A Policy Brief on Pakistan's Logistics Performance and Its Impact on Trade Competitiveness

Policy Advisory Board

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*As **Pakistan's foremost business voice**, the **Federation of Pakistan Chambers of Commerce and Industry (FPCCI)** remains steadfast in its mission to drive **business-friendly reforms** that promote **inclusive and sustainable growth**. By advocating for **clear policies**, forging **strong institutional partnerships**, and mobilizing **broad sectoral support**, FPCCI actively works to **stimulate trade**, **boost exports**, and **shape the nation's economic future**.*

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*Pakistan's economy stands at a **critical turning point**, facing **domestic and external challenges**. It is essential to **address economic risks** through **continuous reforms**, prudent management of **fiscal and monetary policies**, and proactive measures to **strengthen climate resilience**. These actions are not only necessary for **stability**, but also for building a **solid foundation** for **steady and inclusive growth**. The road ahead demands **meaningful reforms** to **boost productivity** and **reduce costs**. By taking these decisive steps, we can set Pakistan on a **clear path toward sustainable, long-term prosperity**.*

*The **FPCCI's Policy Advisory Board** has been actively engaged in broad-based consultative dialogues with stakeholders across Pakistan's business spectrum. Backed by a network of chambers and trade associations, it brings together diverse industry perspectives and plays a pivotal role in shaping **business-friendly policies** that foster sustainable economic growth.*

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*This report, **"A Policy Brief on Pakistan's Logistics Performance and Trade Competitiveness,"** provides an assessment of the country's logistics sector and its implications for economic growth. The report identifies the severe modal imbalance—**94% of freight moving by road**—as the most pressing challenge, compounded by underperforming **railways, congested ports,** and **inadequate warehousing.** These inefficiencies raise the **cost of doing business**, **weaken trade competitiveness**, and limit Pakistan's integration into global value chains. At the same time, the report outlines a reform roadmap, including **railway modernization**, **vessel handling incentives at Gwadar**, **warehousing expansion**, **strict axle load enforcement**, and **capacity-building** measures to unlock Pakistan's potential as a regional trade hub.*

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Executive Summary

Pakistan's logistics sector is simultaneously a **critical enabler of growth** and a **structural bottleneck** to trade competitiveness. Contributing **15.6% to national GDP—one of the highest in the region**, the sector reflects both its economic importance and the inefficiencies that inflate supply chain costs. Comparatively, logistics contributes **8–9% of GDP in advanced economies** such as the U.S., Japan, and Singapore, underscoring the heavier burden Pakistan carries due to high costs, outdated systems, and lack of modernization.

The **World Bank's Logistics Performance Index (LPI)** underscores Pakistan's uneven trajectory. From a relatively **strong position in 2007**, the country's ranking fluctuated sharply, **peaking at 68 in 2016** before **dropping to 122** in 2018, one of the **steepest declines** in the region. Most concerning is Pakistan's **exclusion** from the **2023 LPI rankings** due to **inadequate data** and **lack of interest** of local stakeholders with global **logistics assessments**, not only damaging its international credibility but also signaled risks to investors and trading partners. Meanwhile, regional competitors—including **India, Bangladesh, Vietnam**, and **Indonesia**—have **steadily improved** their logistics **ecosystems**, enhancing their **integration** into **global value chains**.

Structural bottlenecks remain most acute in freight transport. An overwhelming **94% of cargo is moved by road**, compared with only **6% by rail**, despite rail being a cheaper, safer, and more sustainable option. Pakistan Railways has witnessed a decline in operational locomotives—from **528 in 2011 to 449 in 2025**—while freight volumes dropped from **7.4 million tonnes in 2019–20 to 5.8 million tonnes in 2024–25**, eroding its role as a viable mode. Over-reliance on road freight, compounded by widespread **axle load violations**, accelerates road damage and raises logistics costs.

At the port level, inefficiencies are equally stark. Karachi Port and Port Qasim, which handle over **95% of Pakistan's external trade**, remain **underutilized—operating at only one-third of installed capacity**. Average **port dwell times for containers remain at 4–6 days**, significantly longer than **India (2.5–3 days)** or **Vietnam (1–2 days)**, inflating trade costs and weakening competitiveness. **Gwadar Port**, despite being strategically positioned and under China's operational management as part of the BRI, remains **under-developed and marginal in national trade flows** due to poor hinterland connectivity, security perceptions, and lack of integration with supply chains.

Beyond transport, **warehousing and cold-chain infrastructure are severely lacking**. Pakistan loses an estimated **30–40% of fruits and vegetables post-harvest** due to inadequate storage and temperature-controlled facilities. Sectors like **dimensional stones, with a $1–1.5 billion export potential**, are constrained by the absence of dedicated road corridors and vehicles with higher axle-load capacity, preventing economies of scale.

