

The Role of Third-Party Logistics (3PL) In Modern Supply Chain in Bangladesh

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Submitted to:

Dr. Khandoker Mahmudur Rahman

Professor

School of Business & Economics

United International University (UIU)

Submitted by:

Md. Mirajul Islam Miraj

ID: 111 222 118

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School of Business & Economics

United International University

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Letter of Transmittal

24 November, 2025

Dr. Khandoker Mahmudur Rahman

Professor

School of Business & Economics

United International University (UIU)

Madani Avenue, Dhaka-1212

Subject: **Submission of Project Report titled “The Role of Third-Party Logistics (3PL) in Modern Supply Chain in Bangladesh”**

Dear Sir,

I, Md. Mirajul Islam Miraj, bearing ID number 111 222 118, am pleased to submit the enclosed project report titled “**The Role of Third-Party Logistics (3PL) in Modern Supply Chain in Bangladesh**”. The report examines the role of 3PL providers in enhancing national trade competitiveness, notably in light of the RMG export ecosystem and fast-growing e-commerce chain in Bangladesh. It assimilates the recent literature, sector reports, and case evidences; presents a pragmatic time line for enhancement of capability in 3PL process in Bangladesh.

I appreciate the opportunity to conduct this report and sincerely hope that the findings and conclusion presented in this report will be valuable for further discussions and implementations in green computing initiatives.

I trust that the contents of this report will prove enlightening and informative. It is my earnest hope that you will accept my submission, and I eagerly await your response.

Thank you for your time and consideration.

(signature)

Sincerely Yours,

Md. Mirajul Islam Miraj

ID: 111 222 118

Certificate of Similarity Index

This is to declare that the document as hereby submitted, has been subject to similarity check against relevant databases and published works, including articles, books, reports, internship and project reports. The similarity index for this document will be subject to the institutional requirement as of date, and the author hereby declares that this is an original write-up of the author, however, due to the usage of secondary information, some interpretation and reference has been provided in due course. In addition, no part of this report can be copied, reproduced or referenced without prior written permission or due referencing in current or future scholarly work.

Declaration of the Student

I hereby declare that the research and findings presented in this project report, titled “The Role of third-party logistics (3PL) in Modern Supply Chain in Bangladesh” are my original work and have been conducted under the supervision of **Dr. Khandoker Mahmudur Rahman, Professor, School of Business & Economics, United International University.**

I affirm that all statements, analyses, and conclusions in this report are based on my independent research and inquiry. Any references, data, or theoretical frameworks used in this study have been properly cited and acknowledged in accordance with academic integrity standards.

Furthermore, I confirm that this project report has not been submitted to any other institution, either in Bangladesh or abroad, for the purpose of obtaining a degree, diploma, or certification. I have strictly adhered to the guidelines and regulations set forth by United International University in preparing this work.

By submitting this report, I take full responsibility for its content and ensure that it upholds the highest standards of academic honesty.

Acknowledgment

I begin by expressing my gratitude to Allah (SWT), the divine being, for bestowing upon me the opportunity to complete my academic endeavors within the stipulated timeframe and with favorable outcomes.

I wish to convey my heartfelt appreciation to my academic supervisor, Dr. Khandoker Mahmudur Rahman, who serves as a professor at the School of Business and Economics, United International University. The invaluable guidance and unwavering support provided by my supervisor played a pivotal role in the successful culmination of my project. I consider myself exceptionally fortunate to have had the privilege of collaborating with him in conducting this study.

I also extend my thanks to my family for their unwavering support throughout my journey in pursuing a Bachelor of Business Administration (BBA) degree.

Then at last I shall be grateful to those people who read this report and who shall get benefit from this report at present and in future.

Abstract

Third-Party Logistics (3PL) operators have now become indispensable to Bangladeshi trade competitiveness, supporting the nation's export, particularly in ready-made garments (RMG) and driving the meteoric growth of e-commerce in Bangladesh. This analysis consolidates literature (2015–2025), sectoral data and industry cases to build from what is known of how 3PLs add value, where obstacles remain (infrastructure, regulatory fragmentation, skills, technology adoption) and what policy-industry actions might release performance. The analysis reveals that despite a positive relative trajectory in the World Bank's Logistics Performance Index 2023, there is still momentum behind Bangladesh, but enduring bottlenecks, congestion at ports, variability in warehouse quality and reliability of last-mile delivery, still drive-up costs and risks for logistics. In that context, targeted recommendations include to (i) fast-track multimodal integration and port/dry port throughputs, (ii) introduce a national 3PL accreditation framework with service level KPIs, (iii) scale digital logistics platforms around visibility, e-POD, slot booking, (iv) surge cold chain for agrifood/pharma and other sectors of strategic value and finally, (v) invest in skilling the workforce on transport management as well as WMS/TMS & data analytics. A policy and industry roadmap toward higher service quality, greater resiliency and more inclusive market access is presented at the end of the report.

