Unlocking Maritime Potential: The Significance of Ports in Pakistan's Seaborne Trade

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Abstract

This study explores the critical role of seaborne trade in Pakistan's economic development, focusing on its contributions to GDP growth, employment generation, and foreign exchange earnings. Located at the intersection of South Asia, the Middle East, and Central Asia, Pakistan occupies a strategically vital position along the Arabian Sea, facilitating significant maritime connectivity with global markets. It analyzes major trading partners, principal seaports, and the maritime routes that form the backbone of the country's external trade. The research highlights the importance of maritime commerce as a cornerstone of Pakistan's economic framework and highlights its untapped potential for expansion. Adopting a qualitative approach, the study advocates for integrated policy measures to overcome existing challenges and capitalize on emerging opportunities, ensuring that maritime trade continues to serve as a dynamic driver of Pakistan's engagement with the global economy.

Keywords: *Maritime Trade, Economy, Ports, South Asia, Gwadar*.

Introduction

Pakistan, with its strategic location along the Arabian Sea, holds immense untapped potential in the realm of maritime trade. As global commerce increasingly relies on efficient and secure seaborne routes, the role of ports as critical nodes in economic development has never been more vital. For Pakistan, ports like Karachi, Port Qasim, and the emerging Gwadar Port are not only gateways to international markets but also linchpins for regional connectivity, trade integration, and economic resilience. However, despite their significance, challenges related to infrastructure, governance, and regional geopolitics continue to impede the full realization of this potential. This article explores the importance of ports in Pakistan's maritime trade landscape, analyzing their economic, strategic, and developmental roles, while identifying key areas for policy intervention and investment to unlock sustainable growth. Pakistan's coastline along the Arabian Sea is approximately 1,046 kilometers long (Riaz, 2021). It extends from the southern border with Iran, near the town of Gwadar, to the eastern border with India, adjacent to the city of Karachi. This coastal region is characterized by a diverse range of landscape, including sandy beaches, rocky cliffs, and mangrove forests. It's home to several major ports, including Karachi Port and Gwadar Port, which are significant hubs for trade and maritime activity. The coastline plays a pivotal role in Pakistan's economy, offering opportunities for fisheries, trade, tourism, and renewable energy development. Additionally, Pakistan's maritime territory extends well beyond its coastline into the Arabian Sea, contributing to the country's strategic importance in regional and international maritime affairs. This extensive coastline encompasses the provinces of Sindh and Baluchistan, providing Pakistan with a strategic maritime location. Seaborne trade has immense importance to Pakistan as it offers access to international markets, facilitates the movement of goods, and stimulates economic growth. It serves as a key driver of the country's trade and commerce, making it an indispensable component of Pakistan's economic infrastructure. Pakistan's sea transportation is its main source of cargo business. Some nations are quite fortunate in this regard, since they have fantastic coastlines and seaports that they can use to expand their economies. Pakistan, for example, has abundant natural marine resources that are also very productive. Most of its cargo business is sourced from its marine cargo transit with the rest of the world. Pakistan's well-known port in South Asia, Karachi port, handles its maritime transportation. The port of Karachi is located at the confluence of the Indian Ocean and Arabian Sea. Also, it has connections to the Pacific and Atlantic Oceans, respectively (Cargo, 2018).

The existing literature emphasis on the need to tap oceanic resources and build infrastructure to mobilize them. Walayat (2022) examines that it is not unknown that the ocean is the future for a better economy. The maritime industry is not just a single industry, but it is an industry that connects every other industry with it. Pakistan has not completely utilized its sea resources despite being an oceanic country. But with the developmental progress of CPEC and the port of Gwadar, the idea of a blue economy can be put into work (Alam & Azam, 2023). The CPEC project would not only help in building blue economy but will also help revive the traditional economy of Pakistan. It has sparked number of economic sector although being a Chinese investment. The CPEC project between Pakistan and China has built up a strong maritime relation between the two countries and would be helping Pakistan developing a stable economy and regional ties with other countries. In addition, Jalil & Yasmin (2018) further identifies that keeping in view the importance of the oceanic problems and its impacts on the national security, Pakistan has changed its policies towards the ministry of ports and has shifted shipping to the Ministry of Maritime Affairs and suggests that Pakistan should focus on the oceanic produces resources and oceanic and transportation to regrow. The shipping industry has not been working effectively for multiple years now and they should discover more ways to improve the working of these industries. Employment in the blue sector has enormous potential and could be a game changer for the country as well. For which efforts are required to highlight the significance of the blue industry and the potential it holds for the bright future of any country. In this context, emphasizing the need for infrastructural development for maritime potential, Pakistan Merchant Policy (2019) states that shipping could be an exceedingly capital-intensive industry other than requiring modern and costly state of the art technology. Recognizing the potential of the oceanic division and the need that it must prosper; the Government of Pakistan has chosen to re-structure the oceanic division and give a reasonable and speculator neighborly arrangement. In specifics, proficient bolster administrations, improvement of ports, extension of harbor facilities, and accessibility of energetic work drive beside tried and true and unsurprising administrative environment are the key components.

