

HO CHI MINH NATIONAL ACADEMY OF POLITICS

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**IMPORT AND EXPORT SERVICES IN DONG DANG
ECONOMIC ZONE, LANG SON PROVINCE IN THE
CONTEXT OF DIGITAL TRANSFORMATION**

**ABSTRACT OF DOCTORAL
THESIS: POLITICAL ECONOMY**

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**The thesis can be found at the National Library
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INTRODUCTION

1. Reasons for choosing the topic

In the context of deepening international economic integration, along with the strong impact of the Fourth Industrial Revolution, goods import and export services are becoming one of the fields directly and deeply affected by the digital transformation process. The development of artificial intelligence, big data, the Internet of Things, cross-border e-commerce and digital logistics is fundamentally changing the way international trade activities are organized. Modern theories of global value chains and logistics management both show that the competitiveness of import and export activities is increasingly dependent on digital infrastructure, data connectivity, automation and supply chain management efficiency. Therefore, it sets objective requirements for border-gate economic zones to become a constituent part of the global value chain, playing the role of connecting production, circulation, distribution and consumption on an international scale; at the same time, transforming from the traditional management model to the "smart border gate" model, ensuring interconnection, transparency and efficiency in customs clearance, quarantine, goods supervision and logistics service provision.

Theoretically, from the perspective of political economy, the export and import services of goods in border-gate economic zones are an important stage of the circulation and distribution process in the economy, reflecting the process of allocation and redistribution of resources between the State, enterprises and the market in the conditions of international economic integration. Digital transformation is changing the mode of regulating these economic relations when the State shifts from the traditional administrative management model to data-based governance; businesses shift from cost-based competition to technology-based competition, data, and supply chain connectivity; and the market requires greater transparency, speed and automation. This has led to the emergence of many new economic relations, new forms of benefit distribution and new requirements for the administration of border-gate economic zones that have not been fully explained by traditional theories of border trade.

In practice, Dong Dang economic zone, one of the key border gates in the North, developing import and export services on a digital platform is not only in line with international trends but also an urgent requirement to improve competitiveness and deeply integrate into the regional supply chain. Over the years, Dong Dang Economic Zone, Lang Son province has achieved many positive results such as: border gate infrastructure has been gradually upgraded; the digital border gate system and vehicle management have been implemented; import and export turnover has increased stably; customs clearance time has been gradually shortened; logistics services, etc warehousing, quarantine and border transportation are expanded; the business investment environment is becoming more and more favorable. Dong Dang has become an important focal point in the Vietnam-China trade corridor, contributing to promoting the economic growth of the province and the northern mountainous midlands.

Although import and export activities in the period of 2019 - 2025 in Dong Dang economic zone have many positive changes, the service system still has some limitations. *Firstly*, the mechanisms and policies applied at the border gate area are not really consistent, especially in the context of differences in regulations between Vietnam and China, causing businesses to often have to adjust dossiers, apply for explanations or re-carry out procedures. *Secondly*, the quality and level of connectivity of import and export services are not stable and incomplete; many stages in the service chain still lack digital integration, while the demand for bilateral data interconnection with China is increasing. *Thirdly*, the digital infrastructure at the component border gates is not synchronized; the ability to share real-time data between Vietnamese and Chinese functional forces is still limited, leading to delays, congestion or having to handle manually in times of high cargo traffic. These limitations, especially when associated with the requirement for close coordination in Vietnam-China border trade, pose the need to continue researching and perfecting the import and export service system in Dong Dang Economic Zone in the context of digital transformation.

The cause of these limitations comes from both objective and subjective factors. Objectively, there is no synchronization in digital transformation between Vietnam and China, especially in harmonizing processes with the Chinese side and developing new service models such as cross-border e-commerce, digital logistics or cross-border data sharing, etc along with the increasing requirements of new-generation trade agreements, creating pressures that Dong Dang economic zone cannot meet in time. Subjectively, the strategy of developing import and export services in border-gate economic zones has not kept up with the speed of digital transformation and changes in regional supply chains, and at the same time, Dong Dang economic zone does not have a breakthrough long-term strategy for digital import and export services; the quality of human resources in state management agencies and enterprises has not met the requirements of digital governance; financial resources for investment in modern economic zone infrastructure are still limited; meanwhile, the competitive pressure between the Vietnam-China-ASEAN economic corridors is increasingly intense. These things require a breakthrough long-term strategy and overall solution for import and export services in Dong Dang economic zone in the context of digital transformation.

From these theoretical and practical reasons, it can be affirmed that improving the quality of import and export services in Dong Dang economic zone in the direction of modernization, digitalization and deeper integration is an urgent requirement, in order to improve national competitiveness. reduce logistics costs, promote Vietnam-China trade, and at the same time create a driving force for sustainable socio-economic development for Lang Son province in the new period. It is from that urgent practical and theoretical requirements that the author chose the topic "*Import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation*" to carry out his doctoral thesis, Political Economy.

2. Research objectives and tasks

2.1. Research objectives:

The thesis analyzes and evaluates the current situation of goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation in the period of 2019 - 2024; thereby proposing directions and solutions to develop goods import and export services in this economic zone until 2030, with a vision to 2045.

2.2. Research tasks:

From the research objectives, the thesis topic performs the following tasks:

- An overview of research works related to the thesis topic, thereby inheriting and clarifying theoretical and practical issues that have not yet been studied, and thesis issues that need to be supplemented and clarified on the topic of import and export services in border-gate economic zones.
- Systematize and clarify the theoretical basis for goods import and export services in border-gate economic zones in the context of digital transformation: develop a theoretical basis and framework for analyzing the contents, roles, evaluation criteria and factors affecting export services, importing goods in the export economic zone in the context of digital transformation.
- Research international and domestic experiences on goods import and export services in border-gate economic zones in the context of digital transformation, thereby drawing valuable lessons for reference for Dong Dang economic zone, Lang Son province in the context of digital transformation;
- Surveying and analyzing the current situation of goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation, comprehensively assessing the types of goods import and export services, pointing out the achieved results, limitations and causes;
- Proposing solutions to develop goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation to 2030, with a vision to 2045.

3. Research objects

The thesis researches the export and import services of goods in border-gate economic zones in the context of digital transformation from the perspective of political and economic science.

4. Scope of research

- *Content:* The thesis studies the export and import services of goods in border-gate economic zones from the perspective of Marxist-Leninist Political Economy, in which services are considered as an intangible commodity, which is the intermediate stage of the process of circulation and distribution of exported goods, cross-border imports. At the same time, the thesis focuses on analyzing the relationship between the State, service providers and exporters and importers in the context of digital transformation through the main services: customs clearance, banking, yards, logistics and post-customs clearance.

- *Space:* The thesis focuses on research within Dong Dang Economic Zone, Lang Son province.

- *Time*: *Research* thesis for the period of 2019–2024, orientation to 2030 and vision to 2045.

5. Approaches, methods of research and processing of information and data of the thesis

5.1. Approaches

The thesis is based on Marxism-Leninism and Ho Chi Minh Thought; viewpoints, guidelines and policies of the Party and the law of the State of Vietnam on the field of goods import and export services in border-gate economic zones. At the same time, the thesis refers to the research works of domestic and foreign scientists on this issue.

