

# Logistics Service Providers in Central Vietnam: Current Status and Strategies for the Future

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*Abstract:* - The trend of globalization leads to an increased need for international freight transportation and accelerates the development of the global logistics industry. This paper aims to study logistics service providers' current status and strategies in central Vietnam. The study data sample was collected through a questionnaire form, responded by 488 companies outsourcing logistics services. The findings indicate a direction for the Central Vietnam authorities to follow in implementing the ideal investment prioritization and the appropriate regulations for improving its logistics industry. This study enriches the literature by investigating logistics study's current status and prospects in a transitional economy. It also offers invaluable information and implications for local providers, government authorities, and foreign logistic service providers interested in Central Vietnam's logistics industry.

*Key-Words:* - Logistics service provider (LSP), Central Vietnam, Current status, Strategy for development

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## 1 Introduction

Logistics makes the business processes more efficient and cost-effective since it plays a supportive role in business operation's primary functions, including marketing and manufacturing. The objective of logistics service is to minimize the overall costs from the inconsistency of the operation of subsection between units produced to misbalance in the system due to and the desire to achieve the individual goals of individual subsystems [1]. Vietnam has experienced strong growth in trade in recent years, which will support the ongoing development and expansion of its logistics. The logistics industry is one of the fastest-growing industries in Vietnam, and it is estimated to grow at a pace faster than the GDP growth rate. Currently, the logistics service accounts for 15-20% of GDP in Vietnam. Vice versa, Vietnam's logistics industry has also been boosted by the country's increasing GDP rising manufacturing and e-commerce sectors. In addition, the adoption of e-commerce by the country's young demographic has created the demand for expansion in logistic services. The country obtained an overall score of 5.67 out of 10 in Agility's 2021 emerging markets logistics index.

Central Vietnam is one of the three main regions in Vietnam. Provinces in the central region cover

about 151,000 square kilometers, with a population of about 26 million, accounting for 45.5% of the natural area and 27.4% of the population of Vietnam, respectively. The region is located between Hanoi and Hochiminh city, with over 1,500 km long coastline. In Central Vietnam, the final point of the EWEC (East-West Economic Corridor) stretches from Myanmar through Thailand and Laos. Therefore, the economy of 14 provinces in Vietnam's central region has enormous economic potential. There are also territories and regions with great promise to develop logistics services. For example, Danang port functions as a gateway for the center of Vietnam and transit to and from Lao PDR. Tien Sa Terminal in Danang can accommodate vessels of up to 30,000 DWT, with a throughput capacity of 4.5 million tons. The three other major ports serving the central coastline include Cua Lo, Quy Nhon, and Nha Trang can receive vessels of up to 10,000 DWT. Fourteen groups of seaports are planned for the Central Region, including eight Type-I ports belonging to the national port authority, such as Nghi Son (Thanh Hoa), Nghe An, Ha Tinh, Thua Thien-Hue, Da Nang, Dung Quat (Quang Ngai), Quy Nhon (Binh Dinh) and Khanh Hoa ports included in the development plan for Vietnam's seaports from the year 2020 with orientation until 2030. Although the

central region has an advantage of deep-sea ports, with a large cargo volume, container volume is limited, and goods are not diverse, mainly petroleum, cement, steel, textiles, leather shoes, wood, and wooden furniture. The shipping services are still underdeveloped and have not benefited from the deep-sea ports to develop logistics and shipping in the East-West economic corridor. Shipping costs are also higher than in other regions, while management in some ports is overlapping, resulting in the uneven spread of investments and development capabilities.

The development of the logistics sector has drawn much attention from all provinces in the central region of Vietnam. It has been recognized as one of the critical drivers for regional and provincial economy and business development. Several central regions, such as Da Nang, Quy Nhon, and Ha Tinh, have identified logistics as important urban sectors. Some have adopted preferential policies in tax and land use to enhance the development of this sector. This study aims to present an assessment framework of the current logistics situation in Central Vietnam. The study also identifies logistics providers' challenges in Central Vietnam and suggests strategies for LSPs and managers in an increasingly competitive environment.

## 2 Literature Review

Although a large proportion of research has been conducted to study logistics systems at the micro or business level, the number of logistics studies at the national or regional level is still minimal [2]. Approaching logistics from a macro perspective, according to Kampan & Tanielian [3], Arvis et al. [4], logistics plays a vital role in increasing competitiveness, adding value to the supply chain, and reducing costs [5], [6]. Previously, logistics has been considered a 'dark continent' with many benefits and advantages that businesses have not yet exploited [7]. Blanco and Sheffi [8] have stressed the role of logistics in ensuring the availability of material requirements, i.e., raw materials, inventory, semi-finished products, finished products in the production cycle. Therefore logistics advances large production capacity and commercial growth [9]. It can be implied that logistics is the backbone economy. Logistics has also been recognized as one of important drivers for national and regional economy and business development. Thus, there exists studies on logistics that investigate the current

status of logistics providers in a country/region, then offer some managerial implications on logistics competitive strategy.

A study by Hong et al. [10] explored logistics providers' current status and prospects in Tianjin (China). The results revealed that Chinese logistics providers depended heavily on transportation and warehousing businesses but lacked value-added services and logistics information management. The findings indicated that institutional problems are the most severe barrier preventing the development of China's logistics industry. Dang & Yeo [11] evaluated the main factors influencing the improvement of Vietnam's logistics system. The study indicated a direction for the Vietnam government to follow in implementing the ideal investment prioritization and the appropriate regulations to improve its logistics system. The findings showed that the optimal order for improving Vietnam's logistics system should be logistics costs, logistics services, logistics infrastructures, connections between logistics components, institutional frameworks, and technology. Minh [12] indicated the most striking problems that inappropriate and ineffective port investment, highway congestion and consequent delays, unprofessionalism of domestic logistics service providers, cumbersome and inconsistent institutional framework, and, finally, insufficient experienced and qualified human resources.

The above literature review suggests that most previous studies investigate logistics at the national level, but largely ignore the assessment of logistics at the regional level, especially in Vietnam. This research attempts to analyze the current status of logistics in Central Vietnam and provide some managerial implications on logistics competitive strategy.

## 3 Methodology

A national/regional logistics system includes (1) transport and logistics infrastructure, (2) the institutional and regulatory framework, (3) service providers, and (4) logistics service users [13]. The assessment of the logistics system in Central Vietnam can be based on the four strategic dimensions that are considered as being the key components. This standardized logistics framework is essential in understanding the logistics system and its relationship with four logistics-related sizes.

The semi-structured interview was utilized to obtain in-depth data related to four logistics dimensions. The semi-structured interviews were primarily based on what was obtained through an extensive literature review. The purpose of semi-structured interviews questionnaires was to get a clear picture of the current status of logistics-related sectors in Central Vietnam.

The authors surveyed logistics services to understand the current status in Central Vietnam. A thirty-item questionnaire was designed after careful discussion by logistics researchers and practitioners from VLA (Vietnam Logistics Business Association), VCCI (Vietnam Chamber of Commerce and Industry), and UTT (University of Transport Technology), and in consultation with several logistics managers who are familiar with the context of Vietnam. The questionnaire included two major parts: (1) the basic information of enterprises (2) the respondent's perception of the logistics service in Central Vietnam and other regions. The first part has consisted of questions on company information such as type of business ownership, the number of operation years, and the central area of operation. In

part two, close-ended questions were utilized to investigate the current status of logistics services in Central Vietnam and other regions in Vietnam. The questionnaire was developed in the Vietnamese language then distributed through an electronic survey system (Google form). In September 2021, the survey was delivered by email to 600 firms and an official note from the UTT requesting cooperation. After two weeks, a total of 488 valid questionnaires were collected, with a response rate of 81.33%. The survey data were then analyzed to investigate the current status of logistics services in Central Vietnam.

