HO CHI MINH NATIONAL ACADEMY OF POLITICS

NGUYEN THANH HAN

STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

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Scientific Supervisors:

1. Assoc. Prof. Dr. BUI VAN HUYEN

2. Dr. THAI THI HONG MINH

Reviewer 1: .....

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Reviewer 2: .....

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Reviewer 3: .....

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INTRODUCTION

1. Rationale and Urgency of the Research Topic

Logistics is increasingly playing a pivotal role in the modern economy: efficient operations help shorten circulation time, reduce costs, enhance productivity, and strengthen competitiveness. However, logistics is not merely a matter of transport or warehousing techniques; it constitutes a complex, inter-sectoral and inter-regional public governance challenge, requiring the State to act as an institutional architect, undertake integrated planning, coordinate resources, and ensure sustainable development.

In Vietnam, enhancing logistics capacity is closely associated with the objectives of building a modern market economy, advancing digital transformation, and promoting green growth. Logistics costs have decreased from approximately 21% of GDP in 2018 to around 17% in 2022, yet they remain relatively high. The target is to reduce logistics costs to about 15% of GDP by 2025 and to position Vietnam's Logistics Performance Index (LPI) within the top 40 countries by 2035. Achieving these goals requires, as a fundamental condition, the improvement of state management of logistics infrastructure toward synchronized development of both "hard" (physical) and "soft" (institutional and digital) components, strengthened multi-level and multi-sectoral coordination, and enhanced implementation effectiveness.

In this context, Ho Chi Minh City occupies a particularly strategic position: contributing over 22% of national GDP, nearly one-third of total state budget revenue, and leading in exports (exceeding USD 46 billion in 2024). The City hosts a key seaport cluster (with Cat Lai serving as the principal container terminal; the Ho Chi Minh City port cluster ranked 22nd globally with approximately 9.1 million TEUs in 2024), Tan Son Nhat International Airport, and an extensive inter-regional connectivity network. Accordingly, state management of logistics infrastructure in Ho Chi Minh City generates spillover effects across the Southern Key Economic Region and the national economy as a whole.

Nevertheless, multiple bottlenecks persist: planning and technical standards across transport modes remain insufficiently harmonized; inter-regional coordination and data-sharing mechanisms are limited; public investment is still fragmented; PPP arrangements lack sufficient attractiveness; and the legal framework for green logistics and digital transformation has not kept pace with

emerging requirements concerning data governance, digital identification, and risk management. Without redesigning governance mechanisms toward an integrated, flexible, and data-driven model, existing infrastructure advantages may fail to translate into long-term competitive capacity.

From a policy perspective, Resolution No. 31-NQ/TW (2022) and decisions of the Ho Chi Minh City People's Committee on logistics development to 2025, with orientation to 2030, require the operationalization of strategic objectives through feasible management structures equipped with measurable indicators and clear implementation instruments. However, in-depth studies on state management of logistics infrastructure under "mega-urban" conditions such as Ho Chi Minh City remain limited. Many existing works focus primarily on infrastructure development description rather than systematically examining state management in the context of digitalization and green transition.

For these reasons, the topic "State Management of Logistics Infrastructure in Ho Chi Minh City" holds both theoretical and practical significance, meeting the urgent requirements of urban logistics infrastructure governance in the new development phase.

2. Research Objectives and Tasks

2.1. Research Objective

Based on the scientific foundations of state management of logistics infrastructure, the dissertation systematizes and supplements theoretical and practical issues; assesses the current state of logistics infrastructure management in HCMC; and proposes orientations and solutions to improve state management of logistics infrastructure in HCMC in the context of digital transformation, green growth, and international integration toward 2030 with a vision to 2045.

2.2. Research Task

- Literature Review and Identification of the Research Gap:

To synthesize and critically analyze domestic and international studies on logistics infrastructure management; to clarify major findings and identify existing research gaps, particularly at the large metropolitan level.

- Systematization and Development of the Theoretical Framework:

To clarify the concepts and structural components of logistics infrastructure (hard and soft components); to elaborate the conceptual content of state management at the provincial/municipal level; and to identify management contents, objectives, instruments, evaluation criteria, and key factors influencing management effectiveness.

- Analysis and Assessment of the Current Situation:
To evaluate policies, institutional arrangements, governance instruments, and management processes related to state management of logistics infrastructure in Ho Chi Minh City during the 2015–2024 period; to identify achievements, limitations, and underlying causes; and to benchmark findings against domestic and international experiences.

- Proposed Solutions and Policy Recommendations:
To determine orientations for improving state management in the context of digital and green transition and enhanced regional integration; to propose solutions concerning institutional reform, organizational structure, resource mobilization, data governance, and monitoring mechanisms; and to formulate recommendations to the Government and relevant central ministries and agencies.

3. Research Object and Scope

3.1. Research Object

The research object of the dissertation is provincial-level state management activities concerning logistics infrastructure in Ho Chi Minh City.

3.2. Research Scope

3.2.1. Spatial Scope

The study is conducted within the administrative boundaries of Ho Chi Minh City prior to administrative merger, with extended consideration of linkages with the Southeast Region.

3.2.2. Temporal Scope

The study focuses on the period 2015–2024 and proposes orientations and solutions to 2030 with a vision to 2045.

3.2.3. Content Scope

The dissertation concentrates on core contents of state management of urban-level logistics infrastructure, including:

Planning, development plans, and policies: Identification of strategies, orientations, spatial logistics planning, and priority project lists.