Institutional fragmentation compounds these challenges. Logistics oversight is **divided among multiple ministries—Commerce, Railways, Maritime, Defence, and Communications—without a single coordinating authority**. Therefore, the reform priorities for Pakistan's logistics sector must be systemic rather than piecemeal, addressing structural inefficiencies across the value chain.

a) A critical starting point is **granting formal industry status to the trucking sector**, enabling operators to access structured financing, leasing, and fleet modernization facilities, which will improve safety, efficiency, and compliance with global standards.

b) Equally important is the establishment of a **National Logistics Authority** to unify fragmented oversight currently spread across multiple ministries, providing the institutional anchor needed to drive reforms at scale.

c) On infrastructure, the development of dedicated freight corridors is essential to rebalance modal shares. Specifically, all **cargo destined outside Karachi** should be moved through a **port-to-hinterland railway network**, with a dedicated freight corridor linking Karachi Port and Port Qasim to major industrial and consumption centers. This would not only ease urban congestion but also significantly reduce the cost of long-haul transportation.

d) At the same time, expanding **warehousing** and **cold storage capacity** near ports, production clusters, would address the **30–40% post-harvest losses in perishable goods** and enhance the competitiveness of Pakistan's agricultural and food exports.

e) **Gwadar Port**, underutilized despite its strategic positioning, should be incentivized as a regional transshipment hub within the Belt and Road Initiative (BRI) framework to diversify port dependency and strengthen regional connectivity.

f) In parallel, **Pakistan Railways requires urgent modernization**, including the upgrading of rolling stock and the digitalization of cargo monitoring systems. A modernized railway network would directly support the **Prime Minister's** vision of expanding Pakistan's economic output from the **current USD 411 billion** to **USD 1 trillion**. The existing road infrastructure is not capable of aligning this targeted growth trajectory, therefore, **a modern, efficient, and integrated railway system is a prerequisite for achieving the said target**, including faster cargo movement, reduced logistics costs, and improved connectivity.

g) Finally, systemic capacity-building through modern drivers' training institutes and digital freight-matching platforms can professionalize logistics services, improve compliance, and reduce empty backhauls.

1. Introduction

1.1. Objectives and Scope of the Study

This report presents a data-driven and forward-looking assessment of Pakistan's logistics sector, highlighting the structural inefficiencies that continue to raise business costs and undermine competitiveness. It reviews Pakistan's performance on the **World Bank's Logistics Performance Index (LPI)** from 2007 through 2018, as well as the 2023 findings, which consistently place Pakistan behind regional peers such as **India, Vietnam, and Bangladesh**. The study identifies critical weaknesses including the **dominance of road freight and modal imbalance, inadequate enforcement of axle load limits, poor hinterland connectivity, and weak integration of Gwadar Port with national supply chains**. It also draws attention to the **underdeveloped, inadequate warehousing and cold-storage sector**, where significant post-harvest losses undermine agricultural exports, and to the **dimensional stone sector**, which remains constrained by insufficient road infrastructure and limited vehicle capacity.

1.2. The Share of Logistics Sector in Gross Domestic Product (GDP)

The logistic sector comprises roads, rail, water, and air with digital data transfer emerging as a fifth medium. The overall logistics sector in Pakistan is a critical component of the country's economic infrastructure, contributing over 15.6% to the GDP and employing 6% of the workforce. The road sector dominates Pakistan's logistics, with an extensive road network of **501,169 km**, compared to just **7,791 km** of rail network.

The below Table, presents the contribution of logistics to GDP across selected developing and developed countries, revealing important structural contrasts. Among developing economies, Vietnam records the highest share at 21%, followed by **Pakistan (15.6%)**, **Thailand (15%)**, and **India (14%)**, indicating the critical role logistics plays in supporting trade and industrial growth but also reflecting higher costs and inefficiencies in supply chains. **Malaysia, at 13%**, shows comparatively better integration with regional logistics networks. By contrast, developed economies—including the **United States (8.2%)**, **Singapore (8.5%)**, **Japan (8.5%)**, and **Australia (8.6%)**—show substantially lower shares, highlighting more efficient road, railway, logistics systems and diversified economic bases where logistics, though essential, constitutes a smaller proportion of GDP. Overall, the data underscores that developing economies carry a heavier logistics burden relative to GDP due to higher costs and structural inefficiencies, which erodes competitiveness due to higher cost of production. In contrast, developed economies benefit from more optimized, technology-driven logistics systems and a greater share of high value-added sectors, keeping logistics a smaller proportion of their GDP.

