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The role of seaport system with social economic development in Vietnam

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Abstract: In maritime development in general, maritime trade in particular, seaport plays an important role, decides the global reach of every sea nation. For Vietnam - a country with large seas and long coasts, with many waist, lagoon and deep bays near big cities, tourism centers, islands and production areas. It is on the most bustling sea route in the world, the development of the port system is important. Up to now, Vietnam has had 160 seaports put into use, distributed in each area and area of the country, with the capacity of customs clearance increasing. By 2015, cargo throughput of the entire Vietnam seaport system is estimated at over 600 million tons. In particular, the shipping industry is managing 35 harbors in national ports, dozens of specialized ports and over 330 wharves, with a total length of up to 39,950 m, doubling in 1999, contributing to the productivity of loading and unloading, customs clearance of goods of various types of seaports in Vietnam to the level of other countries in the region.

Keywords: seaport system, social economic development, maritime development

1. Introduction

With 3260 km of coastline stretching from the North to the South, the continental shelf has sovereignty over 3 times the size of the mainland, numerous bays, deep rivers, and geographic proximity to international maritime routes. Therefore, Vietnam has great potential in developing marine economy. At present, sea transport is still the dominant sector, occupying the absolute advantage (80% of volume) in trade exchange between countries, and average growth rate of 8-9%. The largest throughput ports are in the Asia-Pacific region. Potential is, but it is not simple to have a direction and a total solution to maximize this potential. The point of the Party and State is to develop the marine economy, facing the sea. The development of marine infrastructure in which seaport development must be prioritized must be one step ahead to serve the political stability and social and economic development of the region and the region as well as the country. Now, Vietnam has a master plan for the port system up to 2020 and Vietnam is expanding its vision up to 2030. However, in reality there are still many inadequacies. The status of "medium and small" in the port system, wherever there is sea port construction without regard to socio-economic efficiency or investment spread, many small ports without water ports. Deep, international ports are losing the advantage of the sea that we have. Due to the inadequacies in the development of Vietnam's seaport system, the need for seaport system, situational analysis and hence some solutions from the perspective of a student To contribute a part in the development of Vietnam's seaport system is increasingly perfect.

Seaports are yards and areas where loading and unloading of ships is carried out, including normal positions for ships waiting for loading and unloading, regardless of the distance of these areas. Normally, the port has common connections with other modes of transport and thus seaports provide continuity services. From a modern point of view, seaports are not the end or end of the transport process but the goods and passenger rotation. In other words, the port is considered as a link in the transport chain. Transport concept is broader: the task of stimulating the interests of the port's parties is not limited by time and space. Its purpose is to serve the prosperity and welfare of a region and a country or countries to ensure the improvement of the quality of life.

The overall assessment shows that although the quantity is abundant and allocated from north to south, land use and exploitation are low. The reason is spreading investment, local "deep water port" while goods are less, natural conditions do not allow. Secondly, due to the lack of foresight and inaccurate seaport system planning, in order to deal with local growth, it is impossible to establish a synchronous and rational national transport network. Closely connected with the seaport system. This has undermined capacity in large urban ports undergoing rapid population growth, as well as severe degraded infrastructure. In particular, it lacks the true deepwater port to accommodate 80,000 DWT vessels or more, or about 6,000 TEU container ships, and there is no international transshipment port for the global shipping industry. Vietnam is also missing the opportunity to acquire Logistics as a key sector of maritime services formed during the development of the seaport system, which now stands at between \$ 8 billion and \$ 10 billion a year, largely in hand. International maritime groups operating in Vietnam. However, due to various reasons, both subjective and objective, the efficiency of using and exploiting Vietnam's seaport system is still low and it has not matched the potential and advantages. At

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present, most 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 and heavy weight in dealing with local growth, are difficult to connect to establish a coherent national transport network. This not only leads to more port and less cargo, but also undermines the capacity to clear goods at large urban ports, but is under increasing population pressure and transportation infrastructure degradation.