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CHAPTER I: INTRODUCTION

1.1 Background of the Study:

Third-Party Logistics (3PL) refers to use of third-party businesses for services including transportation, warehousing, and freight forwarding among others. Worldwide, 3PL utilization has grown in recent years because companies are looking to concentrate on their core business together with the logistics partner's experience and resources. 3PL providers can help organizations to save costs, reduce risk, and increase reliability in service or supply chain operations by providing economies of scale, state-of-the-art technology integration and customizable service plans (Akter et al., 2019b)

In Bangladesh, 3PL business is expanding since last decade because of increased level of global trade and e-commerce. Speedy delivery to international buyers is essential for the RMG sector which receives over 80% export earnings and directly depends on efficient logistics system. What is more, the fast growth of e-commerce websites has also led to new requirements for last-mile delivery, real-time tracking and cash-on-delivery which are often handled by 3PL companies (Mohammadruhulkader, 2022)

Bangladesh, however, is struggling with major logistics problems despite the growing trade through its many capacities, including under-developed multimodal infrastructure, congestion at ports and port services that are not up to standard all play a role in the country. These challenges highlight the importance of investigating 3PL in order to support today's supply chains within the Bangladesh market. Exploring how and why 3PLs generate value, their challenges and opportunities could be useful for both practitioners and policy-makers in increasing the competitiveness of Bangladesh in the global trade. (Group, 2019)

1.2 Data Collection:

The present research pulls secondary data from a range of secondary sources to provide an in-depth overview of 3PL industry practices and challenges in Bangladesh. We are carrying out a systematic literature review through the use of Google Scholar and Semantic Scholar databases to retrieve academic works written trade journals, working papers, and conference proceedings published between 2015-2024. Key sources are publications on supply chain management in Bangladesh, international trade logistics and e-commerce logistics.

Also, industry reports and published case studies of global 3PL leaders like DHL and Kuehne+Nagel, as well as those from local logistics firms like Paperfly and REDx were also reviewed to comprehend practical implementations. These reports in addition to external reports by groups like the World Bank, Bangladesh Investment Development Authority (BIDA), and the Bangladesh Freight Forwarders Association

(BAFFA) provided institutional viewpoints regarding infrastructure, regulations, and policy >frameworks.

Finally, articles on news; online portals, and trade publications were used to capture the latest happenings in logistics and ecommerce in Bangladesh. Collectively, these sources offered a solid ground for analyzing the issues, benefits, value- addition; constraints and future scope of 3PL in Bangladesh.

1.3 Methodology:

The approach of this thesis is qualitative and exploratory to investigate the 3PL in modern supply chain considering Bangladesh as a referential point. The research is largely reliant on secondary-data analysis, such as peer-reviewed journal articles, industry reports, government publications and company cases.

A timeline literature review (2015– 2024) was carried out to find how 3PL has been evolved in both Bangladesh and worldwide. Thematic analysis was used to reveal patterns including infrastructural limitations, trust shortfalls, technology interfaces and existing possibilities in areas such as cold chain logistics. By examining the successful case studies of world logistics service providers and relatively linking with the practices taken place in Bangladesh, comparative learning was developed.

The former involves contextual analysis to investigate the influence of local economic, infrastructural and regulatory conditions on 3PL adoption and performance. This involves examining the tension between international best practices and local constraints. While some quantitative figures, including logistics cost predictions, estimated time taken to handle ports and the growth potential in e-commerce are mentioned, it is about perceiving these trends qualitatively and their implications for the logistics industry within Bangladesh.

It is expected that by synthesizing literature, case studies and themes in some depth the study will contribute to a holistic perspective of 3PL in Bangladesh's supply chains, including both barriers and opportunities for England et al.