Table 1: Logistics Contributions to GDP (%)

S. No.	Country	Category	% Share in GDP	S. No.	Country	Category	% Share in GDP
1	Malaysia	Developing Countries	13%	6	United States	Developed Countries	8.2%
2	India		14%	7	Singapore		8.5%
3	Thailand		15%	8	Japan		8.5%
4	Pakistan		15.6%	9	Australia		8.6%
5	Vietnam		21%				

Source: Pakistan Export Strategy Logistics (2023-27)

1.3. Governance Structure of Logistics Sector in Pakistan

The **National Freight and Logistics Policy (NFLP),** launched in 2021 by the **Ministry of Communications**, aims to modernize the fragmented logistics sector by improving infrastructure, strengthening institutions, adopting technology, and enhancing work-force skills to foster economic growth and trade competitiveness. The NFLP document pointed out that the logistics sector is fragmented and in need of modernization. A lack of institutional framework has further impeded the growth of the logistics sector and a mixture of old and new laws govern what is supposed to be a sector operating in the modern world. Perhaps, a **Ministry of Transport** is very much needed for creating and executing a comprehensive **National Transport Policy** and a **Logistics Authority** may also be constituted under the **Ministry of Transport**. Currently, Pakistan's logistics sector is fragmented among multiple federal ministries and provincial departments, which needs a robust coordination framework between all the stakeholders. Followings are the federal ministries which handle logistics in various ways:

a) The **Ministry of Commerce** handles foreign and transit trade.
b) Shipping services are overseen by the **Ministry of Maritime Affairs.**
c) The **Ministry of Defence** is responsible for airports and aviation.
d) The **Ministry of Communications and Railways** manage rail and road infrastructure as well as freight.
e) The **Regulatory Authorities**

1.4. The Role of Logistics in Pakistan's Economic Growth

The Logistics sector is more than an auxiliary service; it represents a core driver of economic performance of any country. Pakistan's supply chains are deeply dependent on infrastructure networks—**roads, railways, ports,** and **optical fiber networks**—that act as the arteries of the economy, enabling the movement of goods, services, and opportunities across the nation. Efficient logistics reduces time duration, costs cutting, improves reliability, and expands swift access to domestic and international markets, making it a central pillar of trade and industrial development. Given Pakistan's strategic geographic position at the crossroads of Asia, an efficient logistics system could transform the country into a **regional trade hub**, but this requires modernization, streamlined governance, and institutional coherence.

On the other hand, underperforming logistics imposes heavy economic costs, including high transport expenses, increased cost of production - investment, more time consuming, bottlenecks, lower productivity, reduced competitiveness, and constrain Pakistan's ability to integrate into global value chains.

2. Analysis of Pakistan's Logistics Performance Landscape

2.1. World Bank's Logistics Performance Index

The World Bank's Logistics Performance Index (LPI), is a **global benchmarking tool** that measures **how efficiently and effectively countries manage logistics** and **supply chain operations**. It draws on the **insights of logistics professionals** such as **freight forwarders**, **shipping companies**, and **customs agents** to evaluate stakeholder's input based on **six key dimensions** which include;

1. Customs efficiency,
2. Quality of infrastructure,
3. Ease of arranging international shipments,
4. Competence of logistics services,
5. Tracking and tracing capabilities, and
6. Timeliness of deliveries.

2.2. Pakistan's Logistics Performance Index (LPI): A Historical Perspective

Pakistan's performance on the World Bank's Logistics Performance Index (LPI) between 2007 and 2018 reflects a cycle of short-lived progress followed by sharp declines, underscoring the country's structural weaknesses and the fragility of its reforms.

Pakistan ranked **68th**, performing relatively well in **international shipments (65)** and **customs (69)** but struggled in **infrastructure (71)**, **logistics competence (76)**, **tracking & tracing (76)**, and **High Timeliness of deliveries (88)** further weakened competitiveness.

By 2010, Pakistan's ranking deteriorated sharply to **110**, with severe weaknesses in **customs (134)**, **infrastructure (120)**, and **timeliness (110)**. Despite this decline, the relatively stronger performance in **international shipments (66)** highlighted Pakistan's underlying trade potential if supported by systemic reforms.

Between 2012 and 2016, Pakistan experienced its best phase of improvement. The LPI ranking improved to **71 in 2012**, largely due to better **customs procedures (46)**, and peaked at **68 in 2016**, supported by gains in **timeliness (58)**, **tracking & tracing (67)**, and **service competence (68)**. These improvements reflected the impact of **partial customs automation, efficiency gains at ports, and infrastructure investments under early CPEC projects.**

However, this momentum was not sustained. In 2018, Pakistan's LPI rank collapsed to **122**, one of the steepest declines in the region. The sharpest regressions were in **customs (139)**, **tracking & tracing (136)**, and **timeliness (136)**, reflecting the persistence of cumbersome administrative procedures, lack of digital systems for real-time shipment visibility, and weak institutional coordination. Additionally, Until 2018, the World Bank's LPI methodology primarily relied on feedback from local businesses / stakeholders, which often reflected a bias toward negative perceptions, thereby limiting the objectivity of the rankings.

Overall, Pakistan's LPI history highlights that **progress has been episodic and reversible**, driven by isolated reforms rather than systemic transformation. The evidence from 2012–2016 demonstrates that Pakistan can achieve rapid improvements when reforms, infrastructure investments, and digital tools are aligned. Yet, the steep fall in 2018 confirms that without sustained reforms, institutional coherence, and modernization of logistics governance, any gains remain fragile. To strengthen trade competitiveness,

Pakistan must focus on **customs modernization, port efficiency, digital tracking systems, and coordinated infrastructure development** as part of a long-term logistics strategy.