5.2. Research methods

The thesis uses the research method of Marxist-Leninist Political Economy in combination with modern scientific methods, specifically:

- Dialectical materialism and historical materialism: It is the foundation for systematizing theory, determining the content, characteristics and influencing factors in the context of digital transformation and international integration.
- Scientific abstraction method: Generalize the intrinsic relationships between subjects, identify the laws and movement trends of the service system.
- Analysis and synthesis methods: Collect and process secondary documents from policy documents, reports and related research works.
- Comparison method: Comparison between business groups and types of services, as well as between new conditions and requirements to identify limitations and "bottlenecks".

5.3. Methods of collecting information and processing data of the thesis

The thesis combines secondary and primary data:

- Secondary data: Collected from policy documents, reports of regulatory agencies and related studies, for contextual and current analysis.
- Primary data: Collected through a survey of 115 enterprises, including enterprises using and providing services. Choose a template: Combine a convenient method and choose a pattern with intention. Survey Tools: Two sets of surveys consisting of general information, Likert scale evaluation, and recommendations.
- Data processing: Surveyed from 5/2024–9/2024, data is encrypted and processed using descriptive statistics on Excel.

6. Contribution of the thesis

6.1. Theoretical contributions

Firstly, the thesis supplements the approach to research on goods import and export services in border-gate economic zones from the perspective of Political Economy in the context of digital transformation. On that basis, the thesis clarifies the economic nature, role and relationship of interests between entities participating in the supply and use of services in border-gate economic zones.

Secondly, the thesis develops and identifies the analytical framework, evaluation criteria and factors affecting goods import and export services in the context of digital transformation. The analytical framework is approached in the direction of considering services as a stage of the circulation and distribution

process in the economy, associated with the role of the State, suppliers and service users, thereby clarifying the relationship between subjects and service development solutions.

Thirdly, the thesis contributes to perfecting the theoretical basis for goods import and export services in border-gate economic zones in the context of digital transformation.

6.2. Practical contributions

- *Firstly*, the thesis researches the experiences of some localities in the country with similar characteristics to Lang Son province, some experiences of Thailand and China propose more grounds to analyze and draw lessons to apply to the case of Lang Son province.

- *Secondly*, on the basis of primary and secondary data, the thesis provides more comprehensive analysis and assessment of the current situation of goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation. On that basis, clearly identify the achieved results, limitations and causes in the process of providing and using services.

Thirdly, the thesis proposes a system of solutions for goods import and export services in Dong Dang economic zone, Lang Son province towards developing goods import and export services in the direction of modernity and efficiency, associated with digital transformation and international integration, with a vision to 2045. The proposed solutions of the thesis supplement the basis and orientations for implementing local policies in practice.

7. Structure of the thesis

In addition to the Introduction, Conclusions, Recommendations, List of References and Appendices, the content of the thesis is divided into 04 chapters:

Chapter 1: Overview of the research situation related to the thesis topic

Chapter 2: Theoretical basis and practical experience of goods import and export services in border-gate economic zones in the context of digital transformation

Chapter 3: The current situation of goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

Chapter 4: Directions and solutions for developing goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation.

Chapter 1

OVERVIEW OF THE RESEARCH SITUATION RELATED TO THE THESIS TOPIC

1.1. RESEARCH WORKS RELATED TO GOODS IMPORT AND EXPORT SERVICES IN DONG DANG BORDER-GATE ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION

1.1.1. Research works on goods import and export services

1.1.2. Research works on border-gate economic zones

1.1.3. Research works on digital transformation

1.1.4. Research works on goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

1.2. OVERVIEW OF THE RESULTS OF THE RESEARCH WORKS, SCIENTIFIC GAPS AND KEY RESEARCH ISSUES OF THE THESIS

1.2.1. Results achieved in the announced works

Research works on goods import and export services in Dong Dang - Lang Son economic zone in the context of digital transformation have achieved important results in three aspects.

Firstly, theoretically, the studies have approached import and export services in a multi-sectoral direction, clarifying the role of the State, businesses and institutions, and initially associated with digital transformation as an inevitable trend.

Secondly, in practice, the works have reflected the role of Dong Dang economic zone in border trade, and at the same time pointed out limitations in digital infrastructure, logistics and human resources.

Thirdly, in terms of policy, the studies emphasize the need for institutional reform, infrastructure development and digital technology application, towards a smart management model and sustainable development

1.2.2. Research gaps related to goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation and the research direction of the thesis.

Through an overview of research works, the author identified 05 major gaps:

Firstly, the current research mainly approaches in the direction of economics or commercial management, there is no comprehensive research from the perspective of political economy to explain the nature of the relationship of interests and the distribution of resources between subjects in the digital environment.

Secondly, the impact of digital transformation on the actual efficiency in Dong Dang Economic Zone alone has not been considered, as well as there is no model to measure the readiness of digital transformation of subjects here.

Thirdly, the State's multi-dimensional coordination role in the digital environment has not been systematically analyzed, especially the relationship of benefit distribution between the State - Enterprises - Intermediary Organizations.

Fourthly, lack of in-depth empirical studies in Dong Dang on the pilot of digital border gates, leading to a lack of scientific basis to evaluate the ability to connect interdisciplinary data in practice.

Fifthly, the socio-political impact of digital transformation has not been fully assessed, such as changes in labor methods, employment restructuring and the formation of new interest groups in border areas.

Thesis issues that continue to be studied and clarified

Firstly, analyze and clarify the nature of the concept of goods import and export services in border-gate economic zones in the context of digital transformation.

Secondly, it is necessary to develop the content of the analysis framework and determine the criteria for evaluating goods import and export services in the

context of digital transformation. The content of goods import and export services needs to clarify the relationship between service suppliers and developers through the framework of content analysis and evaluation criteria.

Thirdly, clarify the requirements set for goods import and export services in the context of digital transformation and analyze the impact of these factors on service activities.

Fourthly, research and analyze international and domestic experiences on the development of goods import and export services in the context of digital transformation, thereby drawing lessons for Dong Dang economic zone, Lang Son province.

Fifthly, analyze and evaluate the current situation of goods import and export services in Dong Dang Economic Zone, Lang Son province, clarify the achievements, limitations and causes of limitations.

Sixthly, on the basis of the context of digital transformation, determine the direction and propose solutions to develop goods import and export services in Dong Dang Economic Zone, Lang Son province.

Chapter 2

THEORETICAL BASIS AND PRACTICAL EXPERIENCE OF GOODS IMPORT AND EXPORT SERVICES IN BORDER-GATE ECONOMIC ZONES IN THE CONTEXT OF DIGITAL TRANSFORMATION

2.1. DEFINITION, CHARACTERISTICS AND ROLE OF GOODS IMPORT AND EXPORT SERVICES IN BORDER-GATE ECONOMIC ZONES IN THE CONTEXT OF DIGITAL TRANSFORMATION

2.1.1. Concept of goods import and export services in border-gate economic zones in the context of digital transformation

2.1.1.1. Concept of goods import and export services

Goods import and export services are all activities to support and serve the purchase and sale of goods across national borders, value created to meet the needs of entities in the production, circulation and consumption of goods and services.

2.1.1.2. Concept of border-gate economic zones

Border-gate economic zones are specific economic zones established in national border areas, associated with international border gates or main border gates established and managed by competent agencies in order to promote cross-border trade, attract investment, develop production, etc business, and at the same time contribute to the stability of security and defense.