Implementation organization and inter-sectoral coordination: Functional assignment and coordination mechanisms among departments/agencies and localities in investment, operation, and exploitation of infrastructure.

Inspection and supervision: Mechanisms for supervising planning and policy implementation; handling violations; evaluating effectiveness and adjusting development plans.

3.2.4. Scope of Logistics Infrastructure

Hard infrastructure: Transport systems (road, rail, inland waterway, aviation), ports and terminals, warehouses, logistics

centers, and interregional connectivity infrastructure.

Soft infrastructure: Information technology and logistics data infrastructure (digital platforms, data sharing systems, online public services, and the electronic single-window system serving logistics management).

3.2.5. Scope of Management Subjects

The management subject is defined as the Ho Chi Minh City government, including the People's Council, the People's Committee, and departments and agencies responsible for managing and coordinating logistics infrastructure development.

4. Theoretical Basis and Research Methods

4.1. Theoretical Basis

The dissertation is developed on the basis of the state management approach to logistics infrastructure under the discipline of Economic Management, emphasizing the relationship between the State, the market, and enterprises. It applies system theory, institutional analysis, and public policy cycle approaches, integrating requirements of digital transformation and green growth, combined with empirical approaches (qualitative and quantitative) to build the research framework, analyze the current situation, and propose models and solutions.

4.2. Research Methods

The dissertation employs a combination of qualitative methods, sociological investigation, and descriptive quantitative analysis to systematize theoretical foundations, analyze the current situation, and propose solutions for improving state management of logistics infrastructure in HCMC.

Qualitative methods: Synthesis, systematization, descriptive–analytical methods, comparative analysis, and evaluation to (i) construct the conceptual/analytical framework; (ii) describe and analyze the current situation by infrastructure components (hard and soft) and policy cycle (formulation – implementation – monitoring/evaluation); and (iii) identify bottlenecks, causes, and reform priorities.

Sociological investigation (expert interviews): Conducting 10 semi-structured interviews (06 officials from departments/agencies; 02 research institute experts; 02 representatives of logistics associations) to clarify issues related to integrated planning, inter-sectoral and inter-level coordination, capital mobilization/PPP, data and digital infrastructure, and implementation monitoring; information is thematically coded to support analysis.

Sociological investigation (enterprise survey): Surveying 519 logistics enterprises/service providers operating in HCMC; using a 5-point Likert scale to collect satisfaction assessments regarding logistics infrastructure and state management; data processed using statistical software and presented through descriptive statistics (frequency, percentage, mean, standard deviation) to support situation assessment and policy prioritization (without causal inference).

Data sources: Combination of secondary data (policy documents, reports, statistical yearbooks, scientific studies, official statistics, etc.) and primary data (interviews and surveys), with cross-verification to enhance reliability.

5. New Contributions of the Dissertation

5.1. Academic and Theoretical Contributions

The dissertation contributes to refining the scientific foundation of state management of logistics infrastructure in the context of digitalization and green transformation in urban economic governance. Building upon both domestic and international studies, it systematizes and further develops a theoretical framework for state management of logistics infrastructure, clarifying the interrelationships among the concepts of logistics, logistics infrastructure, and state management.

The dissertation proposes a five-group set of evaluation criteria for assessing the effectiveness of state management at the urban level: (1) coordination capacity; (2) legal framework and technical standards; (3) resource mobilization and public–private partnership (PPP) mechanisms; (4) effectiveness in the development and operation of physical and digital infrastructure; and (5) the level of digital transformation, data sharing, and green logistics implementation.

The study synthesizes domestic and international experiences based on the management cycle approach (planning – implementation – monitoring), thereby drawing policy lessons applicable to Ho Chi Minh City.

5.2. Practical Contributions

First, the dissertation provides a comprehensive overview of the current status of logistics infrastructure in the locality (ports and terminals, warehousing facilities, transport systems, and information technology infrastructure), thereby clearly identifying bottlenecks and structural gaps in the configuration and operation of the system.

Second, the dissertation conducts a comprehensive assessment of the current state management of logistics infrastructure in Ho Chi

Minh City using a unified management cycle approach. It identifies achievements, limitations, and underlying causes based on a comparative analysis of primary and secondary data against the developed evaluation criteria framework.

Third, the dissertation proposes objectives, orientations, and a system of solutions to improve state management of logistics infrastructure in Ho Chi Minh City through 2030, with a vision to 2045; it also advances several policy recommendations to the Government and relevant ministries and central agencies.

6. Theoretical and Practical Significance

6.1. Theoretical Significance

The dissertation expands the research framework and systematizes theoretical foundations of local-level state management of logistics in alignment with new contextual requirements.

6.2. Practical Significance

With its state management process-based analytical approach, the findings may assist the Ho Chi Minh City government in evaluating and adjusting its logistics governance more rationally and comprehensively.

7. Structure of the Dissertation

In addition to the Introduction, Conclusion, and References, the dissertation consists of four chapters with twelve sections.

Chapter 1
LITERATURE REVIEW OF RESEARCH WORKS RELATED TO THE DISSERTATION TOPIC

1.1. GENERAL OVERVIEW OF RESEARCH WORKS RELATED TO THE DISSERTATION TOPIC

1.1.1. General Issues on Logistics

Foundational and contemporary studies consistently affirm that logistics is not merely transportation and warehousing, but a system for optimizing the flows of goods, information, and financial resources throughout the supply chain. Beginning with Jay Forrester's (1961) system dynamics theory and the "bullwhip effect," numerous studies have emphasized the critical role of real-time information and systems thinking in enhancing supply chain efficiency.