CHAPTER II: REVIEW OF THE LITERATURE

2.1 3PL Evaluation:

The concept of third-party logistics (3PL) has been increasingly discussed in academic and practical arenas of Bangladesh for the last ten years. Developments such as the up surge of international trade, the growth of ready-made garments (RMG) industry and e-commerce have led to a slow emergence and adoption of logistics outsourcing in the country. This section provides a summary of the literature between 2010 and 2023, where it includes reviews of the studies implemented to document 3PL service and supply chain practices in Bangladesh.

2010: Shamsuddoha (2010) studied the supply chain practices in poultry sector of Bangladesh. It can be concluded from their findings that poor infrastructure and non-availability of market information resulted in the operational inefficiency of logistics networks. Such constraints also constrained the ability of third-party logistics providers in providing proper service quality, embraces the structural difficulties that have traditionally hampered logistics improvements of the country (Shamsuddoha, 2010)

2018: One of the first level studies to look directly on logistics outsourcing is by Roy and Sengupta (2018) which analysed the 3PL adoption patterns in Bangladesh. Their research found that around 63 percent of polled companies outsourced to 3PLs, with freight forwarding, order fulfillment and shipment consolidation offered as the main services. Notably, the research findings indicated that logistic system performance, especially with regard alone to timeliness, cost effectiveness and flexibility were significant predictors of 3PL user satisfaction (Roy & Sengupta, 2018)

2019: Ibrahim (2019) studied the evolution of third-party logistics services by Bangladesh as it extends global engagements. The research also found that 3PL services have developed from mere transportation into warehousing, customs clearance and supply chain integration. "However, it also stressed that Bangladesh 'continued to fall behind regional competitors' owing to bottlenecks such as inefficient multimodal transport, poor hinterland connectivity and limited container handling (Ibrahim et al., 2019b)

2021: Nag and Ferdousy (2021) carried out study on the impact of supply chain management practices on supply chain performance in Bangladesh manufacturing industries. While not geared specifically toward 3PL, their research does reinforce the emerging significance of supplier and customer partnerships, and information sharing (13). These practices are highly associated to the services only provided by 3PL providers and therefore logistics outsourcing has an indirect effect but a significant impact on enhancing performance (Nag & Ferdousy, 2021).

2022: The massive rise of e-commerce in Bangladesh has had a profound impact on the logistics industry. The introduction of new logistics firms (e.g., Paperfly and REDx) entering the market brought about significant changes by providing services such as cash-on-delivery, better tracing system, and targeted last-mile delivery by introducing innovative business models (Mohammadruhulkader, 2022b). However, with all these progress, delivery delays, address inaccuracies, and poor service quality persisted to be setbacks to the sector as such developments still represent a gap in consumer expectations and reality of how logistics work (Mohammadruhulkader, 2022b).

2023: The post-pandemic impetus to the E-commerce Sector of Bangladesh through a situational analysis commented on the expedited requirement for logistics during COVID-19. The report found that online sales rose 70-80% and placed the logistics providers under enormous pressure. But the industry was ill-prepared to cope with this onslaught because of a lack of infrastructure, regulatory humps and lack of service capacity outside major cities. Accordingly, numerous companies began moving closer to the 3PLs or investments in the logistics of their own business model to satisfy new market demands (Kamal, 2023)

There were also attempts to develop niche 3PL fields, including cold chain logistics. The report of a workshop has noted potential develop third-party cold storage facilities to serve agricultural exports and perishable commodities in particular. This pointed the opportunity cost, and market failure of 3PL services in the cold chain space in Bangladesh (GCCA, 2023).

The findings of the reviewed literature present comprehensive development journey of third-party logistics sector in Bangladesh from 2015–2023. The early studies focused on the obstacles such as infrastructure barriers and small-service portfolios; by contrast, recent literatures reported the greater use of 3PL services in response to burgeoning e-commerce demand. However, long-standing issues like infrastructure bottlenecks, service quality concerns and limited digital integration still weigh on the sector. In addition, despite increased demand, specialty services such as cold chain logistics are not well established. In general, though Bangladesh has experienced remarkable attainment with respect to 3PL implementation but there are lot of rooms left for improving service quality, resilience and technological capacity.

2.2 Importance of 3PLs in Bangladesh

The importance of 3PLs in Bangladesh can scarcely be overstated. They are crucial enablers of international trade but in particular for the RMG. 3PLs to one of the worlds` largest garment product exporter country as Bangladesh added value by always meeting timely shipments and deliver services. They are also a component of the SME's competitiveness as a result of barrier elimination on market entry and cost-effective logistics.

