Solutions For Outsourced Logistics Development In Vietnamese Seafood Export-Import Enterprises

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Abstract:

This study aims to propose solutions for the development of outsourced logistics in Vietnamese seafood export-import enterprises. The research is based on the government's viewpoint: Developing logistics as a key economic sector with many competitive advantages involving the participation of various economic sectors. Logistics is considered a driving factor and infrastructure base to promote socio-economic development by enhancing goods production and increasing consumer goods consumption. Logistics should be prioritized for rapid and sustainable investment, laying the groundwork for the country's socio-economic development. Data was collected from 1995 to 2020 using methods such as statistical analysis, balanced analysis, interpretation, induction, synthesis, logic, and forecasting. Based on the research results, the author proposes the following groups of solutions for logistics development: Solutions for logistics infrastructure development (developing road systems, railways, waterways, seaports, air transport systems, and logistics infrastructure; improving quality and connectivity of infrastructure); solutions for information technology development (designing functional public information platforms for seafood logistics centers, building public information platforms for the seafood logistics sector, and developing IT infrastructure); solutions for fisheries industry policy development (standardizing operational processes, establishing a unified legal framework for logistics operations, modernizing customs and other clearance procedures, issuing preferential policies to encourage investment in logistics, and establishing logistics centers in the seafood industry); solutions for human resource development (enhancing logistics education at training institutions, increasing internal employee training within enterprises).

Keywords: Outsourced logistics, seafood

1. Introduction

Logistics is a chain of activities aimed at ensuring uninterrupted production and the efficient flow of goods from suppliers to consumers. The formation and development of logistics for the seafood industry are often associated with the industry's specific requirements and depend on the economic development conditions of different regions. Simultaneously, logistics activities have a reciprocal impact, driving the development of the seafood industry. The seafood industry, characterized by mostly fresh products, has stringent requirements for logistics, particularly in preservation. Therefore, logistics development is crucial for the production and business operations of seafood products, ensuring timeliness and quality. Well-developed logistics can reduce costs, enhance competitiveness, and increase the value of seafood, serving as a key to boosting exports and fostering strong growth.

With a coastline stretching 3,260 km, Vietnam has always regarded the seafood sector as one of the country's key economic sectors and prioritized its development. In 2020, the seafood sector contributed approximately 3.4% of the national GDP and 24.4% of the agricultural GDP. Moreover, during the process of global integration, Vietnam has proactively negotiated and signed agreements with many countries in the region and the world, as well as actively participated in new-generation FTAs such as the Vietnam-EU Free Trade Agreement (EVFTA) and the Vietnam-UK Free Trade Agreement (UKVFTA). These agreements provide opportunities to expand the supply chain, foster investment cooperation, and transfer technology. It can be said that Vietnam's seafood industry is currently in a golden period for growth, needing to seize opportunities for a significant breakthrough and asserting the Vietnamese seafood brand in the international market.

However, in reality, logistics in the field of seafood export-import in Vietnam has not yet developed proportionately to the industry's needs and demands. Especially in key seafood production areas like the Mekong Delta, logistics services face many limitations, such as a lack of warehouse systems, insufficient cold storage facilities, and fragmented and poorly connected logistics centers. Additionally, logistics costs remain a significant challenge for seafood enterprises. According to the Vietnam Logistics Report 2021, logistics costs in Vietnam account for 20.8% of GDP, much higher than in other countries in the region, reducing price competitiveness for seafood enterprises. Therefore, the development of logistics in the seafood industry remains an unsolved problem, requiring attention from both enterprises and state management agencies.

2. Research Overview and Theoretical Basis

Since the formation of the logistics industry globally, the demand for outsourcing logistics services by businesses around the world has continuously increased in both scale and complexity, even surpassing national and regional boundaries. As global production continues to develop, and the processes of globalization and international integration deepen, with increasing specialization and international division of labor, the demand for outsourcing these logistics services has become more urgent than ever. From 2019 to 2021 alone, the global outsourcing logistics market grew by 18%, reaching a value of \$487 billion (Armstrong & Associates, 2022), and this demand is certain to rise even further in the future. Experience from countries around the world has shown that many global companies, particularly those involved in export-import, have reaped significant benefits by effectively utilizing outsourced logistics systems, such as Apple, McDonald's, Wal-Mart, Toyota, Sony, Hewlett-Packard, Spokane Company, Ladner Building Products, Favoured Blend Coffee Company, Sun Microsystems, SKF, Procter & Gamble, among others. Even the United States, the most developed country in the world, currently has the highest demand for outsourced logistics services globally (source: Outsourcing Logistics USA 2021 Survey Report). This underscores the role and importance of using outsourced logistics services in the economic development of a country and businesses. In the future, the use of outsourced logistics services by businesses in general, and seafood export-import businesses in particular, is certain to become an inevitable global development trend as these enterprises seek to expand their goods beyond national borders while their internal logistics resources are limited in management capabilities, physical infrastructure, and participation in the global supply chain.