In the context of rapid technological advancement, logistics has evolved toward trends such as e-logistics, green logistics, and integrated multimodal logistics, closely associated with digitalization

and innovative operational models. Research on e-logistics highlights the roles of the Internet of Things (IoT), artificial intelligence (AI), blockchain, and big data in logistics management; it also proposes frameworks and criteria for assessing the level of digitalization and classifies research into theoretical, operational, system application, and policy-oriented streams.

1.1.2. Issues Concerning Logistics Infrastructure

Both domestic and international studies regard logistics infrastructure as a foundational condition for supply chain development and national competitiveness. Quantitative research demonstrates that investment in warehousing, seaports, and transport networks is positively correlated with delivery time, reliability, and logistics costs; it also confirms that overall effectiveness depends on regional coordination rather than the isolated development of individual projects.

Studies on logistics network structure emphasize the linkage between seaports and their inland hinterlands, in which the "dry port" model is considered a strategic solution for expanding logistics space and optimizing long-haul transportation. In Viet Nam, several studies have applied quantitative and multi-criteria decision-making methods to select dry port locations, offering important implications for the development of regionally integrated logistics centers.

Conversely, many assessments point out that a common limitation of Viet Nam's logistics system lies in fragmented planning and insufficient integration among transport infrastructure, warehousing systems, and information and communication technology (ICT). Therefore, a facilitating and coordinating role of the State is deemed essential to address systemic bottlenecks.

1.1.3. Issues Concerning State Management of Logistics Infrastructure at the National Level

Studies on state management at the national level emphasize the strategic coordinating role of the State in the development of logistics infrastructure through integrated planning, synchronized investment across transport modes, and the promotion of policies such as public–private partnerships (PPP), data sharing, green logistics, and digital logistics. International experience indicates that successful countries typically establish a central coordinating body for logistics in order to reduce fragmentation and enhance policy implementation effectiveness.

In Viet Nam, studies on investment attraction, human resource development, and technology adoption have contributed to clarifying the current situation and identifying key issues in improving state management of logistics.

1.1.4. Issues Concerning State Management of Logistics Infrastructure at the Local and Regional Levels

International research indicates that, despite the existence of national-level policies, the capacity for policy design, implementation, and coordination at the provincial and municipal levels ultimately determines regional logistics performance. The absence of integrated planning, clear decentralization, and effective coordination mechanisms may hinder sustainable development.

In Viet Nam, although local-level studies remain limited, existing research has identified key bottlenecks in several localities such as Hai Phong, Da Nang, and Ho Chi Minh City. With regard to Ho Chi Minh City, studies have recommended prioritizing administrative procedure simplification, enhancing hinterland connectivity, and promoting e-logistics and green logistics. At the same time, they highlight persistent constraints in inter-provincial linkages, data sharing, and the lack of performance measurement indicators, thereby recommending stronger regional coordination mechanisms. Strategic documents and sectoral reports issued by Ho Chi Minh City also serve as important practical references for this research.

1.2. GENERAL ASSESSMENT

1.2.1. Achievements and Inheritable Contributions

Based on the review of domestic and international literature, the clarified findings that can be inherited may be summarized as follows:

- Theoretical perspective: Logistics is conceptualized as an interdisciplinary system evolving toward digitalization, green transformation, and multimodal integration. Concepts such as e-logistics and green logistics have been clearly defined and theoretically elaborated.

- Logistics infrastructure: Studies consistently affirm the central role of logistics infrastructure (both physical infrastructure and management-support systems), while empirically demonstrating the relationship between infrastructure quality and supply chain performance.

- State management: State management plays a decisive role in the development of logistics infrastructure, particularly through integrated planning, inter-sectoral and inter-regional coordination, and effective resource mobilization.

1.2.2. Research Gaps Requiring Further Clarification

The literature review also reveals several prominent gaps:

- Theoretical perspective: There is a lack of a comprehensive

theoretical framework for state management of logistics infrastructure at the metropolitan/megacity level; many existing studies adopt fragmented approaches focusing on individual components rather than a systemic perspective.

- Evaluation criteria and influencing factors: There is no complete set of evaluation criteria (integrating qualitative and quantitative indicators) to assess the effectiveness of state management in Ho Chi Minh City; influencing factors have not been comprehensively synthesized; and systematic reviews of experiences from comparable metropolitan areas remain limited.

- Practical perspective: There is a shortage of in-depth and comprehensive studies on state management of logistics infrastructure in Ho Chi Minh City within the context of regional integration, digital transformation, and green transition.

These research gaps underscore the urgent need for further study to supplement and refine both the theoretical foundation and practical framework of state management of logistics in Ho Chi Minh City under the new development context.

1.3. NEW APPROACH OF THE DISSERTATION

The dissertation approaches state management of logistics infrastructure from a systemic perspective within the specific context of a metropolitan area, conceptualizing it as an integrated public governance system comprising actors, objects, objectives, instruments, resources, and coordination mechanisms within the State–market–enterprise nexus, consistent with the characteristics of a large urban center such as Ho Chi Minh City.

From a theoretical standpoint, the dissertation standardizes and integrates the concepts of logistics, logistics infrastructure, and state management within a multi-actor framework. It develops a unified analytical framework, synthesizes key groups of influencing factors (institutions and policies; investment and PPP mechanisms; technology and data; and managerial capacity), and incorporates comparative insights from similar metropolitan contexts.

In assessing the current situation, the study adopts a management cycle approach (planning – implementation – monitoring), evaluating performance based on criteria of effectiveness, efficiency, relevance, and sustainability. It integrates both qualitative and quantitative indicators rather than focusing solely on infrastructure investment levels.