## 4 Findings

### 4.1 Respondent Profile

The survey has gathered information concerning the respondent profile, which is essential because it provides basic information. Several firm profile issues addressed in the questionnaire are reported and discussed below.

Table 1. Respondent profile

Firm characteristics	Firm group	Frequency	Percentage
Headquarters location	Northern Vietnam	96	19.67%
	Central Vietnam	371	76.02%
	Southern Vietnam	21	4.3%
Ownership	Limited liability company	60	12.30%
	State - owned enterprise	18	3.69%
	Shareholding company	324	66.39%
	Private enterprise	66	13.52%
	Joint venture company	8	1.64%
	Enterprise with 100% foreign-owned capital	12	2.46%
Number of employees	Less than 10	26	5.33%
	11-30	35	7.17%
	31-50	49	10.04%
	51-100	100	20.49%
	101-200	215	44.06%
Major logistics activities	200 or more	63	12.91%
	Sea freight service	322	66%
	Airfreight service	313	64.1%
	Rail transport service	312	63.9%
	Road transport service	344	70.5%
	Delivery service	338	69.3%
	Warehouse service	334	68.4%
	Freight forwarding and customs declaration service	290	59.4%
	Loading and unloading service	312	63.9%
	Analysis and verification	296	60.7%
	Direct delivery service	299	61.3%
Others	265	54.3%	

Several company characteristics are as follows: The survey results indicate that more than 66 percent of respondents are shareholding companies, which has caused a more significant proportion of non-state-owned firms to exist in the logistics industry. The employment base in the survey varies substantially among the respondents. At the same time, 12 percent report less than 30 employees, another 30 percent report at least 200 employees.

#### 4.2 Current Status

The survey also addressed a series of issues concerning the current status of logistics service providers, such as quality of personnel, business coverage, and services offerings.

##### 4.2.1 Facilities and Human Resources

Figure 1 shows the self-evaluation of the quality of personnel. The figure indicates that most employees meet standard work requirements.

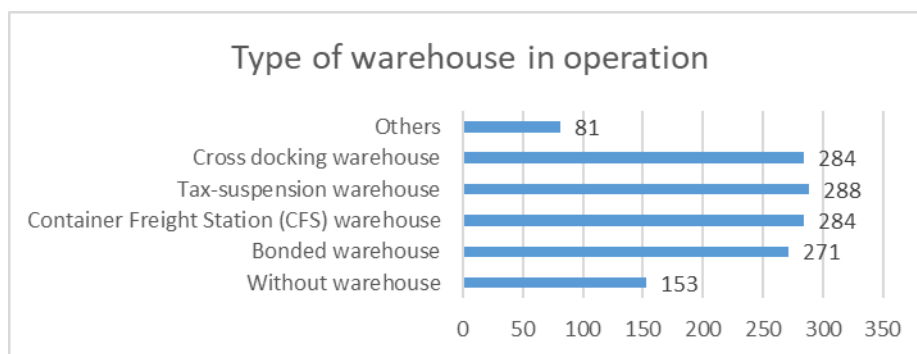


Fig. 1: Quality of personnel

Figure 2 presents which warehouse type is in the operation of logistics companies in Central Vietnam.

It should be noted that 153 out of 488 logistics companies (31.35%) are without a warehouse.



Fig. 2: Type of warehouse

The IT adoption level in logistics companies' operations is exhibited in Figure 3. Almost all

companies are aware of the role of IT in business and have adopted it in the process.

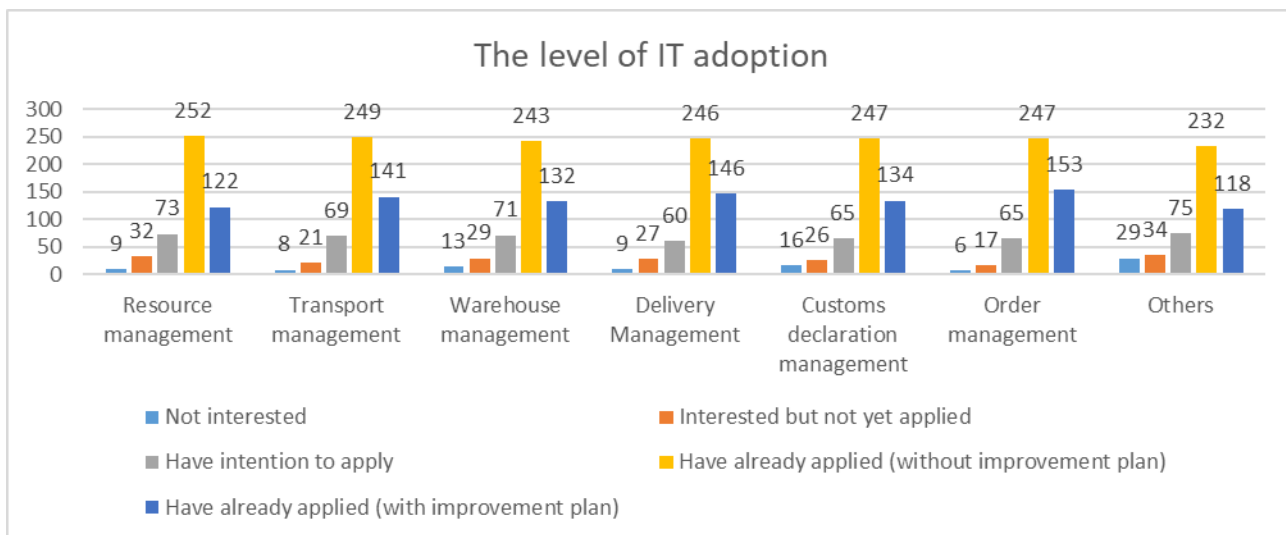


Fig. 3: The level of IT adoption

#### 4.2.2 Current Status

Figure 4 shows factors and their impact on operational practices.

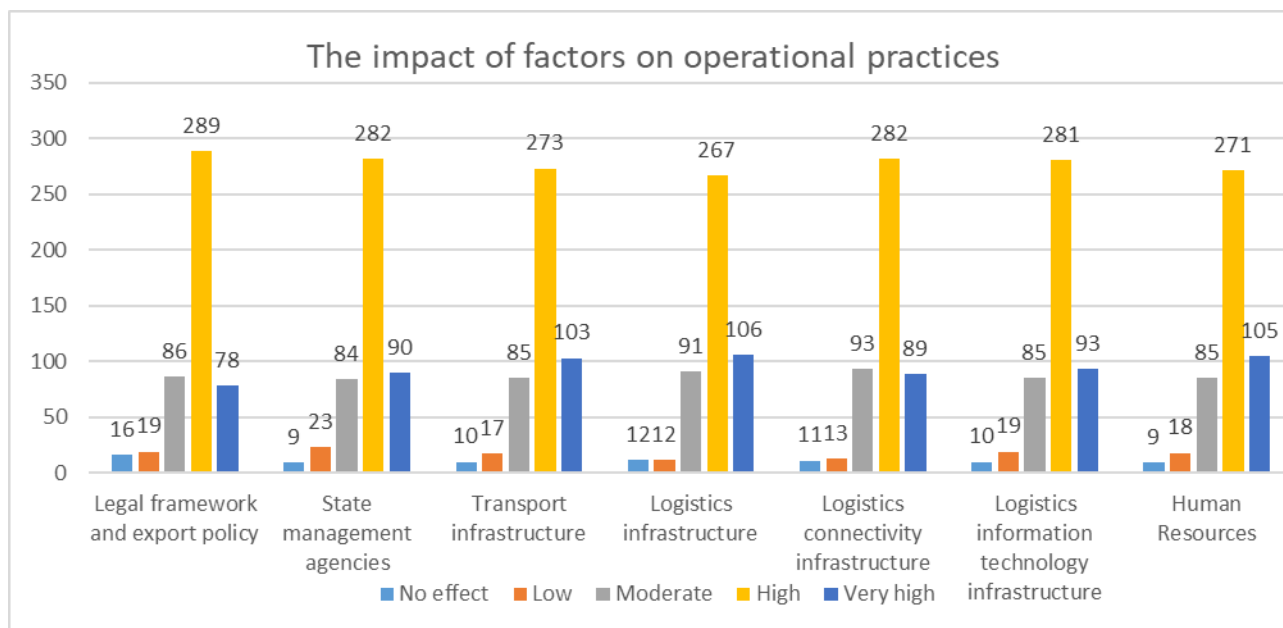


Fig. 4: Factors and their impact on operational practices

Figure 5 shows the components of logistics costs. Logistics costs comprise the charges for the movement of goods using various transportation methods such as railway, road, airway, and waterways, including fuel and passage costs.