In the local market, 3PLs are indispensable to accommodate the growth of e-commerce in need of on-time last-mile delivery and a reliable logistics process. Amid these developments, 3PLs are a game changer in Bangladesh's digital economy, and are facilitating the access of rural producers to markets and that of online retailers to customers (Mohammadruhulkader, 2022b).

In addition to efficiencies, 3PLs support job creation, the implementation of technology and help firms integrate into global value chains. As logistics becomes crucial for being competitive, there is no reason to believe that 3PL services won't grow and become an established part of the economy in Bangladesh.

2.3 Advantages of 3PLs in Bangladesh:

There are many benefits to outsourcing logistics to 3PLs. For firms in the ready-made garments (RMG) sector, which accounts for more than 80 percent of Bangladesh's export revenue, 3PLs offer required services including freight forwarding, customs brokerage and consolidation of shipments. These minimize transaction costs and ensure maintenance of tight delivery dates set by buyers abroad. (32nd anniversary issue-I, 2025)

3PLs also accelerate the growth of e-commerce in the domestic market thanks to their share in last mile delivery, order fulfillment and COD services. Players like Paperfly and REDx have disrupted delivery with digital tracking and organized logistics network, thereby enhancing the trust in online retail among customers (Mohammadruhulkader, 2022b). Well, one reason could be the complexity of my business model but - also - it's because third party logistics (3PLs) have a lot more knowledge about what to do and how in today's growingly complex supply chains.

SMEs frequently do not have the capabilities required to develop their own logistics systems: 3PLs offer a cost-efficient solution for access to national and international distribution networks. This accessibility reduces market thresholds and enables wider domestic and export participation.

2.4 Value Addition of 3PLs:

The role of 3PLs in the value creation in Bangladeshi context is multi-fold. Firstly, efficiency in logistics is made possible, taking advantage of the economies of scale. 3PLs enable the transportation of goods at lower cost due to aggregation of different shipments travelling in the same direction, increasing unit density, decreasing average load weight and empty 3PL-customer fleet-miles travelled. Particularly in an export-driven manufacturing led economy such as Chian, cost performance is essential to maintaining a competitive advantage (Sylvie, 2025)

Second, 3PLs enhance value through technological innovations. Some services, such as Proof of Delivery and Customer Service Tools are now provided on online

platforms for customers to include package tracking, Delivery Confirmation and more (U.S.), Automated Shipments to residential and domestic commercial recipients (U.S.). While adoption has been uneven, these innovations do advance transparency and reliability in the logistics sector.

Third, it is becoming more and more clear that sector-specific value adding is a growing reality. For instance, when 3PL providers became involved in cold chain logistics services generated the new possibility for agriculture and fishery. With adequate cold storage, secure refrigerated transport chain from farm to export markets, perishable commodities can reach world food market without any deterioration in quality and value for which farmers could earn a higher income and Bangladesh may be turned into an agri-food exporting country of high status (Food and Agriculture Organization of the United Nations, 2021).

2.5 Difficulties of 3PLs in Bangladesh:

Logistics in Bangladesh is constrained by some of the poorest infrastructure. Most roads are undeveloped, overcrowded and in bad shape, stretching travel time on route and reducing efficiency for transport operators. Chittagong Port, which is dealing with congestion, lack of container-handling capacity and sluggish customs clearance that have delayed thousands of shipments in recent weeks. These are the issues those elongate lead-times and make Bangladesh exporter less competitive. Also, we are not taking much advantage of rail and inland waterways that can help free the roads and cut costs.

Equally significant is the problem of outdated warehousing facilities. The majority of warehouses in Bangladesh are traditional storage facilities which do not have automation controls, temperature-controlled systems and computer inventory managements. This limits the ability of 3PL providers to offer value-added services, such as just-in-time delivery or supply chain integration. Furthermore, ambiguities in the quality of services can be often reported such as late deliveries, breakage or access to poor service (Sylvie, 2025).

Lacking trust between customer and logistics provider is further barrier. Popular culture In Egypt and Israel, most companies do not trust local 3PLs and prefer doing logistics in-house. This lack of trust is also compounded by weak enforcement contracts and limited regulatory oversight. Technological Updating is another significant challenge, as the processes in many 3PL firms are still dominated by manual work and not having fully mature digital support for real time tracking, order processing, and communication. Finally, the logistics service saturation in those two cities means that other areas are being underserved with reliable logistics access, particularly rural producers and SMEs. (NTT DATA / 3PLSTUDY, n.d.)