Table 2: Pakistan's Logistics Performance Index Trends (2007–2018)

Year	Overall	Customs	Infrastructure	Int'l Shipments	*Logistics Quality & Competence	Tracking & Tracing	Timeliness
2018	122	139	121	97	89	136	136
2016	68	71	69	66	68	67	58
2014	72	58	69	56	75	86	123
2012	71	46	71	68	72	90	83
2010	110	134	120	66	120	93	110
2007	68	69	71	65	63	76	88

Source: World Bank Logistics Performance Index

In the 2007 LPI, logistics Quality & Competence were assessed under two categories: domestic logistics costs was at 90, and logistics services at 63 for Pakistan. In subsequent editions, this evolved into the broader **Logistics Quality & Competence metric.*

2.3. Logistics Performance Index of Regional Countries

The **World Bank's Logistics Performance Index (LPI) 2023** data shows marked improvements in several regional countries, underscoring the growing emphasis on logistics competitiveness in Asia. **India** advanced from rank 44 in 2018 to 38 in 2023, reflecting steady progress in logistics modernization. **South Korea** made a significant leap, improving from 25th to 17th, while **Sri Lanka** and **Bangladesh** also showed notable gains, climbing 21 and 12 positions respectively. **Indonesia's dramatic drop** from 46th to 61st, whereas **Vietnam** slipped slightly from 39th to 43rd, and **Cambodia** declined from 98th to 115th, showing uneven regional progress. **Concerningly, Pakistan does not appear in the 2023 LPI rankings**, despite being ranked 122nd in 2018. This absence reflects disinterest in stakeholder feedback, institutional coordination, and overall poor governance of the logistics sector, leaving Pakistan at a disadvantage in benchmarking itself against regional competitors and signaling an urgent need for comprehensive logistics reforms and improved global engagement.

Table 3: Logistics Performance Index of Regional Countries

S. No.	Country	LPI Rank 2023	LPI Rank 2018
1	China	19	26
2	India	38	44
3	South Korea	17	25
4	Sri Lanka	73	94
5	Bangladesh	88	100
6	Indonesia	61	46
7	Pakistan	-	122
8	Vietnam	43	39
9	Cambodia	115	98

Source: World Bank Logistics Performance Index

2.4. Pakistan's Absence from the 2023 World Bank LPI: Implications and Strategic Opportunities

The **World Bank's Logistics Performance Index (LPI)** is among the most authoritative benchmarks for assessing global trade and transport efficiency. Its influence extends far beyond academia—guiding policymakers, investors, multilateral agencies, and industry stakeholders in shaping trade and investment decisions. The index has been cited in **over 1,000 academic studies**, integrated into **hundreds of policy reports**, and adopted as a standard reference by institutions such as the **ADB, AfDB, IDB, UNCTAD, UNECE, and UNESCAP**. Its role in framing perceptions of logistics competitiveness makes it a critical signal to global markets.

Prior to the 2023 edition of LPI, the index was largely based on **survey responses** from freight forwarders, logistics providers, customs agents, etc. This made it dependent on subjective opinions and the number / quality of responses from each country. However, with the **2023 edition incorporating "Big Data" indicators** on container, air, and parcel movements, the LPI has gained even more credibility among investors and decision-makers.

Pakistan's **exclusion from the LPI 2023** is highly concerning. The reason being—**inadequate survey responses from local logistics service providers**—points not only to weak institutional engagement, indifference, but also to an alarming lack of coordination between industry stakeholders. In a realm where **stakeholder input** is vital for assessing credibility and reliability, **Pakistan's omission from the LPI 2023** sends a clear signal to international trading partners regarding its **limited transparency**, **inadequate institutional reliability**, and **underdeveloped logistics capabilities**.

Additionally for **foreign investors** and **trading partners**, Pakistan's absence may reinforce perceptions of risk, inefficiency, and unpredictability in its trade ecosystem. This could undermine export competitiveness at a time when regional competitors like **India, Bangladesh, and Indonesia** are improving their LPI rankings and strengthening their attractiveness to global supply chains. The exclusion is not simply a statistical gap—it is a **reputational cost**, with potential to deter foreign direct investments, slow trade growth, and isolate Pakistan from international logistics reform dialogues.

2.5. Comparative Analysis of Port Dwell time of South Asian Countries

Port dwell time refers to the total duration a shipping container or cargo spends at a port terminal, from the moment it arrives until it leaves the port. In simple terms, it measures **how long goods remain within the port premises** before being cleared for onward movement — whether for **imports** (delivery into the domestic market) or **exports** (dispatch to international destinations).