The research is based on the following questions:

1. How ports play a significant role in the development of the blue economy of Pakistan?
2. What are the major port facilities in Pakistan?
3. What are the major challenges that affects Pakistan seaborne trade?

Economic and Geo-Political Significance of Ports

With over 95 percent of the country’s trade volume transported via sea, ports like Karachi, Port Qasim, and Gwadar are vital infrastructure assets (Ghumman, 2024). Strategically located along the Arabian Sea, these ports offer Pakistan a geographic advantage at the intersection of South Asia, the Middle East, and Central Asia. This positioning enhances Pakistan's access to international shipping routes, including those linked to the Strait of Hormuz and the Red Sea. From the perspective of geopolitical theory particularly Nicholas Spykman’s Rimland Theory, Pakistan's coastal belt holds immense strategic value as it connects maritime powers and landlocked states to global trade networks. The development of Gwadar Port under the China-Pakistan Economic Corridor (CPEC) exemplifies this, transforming Pakistan into a key player in the regional connectivity landscape. These ports not only facilitate commercial trade but also contribute to national security and regional influence. The ability to host deep-sea vessels and modernize logistics systems further strengthens Pakistan's maritime potential. Seaborne trade enhances employment, industrial activity, and regional integration. In geopolitical terms, Pakistan's ports function as leverage points in international power dynamics. Their expansion has implications for regional maritime security, energy transportation, and strategic alliances. The growing importance of these ports' places Pakistan at the center of emerging global maritime corridors. Thus, seaborne trade and port infrastructure are not just economic tools but are deeply embedded in the geopolitical fabric of the region.

Significance of Ports and Infrastructure of Blue Economy

Port development plays a vital role in facilitating and expanding seaborne trade. A well-equipped and efficiently managed port serves as critical gateways for international trade, enabling the smooth transfer of goods between land and sea routes. As global trade continues to grow, the demand for modern port infrastructure has been increasing, directly impacting a country's trade capacity and economic performance. Improved ports reduce turnaround time for ships, lower transportation costs, and enhance supply chain reliability. Additionally, advanced port facilities attract foreign investment and encourage trade partnerships by providing a secure and efficient environment for maritime transactions. The integration of technology in ports such as automation and digital logistics further strengthens their role in global trade. Countries with strategic port locations can leverage them to become regional trade hubs, increasing their influence in global shipping networks. Thus, port development is not merely a domestic infrastructure issue but a critical element of a nation's trade and economic strategy. Without modern ports, the full potential of seaborne trade cannot be realized. The primary source and resource for the development of maritime economies and cultures is seaborne trade. As a result, a seaport is seen as a hub or platform for the maritime sector of a nation's economy and directs the flow of commerce from the hinterlands. Additionally, essential to the nation's socioeconomic success is the seaport. Therefore, the state's shipping volume will be constrained by larger seaports, a larger shipbuilding industry, and smaller seaports (Kalim, 2018). Activities at the port support industrialization, social change, and employment in the neighboring areas. Pakistan has received a lot of benefits from nature; it is like a beautifully decorated, well-maintained home where everyone has all they need. It is fortunate to have deep-sea ports and natural dams. Other nations are interested in ports and other resources.

Port of Karachi

The Karachi port is the biggest and busiest port of Pakistan. A sizable deep-water port called Bandar Gah Karachi is run in tandem with Pakistan's coast along the Arabian Sea. It handles roughly 60 percent of all national cargo and is owned by the Ministry of Maritime Affairs and operated by the Karachi Port Trust (KPT). Every year, more than 1700 cargo ships call in Karachi port. The port has 1.56 million TEUs and 65.25 million tons of cargo per year (Menon, 2021, p. 16). Pakistan's Deep-Water Containers Port is another project that goes together with this one. The Karachi Port serves as a significant hub for the distribution of industrial minerals and other raw materials used in the building, chemical, and steel industries in Pakistan and Central Asia. KPT benefits from excellent connections and a strategic position owing to an intermodal network. Due to the significant congestion at Karachi Port, other ports including the Pakistan International Container Terminal, Gwadar Port, and Port Qasim have been built and developed. While Ormara Navy Base has taken on naval vessels to free up dock space at Karachi, Korangi Fishing Harbor has been earmarked to relieve demand on that facility.