2. Key factors of the seaport

A seaport is an area that includes port land and port waters, is constructed infrastructure and installed equipment for ships to go into operation to load cargo, pick up passengers and carry out other services. The port includes wharves, warehouses, yards, workshops, offices, service facilities, communication systems, electricity, water, access to ports and other support facilities. A wharf is a fixed structure of a harbor, which is used for seagoing vessels, loading and unloading of goods, pick-up and delivery of passengers and the provision of other services. The offshore vessel receiving area (offshore oil and gas port) is the area where the seagoing vessel departs, goes into operation, unloads cargo and performs other services at offshore facilities. Marine navigational channel is the limit of the water area determined by the maritime signaling system and other auxiliary works so as to ensure safety for the operation of sea-going ships and other waterway means. Marine navigable channels include seaport lanes and other navigable channels. Coastal port branch is a delimited area of water from port to port, defined by the maritime signaling system and auxiliary facilities, to ensure that seagoing vessels and other means of navigation are in and out. safe harbor. Seafreight is the limitation of the water area from the sea to the port, which is determined by the maritime signaling system and auxiliary works to ensure that the vessels enter or leave the seaport safely. The area for receiving and returning pilots is the water area for the ships to anchor and pick up pilots.



Figure 1. International key port of Hai Phong

Quarantine area is a delimited part of seaport waters where ships and boats anchor to quarantine. Storm shelters are limited areas of seaport waters for ships to anchor and avoid storms. Anchorage is a delimited portion of a seaport's waters where vessels anchoring or waiting for berths, oil and gas ships, awaiting transshipment, waiting to cross the channel or perform other related maritime services. Ship turnaround is a limitation of seaport waters for ships to return. Transshipment areas are the restricted areas of seaport water areas for vessels to anchor to carry goods and passengers. Boats include sea-going ships, military vessels, public-duty vessels, fishing ships, inland waterway vessels, hydroplanes and other watercraft. The shipowner is the owner of the vessel or its manager, charterer, operator or authorized person. Port land is limited to the construction of wharves, warehouses, yards, workshops, offices, service facilities, transportation, communications, electricity, water and other auxiliary facilities. and equipment installation. Port water areas are limited to establishing water areas in front of wharves, anchorage areas, transshipment zones, storm shelters, pilot embarkation and disembarkation zones and quarantine areas; to build seaport channels and other auxiliary works.

The international transshipment port has the potential to contribute to the consolidation of maritime sovereignty thanks to the internationalization of the maritime route, the unification of the domestic and international trade gateways, the strengthening of security and national control. marine office. In addition, the

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international transshipment port will create more jobs for laborers in the region with many different qualified positions and be the basis for the acquisition of modern technologies and techniques from advanced countries. gender.

With increasing demand for cargo, especially cargo moving through the Pacific Ocean. Vietnam's coastline is closest to international sea lanes, close to the international maritime axes from Europe to East-North Asia, from Europe to Asia to Latin America, to North Asia routes. South Asia, going to Oceania and vice versa. It is estimated that there are about 150-200 ships of all kinds going through the East Sea each day, of which about 50% of ships have a tonnage of over 5,000 tons, more than 10% of ships with a tonnage of 30,000 tons or more. This is a great potential to exploit and develop an international transshipment port in Vietnam.

The competitiveness of a transshipment port built in Vietnam can also be realized in reducing costs and costs for ships calling at ports. Currently, in addition to the few cargoes coming from Cai Mep - Thi Vai port, which can go directly to Europe and North America, most of the goods exported to these areas are forced to transit through Singapore or Hong Kong. The average cost of transshipment is about \$ 94 per TEU compared to the direct one, and the time is also extended by 6 to 7 days. The transshipment of goods in Hong Kong and Singapore has made importers and exporters incur additional charges of at least US \$ 400 per TEU. With the number of containerized cargoes reaching about 5 million TEUs per year, Vietnam's economy lost nearly \$ 1.5 billion a year.

3. Factors of determining the seaport establishment

Natural conditions: The development of seaports can only be effected if there are certain natural conditions, suitable to the construction of seaports such as many curved bends and bays, wind bays and few beaches. Many estuaries have many convenient places for the construction of many large ports, thus creating conditions for the construction and operation of ports, significantly reducing the costs of building wharf and protection works. port...

Long-term: the area selected for seaport should be taken into account factors of natural fluctuations such as the shallow port, accretion, then dredging measures, renovation later. At present, sea level rise is seriously affecting countries in the world, especially in Vietnam. Excluding these factors, port construction cannot be sustainable. In the case of existing ports, this should also be considered satisfactorily to take preventive and corrective measures if any.