2.1.1.3. Concept of digital transformation

Digital transformation is the process of fundamentally and comprehensively changing the way of organizing, managing and operating economic activities based on digital technology, thereby improving efficiency, creating new value and transforming socio-economic relations in the economy.

2.1.1.4. Concept of goods import and export services in border-gate economic zones in the context of digital transformation

On the basis of inheriting and developing the concepts of goods import and

export services, border-gate economic zones, digital transformation, the author of the thesis determined: *"Goods import and export services in border-gate economic zones in the context of digital transformation are the whole of service activities organized and provided to serve the export process. import of goods in border-gate economic zones; on the basis of applying digital technology, digital data and digital platforms to the process of organizing, managing and providing services, contributing to ensuring the smooth, legal and effective circulation of goods across borders."*

2.1.2. Characteristics of goods import and export services in border-gate economic zones in the context of digital transformation

(1) Multi-dimensional connectivity between subjects inside and outside the territory; (2) High traceability transparency; (3) The ability to flexibly expand the operation of the enterprise; (4) Strongly impacted by the region's digitalization capacity and technological infrastructure; (5) High requirements for digital capabilities of human resources and institutions.

2.1.3. The role of goods import and export services in border-gate economic zones in the context of digital transformation

(1) Contributing to improving economic efficiency and diversifying domestic consumption; (2) Promoting production modernization and economic restructuring; (3) Creating jobs, increasing incomes and improving the lives of people in border areas; (4) Strengthen integration capacity and affirm national economic position.

2.2. CONTENTS, EVALUATION CRITERIA AND FACTORS AFFECTING GOODS IMPORT AND EXPORT SERVICES IN BORDER-GATE ECONOMIC ZONES IN THE CONTEXT OF DIGITAL TRANSFORMATION

2.2.1. Contents of goods import and export services in border-gate economic zones in the context of digital transformation

2.2.1.1. Entities in the supply and use of goods import and export services

Including State subjects, service providers and service users.

2.2.1.2. Types of goods import and export services

The thesis identifies four basic groups of services, corresponding to the main functions in the process of cross-border goods circulation, including: (1) customs clearance services; (2) financial and banking services; (3) terminal and logistics services and (4) post-customs clearance services on digital platforms.

2.2.1.3. Conditions for digital infrastructure in the supply and operation of goods import and export services

In the context of digital transformation, digital infrastructure becomes the foundation for organizing and operating import and export services, allowing automation, reducing costs and improving efficiency. At the same time, data and the ability to control digital infrastructure create advantages between subjects, while the level of system interconnection determines the efficiency of goods circulation.

2.2.2. Criteria for evaluating goods import and export services in border-gate economic zones in the context of digital transformation

2.2.2.1. Group of criteria for entities in the supply and use of goods import

and export services: Reflected in the level of completion and synchronization of digital institutions and policies; The level of transparency and access to information and data of enterprises; The effectiveness of the inter-sectoral coordination mechanism between customs, border guards, quarantine and enterprises.

2.2.2.2. Group of criteria for quality of types of goods import and export services: Reflected in the diversity and adequacy of types of support services; Specialization and operational efficiency of each service stage; Ability to integrate service functions through one or more common digital platforms.

2.2.2.3. Group of criteria for assessment of digital infrastructure conditions in the supply and operation of goods import and export services, including: Modernity and actual exploitation capability of technical infrastructure; Ability to connect actual data between management agencies and businesses; The percentage of online public services used and the degree of automation of business processes; Real-time data access and processing capabilities to optimize decision-making.

2.2.3. Factors affecting goods import and export services in border-gate economic zones in the context of digital transformation

2.2.3.1. Group of Internal Factors

(1) Digitalization strategy and vision of local governments; (2) The quality of human resources participating in the supply and operation of goods import and export services; (3) The ability to attract investment and linkage between enterprises providing import and export services; (4) Geographical location and socio-economic conditions of the locality.

2.2.3.2. Group of external factors

(1) The State's policies on digital transformation; (2) Cooperation policies with neighboring countries; (3) Technology trends and international market requirements; (4) International economic integration and trade commitments.

2.3. EXPERIENCE IN GOODS IMPORT AND EXPORT SERVICES IN BORDER-GATE ECONOMIC ZONES IN THE CONTEXT OF DIGITAL TRANSFORMATION AND LESSONS FOR DONG DANG ECONOMIC ZONE, LANG SON PROVINCE

2.3.1. International experience in goods import and export services in border-gate economic zones in the context of digital transformation

From the study of the experience of Zhuang Autonomous Region, Guangxi, China; The experience of Chiang Khong, Thailand's border-gate economic zone shows that import and export services are developed in digital transformation associated with modern logistics infrastructure and customs digitalization. Leading countries have strongly applied technology, especially cross-border e-commerce and smart management. At the same time, connecting and interconnecting data between subjects is considered a key factor. As a result, the efficiency of goods circulation and competitiveness are significantly improved.

2.3.2. Domestic experience in goods import and export services in border-gate economic zones in the context of digital transformation

From studying the experience of Lao Cai border-gate economic zone, Lao Cai province; The experience of Moc Bai border-gate economic zone, Tay Ninh province shows that border-gate economic zones have focused on infrastructure

investment, e-customs deployment and one-stop mechanism. Some localities promote cross-border cooperation and the application of technology in management. However, the level of development is uneven between regions. The main limitations lie in logistics infrastructure, data interconnection and deployment resources.

2.3.3. Some lessons on goods import and export services for Dong Dang border-gate economic zone, Lang Son province in the context of digital transformation

Firstly, to complete the institution and planning of border-gate economic zones in the direction of multi-functional, modern and in line with local advantages.

Secondly, strengthen regional and international links, connect with economic corridors to expand trade.

Thirdly, synchronously invest in infrastructure, especially transportation, logistics and digital infrastructure.

Fourthly, develop cross-border e-commerce and digital logistics to improve added value.

Fifthly, implement smart customs to speed up customs clearance and reduce transaction costs.

Sixthly, improve the quality of human resources to meet the requirements of digital transformation and international integration.

Chapter 3

THE CURRENT SITUATION OF GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION

3.1. OVERVIEW OF DONG DANG ECONOMIC ZONE IN LANG SON PROVINCE AND THE PROCESS OF DIGITAL TRANSFORMATION OF IMPORT AND EXPORT SERVICES

3.1.1. Location and role of Dong Dang economic zone, Lang Son province in cross-border goods circulation

Dong Dang border-gate economic zone is a comprehensive, multi-functional economic zone, strategically located in the axis linking Lang Son – Hanoi – Hai Phong – Quang Ninh, playing a central role in promoting the circulation of goods across borders.

The economic zone has a structure consisting of a non-tariff zone and a tariff zone, combining economic functions with security and defense, and at the same time an important space for organizing trade activities and import and export services.

With a centralized management mechanism, highly preferential policies and a digital transformation orientation, this economic zone has become a platform to promote the development of import and export services and improve the efficiency of goods circulation.

3.1.2. Advantages for import and export services of goods in Dong Dang economic zone, Lang Son province in the context of digital transformation

Firstly, there is the centralized and unified leadership and direction of the Party committees and authorities for the development of border-gate economic zones and digital transformation;

Secondly, the advantage of geoeconomic location and cross-border regional connection capacity

Thirdly, technical infrastructure and information technology are initially interested in investment, creating a foundation for deploying smart service models;

Fourthly, digital transformation at the border gate area has achieved certain results and brought efficiency;

Fifthly, preferential policies and administrative reforms create favorable conditions for import and export service enterprises.