The **port dwell times** in **India** stands out as the strongest performer, with the region's shortest import dwell time of **2.6 days** and an export dwell time of **4.6 days**. **Vietnam** records an average of **5.3 days for imports** but performs better on the **export side with 4 days**, underscoring its stronger orientation toward export-focused logistics efficiency. **Bangladesh** presents a contrasting picture: while it suffers from the region's longest import dwell time of **7.7 days**, its export dwell time of just **1.6 days** highlights the strength of its ready-made garments sector and well-optimized outbound supply chains. By contrast, **Pakistan** is in a comparatively disadvantaged position, with high dwell times for both imports (**6.4 days**) and exports (**5.7 days**). These figures point to **Pakistan's systemic inefficiencies, limited adoption of digital clearance systems, and weak port logistics governance**. Such inefficiencies not only inflate trade costs, cost of doing business, cost of investment, but also erode Pakistan's image, goodwill, and competitiveness in both

regional and global value chains.

Table 4: Supply Chain Tracking Comparison

Country	Port Dwell time, Import (Mean, Days)	Port Dwell time, Export (Mean, days)
India	**2.6**	**4.6**
Vietnam	**5.3**	**4.0**
Bangladesh	**7.7**	**1.6**
Pakistan	**6.4**	**5.7**
China	**5.5**	**4.9**

Source: World Bank Logistics Performance Index 2023

***The data pertains May-Oct 2022.**

3. Road Expansion at the Cost of Railway: A Policy Dilemma

3.1. Historical Context of Pakistan's Transportation Indicators

Pakistan's transport system has been shaped by a growing imbalance between **railways and roads**. Railways, which were once the backbone of freight and passenger movement, have steadily declined, while roads have expanded rapidly and absorbed the overwhelming share of resources and traffic. Today, nearly **94% of freight moves by road**, despite it being one of the most expensive modes of transport, whereas railways — a more efficient and cost-effective option in other countries but in case of Pakistan it is the most inefficient and unreliable mode, thus accounts for only a small fraction. However, this imbalance has placed immense pressure on the road network, leading to congestion, infrastructure wear, and higher logistics costs, while railways have been left technologically outdated and unable to compete.

The roots of this imbalance go back to the **Second Five-Year Plan (1960–65)**, which marked a deliberate **policy shift from rail to road transport**. At independence (1947), Pakistan inherited a **railway network of 8,553 km**, which has since **shrunk to 7,791 km** by 2024, an almost **9% contraction**. In contrast, road length has expanded nearly **ninefold** — from just over 50,000 km in 1947 to more than 500,000 km by 2024. The construction of 2,816 km of motorways and 32,097 km of national highways marks a significant milestone in enhancing road connectivity, highlighting the ignorance of necessary financial and policy focus on the rail network.

The result is a highly **road-dependent freight** and **passenger system** that is uncompetitive, and environmentally taxing. Pakistan's investment in the road network is **robust** and **commendable**, bringing the country's **road infrastructure closer to the standards of many developing economies**. However, the country has not given the similar attention to the **railway network**, due to which more than **90% freight** and **passenger load** is dependent on road infrastructure. This over-reliance effectively deprives consumers and businesses of alternative transport modes that could better suit their needs in terms of cost, efficiency, and convenience.

A stronger rail and road network would provide equal chances for the consumers promoting healthy competition, and reduce excessive pressure on road infrastructure. The absence of such balance has resulted in a lost opportunity for integrated multimodal development and remains a critical factor behind Pakistan's elevated logistics costs and diminished competitiveness in global markets.

Table 5: Comparison of Pakistan's Transport Indicators 1947 vs 2024

Transport Indicators	1947	2024	% change
Registered Vehicles (number)	30,577	37,475,554	122,461%
Registered Trucks (number)	800	327,719	40,865%
Total Roads (km)	50,367	501,169	895%
Motorways (km)	-	2,816	NA
National Highways (km)	-	32,097	NA
Road Density	0.06	0.63	949%
Railway (km)	8,553	7,791	-8.90%

Source: PIDE, Economic Survey of Pakistan 2024-25

3.2. The Shrinking Role of Rail in Pakistan's Transport System

Pakistan Railways has continued to lose capacity, with locomotives falling from 528 in 2010-11 to 449 in 2024-25. Passenger volumes have almost halved, and freight traffic has dropped from 7.4 million tonnes in 2019-20 to 5.8 million tonnes in 2024-25. According to the 2024 Annual Report on State-Owned Entities, Pakistan Railways recorded a loss of Rs. **51.3 billion**, ranking among the **top 15 loss-making SOEs** at the cost of taxpayers money. Therefore, privatizing/ modernising the railways has become essential for boosting the country's economy and ensuring an efficient transportation system.