Regarding solutions, the dissertation shifts from proposing isolated projects to advancing integrated governance solutions,

emphasizing inter-sectoral and inter-regional coordination, enhancement of PPP mechanisms, development of digital infrastructure, promotion of green logistics, and strengthened monitoring based on a clearly defined evaluation framework.

In summary, the content of state management is structured around three pillars: (i) planning and policy formulation; (ii) implementation and coordination; and (iii) monitoring and adjustment.

This framework is applicable to both hard and soft infrastructure and is aligned with the requirements of regional integration, digital transformation, and green transition.

Chapter 2
THEORETICAL AND PRACTICAL FOUNDATIONS OF STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE

2.1. THEORETICAL FOUNDATIONS OF LOGISTICS AND LOGISTICS INFRASTRUCTURE

2.1.1. Concept and Nature of Logistics

Chapter 2 systematizes various approaches to logistics and adopts a unified view that logistics is the process of organizing and managing the flows of goods, services, and information within the supply chain in order to optimize time, cost, and service quality.

Logistics is inherently characterized by supply chain linkage, multi-actor participation, multi-stage processes, and an increasing association with digitalization, service integration, and operational optimization.

2.1.2. Concept, Components, and Role of Logistics Infrastructure

This section clarifies that logistics infrastructure constitutes the material–technical foundation and supporting conditions that enable logistics to operate efficiently. The scope of logistics infrastructure is approached in an integrated manner, encompassing both “hard” and “soft” components, consistent with the trends of digital logistics and green logistics.

2.1.2.1. Concept of Logistics Infrastructure

Logistics infrastructure is approached as a system comprising physical structures, technology, institutions, and organizational conditions serving logistics operations, with emphasis on integration, connectivity, and coordination among components.

2.1.2.2. Components of Logistics Infrastructure

The components are described from a systemic perspective, including: (i) Multimodal transport networks; (ii) Logistics nodes and hubs such as seaports, inland container depots (ICDs), airports, warehouses, and logistics centers; (iii) Technology and data infrastructure supporting operations and coordination; (iv) Institutional frameworks, standards, and procedures; and (v) Human resources and the supporting service ecosystem.

2.1.2.3. Role of Logistics Infrastructure

Logistics infrastructure determines the connectivity, fluidity, and cost-reduction capacity of supply chains. It also provides the foundation for enhancing regional and local competitiveness, increasing investment attractiveness, strengthening resilience, and promoting green and digital transformation in logistics.

2.2. THEORETICAL FOUNDATIONS OF STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE

2.2.1. Concept, Subjects, and Objects of State Management of Logistics Infrastructure

Chapter 2 defines state management of logistics infrastructure as the process by which the State utilizes legal instruments, planning mechanisms, policies, and resources to orient, organize implementation, coordinate, and supervise logistics infrastructure development.

The management subjects include central authorities and local governments; the management objects encompass both hard and soft infrastructure components, characterized by intersectoral, interregional, and multi-actor participation.

2.2.2. Objectives of State Management of Logistics Infrastructure

The objectives of state management are generalized as follows: enhancing the effectiveness and efficiency of infrastructure investment and operation; ensuring synchronized multimodal connectivity; supporting economic growth and competitiveness; and meeting sustainability requirements, emission reduction targets, data safety and security standards, and digital transformation adaptation.

2.2.3. Contents of State Management of Logistics Infrastructure

The contents of state management are structured according to the management cycle, emphasizing consistency from formulation to implementation and adjustment.

2.2.3.1. Formulation, Planning, and Development of State Management Plans

This includes developing strategies, integrated planning (spatial – sectoral – modal), identifying investment priorities, standardizing

technical standards, allocating land resources, and establishing implementation roadmaps, aligned with green and digital objectives.

2.2.3.2. Organization of Implementation and Coordination

This emphasizes intersectoral and intergovernmental assignment and coordination; interregional coordination mechanisms; resource mobilization and allocation (public investment, PPP, and socialization); project management and operational organization; and promotion of data sharing and technology application to enhance governance efficiency.

2.2.3.3. Inspection, Supervision, and Adjustment in Logistics Infrastructure Development Management

This focuses on compliance inspection, supervision of progress, quality and effectiveness, impact assessment, and adjustment of policies and planning based on practical feedback; it emphasizes data-driven supervision and enhanced accountability.

2.2.4. Criteria for Evaluating State Management of Logistics Infrastructure

A system of evaluation criteria is established according to groups: effectiveness, efficiency, relevance, equity, and sustainability, combining qualitative and quantitative indicators to measure governance quality and policy outcomes.

2.2.5. Factors Influencing State Management of Logistics Infrastructure

Influencing factors are classified into two major groups to explain bottlenecks and reform conditions.

2.2.5.1. Internal Factors

These include institutional capacity and human resources; quality of institutional frameworks and coordination mechanisms; level of information technology and data application; capacity for resource mobilization and allocation; and implementation and project management capability.

2.2.5.2. External Factors

These include the policy and integration context; urbanization and demographic dynamics; technological advancement and digital transformation; economic fluctuations and market demand (industry, e-commerce); environmental risks and climate change.

2.3. INTERNATIONAL AND DOMESTIC EXPERIENCES IN STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE AND LESSONS FOR HO CHI MINH CITY

2.3.1. International Experiences in State Management of Logistics Infrastructure

Chapter 2 synthesizes experiences from leading logistics cities, identifying common features: long-term integrated planning; strong coordinating authorities; multi-actor resource mobilization; data-driven governance; and alignment of infrastructure development with green and digital objectives.