3.1.3. Difficulties for goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

Firstly, the infrastructure, especially the infrastructure for logistics and information technology, is not synchronous and lacks depth;

Secondly, it depends heavily on the Chinese market and is affected by the lack of stability in border control policies;

Thirdly, the institutional framework and technical standards for digital transformation in import and export are lacking and overlapping;

Fourthly, the quality of human resources in border-gate economic zones has not really met international requirements.

3.2. CURRENT SITUATION OF GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION IN THE PERIOD OF 2019-2024

3.2.1. The current situation of the institutional framework regulating the role and interaction between entities in the service system

Firstly, the central government's mechanisms and policies to regulate goods import and export services in the context of digital transformation. From the system of Resolutions, Decrees, Decisions, and Strategies issued in recent years, it can be seen that the State's policy and legal framework has gradually adapted to the requirements of international economic integration and comprehensive digital transformation in the field of import and export of goods in general and import and export services of goods in the region border-gate economy in particular. Policies such as national digital transformation, development of digital border gates, sustainable import and export strategies to 2030... has been concretized by Lang Son province through promoting the digitization of the customs declaration process, integrating interdisciplinary data, modernizing logistics infrastructure and deploying a cross-border e-commerce transaction platform. The practice of implementation in Dong Dang, Lang Son province shows the potential to build a smart border gate economic model, including import and export services of goods operated on a digital platform, ensuring synchronous connection between businesses, management agencies and technical infrastructure in the entire border supply chain.

Secondly, mechanisms and policies of Lang Son province for goods import and export services in the context of digital transformation. The provincial mechanisms

and policies that Lang Son implements in the period of 2019 - 2024 show the initiative and consistency in transforming the import and export service operating model from the traditional administrative method to the digital management method. Dong Dang border-gate economic zone with the role of a focal point is gradually becoming a testing center for smart border gate solutions, shared digital infrastructure and modern logistics platforms in line with the strategic orientation of both the central and local governments in the period to 2030.

3.2.2. Current situation of types of goods import and export services

3.2.2.1. Status of goods customs clearance services

The period of 2019-2024 is a volatile period of import and export services in Dong Dang border-gate economic zone, Lang Son province in general and customs clearance services in particular.

Unit: Million USD

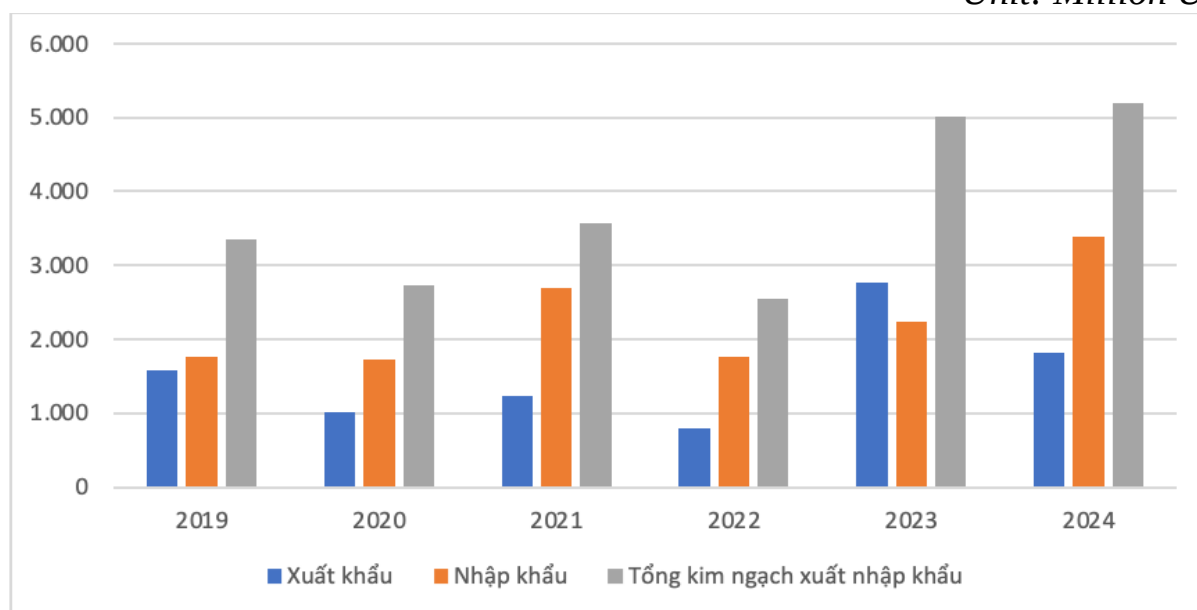


Figure 3.1. Import and export turnover of goods opening customs declarations in Lang Son province in the period of 2019 - 2024

Source: Summary of annual data through the report of the Customs Department of Lang Son province

Figure 3.1. shows that the total import and export turnover of goods opened for customs declaration of Lang Son province in the period of 2019-2024 tends to be unstable, however, the main trend is increasing. In 2024, the total turnover will reach 5,200.00 million USD, continuing to exceed the previous year's mark. In which, exports reached 1,816.60 million USD, down from 2023 but still higher than all previous years (except 2023), while imports increased sharply to 3,383.40 million USD, the highest level in the period. The increase in import turnover clearly reflects the smooth coordination of the service system from physical inspection, information confirmation, to platform connection between businesses and state agencies.

The customs clearance service of Dong Dang border-gate economic zone, Lang Son province has a notable highlight of the import and export of goods at Dong Dang International Railway Station.

Table 3.1. The situation of import and export of goods at Dong Dang International Railway Station, Lang Son province in the period of 2019 - 2024

Year	Number of Declarations	Value (USD)	Declaration increase/decrease rate (%)	Rate of increase/decrease in value (%)
2019	1293	84.093.462		
2020	3792	281.091.683	+193,27	+234,26
2021	2051	137.842.833	-45,91	-50,96
2023	1679	118.326.360	-18,14	-14,16
2024	2005	112.357.845	+19,42	-5,04

Source: Summary of annual data through the report of the Customs Department of Lang Son province

Table 3.1. showing that there is a clear fluctuation in the number of declarations and the value of goods from year to year, which reflects not only market demand but also the efficiency of organizing logistics services and customs clearance in the railway station area. In particular, after 2022, the introduction of the digital border gate model and the integration of multi-sectoral data have contributed to reducing customs clearance time, improving transparency and accuracy in processing documents. Although there are still many challenges in synchronizing infrastructure and sharing data across borders, technical and institutional foundations have been formed. This is an important premise for Lang Son to aim to develop a more modern, efficient and sustainable customs clearance service system in the next period.

3.2.2.2. Current situation of financial and banking services in goods import and export activities

Firstly, the current situation of international payment methods in Dong Dang border-gate economic zone. Large commercial banks with branches in the Lang Son border gate area such as Vietcombank, BIDV, Agribank, VietinBank... have fully implemented international payment methods.

Secondly, develop retail banking services to support the import and export of goods, thereby, serving border residents, workers and small business households. Banks in the area have promoted the application of digital technology, towards paperless banking and contactless transactions.

3.2.2.3. The current situation of wharf and logistics services in Dong Dang economic zone

Firstly, in terms of the scale and capacity of terminal and logistics infrastructure: By 2024, the capacity of customs clearance and storage at border gates will be maintained stably at a high level: Tan Thanh border gate will reach a capacity of about 600-700 vehicles/day; Chi Ma border gate reaches about 600 vehicles/day and Dong Dang International Railway Station handles an average of 120 freight cars/day.