3.3. Axle Load Regime and Structural Weaknesses in Trucking

In Pakistan, the primary transportation of liquid cargo and goods is carried out by trucks and bowsers. Nevertheless, this sector is confronted with considerable structural issues. Numerous truck and bowser owners have illegally altered the axle load limits set by manufacturers, aiming for financial benefits, often overloading their vehicles by 40-45% compared to the design specifications. This practice not only fosters unhealthy competition among transporters but also places immense strain on road infrastructure, resulting in accelerated road wear, higher accident rates, traffic congestion, and environmental damage. To combat the overloading problem, the Ministry of Communication implemented the Axle Load Regime in November 2023, intending to uphold legal weight limits with the help of motorway and highway police, who impose substantial fines for violations. However, these efforts have been largely ineffective due to systemic flaws. Overloaded vehicles pose serious risks by violating crucial safety protocols and exacerbating road deterioration, significantly reducing highways lifespans and being a key contributor to fatalities in accidents involving heavy commercial vehicles.

From the perspective of truck / bowser owners and operators, most vehicles in Pakistan have undergone structural alterations that, in their view, increase axle load capacity and allow them to carry excessive cargo per trip. They argue that such modifications are a practical solution to lower freight rates, rising fuel costs, and increasing costs of trucks and bowsers.

Moreover, the **Dimensional Stone Sector**, which holds an export potential of **US$ 1–1.5 billion**, requires robust road infrastructure and specialized vehicles with higher **axle-load capacity** to transport **heavy stone blocks efficiently** from **quarrying sites to processing factories**.

Table 6: Permissible Axle Load by Trucking type vs Weight

Permissible Axle loads (by truck type)	Permissible GVW (MT)	45% Overload (MT)
2-axle single (Bedford)	**17.5**	**25.38**
2-axle single (Hino/Nissan)	**17.5**	**25.38**
3-axle tandem	**27.5**	**39.88**
5 axle single tandem	**48.5**	**70.33**
6-axle single tridem	**58.5**	**84.33**
6 axle tandem, single tandem	**61.5**	**89.18**

Source: PACRA

*Gross Vehicles Weight (GVW)

4. Structural Issues in Pakistan Logistical Sector

4.1. Under Utilization of Pakistan's Ports

In 2024, Pakistan recorded **US$ 88.92 billion** in merchandise trade, comprising **US$ 56.52 billion in imports** and **US$ 32.46 billion in exports**. Whereas, in 2022, Pakistan recorded **US$ 102.2 billion in merchandised trade** (highest so far). Pakistan's external trade is overwhelmingly concentrated at Karachi Port and Port Qasim, which together handle nearly **100% of the country's trade flows**. In 2024, **Karachi Port** accounts for **54.4%**, while **Port Qasim** manages **45.5%**, reflecting their established infrastructure and connectivity. In contrast, **Gwadar Port** contributes just **0.3% (2024)**, underscoring its limited operational integration despite its strategic potential.

An analysis of port performance highlights significant underutilization of Pakistan's sea ports. **Karachi Port**, with a handling capacity of 125 million tonnes (MT), managed 40.3 MT during July–March FY25, reflecting a utilization rate of only **32.2%**, down from **41.3%** in FY24 and marginally lower than **33.4%** in FY23. This indicates a persistent gap between installed capacity and actual throughput, with FY24 appearing as an outlier year of relatively stronger utilization. **Port Qasim**, with a total capacity of 89 MT, also shows fluctuating utilization patterns. Cargo handling in FY25 reached 33.8 MT, equating to **37.9% utilization**, significantly lower than **55.5%** in FY24 and below the **45.2%** recorded in FY23. In contrast, **Gwadar Port** remains the least utilized facility, despite its strategic significance under Belt and Road Initiative (BRI). With a designed capacity of 11 million tonnes (11,000 thousand tonnes), actual throughput stood at just 42.5 thousand tonnes in FY25—equivalent to **0.36% utilization**, broadly consistent with negligible activity observed in previous years (0.31% in FY24). Although FY23 saw higher volumes (592.4 thousand tonnes, **5.38% utilization**), the sharp fall in subsequent years suggests episodic rather than sustained cargo flows.

Overall, the data highlights a **structural underutilization of ports in Pakistan**, with utilization rates consistently below 45% for Karachi and Port Qasim, and virtually absent at Gwadar. This underperformance underscores systemic inefficiencies in cargo handling, excessive dwell time, logistics integration, lack of trade facilitation, and low economic activities in the country.

Table 7: Pakistan's Ports Cargo Handling Capacity vs Utilization

Ports (% in total trade)	Capacity (Million Tonnes - MT)	Utilization (million tonnes of cargo (MT))		
		2024-25 (July-March)	2023-24	2022-23
Karachi Port (54.42%)	125 (MT)	Total: 40.3 (MT) Utilization: (32.24%) Exports: 37.71% Imports: 62.29%	Total: 51.6 (MT) Utilization: (41.28%) Exports: 36.39% Imports: 63.61%	Total: 41.8 (MT) Utilization: (33.44%) Exports: 30.52% Imports: 69.48%
Port Qasim (45.51%)	89 (MT)	Total: 33.76 Utilization: (37.93%) Exports: 22.44% Imports: 77.55%	Total: 44.90 Utilization: (55.45%) Exports: 21.98% Imports: 78.01%	Total: 40.43 Utilization: (45.20%) Exports: 17.44% Imports: 82.56%
Gwadar Port (0.28%)	11,000 (000 tonnes)	Total: 42.5 (000 tonnes) Utilization: (0.36%) Exports: 37.71% Imports: 62.29%	Total: 34.2 (000 tonnes) Utilization: (0.31%) Exports: 36.39% Imports: 63.61%	Total: 592.4 (000 tonnes) Utilization: (5.38%) Exports: 30.52% Imports: 69.48%