For Vietnam, compared to other countries around the world, it fundamentally possesses the necessary conditions for seafood export-import businesses to apply and develop outsourced logistics activities. Specifically, Vietnam is a country with a coastline along international maritime routes, with a diverse and well-planned port system. The domestic transportation network is gradually being completed, with roads, railways, and waterways being renovated, upgraded, and newly constructed. Vietnam's labor force is abundant and affordable, and its roads, bridges, ports, terminals, warehouses, and communication systems are developing rapidly with new technologies. The country has seen high economic growth for many years, and its economic and political situation

remains stable. This makes it easier for Vietnamese seafood export-import businesses to access outsourced logistics services from both domestic and foreign providers at competitive prices. Moreover, many of the world's leading logistics service providers have invested in and expanded their markets in Vietnam, considering it a potential market in their development strategies, such as TNT, DHL, NYK Logistics, Linfox Logistics, VINAFCO, Maersk Logistics, VIDAMCO, Nissin Logistics, Keppel Logistics, among others.

However, the reality in Vietnam is that the use of outsourced logistics services is still relatively unfamiliar to businesses, especially those involved in seafood export-import. While service, production, and trading sectors have existed in Vietnam for decades and have become ingrained in the mindset of most businesses, the use of outsourced logistics services in seafood export-import has only recently been recognized in Vietnam as the country increasingly integrates into the global economy. Many Vietnamese seafood export-import businesses still lack a proper understanding of the role and importance of using outsourced logistics services in their operations, leading to low business efficiency and an inability to compete with strong competitors in the global market. Furthermore, there are still many shortcomings in the use of outsourced logistics services by these enterprises. According to the World Bank (WB), Vietnam is among the top 10 countries with medium-low income from providing outsourced logistics services globally. This indicates that many Vietnamese businesses have yet to focus on using outsourced logistics services, despite the presence of a strong logistics service supply from domestic companies and leading global logistics companies operating in Vietnam, as well as favorable infrastructure and geographical conditions.

In addition, alongside the global trend of using outsourced logistics services, which brings significant competitive advantages to foreign export-import businesses, many Vietnamese seafood export-import businesses still adhere to a "self-reliance" mindset, wanting to handle all logistics activities on their own. This leads to low operational efficiency, high costs, dispersed resources, and an inability to focus on their core competencies, thereby reducing their competitiveness compared to global market competitors and causing disruptions in the logistics chain, making it difficult to develop logistics service providers. On the other hand, Vietnam's current and near-future economic development policy primarily relies on export-import advantages. With globalization and international integration intensifying, to compete with strong competitors and large corporations worldwide, Vietnamese seafood export-import businesses must have diverse, high-quality, and costeffective logistics services to create competitive advantages in costs and meet the increasing demand for fast delivery to distant international markets. Achieving this cannot be expected from internal logistics operations alone; Vietnamese seafood export-import businesses must change their business methods to enhance efficiency, save all fixed and potential costs, and fully exploit the advantages of logistics service providers while freeing up their resources to focus entirely on their highest competitive advantages. This business method is the development of the most efficient outsourced logistics activities.

Given the above realities, I believe that developing outsourced logistics activities in Vietnamese seafood export-import businesses is extremely important in both theoretical and practical terms, especially in the current period when Vietnam is increasingly integrating into the global economy. Developing outsourced logistics activities in Vietnamese seafood export-import businesses will not only help these businesses expand their markets abroad, gain more benefits, particularly in terms of cost, service quality, and speed of goods delivery to the global market, increase profits, and enhance competitiveness compared to domestic and international competitors, but also contribute to the overall development of Vietnam's economy, enabling it to catch up with the economies of developed countries in the region and around the world.