Secondly, about fluctuations in vehicle traffic and the adaptability of the supply chain: By 2024, the whole province will maintain 7 border gates with stable customs clearance activities, with an average flow of 1,100 - 1,350 vehicles/day. In which: Tan Thanh border gate (Van Lang) has a customs

clearance capacity of about 600-700 vehicles/day. Chi Ma border gate (Loc Binh) reaches about 600 vehicles/day. Dong Dang International Railway Station can handle about 120 freight cars/day.

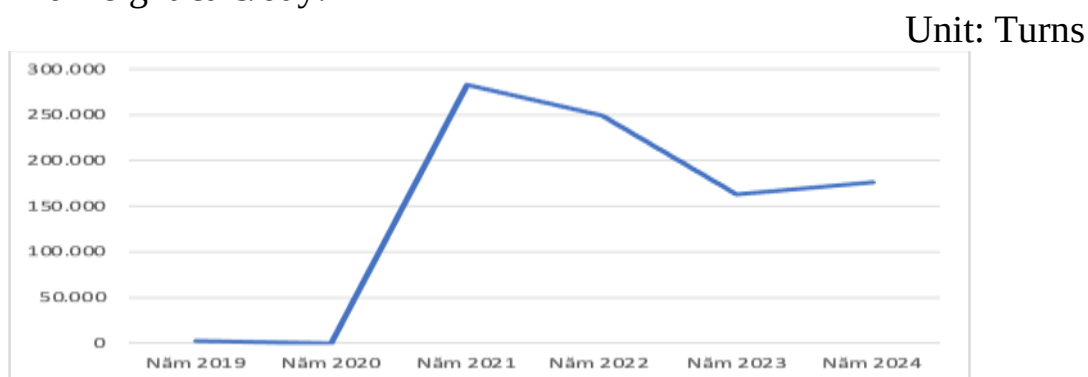


Figure 3.2. Number of vehicles carrying out entry and exit procedures according to Decree 59/2018/ND-CP in Dong Dang border gate area, Lang Son province

Source: Summary of annual data through the report of the Customs Department of Lang Son province

In the period of 2019-2024, the number of vehicles carrying out exit and entry procedures at Dong Dang border gate area, Lang Son Lang Son province has many fluctuations, reflecting the adaptation process of border transport activities to the practical context, reflecting the level of maintaining stability and professionalization of transport services in the border gate area, at the same time, it shows the increasingly clear role of digital technology in optimizing the coordination process, controlling vehicles and increasing the operational efficiency of the border logistics chain.

Thirdly, about the level of digitalization and application of technology in logistics management: Large transport enterprises in Dong Dang area have applied GPS positioning systems, combined with QR codes for traceability, supporting customers to track the status of goods delivery in real time. Many units also integrate an early warning system for vehicles that are stopped for an abnormally long time, ensuring safety and transparency in the transportation process.

Fourthly, on attracting strategic investment and international cooperation: The period of 2022-2024 recorded a strong trend of linkage when many Vietnamese logistics enterprises signed cooperation agreements with Chinese partners in consolidation and warehouse sharing activities. The most important highlight in modern logistics infrastructure is the official opening of Viettel Group Logistics Park Viettel in Lang Son in 2024.

3.2.2.4. The current situation of post-customs clearance services on digital platforms

According to aggregated data, in the last three years (2021-2023), the Department has carried out 97, 129 and 137 post-clearance inspections, respectively; detected 77, 88 and 110 violations, respectively; with total revenue remitted to the state budget reaching VND 4.68 billion (in 2021), VND 6,553 billion (in 2022) and VND 10,161 billion (in 2023). This reflects a steady increase in both the number of inspections, the number of violations detected and the financial efficiency of post-clearance inspection activities.

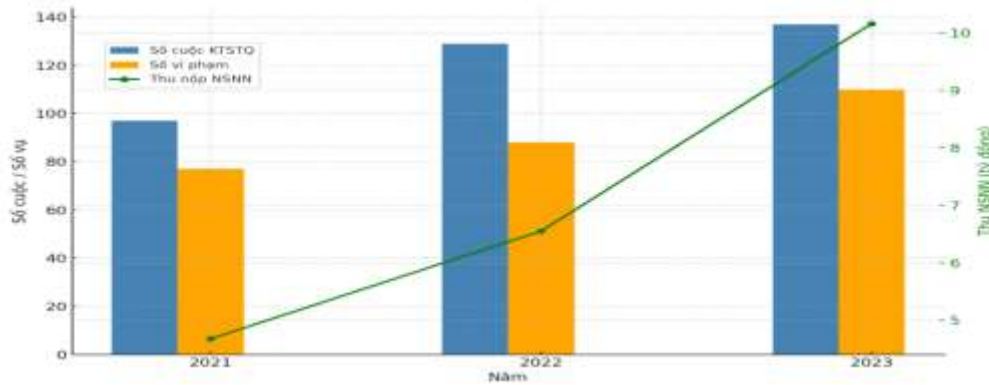


Figure 3.3. The situation of post-clearance inspection in Lang Son province (2021-2023)

Source: Summary of annual data through the report of the Customs Department of Lang Son province

Notably, the rate of violations through post-clearance inspection in Dong Dang area tends to increase, showing that a focused inspection mechanism based on risk analysis has been focused on implementation, gradually replacing the previous random inspection method.

3.2.3. Current status of digital infrastructure conditions in the supply and operation of goods import and export services

3.2.3.1. Current status of technical infrastructure and shared technology platforms

In the period of 2019-2024, the organization and operation of goods import and export services in Dong Dang border-gate economic zone, Lang Son province have had a strong shift from the traditional model to the digital technology application model. Digital infrastructure has been gradually formed and upgraded, contributing to effective support for customs clearance, transportation, warehousing and vehicle monitoring processes.

One of the important platforms is the VNACCS and VCIS systems, implemented by the General Department of Customs, which allow businesses to declare, transmit and receive customs declarations and carry out import and export procedures entirely electronically.

In Dong Dang area, the application of VNACCS has become popular, reflected in the number of enterprises participating in using the system in the period 2019-2024 as shown below:

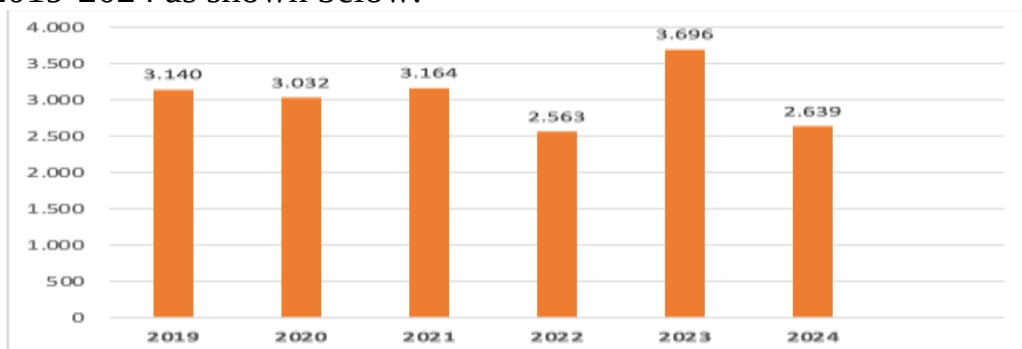


Figure 3.4. Number of enterprises using the VNACCS system in Lang Son province in the period of 2019 – 2024

Source: Summary of annual data through the report of the Customs Department of Lang Son province

In parallel with electronic declaration, many other stages are also digitized such as: electronic tax payment through the bank portal directly connected to the treasury, declaration lookup, online records tracking, application of QR codes to identify vehicles and drivers at the terminal area. By the end of 2024, the rate of import and export dossiers made electronically at border gates of Lang Son province will reach over 98%, of which Dong Dang area is almost absolute with all official trade declarations being transmitted online. contributing to significantly shortening the customs clearance time and reducing pressure on frontline customs forces.