Moreover, the comparison of port infrastructure across South and Southeast Asia highlights stark differences in efficiency and utilization, which directly impact trade competitiveness.

a) India operates **12 ports** with a massive cargo handling **capacity of 1,630 million tons**, yet only **52% of this capacity is being utilized**. Despite this underutilization, India's trade volume has reached **$1.14 trillion** in 2024.

b) **Vietnam,** with **36 ports** and a relatively smaller capacity of **500 million tons,** handles **700 million tons**, representing **140% utilization**. In 2024, **Vietnam's** trade volume stood at **US$ 902.4 billion.**

c) **Bangladesh** demonstrates near-optimal utilization. With only **3 major ports** and a handling capacity of 141 million tons, the country is already utilizing 95% of its capacity, processing 133.4 million tons. In 2024, Bangladesh's trade volume stood at **US$ 88.92 billion.**

d) Pakistan, by contrast, reveals significant underperformance, with a handling capacity of **225 million tons**, its ports processed only **74.19 million tons**, equivalent to average **33% utilization** in the **last three years**. In 2024, Pakistan's trade volume stood at **US$ 88.92 billion**.

Table 8: Regional Comparison of Trade and Ports's Capacity Utilization

Countries	Major Ports	Cargo Handling Capacity (mln tons)	Actual Utilization (mln tons)	% of Total Handling Capacity
India	12	1,630	855	52%
Vietnam	36	500	700	140%
Bangladesh	3	141	133.4	95%
Pakistan	3	225	74.19	33%

4.2. Underutilization of Gwadar Port

Gwadar Port's operational control lies with China Overseas Port Holding Company (COPHC), a China's state-owned company. However, despite its **strategic location and potential to serve as a major regional transshipment hub**, it remains underdeveloped and far from realizing its operational capacity. While initiatives such as the **China-Pakistan Economic Corridor (CPEC)** and the **Central Asia Regional Economic Cooperation (CAREC)** framework are designed to integrate Gwadar into regional and global trade routes, progress has been uneven. Low foreign trade volumes, delay in the establishment of Special Economic Zones (SEZs), persistent **infrastructure gaps, limited connectivity with the hinterland, and weak integration with national supply chains** have hindered its functionality. Moreover, **security and law-and-order concerns** continue to weigh heavily on investor confidence, slowing the pace of development despite recent government initiatives. For Gwadar to emerge as a credible alternative route for Central Asian Markets, **sustained investment, robust connectivity, and strengthened governance frameworks** will be essential.

4.3. Inadequate Warehousing and Cold Storage Facilities

The **warehousing and cold-storage sectors in Pakistan remain underdeveloped**, with critical gaps in infrastructure and facilities. Due to this gap roughly 25-40% of the country's fruits and vegetables are lost port harvest. The shortage of modern warehouses near ports, particularly those equipped to handle perishable goods, results in **substantial post-harvest and supply chain losses.** As a result, the country suffers **substantial post-harvest losses**, with an estimated **25–40% of fruits and vegetables** wasted due to inadequate storage and preservation systems. This not only undermines food security but also erodes export competitiveness, as perishable goods fail to meet international quality and safety standards. Furthermore, the **absence of adequate cold-storage infrastructure at strategic nodes such as railway stations and airports** severely constrains Pakistan's ability to manage temperature-sensitive cargo, including fruits, vegetables, dairy, meat, and pharmaceuticals. Without targeted investments and modernization, these deficiencies will continue to erode Pakistan's competitiveness in both domestic and international trade.

4.4. Lack of Unified Institutional Framework

Pakistan's **institutional framework for logistics remains fragmented and outdated**, undermining the efficiency and competitiveness of the sector. Much of the **transport and logistics legislation is obsolete**, with provisions ill-suited to modern trade and supply chain realities. While the government has developed the **National Transport Policy** and subsequently the **National Freight & Logistics Policy (NFLP)**, progress has been constrained by weak implementation mechanisms. A notable example is the **Carriage of Goods by Road Act**, drafted in 2003, which still awaits approval from the National Assembly after more than two decades. The **absence of a unified Ministry of Transport** further exacerbates these challenges, resulting in poor coordination across multiple agencies, regulatory overlaps, and persistent delays in executing reforms. Without an institutional overhaul, professionalism and stronger enforcement, Pakistan's logistics sector will continue to lag behind regional competitors.