3. Research Methods and Models

The dialectical materialism method and historical materialism method are the fundamental research methods used in this study. Depending on specific sections or content, the study employs various

research methods to clarify theoretical and practical issues. Expert evaluation, synthesis, induction, deduction, comparison, and other methods are used to analyze topics related to the theoretical foundation of the study as well as to assess the current state of outsourced logistics operations. Mathematical, statistical, and sampling methods are also employed to collect, investigate, and process data for analyzing the development status of outsourced logistics activities in Vietnamese export-import enterprises.

4. Solutions for Logistics Development in Vietnamese Seafood Export-Import Enterprises * Group of solutions for logistics infrastructure development

Relevant stakeholders should implement the Seaport Master Plan for 2020 with an orientation towards 2030, the 2020 Road Transport Development Adjustment Plan with an orientation towards 2030, especially the Comprehensive Study Project on Sustainable Transport System Development (VITRANSS2). Priority should be given to investing in key programs that facilitate logistics development.

Road system

Given Vietnam's long and narrow geography along the North-South axis, investment should focus on National Highway 1A, the backbone of the road transport system running the length of the country. This highway connects Hanoi, Bac Ninh, Lang Son (towards the North); Hanoi, Nam Dinh, Ninh Binh, Thanh Hoa, Vinh, Ha Tinh, Dong Hoi, Dong Ha, Hue, Da Nang, Tam Ky, Quang Ngai, Qui Nhon, Tuy Hoa, Ninh Hoa, Nha Trang, Cam Ranh, Phan Rang, Phan Thiet, Bien Hoa, Ho Chi Minh City, Tan An, My Tho, Vinh Long, Can Tho, Soc Trang, Bac Lieu, Ca Mau, and Nam Can (towards the South). Although National Highway 1A is operational, many sections are in poor condition and narrow. Therefore, the plan should include upgrading the highway to at least a four-lane road along its entire length, reinforcing and improving the roadbed to meet international highway standards.

Expanding and upgrading national highways that connect administrative and economic centers, as well as areas with a high concentration of industrial zones like Hai Phong, Quang Ninh, Da Nang, Quang Ngai, Ho Chi Minh City, Kien Giang, and Binh Phuoc, is essential. Similarly, expanding and upgrading national highways leading to major land border crossings such as Mong Cai, Huu Nghi, Ha Khau, Na Meo, Nam Can, Lao Bao, and Moc Bai is necessary.

In addition to completing the road system for general transportation, it is essential to plan transportation routes along ring roads. If necessary, open routes linking ring roads around major urban areas, with particular emphasis on opening routes that connect within the ASEAN system to meet the demand for transportation and regional logistics integration.

Railway system

Besides upgrading the current system and improving machinery and equipment, standardizing Vietnam's railway is necessary for connecting with regional systems. While building a North-South high-speed railway is conceptually correct, it is difficult to implement. Therefore, over the next 20 years, the current North-South railway should be upgraded to meet international standards with a 1.435m gauge, combined with new standard locomotive systems, upgrading the existing rolling stock, and adding flat cars for container transport. Preparations should also be made to connect Vietnam's railway system with the Trans-Asian railway.

Waterway, seaway transport, and seaports

Inland waterway transport is not a significant advantage for Vietnam due to the extensive but small, intricate river network with unpredictable flow, most of which crosses the territory. Thus, waterway transport can only meet the need for small-scale cargo transport, mainly bulk goods, which does not align with the modern logistics trend of container transport. Therefore, the development of waterway transport should focus on serving as a supply channel for warehousing and packaging activities, meaning that river ports and river vessels transporting bulk goods to

warehouse areas for containerization, and then shifting to road or rail transport to subsequent transshipment points.

Vietnam's maritime transport does not have the conditions to become an international maritime transshipment hub, so the immediate focus should be on exploiting short regional routes within Asia. Developing coastal transport routes with small and medium-sized container ships capable of entering most domestic ports to serve as distribution channels for larger container ships is necessary. Consequently, upgrading existing ports and focusing on modernizing key ports such as Ho Chi Minh City Port and Hai Phong Port is practical.