Additional logistics costs may include warehousing space, packaging, security, tariffs and duties, and information processing costs. According to respondents, it is reported that logistics costs in Central Vietnam are high.

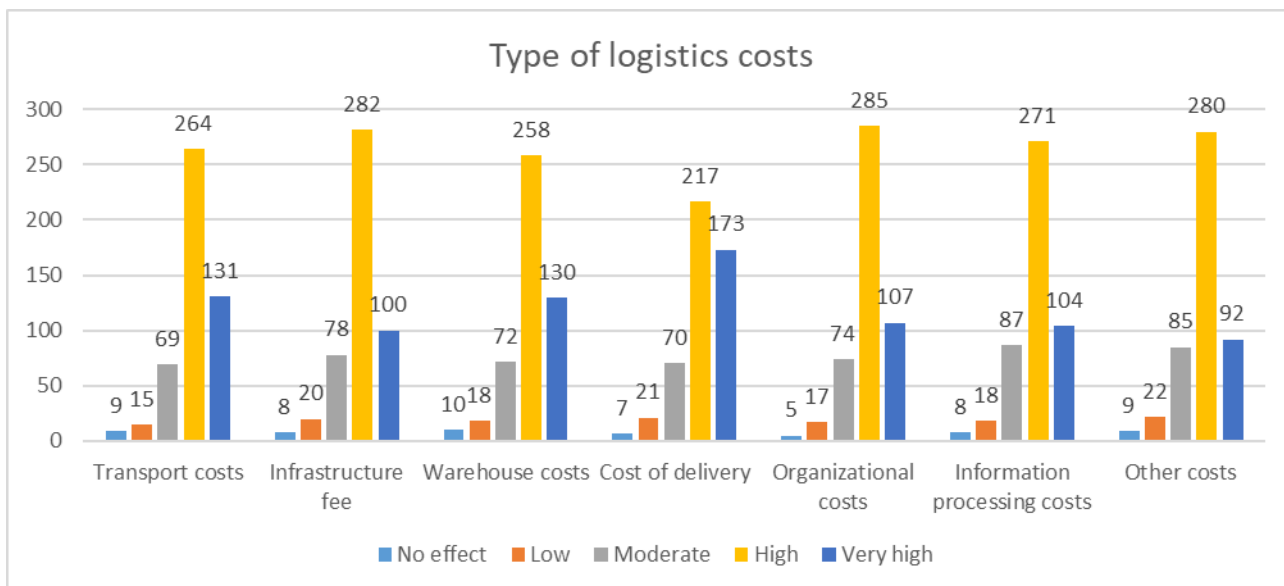


Fig. 5: Type of logistics costs

Figure 6 presents difficulties in logistics management practices. As shown in the figure, the biggest challenge logistics enterprises face in Central Vietnam is limited human resources. The enterprises still lack skilled and highly qualified employees, including experienced executive-level managers and directors who have experience in supply chain and

logistics management. The second difficulty is high operating costs. In Vietnam, the average logistics cost accounts for nearly 17% of the total revenue of logistics enterprises. Recently, the price has been decreased. However, it is still very high compared to other countries in the region.

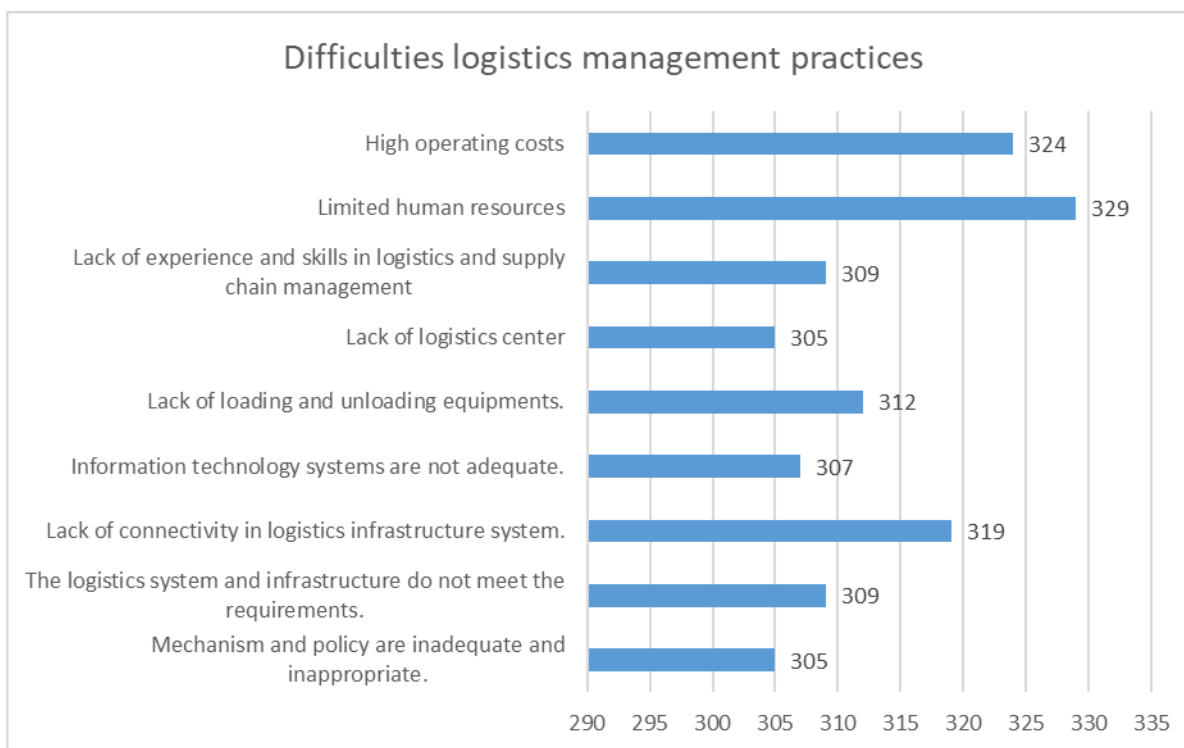


Fig. 6: Difficulties in logistics management practices

On behalf of their organization, the respondents were required to assess infrastructure on the Likert 5-scale. Figures 7, 8, 9, 10, 11, 12, and 13 evaluate road, railway, airway, inland waterways, seaports, warehouse, and IT infrastructure. For example, regarding the evaluation of road infrastructure, the “agree” responses were always dominant with above 62%, then “strongly agree” responses came right after, varied about 17-19%. The transport sector of Central Vietnam consists of a wide range of transport modes: road, railway, inland waterway, coastal and

sea shipping, and aviation. The transport sector has grown significantly since the 1990s. This was partly supported by the development of transport infrastructure and the effects of partial transport deregulation. In addition to general reforms, the transport sector experienced extensive commercialization. According to the respondents' opinion, the evaluation of transportation infrastructure is quite suitable for all the considered aspects, even though they had difficulties assessing the quality.