2.6 Limitations of 3PLs in Bangladesh:

Although 3PLs are advantageous, their limitations are substantial. The quality of service varies greatly from provider to provide and many companies fail to deliver on time, handle goods carefully or offer acceptable customer service. These limitations reflect in part the inadequate investment made both in trained human resources and in new technologies.

Another constraint is that local 3PLs have limited international connectivity. Bangladeshi companies do not have a global network and high level of capabilities in cross-border logistics with the likes of DHL, FedEx or Kuehne+Nagel. Accordingly, exporters are reluctant to join local 3PLs because internationalized services limit the 3 PL market for small and/or less competitive firms such as those in developing nations (Sylvie, 2025).

There is also an agglomeration of logistics providing companies in towns, notably Dhaka, and Chittagong. This excludes rural producers – which are often more in need of logistic support than those based in urban area, constraining rural economic development. Lastly, weak legal and regulatory frameworks contribute to contract enforcement difficulties and a lack of accountability in 3PL relationships (Sylvie, 2025).

2.7 Future Scopes of 3PLs in Bangladesh

The future of 3PLs in Bangladesh looks bright. Demand for integrated professional logistics services is likely to increase in all sectors while the economy grows steadily. The government projects make in large infrastructure such as the Padma Bridge; the Dhaka Metro Rail and port modernization will improve connectivity and minimize logistics bottlenecks thus providing a vastly improved playing field for 3PL service providers.

"Clearly the most immediate opportunity for growth is in e-commerce. Accelerating e-commerce demand will lead to 3PL providers developing last mile delivery networks, digital payment systems, and robotic fulfilment centers. On the other hand, the potential of cold chain logistics in regard to supporting exportation of agriculture, distribution of medicine (pharmacy) and fisheries is also high. These specialized services can be expedited through international collaboration and technology transfer (Mohammadruhulkader, 2022b).

In the wake of COVID-19, the reorganization of global supply chains presents new opportunities too. If any companies have second thoughts and start to balance sourcing away from China toward other countries, it is likely that Bangladesh could lure more international buyers after getting its logistics systems in order. Here, 3PLs can have an important role to play in maintaining supply chain resilience and global interconnectedness. (Kamal, 2023)

CHAPTER III: THE 3PL LANDSCAPE IN BANGLADESH

3.1 Market Context and Structure

The logistics system is an important enabler of export-led growth in Bangladesh where 3PLs (freight forwarding, customs brokerage, warehousing & inventory management, distribution and last mile delivery) have a significant role to play. Recent Logistics Performance Index (LPI) 2023 results show a general improvement in the overall logistics process, driven by improvements in customs processes and timeliness while weaknesses remain in terms of infrastructure as well as tracking/tracing (Sylvie, 2025).

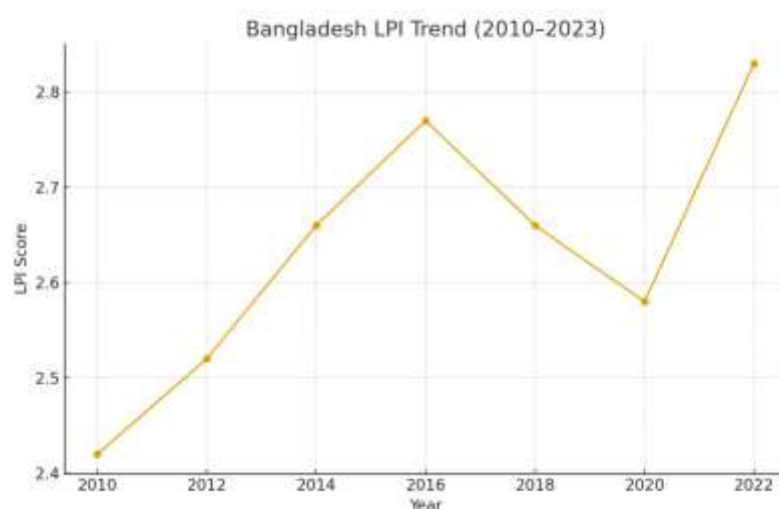


Figure 3. 1: Bangladesh LPI Trend (2010-2023)