5. Recommendations for Enhancing Pakistan's Logistics Competitiveness

5.1. Institutional Governance

a) **Industry Status for Logistics Sector:** The government should immediately **grant formal industry status** to the trucking sector, thereby enabling access to formal banking, financing, and leasing facilities to support systematic **fleet modernization**. Such recognition will create the foundation for structured investment in the sector. This measure will not only improve the quality and efficiency of road freight but also help to reduce logistics costs, enhance safety standards, and improve compliance with international best practices. Moreover, it will facilitate the integration of the trucking sector into Pakistan's formal economy, contributing to long-term **competitiveness**, **revenue mobilization**, and sustainable growth of the logistics industry.

b) **Dedicated Ministry / Focal Authority for Logistics Sector:** Given that logistics is an inherently interconnected sector, where road, rail, air, and maritime transport are interdependent, it is imperative to establish a dedicated ministry or focal authority responsible for robust coordination, governance and development. A focused institutional framework will ensure coherent policymaking, streamlined coordination across modes, elimination of regulatory overlaps, and targeted investments. Such an authority will also serve as a single point of contact for stakeholders, enabling Pakistan to modernize its logistics ecosystem and align it with global best practices.

5.2. Infrastructure Development

a) **Warehousing Facility at Ports:** Urgent need to develop advanced warehousing facilities across the country, particularly at strategic crossing points such as major highways and farm-to-market roads. Modern, well-equipped warehouses—especially at and near ports—are essential to reduce storage losses, improve supply chain efficiency, and facilitate export competitiveness. A national warehousing master plan should be developed as a top priority, ensuring integration with port infrastructure, cold-chain requirements, and multimodal transport connectivity.

b) **Network Connectivity:** Seamless network connectivity across all major road networks is a prerequisite for the effective implementation of digital logistics solutions, including real-time tracking, electronic documentation, and supply chain visibility systems.

5.3. Capacity Building, Sustainability, and Regulation

a) **Certified Drivers - Training Institutes:** Establish certified driver training institutes dedicated to developing a cadre of professional truck drivers equipped with knowledge of international freight regulations, road safety standards, and cross-border transport protocols. Such institutes will not only improve the efficiency and reliability of freight operations but also enhance compliance with international best practices, reduce accidents, and strengthen Pakistan's competitiveness in regional and global logistics.

b) **Fleet Renewal Support:** Introduce targeted incentives and policy measures to encourage the modernization of Pakistan's freight fleets. This includes facilitating access to financing, leasing options, and concessional loans for operators to replace outdated vehicles with modern, fuel-efficient trucks that comply with international environmental and performance benchmarks (e.g., Euro-IV/VI/VII standards). A structured fleet renewal program will not only reduce operating costs and emissions but also enhance road safety, reliability, and competitiveness of Pakistan's logistics sector in regional and global trade.

c) **Strict Enforcement of Axle Load Regulations:** Ensure the full implementation of axle load restrictions across the national transport network to protect road infrastructure, improve road safety, and enhance freight efficiency. Compliance should be enforced through stringent monitoring mechanisms at weigh stations and checkpoints, supported by digital tracking tools. **Transport vehicles that have been illegally modified to higher axle loads may be allowed one time to operate for a limited period**, to save the investments already made by the owners and thereafter the altered vehicles may be dismantled. However, **penalties for violations must move beyond nominal fines**—including **impounding of vehicles, and suspension of licenses for habitual offenders**. Such a **robust facilitation coupled with an enforcement framework** will not only **deter non-compliance** but also **reduce road damage, improve safety, and align Pakistan's logistics practices with international standards.**

5.4. Addressing the Modal Imbalance in Freight Transportation and Underutilization of Gwadar Port

To address the severe modal imbalance in Pakistan's freight transportation system, it is recommended to adopt a National Modal Shift Strategy aimed at reducing the share of road freight from the current 94% to 50% within the next 5–10 years, with a corresponding enhancement of rail's role as the backbone of long-haul freight. Proposed measures include:

a) **Dedicated Freight Corridors:** Develop and operationalize high-capacity, dedicated rail freight corridors connecting major ports (Karachi, Port Qasim, Gwadar) with key industrial and commercial hubs (Faisalabad, Sialkot, Gujranwala, Gujrat, Lahore, Multan, Peshawar).

b) **Modernization of Pakistan Railway:** Prioritize investment in track upgrades, signaling systems, and containerized freight services to improve efficiency, speed, and reliability. **Priority may also be given to completion of the ML-1 railway project.**

c) **Public-Private Partnerships (PPP):** Encourage private sector participation in rail freight through leasing of locomotives, wagons, and terminals under transparent PPP models.

d) **Incentivize Vessel Handling at Gwadar Port:** To unlock the full potential of Gwadar Port as a regional trade and transshipment hub, it is essential to introduce a targeted incentive framework for vessel handling. Despite its strategic location at the crossroads of South Asia, the Middle East, and Central Asia, Gwadar remains underutilized due to minimal commercial traffic of the belt and road initiative.