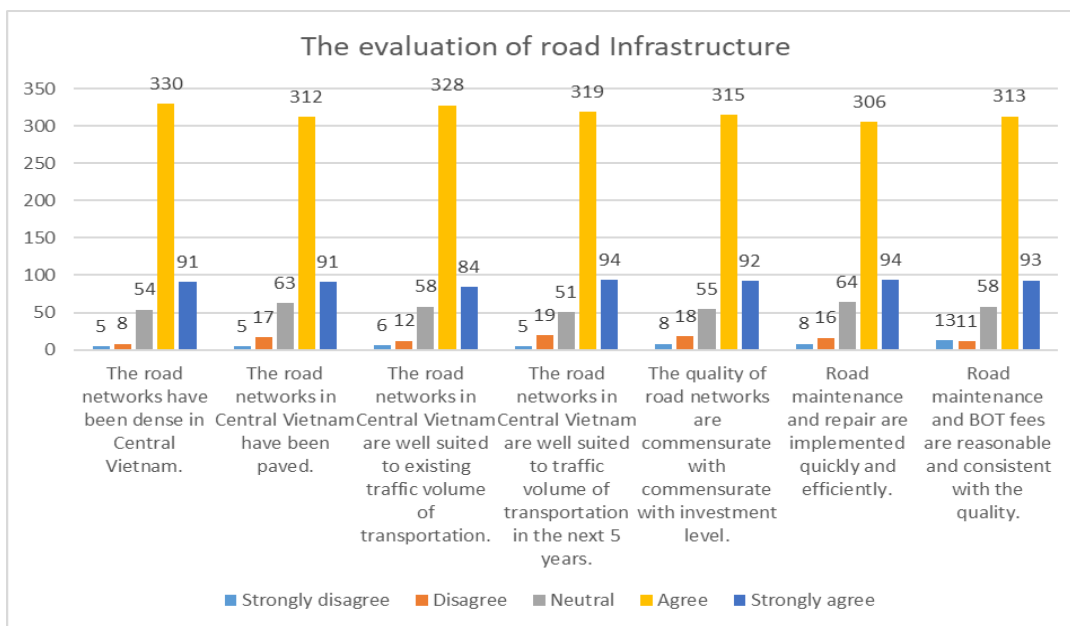


Fig. 7: The evaluation of road infrastructure

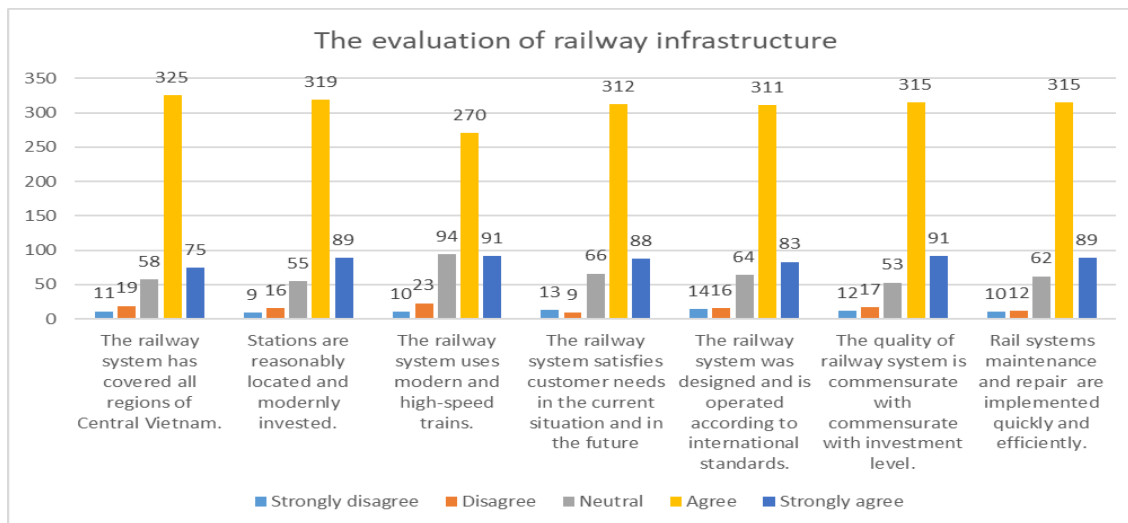


Fig. 8: The evaluation of railway infrastructure

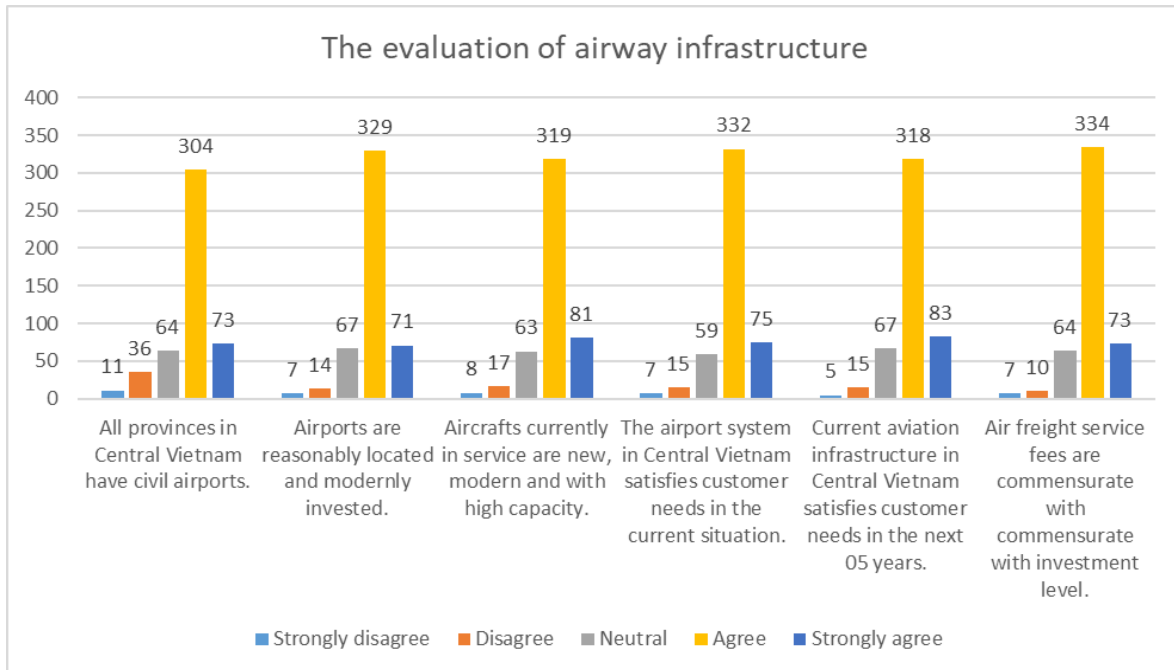


Fig. 9: The evaluation of airway infrastructure

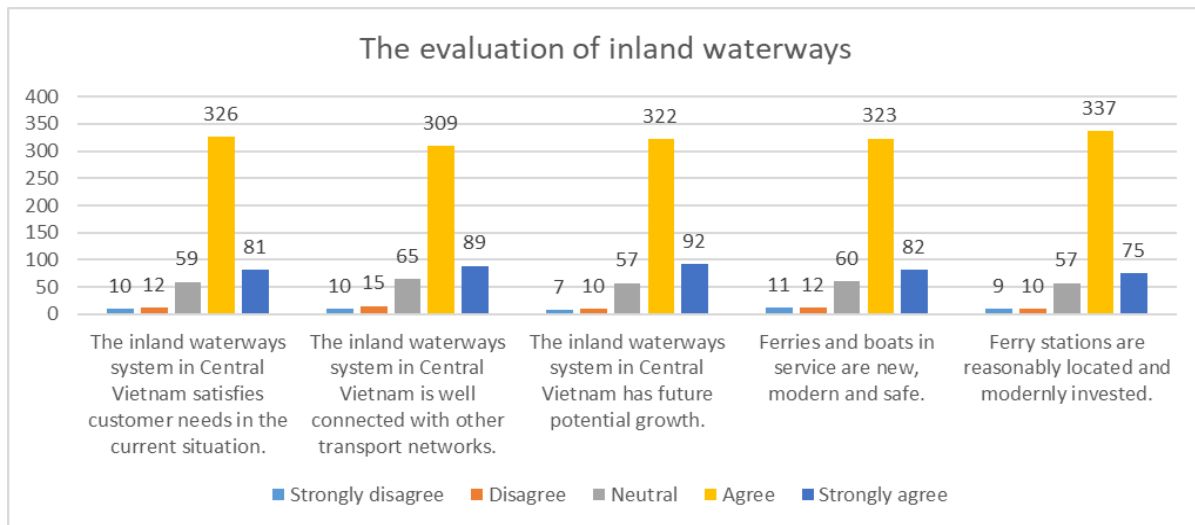


Fig. 10: The evaluation of inland waterways



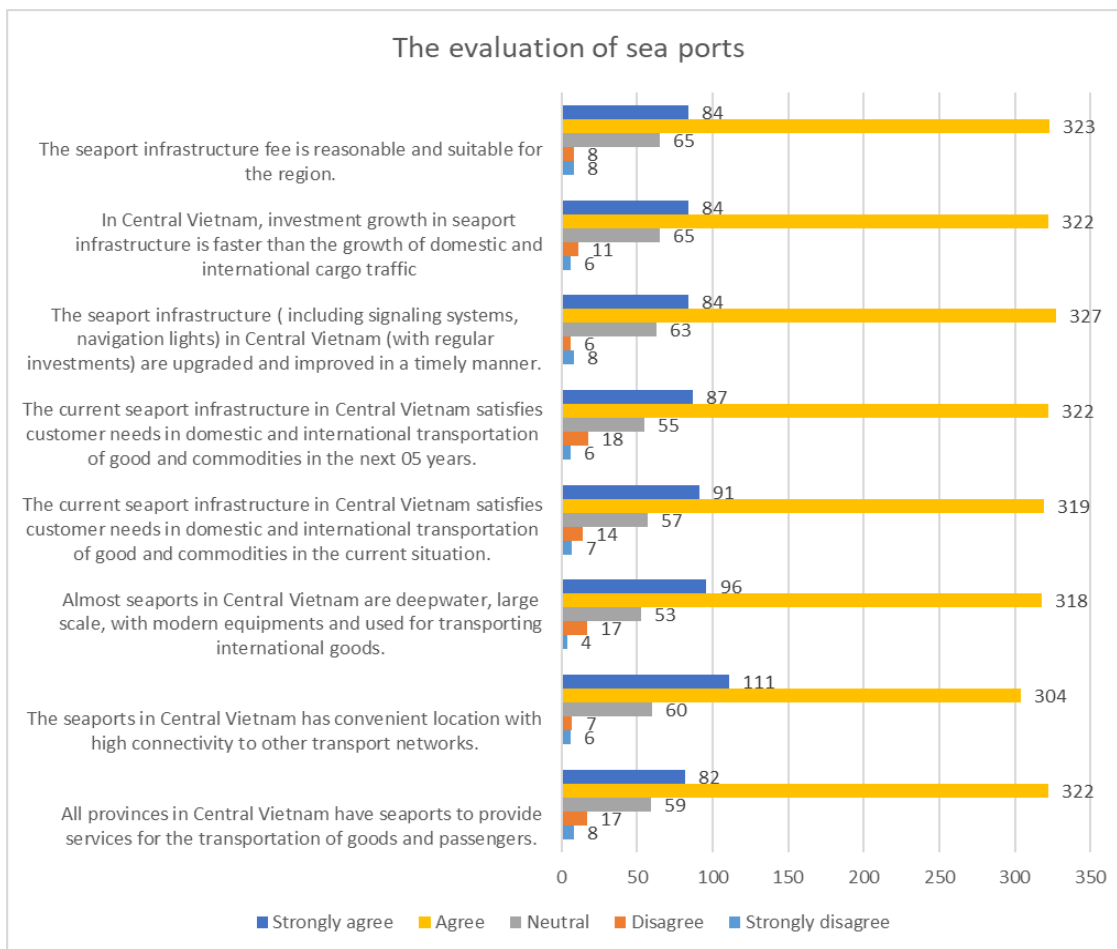


Fig. 11: The evaluation of seaports