3.2 Key Segments

(a) RMG Export Ecosystem

3PLs bundle loaders, manage documents and synchronize port/airport flow during random events (e.g., customs actions, strikes and facility event) that may result in lead-time variations. Only recently we were reporting on spreading port and airfreight disruptions, illustrating how sensitive export planning is to operational shocks. (32nd anniversary issue-I, 2025)

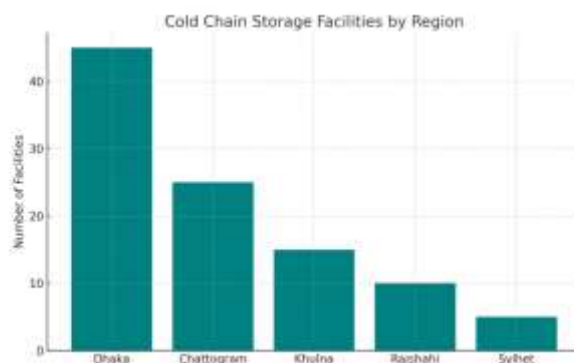
(b) E-commerce Logistics

Starting in 2020, local tech-enabled 3PLs (Paperfly, REDx, e-Courier, Pathao Courier, Delivery Tiger) introduced cash-on-delivery, parcel tracking and hub-and-spoke last-

mile networks – professionalizing B2C distribution while surfacing ongoing address quality and service consistency issues. (Mohammadruhulkader, 2022b).

(c) Trade in a Cold Chain and Sectoral Specialization

The cold chain is far from adequate but growing from a low base. ACRs from Global Cold Chain Alliance (GCCA) project investment patterns and good practices within agrifood, pharma in Bangladesh; formal standards for operations, energy efficiency of facilities and skilled talent remain the constraining principles. (GCCA, 2023).



1.

Figure 3.2: Cold Chain Storage Facilities by Region

3.3 Infrastructure & Nodes

The principal port is Chattogram (Chittagong) Port. Intermittent disruptions related to weather, labor actions or yard congestion increase berthing and dwell times, contributing further to logistics costs. Publications dating from 2024–2025 have reported on repeated surges in TAT (e.g., >96 hours at peaks). (Hapag-Lloyd AG, 2025).

WAM carload (DAC) is important in handling high value and time sensitive RMG, its mishap at the cargo complexes can upset export flows during peak seasons.

3.4 Illustrative Caselets

Player	Snapshot	Illustrative Value	Note
DHL / Kuehne+Nagel (myKN)	Global 3PLs with FF, contract logistics, visibility tools	Schedule advisories; compliance discipline; ocean & air capacity mgmt	myKN reported Chittagong congestion advisories.

Paperfly	Nationwide hubs; e-commerce last mile; data-driven ops	COD, doorstep KYC, returns	Backed by Ecom Express; network scaling.
REDx / Pathao Courier	Tech-first delivery networks	Dense urban last mile; API integration	Competitive growth in B2C parcels.
Cold-chain operators	Temp-controlled storage/transport	Reduce wastage; export-quality produce	GCCA frameworks & training.

Table 3.1: Selected Caselets

3.5 Process Views



Figure 3.3: 3PL Value Chain

CHAPTER IV: IMPLEMENTATION CHALLENGES & RISKS

4.1 Structural Bottlenecks

- Port & Yard Congestion: Varying berth windows, lengthy dwells and weather-related delays cause further transit time delay and increased risk of surcharges. (Hapag-Lloyd AG, 2025).
- Infrastructure & Tracking: There are still enduring gaps in infrastructure and tracking/tracing for LPI sub -indexes and it hinders predictability and visibility. (Sylvie, 2025).
- Regulatory Resistance: Customs uncertainty, occasional labor actions/strikes may stop up gate flows and documentation timings. (Sylvie, 2025)

4.2 Capability & Technology

- Difference in adoption level of WMS/TMS by local 3PLs, people doing slot-booking; YMS and dock-scheduling limited unless very large facility
- Quality of addressing, e-POD, and returns orchestration is less developed than with B2C parcels. (Sylvie, 2025)

4.3 Finance & Scale

- Lack of working capital intensity (by way of a fuel, linehaul and COD float) and exposure to thin margins are barriers in the path of technology automation/ fleet replacement investments.
- Demand signals are strong but cold chain capex and energy costs delay scale-up.

4.4 Human Capital

- Lack of mid-career professionals in transport planning, S&OP–logistics integration and data analytics; narrow sector-specific training pathways.