2.3.1.1. Experience from Singapore

Long-term strategic planning aimed at optimizing logistics space; a streamlined organizational apparatus with effective coordination mechanisms; and accelerated digitalization accompanied by results-based performance measurement.

2.3.1.2. Experience from Shanghai, China

Integrated urban–regional planning; centralized coordination combined with multi-level governance; and the application of real-time data in managing large-scale logistics networks.

2.3.1.3. Experience from Rotterdam, the Netherlands

Development of the port–hinterland model with multimodal connectivity; digitalization of the port community; and strong alignment with green objectives and emissions reduction targets.

2.3.1.4. Experience from Hamburg, Federal Republic of Germany

Ecosystem-based governance of logistics; coordinated collaboration among government authorities, port operators, and enterprises; and the development of connective infrastructure and digital platforms to coordinate the port–urban region.

2.3.1.5. Experience from Tokyo, Japan

Management of high-density urban logistics; optimization of last-mile distribution; and enhanced standardization, safety, and resilience.

2.3.2. Domestic Experiences in State Management of Logistics Infrastructure

Domestic experience indicates that local authorities play a decisive role in planning, land allocation, investment in connectivity infrastructure, and policy coordination tailored to local characteristics; at the same time, it underscores the need to strengthen regional linkages and establish a systematic performance measurement framework for management effectiveness.

2.3.2.1. Experience from Hai Phong City

Concentrates on logistics development oriented toward seaport-based growth, formation of logistics zones and hubs, enhancement of infrastructure connectivity, and improvement of implementation and supervision mechanisms aligned with development objectives.

2.3.2.2. Experience from Da Nang City

Notable for planning orientation, selection of key projects, resource mobilization, coordination improvement, and emphasis on monitoring and adjusting planning according to development needs and feasibility.

2.3.2.3. Experience from Hanoi

Focus on planning, implementation, coordination, and monitoring–adjustment mechanisms; drawing lessons for urban logistics infrastructure development aligned with regional connectivity and market demand.

2.3.3. Lessons for Ho Chi Minh City

Chapter 2 synthesizes lessons learned according to three pillars of state management:

(i) Integrated planning and strategic programming across spatial, sectoral, and modal dimensions, aligned with green and digital objectives; (ii) Implementation through a sufficiently empowered lead agency, strengthened regional linkages, effective mobilization of PPP mechanisms, and shared data platforms; (iii) Inspection, monitoring, and policy adjustment based on a defined set of performance indicators, real-time data, and feedback mechanisms to ensure continuous improvement.

Chapter 3
STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY: CURRENT SITUATION

3.1. OVERVIEW OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

This section describes the foundational conditions and principal infrastructure components (ports/warehousing, transport infrastructure, information technology) that constitute the "inputs" for assessing the current state of state management.

3.1.1. Specific Conditions Affecting State Management of Logistics Infrastructure in the Area

This subsection clarifies the natural, economic, and social characteristics that generate substantial logistics demand while simultaneously increasing the complexity of inter-sectoral and inter-regional coordination in infrastructure management.

3.1.1.1. Natural and Geographical Conditions

This part outlines the geographical position of Ho Chi Minh City in the Southeast Region and its natural/climatic conditions,

demonstrating that the City possesses gateway advantages for trade while also facing constraints related to urban space, environmental pressures, and the need for adaptive infrastructure organization.

3.1.1.2. Socio-Economic Development Situation

This subsection analyzes trends in GRDP growth, state budget revenues and expenditures, FDI inflows, and import–export activities (including temporary disruptions due to COVID-19 followed by strong recovery). It emphasizes that large-scale economic growth and trade expansion have rapidly increased logistics demand, requiring infrastructure and infrastructure governance to keep pace.

3.1.2. Port and Warehousing Infrastructure

Ho Chi Minh City serves as a major seaport and container hub—particularly with the strategic role of Cat Lai Port—alongside an extensive system of inland container depots (ICDs), warehousing facilities, and logistics centers. While its customs clearance capacity is substantial, the system faces significant congestion pressures and increasing demands for enhanced connectivity and coordinated management.

3.1.3. Transport Infrastructure

The radial, ring road, and expressway network provides connectivity to the port system, complemented by air transport, rail/metro, inland waterways, and key infrastructure projects. The principal bottlenecks lie in multimodal connectivity gaps and gateway congestion, which increase overall logistics costs.

3.1.4. Information Technology (IT) Infrastructure

Information technology (IT) plays a pivotal role in optimizing logistics operations; technologies such as Electronic Data Interchange (EDI), Radio Frequency Identification (RFID), cloud computing, Transportation Management Systems (TMS), and Global Positioning Systems (GPS) are increasingly being deployed. However, disparities in digital capabilities among enterprises remain evident, underscoring the need to enhance data interoperability and integration between government authorities and businesses.

3.2. CURRENT STATE OF STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

This section analyzes state management across three core stages: *(i) planning and programming; (ii) implementation and coordination; (iii) inspection, supervision, and adjustment.*

3.2.1. Policy Formulation, Planning, and Development Programs for Logistics Infrastructure

A synthesis of Ho Chi Minh City's orientations, programs, and

action plans is conducted to identify development objectives, spatial allocation, and task assignments; at the same time, it highlights existing limitations in policy coherence and the capacity for effective operationalization.