Vietnam does not have many continental shelf areas deep and wide enough for large ships to anchor and load/unload, even current deep-water ports like Cai Lan, Lach Huyen, Cai Mep, Ben Dinh have limited capacity. Therefore, investing in deep-water ports as international ports should not aim at expanding scale but rather focus on loading and unloading capacity. These deep-water port clusters should be organized as complex port clusters, including container yards, inland ports, truck yards, etc., to serve as anchoring and loading points for large ships as well as transfer points for goods to other transport modes, shorter routes, and coastal routes. To effectively fulfill this function, investment should not go towards large container yards but rather towards developing strong loading and unloading systems so that goods can be quickly transferred from seaway to roadway or railway.

Air transport system and airports

Vietnam is centrally located in a region where air logistics has developed strongly, with major international airports like Suvarnabhumi, Kuala Lumpur, Incheon, and Hong Kong nearby. Therefore, Vietnam should not invest in building new airports. Instead, the focus should be on expanding the existing major international airports, Noi Bai and Tan Son Nhat, and upgrading smaller international airports such as Cat Bi, Cam Ranh, and Da Nang to increase their capacity to handle more flights, especially direct international flights. It is also unnecessary to open cargo-only flight routes or build new terminals solely for large cargo planes or cargo transport. Instead, Vietnam should equip modern facilities to enhance cargo handling capacity, combining it with passenger transport as it is currently, building and expanding warehouse systems, and opening direct routes from the warehouse system connecting to the main road system.

Mobilizing capital for logistics infrastructure development

Recently, the capital for infrastructure development has been limited, primarily sourced from the state budget and ODA funds. In the future, ODA funding is expected to decrease, but the need for logistics infrastructure development requires a substantial investment. Therefore, learning from the experience of developed countries, Vietnam needs to diversify capital mobilization methods and investment forms, enhancing the attraction of private investment into developing physical infrastructure, information, and telecommunications. To do this, a framework for implementing the Public-Private Partnership (PPP) investment method should be quickly completed: institutional framework, financial risk gap compensation and handling solutions, and pilot implementation.

Improving infrastructure quality and connectivity

Vietnamese enterprises' logistics infrastructure serving the seafood industry still has many inadequacies, such as a lack of cold storage facilities and specialized transportation for seafood products. Therefore, investing in upgrading enterprises' infrastructure, from warehouses to transportation means on both sea and land, specialized preservation equipment, will help logistics enterprises become more professional and further advance in providing logistics services in the seafood industry.

* Group of Solutions for Information Technology Development

We all recognize the crucial role of information technology in logistics development in general and specifically in the seafood logistics sector. Enterprises need to enhance their

competitiveness, adopt new technologies to keep up with the latest trends in logistics services, and implement new technologies such as electronic ports (Eport) and electronic delivery orders (EDO).

Designing the functional capabilities of the public information platform for seafood logistics centers

Building the information platform for future seafood logistics centers should encompass at least two functionalities: a basic function and an extended function. The basic function primarily includes the conversion and sharing of information, the publication of existing information, and information system management. The extended function mainly involves integrating smart distribution services, navigation and tracking of goods, and inventory forecasting.

Building a public information platform for seafood logistics

A logistics zone is considered a type of service business that creates more value by integrating data, managing processes, and enhancing the quality of logistics services. Completing the hardware and software aspects of logistics services and focusing on training personnel for professional 3PL (Third-Party Logistics) companies are key elements.

Building information technology infrastructure

Developing the logistics zone's platform based on modern technologies such as the Internet, telecommunication, and web services is essential. Information about various functional elements of logistics required throughout the entire process of a seafood product, from source to final stage, needs to be collected, categorized, cleansed, analyzed, evaluated, reflected, published, and shared publicly as the foundation for labor division and cooperation. Among established seafood logistics companies, only a very small number are equipped with a complete information platform. Most company operations rely heavily on telephone and internet services, lacking timely and accurate information. Therefore, if a reasonable and effective seafood logistics information platform can be established within the logistics zone as soon as possible, it can monitor the entire logistics process of seafood products in the region. Using fishermen as the primary subjects for implementing informatization, this platform can provide an information environment, enable shared information, and foster mutually beneficial cooperation among fishing households, seafood-related enterprises, and 3PL logistics companies. Additionally, such a unified process will facilitate government agencies in standardizing logistics operations, implementing centralized seafood quality inspections, and effectively completing related logistics activities, which will be highly beneficial in ensuring the quality of seafood logistics.