4.5 Risk Register (Excerpt)

- Operational (port delay, equipment breakdown), Regulatory (change in policy, strikes), Financial (diesel price spike, COD leakage), Environmental (monsoon/flood), Security (cargo theft, cyber) Reputational.

CHAPTER V: FINDINGS AND ANALYSIS

5.1 What the Evidence Shows

2. Momentum with Gaps: Bangladesh's LPI 2023 improvement suggests better customs/timeliness, but infrastructure and visibility still lag, limiting on-time performance and increasing buffer stocks.
3. Gateway Sensitivity: Export lead times remain highly sensitive to Chattogram and air cargo events, which periodically elevate dwell and spot rates.
4. Digital Last Mile, Physical First Mile: E-commerce 3PLs digitized delivery and COD, but upstream first-mile and returns orchestration still cause variability.
5. Cold Chain is a High-leverage Gap: Cold chain, with agrifood, fruits or pharma has high value but cold chain standards-based becomes capex, energy efficient and operator skilled.

5.2 SWOT analysis of Bangladeshi 3PLs

Strength:

1. Large and Balanced volume of RMG Exports: Bangladesh's textile industry is the backbone of its export economy where BD is the second largest RMG exporter in the world. It creates the demand for logistics services including warehousing, distribution and transportation in BD market. The volume of the ready-made garments assures a continuous flow of goods driving the logistics sector. (Wikipedia Contributors, 2019b)
2. Entrepreneurial Last-Mile Delivery: Bangladesh has established a vibrant last-mile delivery ecosystem with small, aspirant businesses. Several logistics firms in BD have exhibited flexible and innovative delivery systems that are appropriate for native needs, like affordable micro-delivery services in both rural and urban areas. (Alam, 2025)
3. Improving Customs Efficiency and Timeliness: To develop customs process and cleanup times, the Bangladeshi government has bestowed. The receiving of digitalised customs processes and customs automation technologies has driven to faster port cleanup times, fewer lag, and grown in total timeliness for logistics operations. (The Financial Express, 2025)

Weaknesses:

1. Infrastructure and Visibility Gaps: Bangladesh has a deficiency in infrastructure in spite of having a large and growing logistics sector. The air cargo facilities, the roads

and the ports are in need of improvement in a very massive way. The greatest issues that have persisted are bad roads, seaport congestion and lack of multimodal connection. Real-time data and tracking systems also have a weakness whereby they limit visibility of operations. (The Financial Express, 2025b)

2. Traffic jams and Weaknesses of accessing Efficient Routes: Dhaka and Chittagong are big cities, and their high-traffic congestions are a characteristic of the cities, and make them costly in terms of speed of deliveries. It is not always feasible to find efficient routes in the densely populated cities, which is the contribution of the inefficiencies and delays of the last-mile delivery. (Ali et al., 2023)

3. Weak Automation of Logistics Processes: Weak Automation of Logistics processes in Bangladesh is in place. It does not have such innovative technologies as warehouse robots, automatic sorting machines and artificial intelligence-based inventory management software. The absence of automation will render the labour more costly and less efficient. (*Logistic Sector Needs More Investment and Automation*, 2025)

4. Skill Gaps in the Workforce: The shortage of skilled labor is a major problem for the logistics sector. There is a lack of specialised knowledge in areas like data analytics, IT systems integration, and supply chain management. This range mirrors the industry's authority to successfully arise and accomplish contemporaneous technology authorization. (Fahmida et al., n.d.)

Opportunities:

1. Cold Chain Proliferation: Bangladesh is highly prospective of cold chain logistics particularly in regards to sensitive products including dairy, fruits, and vegetables. Logistics companies are also focusing so much on development of warehousing and chilled transportation because of the rising demand of goods such as pharmaceuticals and frozen goods by the native market. (GCCA, 2023).