Karachi Port offers tremendous economic opportunities because it provides direct access to all the main nations in the world. Europe, the United Kingdom, the Gulf, and other significant global markets are directly connected to Karachi port through a maritime network. Mother vessels can remain there straight in Karachi port because Karachi harbor has open and deep water. Every port or harbor in the open sea lacks the capacity to hold mother vessels, which are compelled to loiter in deep water. Due to Karachi Port's naturally deep water and open water, mother ship can stay in the harbor directly, which would provide some additional benefits. The cargo business in Pakistan benefits greatly from the large international corporations' mother vessels calling at Karachi Port, while on the other side, mother vessels have a great opportunity to transport commodities from Pakistan to the rest of the globe. Since Karachi is the primary location for all of Pakistan's maritime trade, there are always goods available there for mother vessels to pick up as they travel towards Pakistan (Cargo, 2018). Knowing the benefits that Karachi port holds, the Ministry of Maritime Affairs has signed a new project Karachi Coastal Comprehensive Development Zone (KCCDZ) scheme which is a China-Pakistan Economic Corridor (CPEC) project to rebuild the Karachi coastline and transform it into a better trade hub with a more modern infrastructure, better housing schemes, and will be environmentally sustainable. These 3.1-3.5 billion projects will help Pakistan develop a more advanced business bay, industrial sector and provide improved livelihood to the coastal communities (Ayub, 2021).

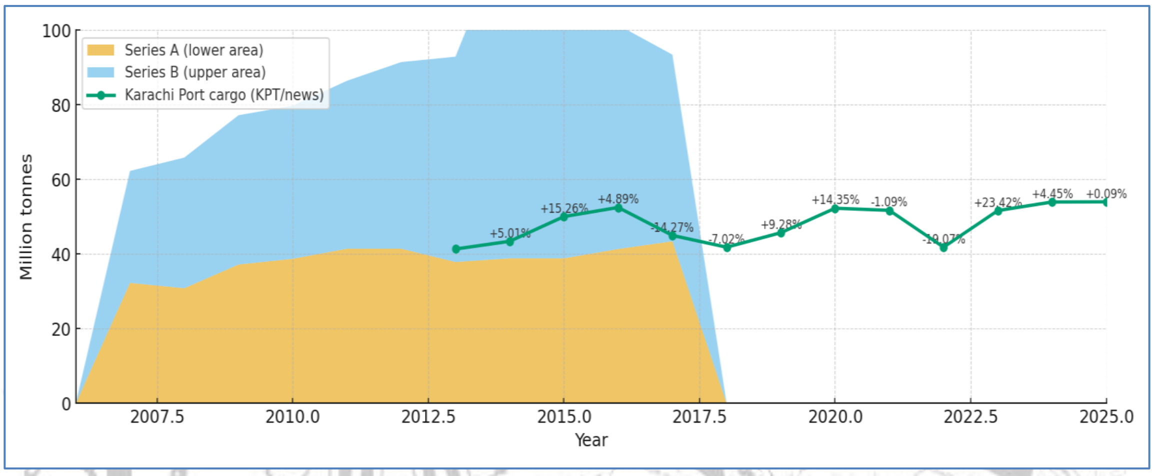


Figure 1: Karachi Port Cargo
Source: (Menon, 2021)

Muhammad bin Qasim Port

The second-largest port in Pakistan is Muhammad Bin Qasim, which is also among the top 150 ports in the world. It is a deep-water port that was built in the Sindh Province's man-made harbor. It transports almost 40 percent of the nation's goods. It is situated in Phitti Creek. Port Qasim's infrastructure is well-organized; it is connected to six railway tracks and is located around 15 kilometers from a highway. Additionally, the airport is around 22 km away from this seaport. Here in Port Qasim, there is only one privately owned petroleum terminal FOTCO in Pakistan. Every year, more than 1500 ships come into this harbor. It manages over 35 percent of all maritime traffic that passes through Pakistan, makes more than 1,500 port visits each year, has a container volume of 700,000 TEUs, and transports 16.6 million tons of cargo annually. As of 2008, the harbor can accommodate ships up to 75,000 DWT and has a 3-meter tidal range. The Korangi Industrial Area, the Landhi Export Processing Zone, and a few auto manufacturing firms are all connected to Port Qasim. It is situated on the Indus River and is near to Port Karachi. The port has excellent access to inland waterways, rail, and roads. Within a 20 km range of the harbor are the National Highway, Jinnah International Airport, and Indus connecting routes.