Specifically, investing in the application of information technology for managing the journey of fishing service vessels, warehouse management, seafood supply chain management, and automating cargo handling processes will reduce the time from when seafood is harvested to when it is safely stored in specialized warehouses. This will help improve the quality of harvested products and give enterprises more time to research the logistics market and develop solutions to enhance their own quality.

More importantly, the Government must establish a national standard data system to create a complete, traceable, and interconnected data system across all economic sectors. This will allow logistics services to access and connect with other economic activities, improving logistics efficiency while creating opportunities for expanding and developing the domestic logistics market. Moreover, standardized information aimed at common regional and international standards, coupled with upgrading fiber optic systems, increasing bandwidth capacity, improving transmission speeds, and upgrading standardized terminal devices, will enable Vietnam's logistics sector to integrate into the regional and global logistics system.

The Government should not only encourage but also implement mandatory regulations for the application of information technology in logistics. Government agencies and ministries must take the lead in applying information technology in management. Logistics service providers must have management, statistical, and monitoring systems that meet minimum requirements to serve both state management and ensure greater efficiency and safety for businesses. Along with mandatory regulations, the Government can directly support enterprises in implementing and applying these technologies by providing management software, basic connectivity devices, and training courses for businesses.

* Group of solutions for industry development policies

The government should review and refine laws, circulars, decrees, and related regulations, and introduce preferential policies, increasing investment in logistics and technology for seafood products. The government should fully utilize the effectiveness of general guidelines, based on the current production scale and the overall layout of Vietnam's seafood products. A comprehensive assessment of production and business needs, consumer demands, and the import needs of other countries for Vietnamese seafood should be conducted to provide corresponding convenience for the development of logistics in the seafood industry. Additionally, investment attraction methods can be applied to promote the harmonious development of logistics in the seafood sector.

Standardizing operational processes

The technical standards and operational standards systems for the entire seafood production process are not yet complete. The lack of standardization in logistics stages and processes increases the costs of the entire seafood production process and reduces the service quality throughout the process, which significantly impacts modernization efforts and creates obstacles in connecting with international markets. Therefore, regulatory authorities need to develop a system of standards, gradually forming service standards for seafood products, and move towards establishing and issuing a comprehensive logistics service standards system, which will serve as a foundation for developing logistics service products in the seafood industry.

Regulatory authorities should closely integrate seafood production activities with logistics operations in the seafood industry. This includes enhancing the standardization of seafood products, standardizing calculations, packaging regulations, transportation tools, and specifying transport procedures. These measures will ensure that employees adhere to standardized operations during processes. Promoting the standardization of all logistics equipment and tools, as well as standardizing the logistics processes in the seafood industry, will help strengthen connections with the international market.

Continuous improvement of the standardization system for seafood products, quality monitoring systems, and product certification systems is necessary. Establishing a quality control system based on the HACCP (Hazard Analysis and Critical Control Point) standard, quickly setting up a quality safety certification system, and a market entry licensing system are critical steps. The quality standard system, market licensing, and monitoring systems that appear during seafood transportation must be standardized and rationalized throughout the entire process to ensure highefficiency transport operations and maximize the benefits of the entire logistics system in the seafood industry.

Establishing a Unified Legal Framework for Regulating Logistics Operations It is necessary to amend and supplement the 2005 Commercial Law concerning logistics services, developing a legal system, regulations, and standards for the logistics industry to enhance transparency, promote healthy competition, and particularly encourage the development of the logistics sector. In developing these institutions, we can learn from Japan's experience. Attention must be given to implementing the ASEAN logistics service integration roadmap to which Vietnam has committed during the legal framework's development. Moreover, there should be plans to implement the commitments to facilitate the operations of both domestic and foreign logistics service providers in Vietnam. The government should widely disseminate the integration roadmap through mass media and seminars to help businesses stay informed about integration, proactively planning for their companies, as Vietnamese domestic companies will no longer be supported and must compete on equal terms with foreign enterprises on their home turf after integration. Without proactive preparation, Vietnamese businesses, which are still small in scale and lack experience, may struggle to survive and grow.

To gather opinions and advice on logistics, the government could establish a national logistics forum. Through this forum, logistics companies, businesses using outsourced logistics services, logistics researchers, and regulatory agencies can exchange ideas, contribute to draft laws, and propose solutions to develop Vietnam's logistics industry.