3.2.3.2. The current status of data interconnection between management agencies and enterprises

In the period of 2021-2024, Lang Son is the leading locality in the country in deploying the digital border gate platform with an integrated system of declaration, registration, channeling and management of vehicles and goods at border gates in an online environment. By the end of 2022, this platform has been officially put into operation at Huu Nghi and Tan Thanh border gates, allowing automatic processing of more than 1,000 vehicles/day, helping to reduce the average check-in time from 15 minutes to less than 5 minutes/vehicle. The system also connects with functional forces such as customs, border guards, quarantine and market management, helping to improve coordination and monitoring throughout the system. In addition, the number of Mobile Base Receiving Stations (BTS) has been paid attention to building in most villages and villages with white and weak waves or expanding coverage areas and enhancing service quality; To establish 100% of communes with postal service points with servants under the direction of the Ministry of Information and Communications; 100% of communes have radio stations, of which 83/200 communes have radios applying digital platforms (accounting for 41.5%), 57 communes have both used FM radio and IP radio in parallel; Continue to effectively operate the VNACCS/VCIS automatic customs clearance system, E-Customs satellite system, GTT22, KTTT, etc. with the implementation of the entire border-gate Customs Sub-Department, ensuring 24/7 operation with 99% of customs customs carried out through this system, except for procedures for the yellowization of border residents.

3.3. ASSESSMENT OF THE CURRENT SITUATION OF GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION IN THE PERIOD OF 2019-2024

3.3.1. Results achieved

Firstly, in general, the system of mechanisms and policies in the period of 2019-2024 has made an important contribution to improving the legal environment, improving the efficiency of border gate management and promoting digital transformation in Dong Dang Border-gate Economic Zone: (1) The legal framework from the Central Government has created an important foundation for managing import and export activities and promoting digital transformation; (2) The policy of Lang Son province shows strong initiative in the Logistics Service Development Project 2021 – 2030; (3) The content of digital transformation in policies is more clearly identified over time; (4) The system of mechanisms and policies has created a

relatively stable environment for import and export services to operate.

Secondly, the types of goods import and export services in Dong Dang border-gate economic zone have made significant progress in terms of processing time, diversity, digital integration ability and level of specialization, better meeting the needs of businesses in the period of 2019 – 2024: (1) Basic customs clearance and logistics services meet time and procedure requirements; (2) Types of goods import and export services and warehousing systems are increasingly diverse, better meeting market demand;

Thirdly, the digital infrastructure and the level of technology application in import and export services have been significantly improved, gradually creating a foundation for the digital border gate model and modern import and export management. Practice proves: digitalization has become popular thanks to electronic platforms operated throughout the period of 2019-2024, especially after Covid-19, Lang Son province is a leading locality in deploying a digital border gate platform, automatically processing more than 1,000 vehicles/day, and at the same time connecting real-time databases between customs - border guard - quarantine - management market; Telecommunications infrastructure in the province has also been invested and expanded: the percentage of households with fiber optic Internet in many areas reaches over 85%, the rate of adults using smartphones reaches 90%, and 100% of communes have postal service points. These facilitate the provision of online public services and the implementation of smart customs in the future.

3.3.2. Limitations and causes

3.3.2.1. Limitations

Firstly, regarding policy mechanisms: the level of clarity, synchronization and applicability in practice is still limited. A number of central policies on digital transformation, digital border gates, e-customs, etc. are promulgated, but when deployed to the grassroots level, there is a lack of detailed processes. Through survey data, understanding and enforcing regulations on digital transformation of manufacturing and trading enterprises are still limited, especially when technical contents (data standards, digital signatures, vehicle QR codes, etc.) have not been guided in detail. The inter-sectoral coordination mechanism between customs - border guard - quarantine still faces many problems and inconsistencies.

Secondly, about the types of goods import and export services: the quality of services is uneven, unstable and does not meet the actual demand. Survey data shows that: Customs clearance - logistics services are still locally overloaded and unstable; The diversity of export, import and warehousing services is uneven between regions; The level of digital integration between stages in the service chain is not synchronized. The data has not been fully connected, many records have to be re-entered at each stage. The digital system between state agencies and enterprises is not consistent; Some software has different interfaces and data standards. The cross-border data sharing with the Chinese side has not been synchronized, leading to the need to supplement records or adjust declarations many times.

Thirdly, the capacity to operate digital infrastructure is not stable and the application of technology has not been effective and not up to expectations. The survey results show that digital infrastructure is not really stable and uniform between

border gates; the digital system between state agencies and enterprises is not fully connected; enterprises use online public services but have not fully exploited the benefits of digitalization; The automation process still has bottlenecks.

3.3.2.2. Causes of existence and limitations

Firstly, due to the characteristics of geographical location and socio-economic location. Dong Dang border-gate economic zone is located in deep-lying, remote and border areas, so living conditions and educational, medical and cultural infrastructure are still limited, making it difficult to attract high-quality human resources from large urban centers. In addition, while the Chinese side has invested heavily in border gate infrastructure and modern logistics systems, the Vietnamese side is still limited in terms of warehouses, transshipment terminals and logistics services. This disparity creates a "bottleneck" in the cross-border supply chain.

Secondly, due to fluctuations from the international economic and political environment, it has a strong impact on import and export activities in border areas. In the period of 2019 - 2024, the COVID-19 pandemic and the strict "Zero COVID" policy from the Chinese side have caused serious disruptions in the supply chain.

Thirdly, the gap in digital capacity and technical standards between Vietnam and its trading partners is also a barrier to the integration of modern management systems. Currently, there is no bilateral electronic data sharing mechanism between Vietnam and China at the border gate area, making goods monitoring, information verification and synchronous processing by technology still limited, depending on manual operations and traditional paperwork.

Fourthly, lack of financial resources. This is the main reason for the limitations and difficulties of Dong Dang border-gate economic zone. Capital constraints affect public investment, the ability to support businesses, train and attract talents, and the need to apply technology in border-gate economic zones. Thereby, reducing the competitiveness of import and export services, creating a great barrier to the comprehensive development of import and export services.

Fifthly, the technology and telecommunications infrastructure in the border area is still inconsistent and has not been comprehensively developed. Although the authorities at all levels of Lang Son province have invested significantly in main border gates such as Huu Nghi and Tan Thanh, secondary border gate areas or gathering points in remote and remote areas still lack surveillance cameras, vehicle dispatch software, and electronic weighing stations connected to the center. This affects the ability to operate the smart logistics chain and continuous monitoring throughout the system.