3.2.1.1. Strategic Planning for Logistics Infrastructure Development

This subsection reviews Ho Chi Minh City's positioning of logistics as a foundational service sector; the development of the Logistics Development Plan (oriented toward 2025/2030); identification of key task groups and regional linkage requirements. It also notes that some strategic objectives have not been fully translated into phased infrastructure priorities closely aligned with sustainable urban development and emission reduction goals.

3.2.1.2. Integrated Multi-Sectoral and Spatial Planning of Logistics

It describes efforts to integrate logistics into transport planning, land-use planning, and the overall master plan, as well as the orientation for a strategically located network of logistics centers. However, the level of coherence among different planning instruments remains limited, and insufficient market consultation reduces overall feasibility.

3.2.1.3. Development of Action Plans and Performance Indicators

This subsection summarizes action plans (task assignment to departments/sectors, target setting), including logistics digital transformation initiatives (training, workshops, digital logistics maps, shared data platforms, etc.). It assesses that although a framework of indicators and timelines exists, implementation outcomes remain modest; many key projects/investments (particularly logistics centers) are delayed or remain at preparatory stages.

3.2.2. Organization of Implementation and Coordination in Logistics Infrastructure Development Management

This subsection analyzes the institutional apparatus, coordination mechanisms, resource mobilization, and project implementation capacity—where the gap between objectives and execution is most evident.

3.2.2.1. Assignment of Management Responsibilities and Inter-Sectoral Coordination Mechanisms

It describes inter-sectoral coordination mechanisms (such as the Logistics Council and inter-agency task forces), project- or center-based assignment of responsibilities, and the trend toward strengthened coordination. The assessment indicates that roles have

become clearer and more proactive; however, constraints persist due to the cross-sectoral and inter-jurisdictional nature of logistics governance, as well as dependencies on land allocation, planning procedures, and administrative processes.

3.2.2.2. Mobilization and Allocation of Financial Resources and Investment Capital

It presents the substantial capital requirements and the main financing sources (state budget, foreign direct investment (FDI), public–private partnerships (PPP), and seaport infrastructure fees), along with orientations to increase investment and introduce special mechanisms. At the same time, it highlights risks associated with large-scale projects, long capital recovery periods, and regulatory as well as PPP-related constraints, which may reduce investor attractiveness.

3.2.2.3. Project Implementation Management and Infrastructure Operation

The analysis focuses on the "land availability bottleneck" and the spatial organization of logistics infrastructure. The plan envisions eight logistics centers located in gateway areas, connected to ring roads and expressways to alleviate inner-city congestion. However, implementation has been delayed due to planning inconsistencies, land clearance difficulties, and legal constraints; therefore, more flexible planning mechanisms and the provision of cleared land funds are required to accelerate progress.

3.2.2.4. Human Resource Development and Capacity Enhancement

It identifies the shortage of high-quality logistics human resources and proposes solutions including the expansion of specialized training programs, stronger collaboration between educational institutions and enterprises, talent attraction policies, and the enhancement of managerial capacity. At the same time, it recognizes the ongoing trend of digital transformation in the logistics sector; however, a noticeable disparity persists between large enterprises and small and medium-sized enterprises (SMEs) in terms of financial resources, technological capabilities, and levels of digital adoption.

3.2.3. Inspection, Supervision, and Policy Adjustment in Logistics Infrastructure Management

This subsection clarifies how Ho Chi Minh City closes the management cycle through performance monitoring, project inspection, social supervision, and policy adjustment.

3.2.3.1. Establishment of Monitoring and Evaluation (M&E) Systems

Ho Chi Minh City has initially shifted from progress-based management to a goal- and task-oriented approach, with defined targets and timelines. However, the monitoring and evaluation (M&E) system remains largely input-oriented, lacking outcome- and impact-based indicators, as well as regular disclosure and benchmarking mechanisms to support timely policy adjustment.

3.2.3.2. Inspection of Logistics Infrastructure Projects

Inspection and supervision activities have been strengthened to accelerate the implementation of major projects, thereby reinforcing enforcement discipline. However, in the case of complex, long-term projects involving significant legal risks, inspections are at times not sufficiently timely or comprehensive.

3.2.3.3. Social Supervision and Multi-Stakeholder Feedback Mechanisms

These mechanisms include oversight channels from elected bodies, enterprises and business associations, the media and community groups, as well as environmental and social compliance requirements. Although feedback mechanisms have been established, the transformation of market and societal input into governance data and formal inputs for policy adjustment remains limited.

3.2.3.4. Policy Review, Evaluation, and Adjustment

Ho Chi Minh City conducts legal reviews, requires progress commitments from project developers, and applies land recovery or sanctions in cases of delay or violations. Nevertheless, policy adjustments remain largely ad hoc and case-specific, lacking a periodic mechanism grounded in impact assessment and a standardized indicator framework.

3.3. EVALUATION OF STATE MANAGEMENT RESULTS OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

This section synthesizes results (including enterprise survey findings), identifies strengths and weaknesses across the three management stages, and analyzes subjective and objective causes.

3.3.1. Achievements

Ho Chi Minh City has made clear progress in strategic orientation, implementation organization, and supervision, laying the foundation for becoming a regional logistics hub while partially improving the logistics environment and coordination capacity.

3.3.1.1. Achievements in Planning and Programming

Strengths include the establishment of policy frameworks and spatial

arrangements for logistics centers based on gateway–regional linkage logic; improved market consultation; and planning that helps shape a decentralized development structure to reduce inner-city congestion.

3.3.1.2. Achievements in Implementation and Coordination

Notable achievements include strengthened inter-sectoral coordination mechanisms, financial instrument mobilization, and digital transformation promotion. Enterprises have expressed more positive assessments regarding proactiveness and administrative support in certain areas. However, rising expectations highlight the need to accelerate project implementation and improve coordination quality.

