

Study on the Impact of International Logistics in Nansha Free Trade Zone

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Abstract: With the process of economic globalization, China's port cities have established free trade zones, in order to achieve the docking with the international economy, not only optimize the customs clearance environment, but also to a certain extent, improve the comprehensive service ability of the port city, drive the development of international logistics industry. This paper is divided into the following four parts: First, the development status of Nansha international logistics industry is expounded; Secondly, it analyzes the opportunities brought by Nansha Free Trade Zone for Guangzhou international logistics industry; Next, analyze the problems existing in the international logistics industry of Nansha Free Trade Zone; Finally, according to the existing problems, it puts forward targeted policy suggestions.

Keywords: Guangzhou Nansha Free Trade Zone; International logistics; Policy suggestion

1. Introduction

With the advent of economic globalization, the economic links between countries in the world have become increasingly close, and the pattern of world finance and trade has also undergone a series of changes. On the one hand, free trade zones can enhance the internationalization and legalization of trade; On the other hand, it also drives the development of the international logistics industry^[1]. The development of logistics industry in Guangdong, Hong Kong and Macao has great development potential, and the economic strength of the three places ranks in the forefront among provinces and regions in China. Nansha is located in the central position connecting Guangdong, Hong Kong and Macao, and is one of the key cooperation construction areas of Guangdong, Hong Kong and Macao. Meanwhile, Nansha Free Trade Zone is also the largest and most advantageous geographical location of Guangzhou, and the development of Nansha has been highly valued by the country.

2. General situation of development of Nansha international logistics industry

2.1 Overall development

Nansha of Guangzhou is located in the geographical and geometric center of the whole Pearl River Delta, with more than 10 of the most economically developed large and medium-sized cities in the Pearl River Delta within A radius of 100 kilometers. At the same time, Nansha of Guangzhou is in the support position of the "A" shaped spatial structure of Guangzhou-Hong Kong-Macao in the Pearl River Estuary area, and it is a pivotal node connecting the urban agglomeration on both sides of the Pearl River Estuary. Nansha is a regional water and land transportation hub, 38 nautical miles away from Hong Kong and 41 nautical miles away from Macao, with a prominent strategic location and strong market potential and radiation^[2].

In recent years, Nansha international logistics industry has developed rapidly and become an important shipping logistics hub in the Guangdong-Hong Kong-Macao Greater Bay Area. By 2023, the region's GDP will reach 232.354 billion yuan, an increase of 4.3 percent over the previous year. Among them, the added value of the primary industry was 6.954 billion yuan, down 1.2%; The added value of the secondary industry was 97.649 billion yuan, up by 3.4%; The value added of the tertiary industry was 127.751 billion yuan, up by 5.2%. The ratio of the added value of the three industries is

3.0:42.0:55.0. By the end of 2023, the district has 967,900 permanent residents, 563,200 registered residents, and 692,600 real-name registered employees [5].

2.2 Development of international shipping

The shipping industry of Nansha Free Trade Zone maintains a relatively good growth trend, and the maritime department actively promotes the high-quality development of the shipping industry. In the year, 292,000 ships enter and leave the port, and the container throughput is 18.39 million TEU, accounting for 80% of the total area under the jurisdiction of Guangzhou Maritime Safety Administration. Guangzhou Shipping Exchange actively promotes the construction of a comprehensive shipping information service platform, and promotes the global agglomeration and allocation of shipping resource elements. In 2023, Nansha Port Area Phase IV (I) project, Guangzhou LNG emergency peak gas source station supporting terminal, Nansha Port Phase III Project III storage yard, III project dangerous goods storage yard have been completed and put into operation. The revenue of railway transportation, warehousing and postal services in the region was 64.153 billion yuan, up by 1.4 percent. In the whole year, Nansha Port area achieved a container throughput of 19.8 million TEU, an increase of 5.4%, and a cargo throughput of 371 million tons, an increase of 2.9%.