The following are the primary amenities offered to berthed ships in Port Qasim:

1. 4 berth Multipurpose Terminal under PQA.
2. 5 berth Container Terminal under Qasim International Container Terminal (QICT).
3. Single berth Liquid Chemical Terminal under Engro Vopak Ltd.
4. Single berth Oil Terminal under Fotco Oil Terminal.

This Port is currently running under the operations conducted by Port Qasim Authority (PQA) and covers an area of 50 sq. kilometers. The Port covers an area of 1000 acres that joins with an industrial estate area of 11,000 acres and is in the Indus Delta Regions. It is in very close proximity to Port Karachi near the Indus River, being a main reason, lot of people regard both these ports as the same. For the ease of administrative activities and trade handling, the harbor is divided into 3 zones, i.e.

1. Eastern Industrial Zone (EIZ) – 8,300 acres
2. Northwestern Industrial Zone (NWIZ) – 2,920 acres
3. Southwestern Industrial Zone (SWIZ) – 1,000 acres

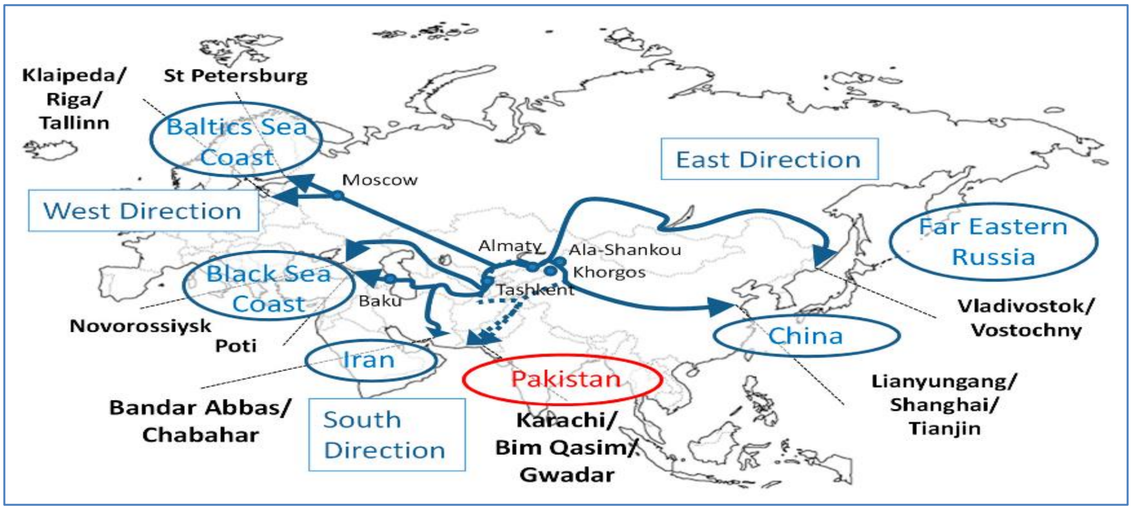
The most interesting thing to factor in about Karachi Port Qasim is that it has a dedicated Iron Ore Coal Berth, which is solely for accommodating the handling of bulk raw materials of Pakistan Steel Mill. Currently, the Port has a collective (both private and governmental) total of 18 berths that annually gives around 89 million tons (Qamer, 2022).

Port Qasim handles roughly 35 percent of the nation’s sea-borne trade and becoming a critical node in import & export logistics (Pakistan, 2025). In 2025, the government announced a 50 percent reduction in export charges at Port Qasim (including wharfage and transshipment container fees) in order to make exports more competitive. This measure is part of broader reforms aimed at boosting trade, especially for exporters from Karachi and surrounding industrial regions. Strategically, the port sits about 50 km east of Karachi, giving it both deep-sea access and proximity to major industrial zones like the Bin Qasim Industrial Zone. In 2025 it also secured Chinese support to build an integrated maritime industrial complex, which will include a green ship-recycling yard and clusters for fish and date processing. The port plays a key role in Pakistan’s blue economy strategy and its maritime trade infrastructure under CPEC. Despite its strengths, Port Qasim saw a small cargo dip of about 1.6 percent in the first eight months of FY2025 compared to the same period last year, handling 33.8 million tons versus 34.3 million tons (Ali, 2025).