3.3.1.3. Achievements in Inspection, Supervision, and Policy Adjustment

It records strengthened monitoring and inspection activities, as well as the incorporation of performance targets into the tracking system; enterprises generally express more positive assessments of enforcement discipline. An evaluation based on public governance criteria-effectiveness, efficiency, relevance, equity, and sustainability - indicates an overall trend of improvement; however, progress remains uneven across different management dimensions.

3.3.2. Limitations

A key issue is the gap between "well-oriented planning" and "slow implementation," alongside insufficient synchronization and weak impact-based evaluation mechanisms.

3.3.2.1. Limitations in Planning and Programming

Major limitations relate to quality and feasibility: fragmented planning; insufficient alignment with operational demand (cargo flows, warehouse/ICD locations, sector-specific transshipment points); uneven consultation (limited SME participation), resulting in reduced flexibility amid rapid market changes.

3.3.2.2. Limitations in Implementation and Coordination

Prominent issues include slow project progress, limited resource mobilization, and delayed inter-sectoral/inter-level coordination; many logistics centers and key connectivity projects remain behind schedule; PPP mechanisms are constrained; and land acquisition/site clearance remains a persistent bottleneck.

3.3.2.3. Limitations in Inspection, Supervision, and Policy Adjustment

There is a lack of a systematic ex post evaluation framework and a scientifically grounded set of performance indicators; mechanisms for public disclosure of results remain unclear. Policy adjustments are often ad hoc and insufficiently grounded in impact assessment, thereby limiting the sustainability of management effectiveness.

3.3.3. Causes of Limitations

Causes are categorized into subjective (implementation capacity and organization) and objective (higher-level institutional frameworks, urban–market–technology–environmental context).

3.3.3.1. Subjective Causes

These shortcomings primarily stem from: limitations in institutional capacity, organizational structure, and inter-agency coordination; inconsistencies in planning and policy frameworks, coupled with insufficient stakeholder consultation; financial resource constraints and PPP mechanisms that are not well aligned with large-scale projects; administrative procedures causing implementation delays; and fragmented data systems alongside incomplete digital transformation.

3.3.3.2. Objective Causes

These include overlapping and inconsistent central legal frameworks; rapid urbanization that compresses infrastructure space; fast-changing technological developments and integration dynamics; logistics demand exceeding existing infrastructure capacity; and environmental factors, including climate change, which further complicate planning and project implementation.

Chapter 4
ORIENTATIONS AND SOLUTIONS FOR IMPROVING STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

4.1. ORIENTATIONS FOR IMPROVING STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

4.1.1. New Context and Emerging Trends Affecting State Management of Logistics Infrastructure

4.1.1.1. New Context Influencing State Management of Logistics Infrastructure in Ho Chi Minh City

- Digital economy and the Fourth Industrial Revolution (Industry 4.0)
- Climate change and sustainability requirements
- Competition and international integration
- Institutional and macroeconomic policy environment

4.1.1.2. Logistics Development Trends Affecting State Management of Logistics Infrastructure in Ho Chi Minh City

- Digital transformation in logistics
- Green logistics

- Outsourcing logistics services (3PL–5PL) and e-logistics

Concluding orientation for state management: *(1) shifting from sector-based management to integrated regional governance; (2) transitioning toward data- and results-based governance; (3) adopting proactive and anticipatory governance instead of ex-post control.*

4.1.2. Logistics Infrastructure Development Objectives of Ho Chi Minh City to 2030, with a Vision to 2045

4.1.2.1. General Objectives

To develop logistics infrastructure in a synchronized, smart, green, and regionally connected manner; to enhance Ho Chi Minh City's role as a national logistics hub and international gateway; to reduce logistics costs; to improve goods circulation efficiency and the quality of state management; and to increase the sector's contribution to GRDP.

4.1.2.2. Specific Objectives to 2030, with a Vision to 2045

(Specific quantitative and qualitative targets to be detailed according to development phases and strategic milestones.)

4.1.3. Orientations for Improving State Management of Logistics Infrastructure in Ho Chi Minh City

This section proposes reforms in state management following the state management cycle, focusing on three key areas: *(i) integrated planning and programming; (ii) implementation organization and inter-sectoral coordination, including public–private partnerships (PPP); (iii) inspection, supervision, and policy adjustment.*

4.1.3.1. Integrated Planning and Programming of Logistics Infrastructure

4.1.3.2. Organization of Implementation and Inter-Sectoral Coordination, with Enhanced Public–Private Partnerships (PPP)

4.1.3.3. Inspection, Supervision, and Policy Adjustment

4.2. SOLUTIONS FOR IMPROVING STATE MANAGEMENT OF LOGISTICS INFRASTRUCTURE IN HO CHI MINH CITY

4.2.1. Improving Institutions, Policies, and Integrated Planning for Logistics Infrastructure

The focus is on addressing overlapping planning frameworks, promulgating a local-level logistics management regulation, and formulating an integrated master plan through 2045 with a strong regional linkage orientation. It also includes establishing inter-sectoral coordination mechanisms; developing a comprehensive set of evaluation criteria; refining policies for resource mobilization (particularly PPP mechanisms); and institutionalizing digital transformation and green logistics within the regulatory framework.