By the end of 2023, there were 156 international container liner routes and 34 domestic container liner routes in Nansha Port area. The freight turnover of the water transport industry reached 2.06 trillion ton-kilometers, an increase of 7.0 percent. The "Bay Area - Hong Kong Stock Connect" has completed 165,000 TEUs, the sea-rail combined transport has completed 306,000 TEUs, and a total of 24 China-Central Asia freight trains have been shipped. Nansha Port has built 16 deep-water container berths, with an annual capacity of more than 20 million TEUs, and foreign trade routes to more than 400 ports in more than 100 countries and regions around the world. Through such innovative modes as sea-rail transport and Bay Area Link, Nansha Port has enhanced its function of "internal attraction and external connection", strengthened its connection with inland waterway shipping, and enhanced the combined transport capacity of the MTR by using rail transport.

2.3 International maritime services

Nansha International Maritime Service Agglomeration Zone has attracted 26 enterprises to settle in, focusing on supporting the development of water transport, freight forwarding, shipping transactions and other industries. Nansha District issued the "Support Measures" to fully support shipping logistics enterprises to settle down and develop in Nansha, support shipping logistics enterprises from many aspects such as enterprise settlement and development, business contribution awards, route awards, and add sea and rail combined transport awards, with an annual total of up to 40 million yuan to enhance the function of international shipping logistics hub. Among them, the Nansha Plan proposes to enhance the function of international shipping logistics hub, promote the integration of shipping service resources within the Guangdong-Hong Kong-Macao Greater Bay Area, support the building of a joint shipping trading center in the Greater Bay Area, and build an international maritime service industry cluster area.

2.4 Integration of shipping service resources

Guangzhou Futures Exchange has listed industrial silicon and lithium carbonate two business varieties, the cumulative turnover of more than 6 trillion yuan; To launch the construction of the Guangdong-Hong Kong-Macao Greater Bay Area (Nansha, Guangzhou) cross-border financial and asset management Center; We deepened trials to open cross-border trade and investment at a high level, and implemented all 13 pilot measures, with a cumulative transaction value of more than US \$30 billion. Four new QFLP pilot enterprises (10 in total) and one QDLP pilot enterprise were added throughout the year, with a total approved quota of more than 24 billion yuan; The International Financial Forum (IFF) 2023 Global Annual Meeting was held in the newly completed permanent venue in Nansha, and the first climate investment and financing exchange brand "Mingzhu Bay International Climate Investment and Financing Conference" was held in China.

3. Analysis of opportunities brought by Nansha Free Trade Zone for Guangzhou international logistics industry

3.1 Policies and systems are conducive to the development of logistics enterprises

In 2022, The State Council officially issued the Overall Plan for Deepening Guangdong-Hong Kong-Macao Comprehensive Cooperation in Guangzhou Nansha for the World (hereinafter referred to as the Nansha Plan). The "Nansha Plan" puts forward higher requirements for Nansha to build an open door, clarifies the tasks such as strengthening the function of international shipping logistics hub, and further strengthens the exchange and integration with the international logistics industry. It pointed out that we should fully promote the development and opening up of Nansha, accelerate the construction of the eastern center, and build a new Guangzhou with high-end resources. The benchmark is world-class, with the focus on "three veins", "three axes" and "three cores" to optimize and improve the urban spatial pattern, and continue to strengthen the status of the city's central hub. To build a major platform for high-quality "south and east development", promote Nansha to make substantive breakthroughs in the implementation of policies, upgrading planning, Guangdong-Hong Kong-Macao cooperation, urban construction and industrial development, implement the strategy of upgrading the Free trade area of the standard International Free Trade Port, operate the "going out" comprehensive service base for Chinese enterprises, and jointly build the Guangzhou-Shenzhen Industrial Park. We will release the dividends of relaxed market access and preferential corporate income tax, vigorously develop the waterfront economy, build an unmanned industrial base in the Greater Bay Area, and make the construction of Nansha shine and shine. Highlight the "strong to the air and prosperous to the sea", build a Marine innovation and development city, build a high-level international aviation hub, shipping hub and world-class railway hub and rail system, so that Guangzhou can better connect the world and link the world. To sum up, a good policy environment can provide growth space for the development of Nansha logistics enterprises.

