less developed, but the number of ports is two to three times higher for both the North and the South due to the natural conditions in this area is quite conducive to the construction of the port. On the other hand, due to the unplanned and unplanned port planning, there has been a spontaneous development of port construction in the localities and branches.

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