4.2.2. Enhancing the Effectiveness of Implementation Organization and Inter-Sectoral/Inter-Regional Coordination

This section proposes a "one-stop" coordination model through the establishment of a Logistics Coordination Center; the issuance of inter-agency coordination regulations; and strengthened linkages within the Southeast region (including data sharing and interregional project connectivity). It also recommends digitalizing the monitoring of public investment and PPP projects, as well as enhancing dialogue and feedback mechanisms with enterprises and business associations.

4.2.3. Developing Financial Resources and Promoting Public–Private Partnerships (PPP) in Logistics Infrastructure Development

A breakthrough in capital mobilization is to be achieved by prioritizing public investment for strategic connectivity projects; innovating PPP mechanisms (including priority project lists, flexible contracts, risk-sharing arrangements, and dedicated PPP support units); promoting green finance instruments (such as green bonds, green credit, and ODA funding); establishing a Ho Chi Minh City Logistics Development Fund; and improving the investment climate alongside international promotion efforts to attract major logistics investors.

4.2.4. Promoting Digital Transformation and Green Logistics in State Management of Logistics Infrastructure

This involves building a digital–green logistics governance foundation through the HCMC Logistics Data Hub and digital mapping systems; implementing the 2025–2030 Digital Transformation Program; and issuing green logistics standards and certification labels. It further promotes the application of AI, Digital Twin technology, Blockchain, and IoT for monitoring, forecasting, and optimization; expanding international cooperation; and establishing a logistics innovation center.

4.2.5. Strengthening Human Resource Capacity and Improving Inspection, Supervision, and Evaluation Tools in Logistics Infrastructure Management

Emphasizing the dual focus on "people and tools," this solution includes specialized training (in PPP management, data governance, and green transition), standardizing competency frameworks, and reinforcing institutional structures under the urban governance model. It also proposes the development of a digitalized, risk-based M&E system; refinement of performance and accountability indicators; and the establishment of a public logistics expert network to support policy advisory and critical review functions.

4.3. POLICY RECOMMENDATIONS TO THE GOVERNMENT, MINISTRIES, SECTORS, AND THE HO CHI MINH CITY AUTHORITY

4.3.1. Recommendations to the Government and Central Coordinating Agencies

4.3.2. Recommendations to the Ministry of Industry and Trade and the Ministry of Foreign Affairs

4.3.3. Recommendations to the Ministry of Finance and the General Department of Customs

4.3.4. Recommendations to the Ministry of Construction and the Ministry of Agriculture and Rural Development

4.3.5. Recommendations to the Ministry of Science and Technology and the Ministry of Education and Training

CONCLUSION

Research on state management (SM) of logistics infrastructure in Ho Chi Minh City demonstrates that this field holds strategic significance, both as a driver of socio-economic growth and as a reflection of modern urban governance capacity in the context of globalization and digital transformation.

First, the dissertation clarifies the theoretical framework of logistics infrastructure and state management in this domain. Logistics infrastructure is approached in a broad sense, encompassing not only physical and technical foundations but also institutional arrangements, policies, technology, and human resources. Drawing upon theories of public governance and sustainable development, the dissertation develops an analytical framework comprising three groups: (1) influencing factors; (2) state management content (planning – implementation – monitoring and adjustment); and (3) output results (effectiveness, efficiency, relevance, equity, and sustainability). This framework serves as an instrument for assessing the level of completeness of state management at the urban level.

Second, empirical analysis indicates that Ho Chi Minh City functions as the national logistics hub and the principal import–export gateway of the Southern Key Economic Region. However, rapid growth has exerted significant pressure on infrastructure capacity; planning remains insufficiently integrated; port–warehouse–ICD systems are spatially fragmented; and logistics costs remain relatively high. State management still faces limitations in inter-sectoral coordination, PPP and data governance mechanisms, forecasting and monitoring capacity, and the depth of digital transformation.

Third, the 2025–2035 period requires a comprehensive

restructuring of state management in response to the impacts of the digital economy, climate change, ASEAN integration, and emission reduction commitments. The expansion of the urban–port space alters the scope of governance, necessitating a flexible, integrated, and multi-level management model in which urban authorities play a central coordinating role.

Fourth, the dissertation proposes five groups of solutions: (1) improving institutions, policies, and integrated planning frameworks; (2) enhancing implementation effectiveness and inter-sectoral and inter-regional coordination; (3) developing financial resources and promoting PPP and green finance mechanisms; (4) accelerating digital transformation and green logistics development; and (5) strengthening human resource capacity and improving monitoring and evaluation instruments.

Fifth, at the national level, the dissertation recommends promulgating a Vietnam Logistics Law; establishing a national logistics coordinating body; implementing a 2026–2035 logistics infrastructure investment program and a development fund mechanism; and updating the national logistics development strategy, multimodal transport planning, and logistics human resource competency framework.

Sixth, for an expanded Ho Chi Minh City, it is necessary to implement a master plan for logistics infrastructure development through 2045; establish a regional logistics coordination center; and carry out the 2025–2030 digital transformation and green logistics program. Strengthening logistics corridor linkages with neighboring provinces will be essential to forming a national and regional "super logistics hub."

Seventh, from a theoretical perspective, the dissertation advances an analytical model of urban-level state management of logistics infrastructure grounded in multi-level governance, data-driven management, and sustainable development principles. From a practical perspective, it provides a highly applicable set of policy recommendations.

In conclusion, state management of logistics infrastructure constitutes a long-term development governance function that requires inter-sectoral and inter-regional coordination, as well as strong innovation capacity. Effective implementation of the proposed solutions will enable Ho Chi Minh City to address current bottlenecks and progress toward becoming a smart, green, and competitive logistics center of Southeast Asia by 2035, with a vision to 2045./.

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