3.2 Transportation advantages are conducive to the development of international logistics

3.2.1 Maritime Advantage

Nansha Port has continuously advanced in the unobstructed vast inland hinterland and connected to the international market, making efforts to build an international logistics hub. With the operation and adaptation of Nansha Port, Guangzhou has opened up an important channel to the sea, and innovative modes such as sea-rail combined transport and Bay Area - Hong Kong Connect have further enhanced the function of Nansha Port as "internal attraction and external connection"^[8]. The introduction of the Nansha Plan further proposes to integrate the shipping resources of the Guangdong-Hong Kong-Macao Greater Bay Area, and promote the comprehensive and in-depth participation of Guangdong-Hong Kong-Macao in the construction of the Belt and Road. At Nansha Port Phase 4 terminal of Guangzhou Port, unmanned IGV vehicles equipped with the Beidou navigation System accurately docking containers for automated operations, and "smart port" has become a reality. By the end of 2023, Guangzhou Port Nansha Port Area has built 16 deep-water container berths, the annual capacity of more than 20 million TEUs, foreign trade routes to more than 400 ports in more than 100 countries and regions around the world.

In addition, on June 25, 2024, Guangzhou Nansha International Cruise home Port officially opened, which also means that Guangzhou Nansha International Cruise home port welcomed international cruise ships again. Nansha International Cruise Terminal has opened 9 routes, a total of 12 cruise destinations (including Hong Kong, China, Naha City, Okinawa, Miyako Island, Yaeyama Islands, Ho Chi Minh City, Nha Trang, Da Nang, Halong Bay, Manila, Boracay Island, Subic Bay), is the domestic cruise port with the most routes in Southeast Asia. Therefore, the superior shipping conditions can better promote the development of Nansha international logistics industry.

3.2.2 Advantages of land transportation

In addition to strengthening the connection with inland shipping, Nansha Port will also make full use of rail transport. The Nansha Plan proposes to further enhance the MTR intermodal transport capacity. Combining the network layout of "international liner route + shuttle bus branch line + inland port office", Guangzhou Port builds a sea-rail intermodal transport channel connecting inland areas and Guangzhou Port to the world, and moves the "outlet to the sea" of Guangzhou Port to the "doorstep" of inland enterprises^[7]. It can transport goods from neighboring provinces directly to the port of Guangdong, driving the concentration of goods in the hinterland of the entire port. By the first half of

2022, Guangzhou Port will build a multimodal transport channel of "railway + sea transportation + international inland logistics", and the Hong Kong sea and rail intermodal train service will radiate 9 provinces and cities and 42 prefecture-level cities across the country. From January to May 2022, Guangzhou Port has shipped a total of 7 China-Central Asia freight trains, with a year-on-year increase of 49.9% in the volume of sea-rail combined transport^[3].

On the other hand, the opening of the Shenzhen-China Corridor on June 30, 2024 is also a major change for the location of Nansha. The opening of the Wanqingsha Branch line of Shenzhen-China Passage will be the second historic opportunity to profoundly change the external traffic of Nansha after the Nansha Bridge. At present, the main line of the South and Middle high-speed has been through in April 2024, and the whole line is scheduled to be completed and opened to traffic in the second half of 2024, which will achieve seamless docking with the Shenzhen-China Channel, and the Nansha Wanqingsha to and from Shenzhen Qianhai can speed up to the fastest 12 minutes each other (calculated by 20 kilometers). Therefore, good land transportation conditions will also strengthen Nansha's radiating role in the surrounding cities, enhance the status of Guangdong-Hong Kong-Macao Greater Bay Area as the central city, promote the further connectivity of the Guangdong-Hong Kong-Macao Greater Bay Area, and promote the development of Nansha's international logistics industry.