2. Multimodal Integration (ICD / River / Rail): Multimodal transport will give an opportunity to streamline the logistics. With the assistance of Inland Container Depots (ICDs), river transport and rail networks, ports, and road congestion can be decreased. The government is also making investments in the multimodal transport infrastructure that would help to open up more inland areas in an effort to access the major export destinations. (*Welcome to Zscaler Directory Authentication*, 2025)

3. Emergence of Digital Platforms: The digital platform and e-commerce is appearing at a rapid pace in Bangladesh with more integrated logistics solutions required. With the development of platforms like Shopee, Daraz or a local courier service provider, 3PLs have an opportunity to integrate digital tools into their service proposals to offer more efficient and effective tracking, customer support, and efficiency. (*Welcome to Zscaler Directory Authentication*, 2025)

Threats

1. Policy and Labor Shocks: The government policy changes particularly on trade tariffs, export regulations, and labor regulations can disorient the logistics supply chain. Divergent labor activities of strikes and labor availability would also find favorable results as delays and inefficiencies to the entire logistics performance. (*Bangladesh Issues New Labour Act Amendment Ordinance, 2025*)

2. Climate and Monsoon Disruptions: Bangladesh is highly prone to climatic change and floods; cyclones and monsoons rain occur frequently and disrupt the logistics operations. Damage to the infrastructure in the event of natural disasters such as road washouts or ports closures can create delays and impact on on-time availability of goods. (Biswas, 2013)

3. International Demand Unpredictability: Exports produced in Bangladesh can be affected by a global shift in demand in trade, be it caused by geopolitical strains, the deceleration of the economy, or a change in consumer demand. Given that the logistics industry is mainly export-driven in the country, the reduction in the quantity of goods that the world markets can buy of Bangladesh would lead to poor utilization of the logistics capacity.

CHAPTER VI: RECOMMENDATIONS & CONCLUSION

6.1 Actionable Recommendations

Policy / Public Sector

1. Throughput First: Increase yard capacity, cranes and gate automation at Chattogram; institutionalize slot-booking and truck appointment systems; digitize landside documentation. (Hapag-Lloyd AG, 2025)
2. Intermodal Integration: Encourage ICD/CFS linkage and rail/inland waterway share to free roads from choking traffic to port. (Adapted from the World Bank logistics diagnostics.)
3. National 3PL Accreditation: Introduce a service level/profile and safety certification (on-time %, damages/1,000, e-POD compliance, data security) linked to eligibility for public procurement.
4. Cold Chain Catalysts: Energy Efficient Refrigeration preferential tariffs, concessionary finance for GWP friendly refrigerants and technical standards including GCCA aligned training. (GCCA, 2023).

Industry / Private Sector

5. Digital Visibility Stack: Implement WMS/TMS, API based Tracking, e-POD and automate invoicing; Establish Customer Portals with ETA Confidence Dashboards. (Sylvie, 2025).
6. Operations Excellence: Roll dock scheduling, YMS and cross-dock playbooks to lessens dwell and damages; benchmark PIVOT KPIs (OTIF, dwell turns damage rate). (Sylvie, 2025).
7. People & Skills: Establish a Logistics Academy network (3PLs + universities) with micro-credentials for transport planning, data analytics, cold chain operations.
8. Behavior-Driving Contracts: Implement gainshare clauses for lead time compression, order-to-cash cycle time and returns recovery.

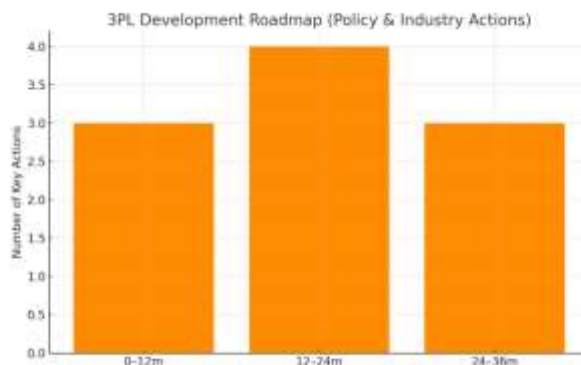


Figure: 6.1: Policy–Industry Roadmap

- 0–12 months: Truck appointment pilots; e-POD mandate for government logistics; standards on COD reconciliation. (Sylvie, 2025).
- 12–24 months: port gate automation scaleup; launch of —3PL accreditation; tax credits for cold chain.
- 24–36 months: Rail/IWT share targets; integrated port community system; national visibility data lake.

6.2 Conclusion

The 3PL market in Bangladesh is at a crossover point. Enhanced LPI results indicate progress, but competitiveness will be sustained only by alleviating gateway bottlenecks, expanding digital visibility and professionalizing quality of service. A shared policy–industry effort would – centred on throughput, multimodality, standards and capabilities – bring down the logistics cost for all; making it affordable, reliable and accessible to exporters, SMEs and rural producers. (Tasreen, 2021)

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