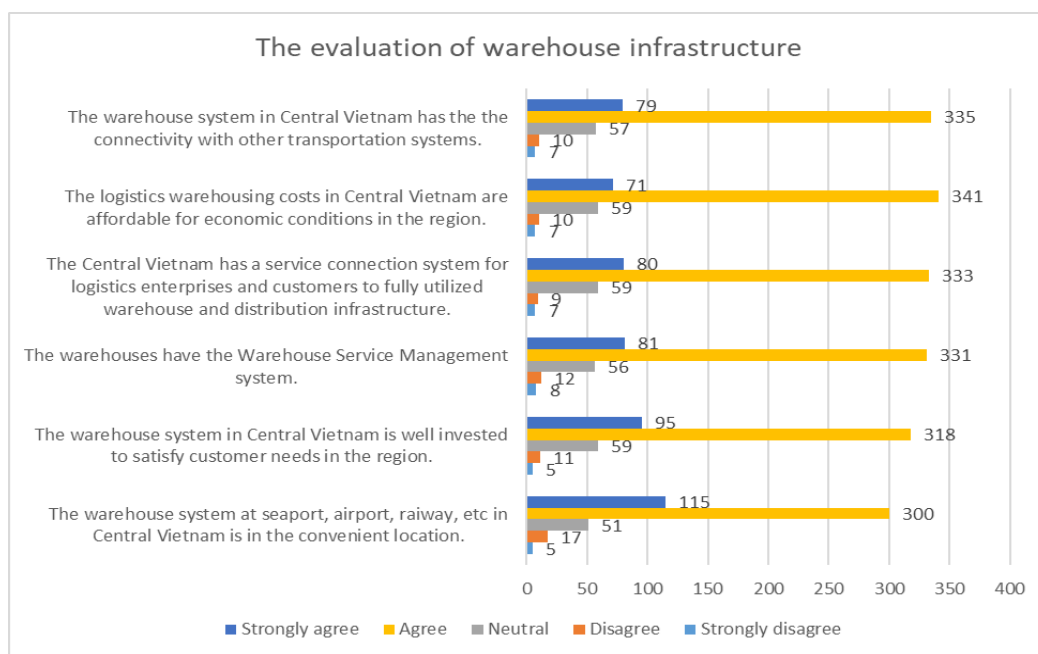


Fig. 12: The evaluation of warehouse infrastructure

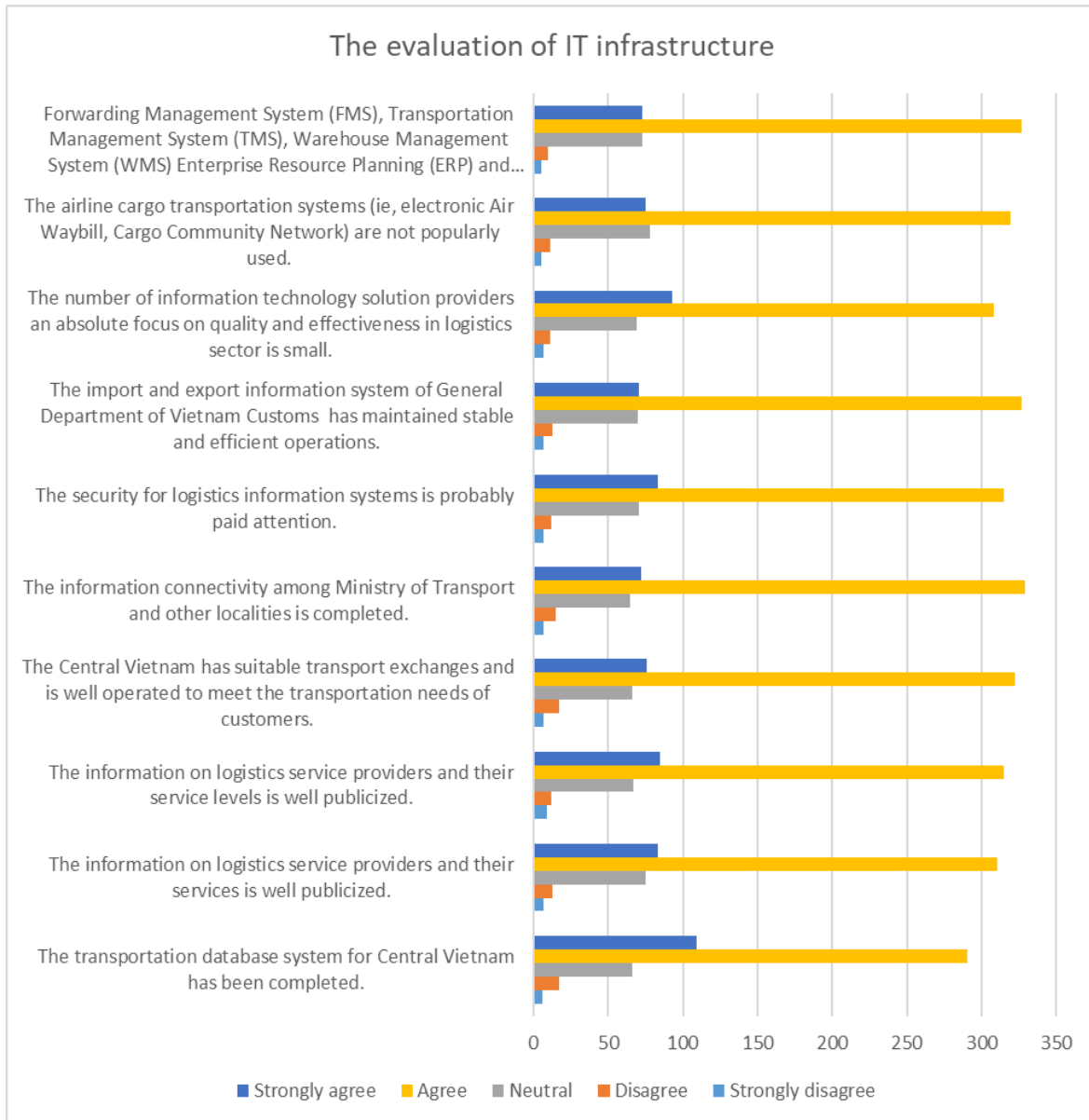


Fig. 13: The evaluation of IT infrastructure

Figures 14, 15, 16, and 17 evaluate road, seaport, airport, railway connectivity in Central Vietnam, respectively. As can be observed, the connectivity of

transport systems and cooperation between different modes are rated at a reasonable level.