3.2.3 Air transportation advantage

The General Office of the Guangzhou Municipal People's Government issued the Guangzhou Comprehensive Three-dimensional Transportation Network Plan (2023-2035), planning the construction of five general airports in Panyu, Zengcheng, Nansha, Conghua and Whampoa to build a world-class airport cluster in the Greater Bay Area, which will lead the development of a world-class airport cluster in the Greater Bay Area in collaboration with Guangzhou Baiyun International Airport. To sum up, through the sea, land and air three aspects to improve the level of Nansha hub, build a high standard Bay Area express line system, strengthen the leading role of rail transit, the construction of internal and external multi-level rail transit integration network, through rail transit to drive the Nansha "half hour life circle" planning and development, support the construction of international Bay Area hub portal.

3.3 Industrial advantages are conducive to the development of logistics enterprises

Nansha Development Zone takes port and modern logistics as industry leaders, and has formed an industrial pattern of eight industries supporting each other. Nansha Free Trade Zone focuses on the development of modern service industry and high-end manufacturing, forming an industrial cluster, logistics enterprises can rely on these industrial clusters, to provide professional and customized logistics services. Nansha Free Trade Zone actively develops shipping services, including shipping finance, shipping insurance, shipping brokerage, etc. In addition, semiconductor industry park has been built in Wanqingsha, core Yue energy, core energy, Jinko Electronics, Lianjing intelligence, South sand wafer and other chip industry manufacturers have landed here. In order to promote the development of semiconductor and integrated circuit industry chain, Nansha has formed a third-generation semiconductor industry chain, a semiconductor and integrated circuit industrial park, a "strong core nine" policy, a series of industrial investment funds, including the "4 1" industrial development system, in summary, these complete industrial advantages will provide all-round support for Nansha logistics enterprises.

4. Analysis of problems existing in the international logistics industry of Nansha Free Trade Zone

4.1 Lack of competitive logistics leading enterprises

In addition to the South China Sinotrans Container Logistics Co., Ltd. and the Guangzhou operation center of Sinotrans South China Co., LTD., established in May 2020. The former will rely on the location, industry and policy advantages of Nansha District of Guangzhou, combined with its own resource advantages as a leading logistics enterprise in South China in the field of integrated logistics services, to build Sinotrans South China Container logistics Headquarters in Nansha; The latter is a wholly-owned subsidiary of Sinotrans Co., LTD., one of China's top 500 enterprises, and its comprehensive logistics service capability ranks first in China. Generally speaking, Nansha lacks the headquarters and settlement center of large modern logistics enterprises, and the investment of large international logistics enterprises is also small^[2]. Although the number of logistics enterprises in

Guangzhou is relatively large, most of them belong to small and medium-sized enterprises with small scale. In addition, the advantages of port logistics have not been fully utilized, Nansha only stays in the development of containers, the lack of the overall operation of port logistics and high-end talents, the efficiency of port logistics still needs to be improved.

4.2 Lack of distinctive logistics industry chain

In addition to the lack of large modern logistics enterprise headquarters, the region is also relatively weak in the development of small and medium-sized logistics enterprises and private economy, the number of private enterprises is small, and the scale of enterprises is small. Logistics warehousing and supporting systems need to be improved, while logistics warehousing facilities and logistics cold storage management systems also need to be further improved to meet the growing logistics needs. The problem of information island exists among logistics hubs, logistics parks and industrial parks, and the logistics industry chain of information sharing and resource integration has not yet been formed^[10].