Sixthly, the level of institutional coordination between the border-gate authorities of the two sides. In fact, Lang Son border-gate economic zone often has to petition Bang Tuong and Guangxi's superior agencies to reopen customs clearance, upgrade border gates, promote smart border gates and increase convenience in customs clearance. That means that the operational stability of the border-gate economic zone depends not only on Vietnam's internal processes, but also on the willingness of the Chinese border-gate management system to coordinate. When the coordination is slow, inconsistent or has to wait for a decision

from a higher level on your side, Vietnam's border-gate economic zone will suffer direct consequences in the form of reduced customs clearance traffic, increased transaction costs and reduced attractiveness for import-export enterprises.

Seventhly, the role of state management has not been really drastic as digital transformation in some fields is still formal; has not completely shifted to data-based governance; some regulations have not kept up with the reality of digital transformation;

Eighthly, the capacity of goods import and export service enterprises is still limited such as lack of technology investment capital; lack of digital human resources; fear of changing operating models, dependence on intermediaries and not actively applying digital technology; not ready to connect to the digital system of state agencies; etc.

Chapter 4

DIRECTIONS AND SOLUTIONS TO DEVELOP GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION

4.1. NEW CONTEXT AND DIRECTIONS FOR THE DEVELOPMENT OF GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION

4.1.1. New context affecting goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

Regarding the international situation: (1) The global supply chain is restructuring after Covid-19, especially during the US-China trade war, geopolitical conflicts are fierce; (2) China-ASEAN border trade continues to expand, especially on the economic corridors of the Nanning - Lang Son - Hanoi - Hai Phong - Quang Ninh corridor, with great demand for logistics services, warehousing, multimodal transportation, finance, insurance and customs services; (3) Digital transformation in international trade has become the norm; (4) Digital transformation is becoming a constituent part of the "rules" of international trade.; (5) The trend of greening supply chains, reducing emissions, traceability and quality control is increasingly directly impacting cross-border agricultural trade and logistics.

Regarding the domestic situation: (1) The whole country strongly implements the Digital Economy Development Strategy, the Logistics Service Development Strategy, and the Customs Strategy to 2030, with clear goals of digital customs, smart customs, smart border gates, and promoting border trade with China and ASEAN; (2) Promote logistics infrastructure, inland ports, logistics centers associated with cross-border economic corridors, in which Lang Son is oriented as one of the important logistics centers of the country; (3) Strengthen administrative procedure reform, cut transaction costs, widely deploy e-customs, e-payment, risk management, national single-window and ASEAN single-window, and facilitate trade for import-export enterprises.

4.1.2. Objectives of developing goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

General objectives

To build Dong Dang border-gate economic zone into a modern and dynamic

border-gate economic center, playing a driving role in promoting economic growth of the province and the Northeast region; Shifting the model of developing import and export services from breadth to depth based on digital technology; forming the ecosystem of "Digital Border Gate - Smart - Green"; Striving to make Lang Son the largest logistics and transshipment center between Vietnam and ASEAN countries and China, ensuring fast, transparent, safe and cost-optimized circulation of goods.

Specific objectives (Period to 2030 and orientation to 2050)

Firstly, in terms of the growth scale of turnover and border economy: The average growth rate of import and export turnover through the area is from 14% to 15%/year.

Secondly, in terms of customs clearance capacity and vehicle traffic: By 2030, customs clearance capacity will increase 2-3 times compared to today.

Thirdly, in terms of the level of digital transformation and administrative reform: 100% of administrative procedures related to import and export are carried out in the network environment; 100% of yard and logistics businesses connect surveillance camera systems and share real-time data with management agencies and 100% of vehicles are managed by digitized systems such as identification, traffic flow.

Fourthly, in terms of cost and time efficiency: Reduce 30-40% of the time for customs clearance procedures and the time for releasing goods compared to 2020 thanks to the application of digitalization and automation processes; Reduce logistics costs to the equivalent of 10-12% of product costs.

4.1.3. Orientations for goods import and export services in Dong Dang economic zone, Lang Son province in the context of digital transformation

Firstly, Lang Son province orients the development of Dong Dang border-gate economic zone in the direction of modernity, synchronization and associated with the national digital transformation process.

Secondly, the province is oriented to develop modern and synchronous logistics infrastructure, including warehouses, bonded warehouses, vehicle parking lots, logistics centers and transportation systems connected to strategic traffic routes.

Thirdly, the province focuses on promoting digital transformation in the community of import-export and logistics service enterprises.

Fourthly, the provincial government continues to reform administrative procedures in import and export activities in the direction of streamlining, transparency and digitalization.

Fifthly, strengthen international cooperation and regional linkages to expand development space for Dong Dang border-gate economic zone.

Sixthly, solution to protect information systems, control cross-border data, prevent trade fraud and ensure order at border gates are strengthened by the province.

4.2. SOLUTIONS TO DEVELOP GOODS IMPORT AND EXPORT SERVICES IN DONG DANG ECONOMIC ZONE, LANG SON PROVINCE IN THE CONTEXT OF DIGITAL TRANSFORMATION

4.2.1. Completing the institutional framework and policies to adjust goods import and export services in the context of digital transformation

(1) Adjusting the planning of border-gate economic zones, including: The Lang Son provincial government needs to review and update the development

objectives, targets and orientations in the existing planning, ensuring that it is associated with national strategies on digital transformation, logistics development and border-gate economy; Restructuring the functional space of the economic zone through the reasonable allocation of land funds for smart logistics zones, high-tech bonded warehouse areas, and service areas to support the export and import of goods associated with digital platforms; Integrate digital infrastructure into technical infrastructure; linking the planning of border-gate economic zones with regional economic and logistics corridors;

(2) Amending, supplementing and reviewing policies on regulating goods import and export services in the context of digital transformation, including: Comprehensively reviewing existing legal documents, mechanisms and policies of the province related to the management of border-gate economic zones, logistics services, warehousing services, transportation, customs agents, export and import entrustment services, border-gate fees and charges; Amending and supplementing regulations in the direction of recognizing and encouraging the use of digital technology; To promulgate specific regulations on data sharing between state agencies and between the public-private sector within border-gate economic zones; Completing fee and charge policies in the direction of encouraging electronic transactions; supplementing regulations on data protection, cyber security, and economic security in digital import and export services;

(3) Developing preferential regulations for investors in Dong Dang economic zones, including: Concretizing forms of tax incentives, land rents, infrastructure use fees, wharf and yard use fees with higher priority for investment projects in modern logistics infrastructure; Regulation of non-financial incentives; Develop a mechanism for sharing risks and benefits with large-scale infrastructure projects in the form of public-private cooperation or socialization; Design incentives associated with technology transfer, human resource training, job creation and budget contribution; Publicity, transparency and standardization of the entire process, evaluation criteria and preferential levels in the set of regulations to reach domestic and foreign investors.

4.2.2. Improving the quality of human resources for goods import and export services in the context of digital transformation

(1) Human resources of state management agencies, including: Organizing the overall assessment of the capacity of cadres, civil servants and public employees who are directly involved in the management of import and export activities; Develop intensive training and retraining programs; Strengthen the mechanism for evaluating cadres according to competency, in which the criteria of digital capacity, ability to handle situations in the digital environment and the level of compliance with electronic processes become mandatory criteria; Strengthen the arrangement of young cadres with technological knowledge and knowledge of the digital economy in key positions at border gates; Cooperate with training institutions, logistics groups, international organizations such as ADB, JICA, UNESCAP to organize in-depth training courses.