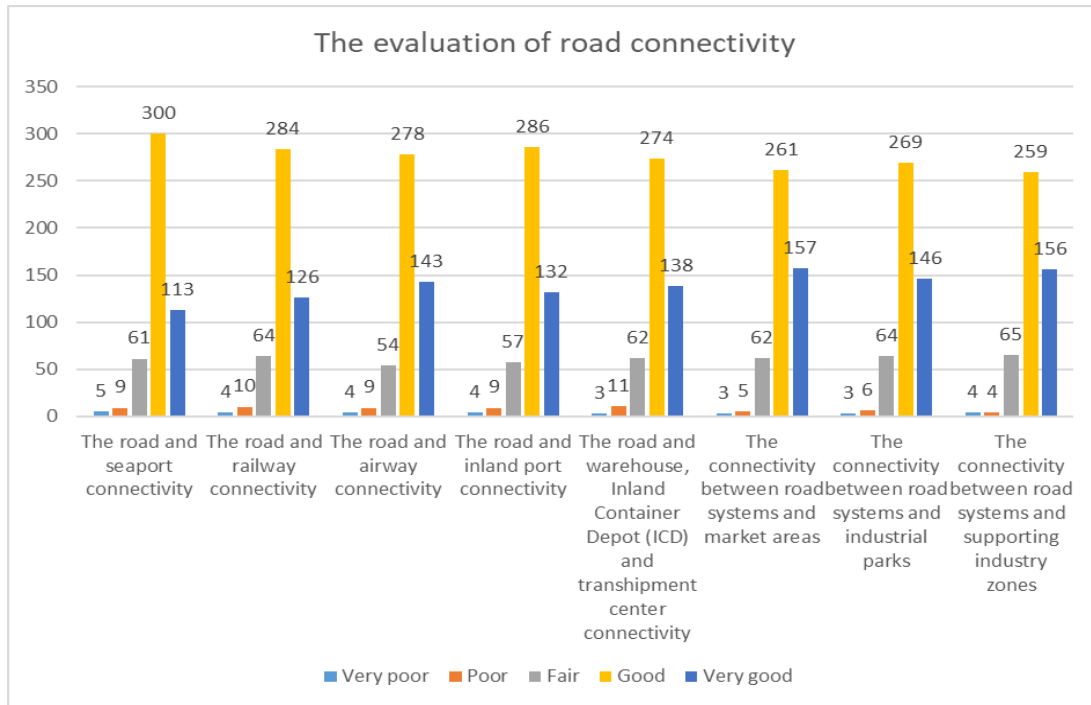


Fig. 14: The evaluation of road connectivity

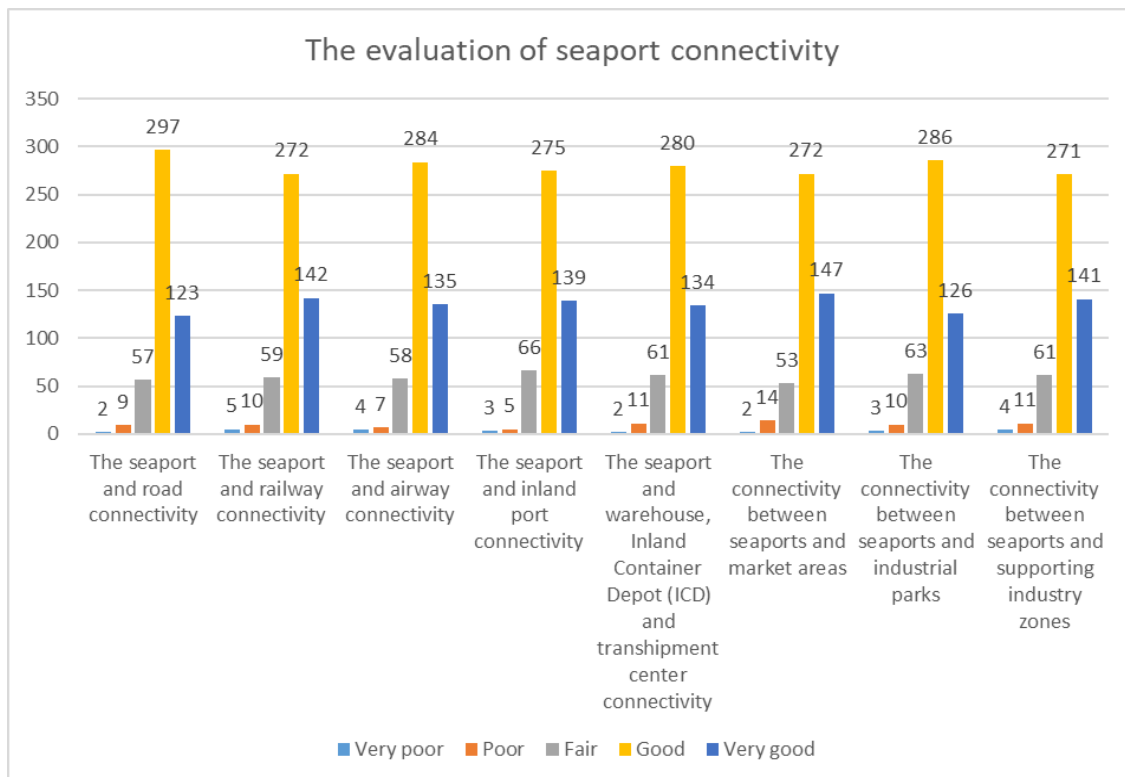


Fig. 15: The evaluation of seaport connectivity

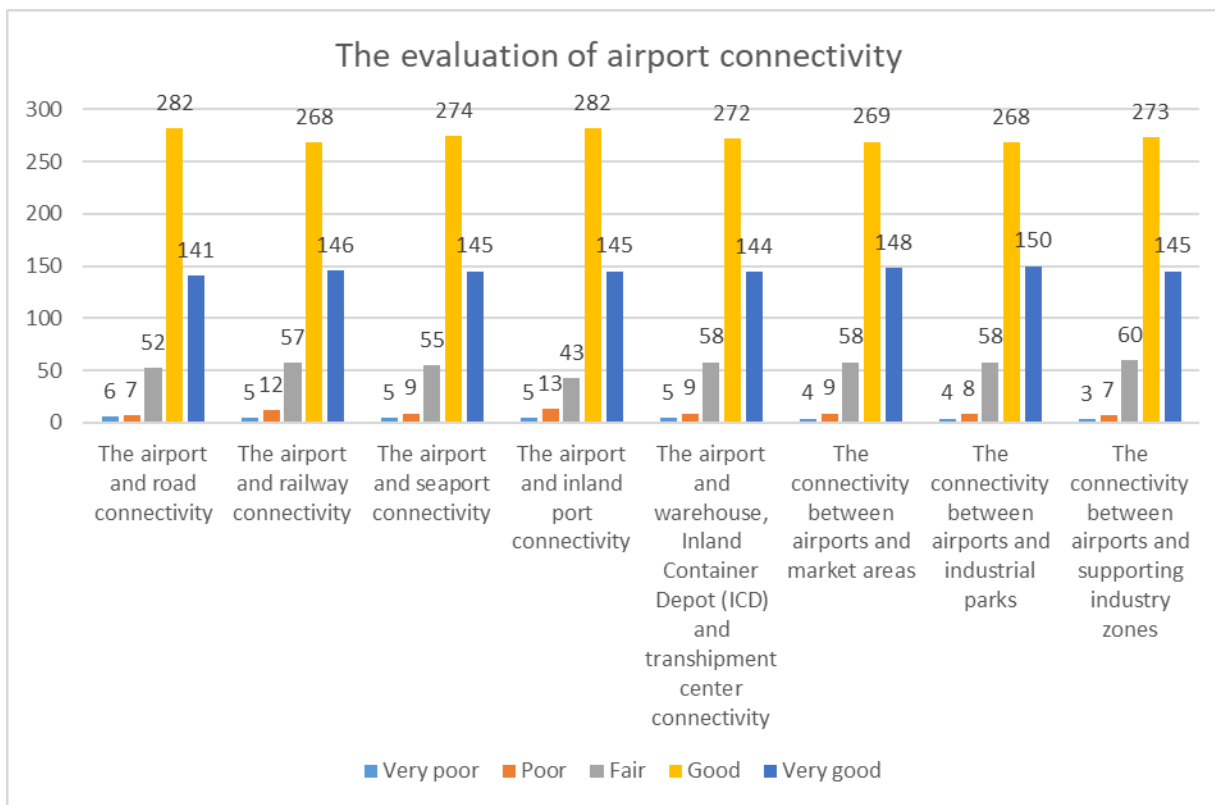


Fig. 16: The evaluation of airport connectivity

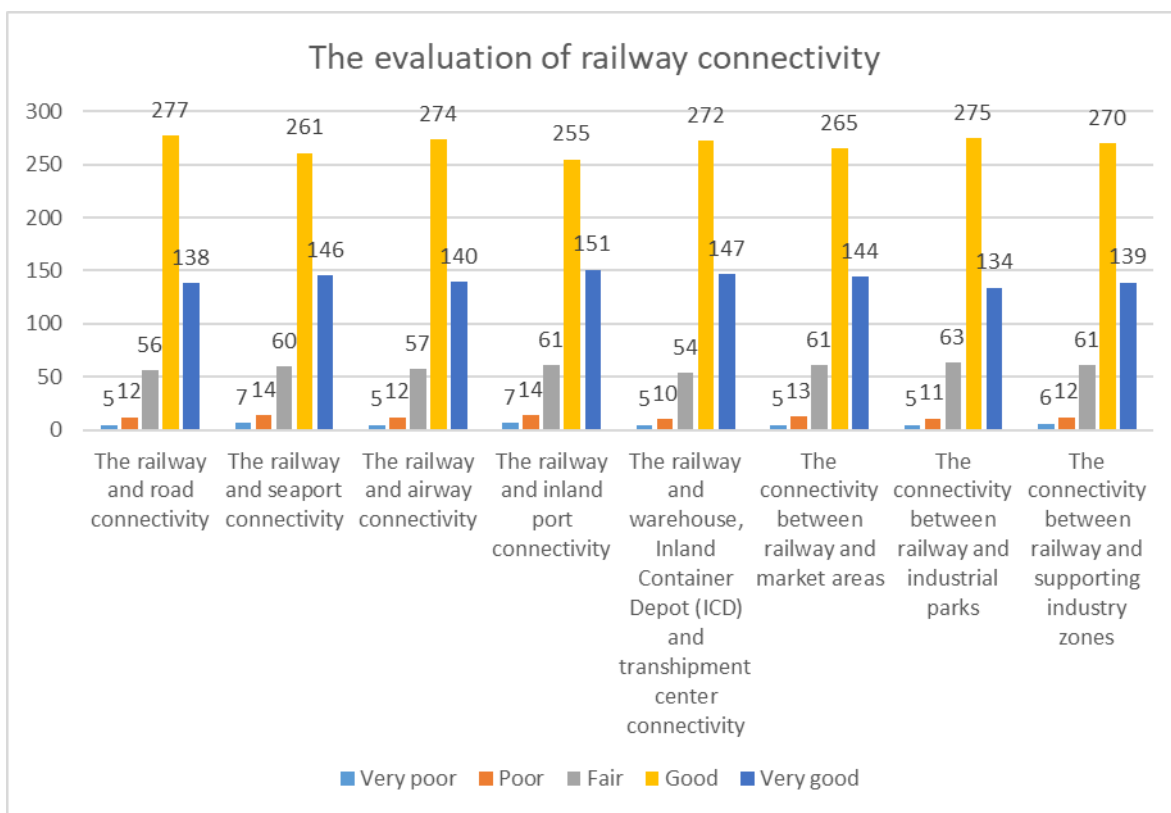


Fig. 17: The evaluation of railway connectivity

Figure 18 exhibits the factor affecting central Vietnam's location selection of logistics service providers. The factors considered in the logistics

center location are grouped into natural environmental factors, business environment factors, infrastructure status.