Factors to consider for the construction of seaports are generally the exchange of goods between countries, especially with the intention of promoting the export and import network. Sea trade with the importance of the port system has created good conditions for economic development, utilizing comparative advantages. Countries like Singapore and Hong Kong thrive in this direction. It is important to look at the markets of the production and consumption markets of each commodity through the port. In Vietnam we can promote commercial advantage as domestic consumption market, neighboring countries such as Laos, Cambodia, Northeast Thailand and southern China have no seaports. Regarding exports, Vietnam is also easy to promote trade with Asian countries, the United States.

Port development usually includes a strong economic development objective. Thanks to the available commercial advantages, seaports also provide jobs for local laborers, creating new service industries and expanding them. The port system is also the leading infrastructure element before the development of economic sectors such as oil refining, fishing, aquaculture, marine tourism. The development of the marine economy can be considered as the spearhead of the local, regional and national development. There are strong maritime states that have developed economically in this direction, including Singapore, Hong Kong or Sweden.

Having a seaport, the economic, cultural and social exchanges among countries in the region are going to become easier in the world. In countries with strategic geographic locations such as Vietnam, the development of seaport system is also important in maintaining security and politics. History has proved the importance of seaports to the ancient cities developed by the famous ports and development, expanding both economic and cultural of Vietnam with the outside. The trend of the world is now the economy facing the sea, strong development of the marine economy, so the orientation to perfect the port system of Vietnam is perfectly suited to the world trend.

At present, over 90% of the import and export goods of our country is transported through the port system. In general, countries in the world who want to develop in line with the common development momentum must integrate into the international and regional markets through foreign economic relations, which focus on foreign trade activities. These activities cannot be operated without the decisive contribution of sea transport that port plays an important role. Seaports are the hub of traffic connecting the sea with the continent by the traffic arteries such as river, road, rail and road, which are not used for the exchange of goods and passengers between areas the country of a country and between that country and other countries in the world. Economic growth is related to trade, particularly foreign trade, while trade itself creates growth. In other words,

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international trade is at the same time the cause and effect of economic growth, and trade cannot occur without sea transport. Consequently, efficient transportation at a reasonable cost is considered a basic requirement of economic development. This is obvious because the cost of seaports now accounts for a significant proportion of the total cost of shipping. Moreover, the port is considered as the most important link in the entire transport chain. In the context of economic globalization, the role of seaports becomes important. Ports play a very important role in the production chain of the national economy. Port operations not only meet transport needs, but also involve other sectors such as trading, trading, agency, brokerage, insurance, arbitration, law, finance, banking, and travel. Seaports are a mix of functions that are the nucleus of economic development in a region and contribute significantly to the development of the national economy. Seaport economics has great potential, if properly exploited will bring many benefits to the country. Apart from the main function of carriage, cargo transportation and seaport, there are many other functions which can be divided into 5 main functions as follows:

* The function of transportation, loading and transporting goods

In the national transportation system, seaports are the convergence points of various transportation routes (sea, river, rail, air). This is the main traffic hub for all modes of transport as a gateway for economic and trade exchanges in the country and abroad in order to integrate our economy with the international market economy, with all countries in the region. In terms of modes of transportation in Vietnam, seaports are considered as the most important factor in the development of marine transport systems, which mainly serve inter-region and international. This division allows the transport routes can promote their advantages and advantages, forming a flexible and unified. Seaports perform the transportation function through the distribution of goods. When studying the implications for the formation of the transport network in the port area, we see that the role of the transport hub in the network of transportation is increasing. To handle a large volume of cargo through the port, a system of wharves with a high level of specialization, investment in modern loading and unloading facilities, storage and processing systems, packaging and distribution of goods are convenient and reliable. In Vietnam, seaports such as Hai Phong, Da Nang, and Saigon have long been the main transport focal points of the three northern, central and southern regions and along with time, this role is most affirmed. In the period when our country is implementing the mechanism of open cooperation, the ports are not only the hub of domestic transportation but also the focal point of international transportation routes with Laos and Cambodia, Northeast Thailand, South China as well as other ports around the world.