To develop logistics enterprises, the government needs to create policies that facilitate the development of logistics services and domestic 3PL businesses and remove restrictions and barriers to allow foreign 3PL and 4PL companies to operate more smoothly.

Modernizing customs and other clearance procedures

Alongside the implementation of Customs Law regulations, the government should also study and issue policies to address issues arising during the application of Customs Law. Additionally, customs regulations should be adjusted to align with international and regional practices. Developing information technology, establishing a legal framework for electronic customs declaration and data exchange, as stipulated by the Customs Law, is an urgent requirement and a breakthrough step to ensure streamlined, simple, and efficient customs procedures, avoiding complexity that hinders and delays customs clearance, affecting delivery contracts and logistics service quality.

The application of information technology to customs procedures will contribute to enhancing logistics efficiency, reducing time and costs in processing procedures, and facilitating the clearance of goods. To achieve this goal, the government should support the Customs sector in building a customs information system, ensuring the transmission and receipt of information from the General Department of Customs' data center to Customs Sub-departments and related government agencies, organizations for management, operations, and electronic data exchange in customs procedures, goods inspection, tax management on imported and exported goods, and the modernization of customs management, as well as ensuring customs inspection and supervision of imported and exported goods through e-commerce. Reforming customs activities in inspection and supervision will strongly support the development of logistics. Programs to enhance the capacity for applying management software and executing customs procedures through recruiting and training customs officers should also be implemented.

It is necessary to standardize customs documents and procedures or establish a new document system compatible with multimodal transport methods, allowing logistics operations to complete customs procedures for land, air, and sea transport within a single file, minimizing intermediaries, steps, and the number of documents. Documents and procedures should also be synchronized or adjusted to be as compatible and suitable as possible with the customs systems of countries in the region.

Along with the electronic customs system, the government needs to invest in upgrading and expanding customs clearance locations at border gates. Although many customs and clearance procedures can be completed online via electronic systems, many specific activities still need to be carried out at the border, such as inspections, appraisals, and quarantines. Therefore, direct investment in the scale, capacity, and equipment at border gates is crucial to ensure the capacity to handle the increasing volume of transported goods, reducing time and costs for logistics operations, and improving customs efficiency.

The legal framework for inspection at warehouses, inspection at transshipment stations, and the establishment of mobile customs teams needs to be improved. Businesses and service providers can register and request customs authorities to perform necessary operations at appropriate times, such as before goods are loaded into containers, during temporary storage at warehouses or transshipment stations, or upon arrival at the gathering point, to create the most favorable conditions for businesses and logistics service providers. Once inspected, goods will be sealed and will not require further inspection at the border. This approach benefits both logistics service users and providers, reducing costs and shortening clearance times at border gates, easing the burden on customs authorities at border gates, and reducing the time goods spend waiting for procedures at border gates.

Issuing preferential policies to promote investment in logistics

Logistics is a complex and highly interconnected activity, so to develop a logistics system, the goal of attracting foreign investment into the logistics sector should not only be about capital but, more importantly, the experience and active participation of foreign logistics service providers in the national logistics system. The operations of foreign logistics service providers in a still relatively underdeveloped logistics market like Vietnam will establish the operational methods that the entire market will follow, eventually becoming a synchronized system. Before Vietnam can learn and operate independently, there needs to be conditions and an environment to practice and emulate the activities that experienced logistics service companies have successfully implemented over the past decades.

Therefore, Vietnam's foreign investment attraction policies in the logistics sector should focus on creating favorable conditions for foreign logistics service providers to participate in the Vietnamese market, followed by investors and financial institutions. This group of policies should include not only economic and financial incentives but also business operation support policies, residency policies, natural movement policies, and even policies related to training and utilizing human resources.

Establishing logistics centers in the seafood industry

Managing a logistics center is an integrated management method that benefits the industry, accelerates product management, and shifts from single-factor management to multi-aspect management of the logistics supply chain, aiming to develop a more reasonable management method.