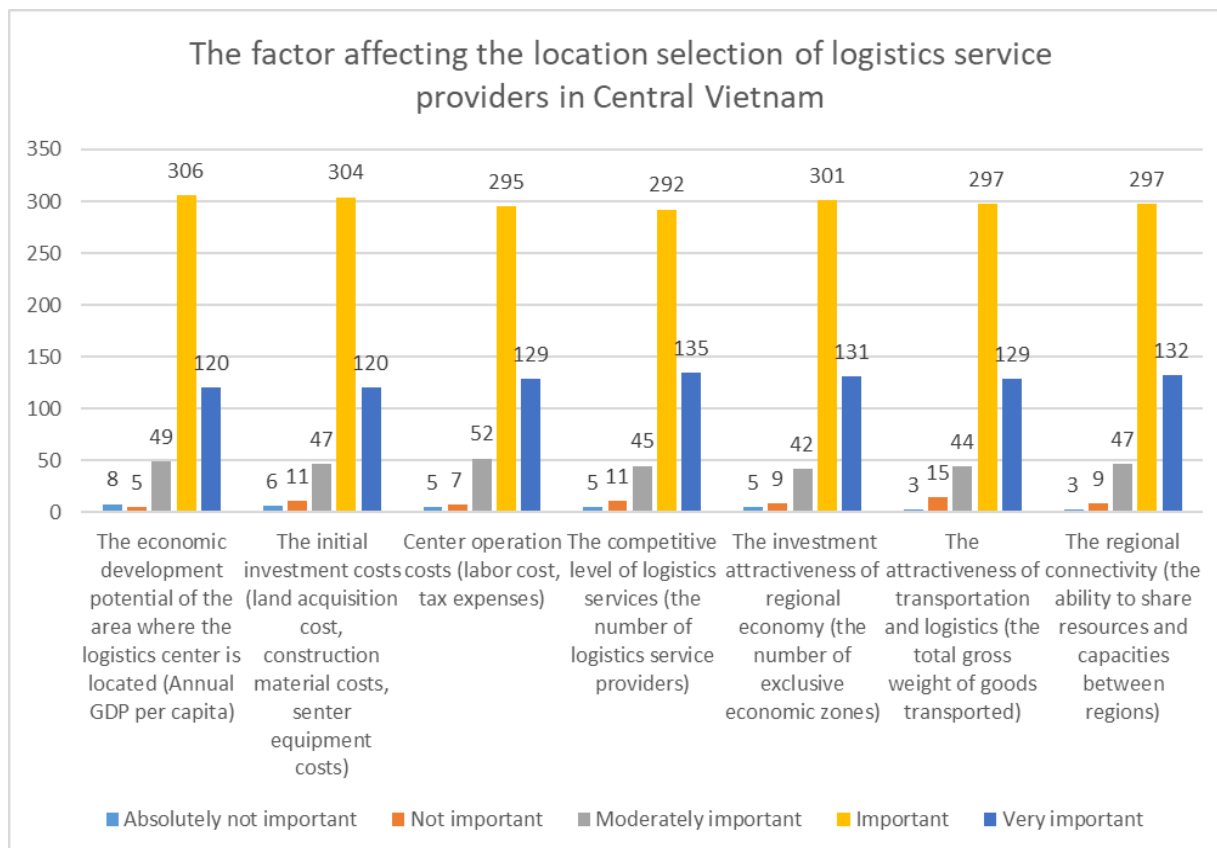


Fig. 18: The factor affecting the location selection of logistics service providers in Central Vietnam

From the above survey findings, it can be concluded that the logistics system in Central Vietnam has several advantages as follows:

The central region in Vietnam offers various strategically important geographical characteristics and a well-developed transportation infrastructure that provides significant competitive advantages to investors over other areas of Vietnam. The long coastline of 1,200 kilometers and 13 seaports, including seven first-class ports, are the considerable advantages of the central coastal provinces to develop the economy. The central region has good seaports, including Chan May and Da Nang, Ky Ha and Dung Quat, Quy Nhon, and Nha Trang. These could serve as the springboard to boost trade and develop the logistics industry. Based on the survey, it is generally believed that Central Vietnam is a land of logistics opportunity. However, there are difficulties and challenges in fully exploiting the

advantages of serving logistics development in the area.

## 6 Discussions and Implications

According to the Prime Minister's Decision No 221/QD-TTg, the action plan for improving the competitiveness of Vietnam's logistics industry to 2025 has been improved. Vietnam is planning to raise the contribution of logistics services to its GDP to about 6% by 2025. Several critical managerial implications could be drawn for logistics service providers and managers in Central Vietnam.

### 6.1 Resolutions on Several Specific Mechanisms and Policies

Several logistics policies should be taken into account as follows:

Logistics zones should be provided to create logistics activities and added value clusters. Still, these zones may not fit well the needs of logistics service providers, particularly with the ongoing change in manufacturing around automation and robotization.

The findings also indicate that the institutional problem is one of the most serious barriers that prevent the development of the logistics industry. It is necessary to strengthen the coordination between logistics-related authorities, prevent regional protectionism, take policies to encourage the state-owned logistics users to detach in-house logistics departments.

The government should promote transparency in custom clearance in particular or in other rules and regulations in general. The goal is to establish a solid base ground for consistent implementation, interpretation, and enforcement. The draft of any new law should be widely publicized to survey and collect comments and suggestions. For instance, before coming into effect, new regulations regarding custom clearance should be made public so that practitioners, including freight forwarders, shipping agents, shippers, and customs officers, could contribute their idea.

Local government agencies should facilitate international trade through their efficient customs administration, security, good sanitation, and business environment, and give foreign logistics companies easy access to funds.

## **6.2 Resolutions on Infrastructure Development**

The government should liberalization and privatize the transport sector and break public monopolies, particularly in the road, port, and airport sectors. These measures may enable the logistics industry in Central Vietnam to improve its performance and competitiveness.

A significant transshipment hub and its logistics zones should be developed. This will be expected to build new linkages with global supply chains, mainly through its expanded connectivity as a transshipment hub.

It is necessary to strengthen and diversify investment capital sources for developing transport infrastructures for developing logistics infrastructure. Also, government bodies must encourage and create conditions for all economic sectors, including foreign-invested enterprises, to participate in

infrastructure development, concentrating resources to prioritize renovation, upgrading, and constructing new transportation systems.

## **6.3 Resolutions on Human Resources Development**

Human capital availability is an essential factor in making a logistics hub successful. Workers must have language skills such as English, be open-minded, and accept changes, such as changes brought about by globalization. Workers must also be well equipped with the knowledge to work in the logistics sector, i.e., the availability of logistics professionals. Several measures are as follows:

The provincial government should develop human resources in logistics by expanding labor and logistical services skills.

Short-term courses in logistics, including theoretical knowledge and practical experience taught by leading experts, should be organized. It is necessary to seek more domestic and international funding for short-term training programs and coordinate and take advantage of cooperation with the International Federation of Freight Forwarders Associations (FIATA), The International Air Transport Association (IATA), and other non-governmental organizations to receive more regular training funding.

## **7 Conclusions**

The outsourcing of logistics activities to logistics service providers has now become widespread. Therefore, as an integral part of the business environment, the logistics industry has attracted much attention from academia and practitioners. This study has attempted to study the current status and prospects of the logistics industry in Central Vietnam. Various important characteristics and managerial implications have been derived.

Future studies with larger samples and more comprehensive survey questions will provide more invaluable information for local providers and government authorities. It could also be helpful for foreign logistic service providers to understand the logistics industry in Central Vietnam better and take an appropriate strategy when they enter it. At the same time, the study provides a valuable reference for future studies in studying the logistics industry in other regions.

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**Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)**

Quang Hung Do carried out the research design. The Tuan Tran has designed the questionnaire. Quang Toan Dinh has collected the data. All authors were responsible for the manuscript writing.

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