* Functional trade and international trade

As the focal point of the transportation routes: river, rail, road, from the very beginning, seaports have been the focus of trade of merchants from all over. They bring to the port the special communication products of their localities and create a large exchange of goods with diversified goods, especially in the port areas where they are located. The natural advantages such as lying on the international maritime routes linking continents and dynamic economic development areas, the business and trade exchange is more and more exciting. These port areas quickly became the commercial center not only of the region but also of the whole world. To meet the requirements of socio-economic development of the country, the cargo through the port is increasing rapidly. Therefore, for a country rich in marine resources like Vietnam, the development of the seaport system will be a favorable condition for us to increase bilateral and multilateral trade exchange with the world economy, As a result, the major trade centers in the port area, acting as the growth drivers, will lead to the economic development of the whole country.

* Industrial functions and fuel supply

Seaports are good locations for building factories of different industries because it allows for a great deal of transportation costs, Importing and exporting its products by sea transport will achieve great savings, lower production costs and help the company's products compete in the international market. Planners often consider setting up industrial plants in the port near the port an ideal arrangement. In addition, these industrial enterprises can be linked together to form a uniform and efficient production process. For example, the same port area may have shipbuilding and refineries, refineries, and chemical plants. The output of the refinery is when the methane, ethylene will be supplied as the main raw material for the chemical plant organic synthesis. Establishment and development of seaports is one of the favorable conditions for the establishment of industrial zones, export processing zones and production and business activities of these zones, which creates demand for transportation. the sea must meet. Therefore, industrial zones are a solid foundation for seaports to survive and develop non-stop. This is the relationship of mutual impact, mutual support and development of seaports and industrial parks. And this relationship is nowadays being solemnly declared by the seas to serve the cause of socio-economic development of the country. In Vietnam, in the plan for socio-economic development to 2010,

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Vietnam has made detailed plans for the construction of deep-water ports such as Cai Lan port (serving Quang Ninh industrial zone and distributing Dung Quat port (serving Dung Quat industrial zone and economic development in Central Vietnam).

* City and urban development functions

The relationship between seaports and cities is interrelated. Seaports influence the formation and development of the port city by means of various means: creating a scale that extends the city, creating jobs for the people of the city.

* Functional cultural center, leisure, travel and entertainment

Port operation also creates cultural exchanges between regions and regions throughout the country as well as between countries as it is accompanied by economic exchange as cultural exchanges. The foreign merchants (China, Japan, India ...) bring here traditional products and unique cultural identity of their own. Conversely, the culture of Vietnam will also exchange and spread to other countries through the exchange of traditional products of the nation. On the other hand, the development of seaports and industrial parks and port towns has led to the construction of residential areas, recreation centers for local people and tourists from other destination ports.



Figure 1. Singapore port

Located in an ideal location and location, Singapore has built itself a modern seaport system with the region's most developed shipping network. The port in Singapore is particularly attractive as it has a very complete infrastructure and modern communications system in the world. With only a few dozen sea lanes linking with neighboring countries, by the end of the 1980s, Singapore had over 700 sea lanes and cargo ships to more than 600 ports around the world. All tariffs and procedures for import and export goods are exempted. Every year there are about 40,000 vessels berthed. In terms of volume, the Singapore port ranks second in the world, behind Rottedam and fifth in containerized cargo volume. In addition, the Port of Singapore is the world's most competitive ship repairs. Every year between 2500 and 3000 ships are repaired here. Singapore is also the world's leading supplier of fuel and the world's third-largest oil refiner. Singapore has excellent banking and financial services. Highly skilled workforce, modern and synchronized infrastructure, is Asia's largest deepwater port, comparable to major ports in Western Europe. With such achievements, the Government of Singapore has a lot of measures and policies for the development of seaports, including mainly the policy of attracting foreign investment for the maritime industry, in addition to the open Completely Maritime Market. In recent years, the Singapore government has adopted a new management policy in three steps. As of 01/10/1987, the port of Singapore was transformed into a company, the next step was to privatize the port. Not only Singapore seaports have made offshore investments and have achieved success in China.

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4. Conclusion

21st century is considered the century of the sea, the sea states are building their fishing strategy. Vietnam has become an official member of the WTO, so the strategy of marine economic development in our country should cover the basics to manage and exploit the sea effectively. Among them is the strategy of searching, protecting and exploiting marine and coastal resources; industry strategy; security strategy; Strategy to protect and enrich the marine environment; marine science and technology strategy; human resource development strategy; regional and international cooperation strategies; Strategy for unified national marine management and implementation of the strategy. That is why it is necessary to further improve the port capacity of Vietnam in the context of deep integration into the global economy.

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