4.3 Lack of green and low-carbon development of shipping

The shipping industry has traditionally relied on fossil fuels, and clean energy such as electricity, hydrogen energy and LNG (liquefied natural gas) are not widely used in the Nansha Port area. Although the International Maritime Organization (IMO) has relevant emission standards for ships, there may be room for more stringent emission control measures in the Nansha port area. In addition, the construction of green ports needs to be further strengthened, which not only includes the use of clean energy, but also involves the port operation efficiency, waste treatment, water resources management and other aspects need to be improved. Green and low-carbon development requires a large amount of capital investment, including the research and development of green ships, clean energy infrastructure construction, etc., which needs more financial support and investment. Green and low-carbon shipping needs to rely on technological innovation, such as energy efficiency management, alternative fuel technology, carbon capture and storage technology, etc. The research and development and application of these technologies are still in the initial stage in Nansha.

5. Countermeasures of Guangzhou international logistics industry under the influence of Nansha Free Trade Zone

5.1 Actively cultivate leading logistics enterprises

Based on the current development of the logistics industry in Guangzhou, it is necessary to cultivate a group of leading logistics enterprises, actively introduce large international and domestic modern logistics and supply chain leading enterprises and their regional headquarters, marketing centers, data centers, settlement centers, research and development centers, and support enterprises to move their registration and tax places into Nansha and settle transactions in Nansha. For large logistics backbone enterprises with a certain scale and core competitiveness, give full play to their leading role and drive the development of other logistics industries. In addition, it is necessary to strengthen the coordinated development with international logistics giants and domestic large logistics groups, constantly open up new development space, achieve effective linkage at home and abroad, promote resource integration and sharing, create more brand logistics enterprises, and jointly commit to the development of Guangzhou logistics industry^[9].

5.2 Accelerate the formation of a distinctive logistics industry chain

Nansha International Logistics Park has basically completed the infrastructure construction of the bonded center, which will integrate the functions of "export supervision warehouse" and "bonded warehouse" to achieve port functions, break the status of the two warehouses storing inbound and outbound goods respectively, and the inbound and outbound centers can be declared, transferred and extracted in the center. Nansha International Logistics Park must establish a professional information management system, jointly establish an inland logistics distribution network with domestic logistics partners, and provide high-quality and efficient bonded logistics circulation processing, information consulting and other services by expanding the international transfer, distribution, distribution and assembly of import and export goods in the Pearl River Delta^[4]. Promote the construction of logistics informatization, strengthen the construction of logistics informatization, achieve full-process paperless

and intelligent logistics information, and enhance customs clearance efficiency.

5.3 Cultivate and guide the green and low-carbon development of shipping

The government encourages the green and low-carbon development of the shipping industry and the transformation of ships to save energy and reduce emissions, and grants corresponding subsidies to ships that promote the use of clean energy such as electricity, hydrogen energy and liquefied natural gas in the Nansha Port area. Support the development of multimodal transport services, introduce subsidies for sea-rail combined transport, encourage enterprises to use sea-rail combined transport and other methods to handle cargo, expand the cargo hinterland of Nansha Port, reduce the burden on surrounding road traffic, and guide the green and low-carbon development of shipping^[6]. Shipping logistics enterprises are encouraged to adopt more environmentally friendly and sustainable operation methods to promote the green transformation and sustainable development of Nansha international logistics industry.

6. Conclusion

With the development of economy, the logistics industry of Nansha is constantly in line with international standards. This paper fully expounds the current situation of the development of Nansha international logistics industry, and analyzes the opportunities brought by Nansha Free Trade Zone for Guangzhou international logistics industry from the perspective of location advantages such as sea, land and air transportation. At the same time, according to the problems existing in the international logistics industry of Nansha Free Trade Zone, the paper analyzes and puts forward targeted policy suggestions, so as to empower the development of our economy.

Acknowledgements

This work was supported by the Fund project, Guangzhou College of Commerce - Huazhan Logistics Industry-Academia-Education Integration Practical Teaching Base (2023ZLGC01)

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