(2) Human resources of enterprises and organizations providing goods import and export services, including: Supporting enterprises to implement human resource

capacity assessment programs, focusing on skills; Organize intensive training and training programs according to each target group; Promote enterprises to cooperate with universities, research institutes, logistics associations and technology corporations to develop human resources; Build a team of core experts in businesses into experts capable of internal training, implementing digital transformation and leading organizations in the process of applying new technologies.

4.2.3. Improving the capacity of enterprises to participate in goods import and export services in the context of digital transformation

(1) Improving the governance capacity and legal compliance capacity for import-export enterprises; (2) Promoting digital transformation in import-export enterprises and logistics service enterprises; (3) Improving the financial capacity and access to capital of enterprises; (4) developing market capacity and chain linkage of enterprises; (5) Develop a mechanism to support enterprises to innovate technology and participate in new service models.

4.2.4. Investment in the development of synchronous infrastructure in association with improving the quality of goods import and export services on the digital platform

(1) Regarding the transport system, it is necessary to: Upgrade and expand the capacity of roads directly connecting border gates such as Huu Nghi - Tan Thanh - Coc Nam route; Promote investment in making the Dong Dang - Bang Tuong intermodal railway line become the main transport axis for high-volume goods; build inter-regional connecting routes: Hanoi - Bac Ninh - Lang Son - Guangxi and the connection between border gates - industrial parks - logistics centers - seaports (Hai Phong, Quang Ninh); Integrate smart transportation solutions on digital platforms with vehicle flow management systems using real-time data;

(2) Regarding the system of warehouses and yards, it is necessary to: Invest in the construction of bonded warehouses and regional logistics centers, with modern infrastructure, large area, capable of receiving container goods and goods via multimodal transportation; To develop high-tech cold storage to serve agricultural products, foodstuffs, and goods with special storage conditions; Applying modern technology in warehouse management; Renovating and expanding vehicle parking lots, import and export waiting lots, integrating with vehicle scheduling software, load control, automatic management of vehicles entering and exiting; Developing diversified logistics service models in warehouses and yards: sorting, packaging, electronic labeling, quality inspection, order processing, light processing, etc.;

(3) Regarding digital infrastructure, it is necessary to: Build a data center of border-gate economic zones, serving the storage, processing and analysis of big data related to goods, vehicles, enterprises, customs clearance flows; Completing and expanding the digital border gate platform; synchronously deploy the digital customs system - smart customs, connecting with businesses, warehouses, terminals, banks, transportation and quarantine; Invest in high-speed transmission infrastructure, 5G networks, fiber optic cables, surveillance cameras, IoT systems along transport routes and at border gates; Establish a big data analysis system, apply artificial intelligence to forecast cargo volumes, regulate vehicles, detect trade fraud and optimize the customs clearance process; Building a model of the test area.

4.2.5. Increase the mobilization and effective use of capital sources for goods import and export services in the context of digital transformation

(1) Prioritize the allocation of the provincial budget and integrate public investment programs for items serving import and export services; (2) Increase capital mobilization from enterprises, public-private cooperation for import and export service projects capable of recovering capital, including important items; (3) Taking advantage of the central government's support sources, especially capital for border-gate economy, border trade and digital transformation; (4) Attracting capital from commercial banks and financial institutions to support import-export enterprises in upgrading technology, applying digital platforms, deploying international payments and commercial insurance; (5) Use resources effectively, avoid spreading, give priority to projects that have a direct impact on the quality of goods import and export services and digital transformation capabilities.

4.2.6. Strengthening bilateral cooperation between Vietnam and China on goods import and export services in Dong Dang economic zone

(1) Strengthen the mechanism for information exchange, bilateral coordination and data sharing of border gate operation between Lang Son province and Guangxi province; (2) Unifying professional processes and technical standards in the stages of quarantine, specialized inspection, electronic documents and traceability in order to shorten the time for customs clearance; (3) Coordinating the development of new cross-border service models on digital platforms; (4) Strengthen coordination between functional forces of the two sides (customs, border guard, quarantine, market management).

CONCLUSION

Import and export services in Dong Dang border-gate economic zone, Lang Son province play a particularly important role in promoting Vietnam-China border trade, The research process shows that the period 2019 - 2024 is a pivotal period, with outstanding progress but at the same time reveals many issues that need to be improved.

Firstly, the import and export service system in Dong Dang border-gate economic zone has been formed relatively fully in structure, including core service groups such as customs clearance, logistics and transportation, warehousing, banking, international payment, quarantine – inspection, customs agents, etc monitoring services and digital-based support services. The development of these service groups makes an important contribution to improving the speed of goods processing, reducing transaction costs, facilitating trade and increasing the competitiveness of the border-gate area. The implementation practice shows that the types of services are becoming more and more diverse, more professional, capable of meeting the increasing requirements of Chinese businesses and trading partners.

Secondly, the application of digital technology has created an important change in service management and operation. Systems such as e-customs, vehicle management through border gates, remote declaration software, non-cash payment, digital logistics platforms, etc. have been gradually applied, helping to increase

transparency, reduce waiting time and improve the efficiency of coordination between authorities. This is an important premise for Dong Dang to integrate more deeply into the regional logistics chain and meet the requirements of digital transformation in border trade. However, the level of digitalization between stages is still uneven; the shared data system has not been fully interconnected; and the level of coordination between actors is still limited, especially in cross-border connections with the Chinese side.

Thirdly, the current situation study also shows that the framework of mechanisms and policies in the period 2019 – 2024 has improved a lot, but there are still inadequacies. Some regulations are still overlapping and not synchronized between the central and local governments; the implementation process at each stage is still different; and the level of transparency is still limited for small and medium-sized enterprises. The results of the business survey show that their biggest difficulties are related to access to information, frequently changing procedures and ineffective coordination between management agencies. This directly affects the ability to take advantage of trade opportunities as well as the process of adapting to digital transformation.

Fourthly, the relationship of interests between entities in the service system in Dong Dang border-gate economic zone is increasingly shaped in the context of digitalization. State management agencies play the role of regulating and ensuring compliance with regulations and maintaining border security; enterprises are the central enforcement force, directly using and affecting service quality; intermediaries such as logistics, banks, customs agents, etc. play an important role in connecting the stages. However, differences in interests between subject groups sometimes lead to inconsistencies in coordination, reducing the overall effectiveness of the service system.

Fifthly, the digital transformation process in the import and export service system at the border gate area is strongly promoted by practical requirements and competitive pressure, but the level of adaptation between service groups and types of businesses is uneven. Large enterprises are able to adopt technology faster thanks to strong resources, while small businesses struggle with capital, human resources, and digital literacy. This creates a disparity in the capacity to access services, making the service market not really reach its full potential.

Sixthly, the context of Vietnam-China trade cooperation also creates many direct impacts on the export and import of goods in Dong Dang. Cross-border connection infrastructure, coordination mechanism between the two authorities, and compatibility of information technology systems are factors that strongly affect service efficiency. Over the years, changes in border opening policies, adjustments to China's quarantine procedures, or seasonal congestion have significantly impacted the operation of the border crossing area, posing a requirement to improve joint forecasting and coordination capabilities.

On the basis of synthesizing the results of analysis and survey, it can be affirmed that the import and export services of goods in Dong Dang Border-gate Economic Zone have been transforming in the direction of modernization, digitalization and more professionalism./.

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