A logistics center in the seafood industry is a process that integrates seafood products from the initial fishing stage, through processing and storage by enterprises, to final transportation to consumers. It is not only a place for gathering products during logistics transportation but also a site for logistics operations. Enterprises within a seafood logistics center can collaborate to provide various services, which can standardize and rationalize the logistics supply chain for seafood products. Building a logistics center is typically done at the beginning of the supply chain, at the beginning of the wholesale chain, or the beginning of the circulation process, providing value-added services for 3PL logistics enterprises. Quality control, inspection, and customs clearance departments, as well as seafood associations, can be centralized at a certain level within the logistics center. Establishing a logistics center can create a system of standards, where enterprises inside and outside the logistics center have the opportunity to collaborate, selecting the best service providers based on their needs. Service providers will benefit from the logistics infrastructure, while reducing logistics operation costs, increasing technical standardization, and thus achieving maximum benefits.

* Group of solutions for human resource development

Strengthening education at training institutions

To enhance the capacity and quality of logistics human resource training, it is crucial to persist in developing a qualified teaching workforce in logistics. This includes attracting logistics experts from both domestic and international sources to participate in teaching and training, and closely collaborating with businesses to build training programs, practical experiences, internships, etc. Collaboration with enterprises also provides opportunities for students to gain real-world experience, conduct research, and find employment after graduation. Logistics students should regularly engage in practical activities to learn about processes and equipment related to their field of study. For example, when visiting a business involved in warehousing operations, students can gain in-depth knowledge of the processes for selecting and handling orders in the warehouse,

practice using specialized equipment, and learn how to sort, pack, and store goods. Additionally, training institutions should focus on equipping students with "soft" skills such as teamwork, situational awareness, problem identification, and responsibility. Today, logistics service providers can offer comprehensive services from shipping warehouses to receiving warehouses through a synchronized system that includes material supply, production-supporting logistics, warehousing, and both domestic and international transportation and delivery. For instance, during their studies, students are given detailed guidance on the process of selecting and handling orders in a simulated warehouse and how to use some of the specialized equipment found in warehouses today. Moreover, students get hands-on experience with warehouse equipment such as pallet jacks (a flat transport structure that stabilizes goods while being lifted by a forklift), hand trolleys, label makers, and more as they perform order selection and processing tasks. These focused training modules have helped students not only acquire professional knowledge but also develop specific skills related to their future jobs.

Enhancing employee training within enterprises

In addition to training support from associations, organizations, and universities, logistics companies need to implement policies for training and developing their workforce to optimize human resources, ensuring sustainable and long-term business growth. To achieve this, companies should adopt several practical and detailed policies, such as:

Assigning human resources to specialized departments according to their trained professions and aligning with their capabilities; reviewing and assessing the entire staff in terms of qualifications, gender, and education levels; and developing programs to improve professional knowledge, skills, and expertise for employees.

Enhancing professional skills in logistics operations: improving expertise and craftsmanship, enabling employees to learn and accumulate knowledge and experience from practical work, applying science and technology in customs procedures, and clearly defining training goals and creating training plans.

Raising employee awareness: Given the need to increase employee awareness to meet the development requirements of the business, it is essential to foster a strong shift in attitudes and behaviors towards work and social relationships.

Motivating employees: Creating motivation to achieve active engagement, thereby enhancing productivity, quality, and efficiency in work.

5. Conclusion

The seafood industry is a sector that is highly prioritized by governments worldwide, including in Vietnam. In the development of the seafood industry, logistics plays a critical role, as it is the key to ensuring the quality of seafood when it reaches consumers. However, logistics in Vietnam's seafood sector has not yet developed in proportion to the industry's potential. Based on my research, I have found:

Developing logistics in the seafood industry can be understood as the process of planning, executing, coordinating effectively among parties, and controlling the flow of seafood products, means of transport, and information within the seafood industry and between the seafood industry and other external sectors, with the goal of enhancing the competitiveness of the seafood industry as a whole and the logistics businesses serving the seafood industry in particular.

The development of logistics in the seafood industry is demonstrated through the development of logistics infrastructure and equipment serving the seafood sector; improving the connectivity of transport infrastructure in logistics serving the seafood sector; applying scientific and technological advancements in logistics serving the seafood industry; establishing and perfecting the legal framework and policies for logistics development in the seafood industry; and developing logistics human resources in the seafood industry.

However, logistics in Vietnam's seafood sector still faces numerous challenges hindering its development, such as logistics infrastructure not keeping pace with development needs, the competitiveness of Vietnam's fleet being relatively low compared to the global level, and the legal, institutional, and policy frameworks related to logistics in the seafood sector being inconsistent, with a lack of well-trained personnel.

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