Port of Gwadar

Gwadar port is a significant port on the Arabian Sea run by the Gwadar Port Authority. It is regarded as one of the top deep-sea ports. The port is under the operational and management supervision of the China Overseas Port Holding Company. A hub of the projected China-Pakistan Economic Corridor, Gwadar is a significant role in the transportation of trade between Pakistan and Afghanistan (CPEC). The harbor is connected to the Belt and Road Project and the Maritime Silk Road through these programs. Gwadar is a deep-sea port that has been in service since 2016 and is close to the Iranian port of Chabahar as well as the Gulf of Oman and Straits of Hormuz. It is still undergoing expansionary activities that are scheduled for three more phases. The port has a floating LNG facility, the Gwadar Special Economic Zone, and a facility specifically designed to advance CPEC objectives. The Khunjerab Railway will be connected to the harbor to allow for transportation to nearby commercial centers. The Gwadar-Chabahar region is projected to grow because of the bilateral Iranian Indian expansion of Port Chabahar, which could also result in transshipment facilities at both ports (Menon, 2021). It is also close to one of the busiest maritime channels in the world. To provide calm berthing conditions, the extension of the eastern berths of the Gwadar Port also necessitates the construction of a breakwater.

Despite this, Pakistan possesses an EEZ of 240,000 square kilometers, which was expanded by UNCLOS by an additional 50,000 square kilometers in 2015. The potential for fishing and farming in this region is considerable. Despite this, Pakistan may be able to adapt to climate change and global warming with the aid of blue carbon. Baluchistan can act as a gateway for marine goods because of its crucial strategic relevance. Despite the challenges created by CPEC's detractors, Baluchistan is developing through Gwadar Port.



Map 1: Routes of Gwadar
Source: (Rodrigue & Notteboom, 2020)

As maritime lines of communication (SLOCs) from the Gulf of Aden and the Persian Gulf reach Gwadar, Karachi, and beyond, the western coast of Pakistan is significant from a geopolitical standpoint. Gwadar is essential to Pakistan's economic development as well as China's Belt and Road Initiative. Thus, Gwadar has the potential to develop into a modern port metropolis (Shakeel, 2023).

Gwadar’s future dynamics hold significant strategic weight in the regional maritime competition, particularly in balancing the influence of Iran’s Chabahar Port. As Gwadar continues to develop under the China-Pakistan Economic Corridor (CPEC), it is expected to emerge as a major hub for trade linking South Asia, Central Asia, and the Middle East. Its deep-sea capacity and modern infrastructure provide Pakistan and China with an advantage in attracting large-scale commercial traffic compared to Chabahar, which is still in gradual development. Gwadar’s integration into global supply chains could reduce dependency on regional chokepoints and offer alternative routes for energy and trade, challenging Chabahar’s role as India’s gateway to Afghanistan and Central Asia. Moreover, Gwadar’s connectivity with the Belt and Road Initiative strengthens its economic and political relevance, positioning it as a counterweight to India-Iran cooperation at Chabahar. In security terms, Gwadar allows Pakistan to project maritime presence in the Arabian Sea, complementing China’s naval reach and limiting the strategic space available for India through Chabahar. Future expansions in logistics, energy corridors, and industrial zones in Gwadar could further diminish Chabahar’s comparative advantage by offering more competitive facilities. However, success will depend on regional stability, investment flows, and the ability to address local security challenges. If effectively managed, Gwadar has the potential to shift the regional balance of power in Pakistan and China’s favor, undermining Chabahar’s projected dominance in regional trade and geopolitics.

Port Kati Bander

The Kati Bander/Bandar Port, one of Pakistan's oldest ports, is a small harbor that boosts the local economy. Kati Bander is in the Thatta District about four hours' drive from Karachi, is an outpost of the famed harbor of Debal near to Manora Island. Because of it being close to both the Arabian Sea and the Hajamrao River, the modern port on the Indus River is a major hub. Fishermen from the Mansura and Thatta areas use Kati Bander mostly as a portIt has been put under CPEC project in 2018 to shift the load of Karachi port but still no significant development has taken place. It can be a potential port for the export of coal and industrial development (Memon, 2024).

Port of Ormara

Between the Karachi and Gwadar Ports, Pakistan's Makran Coast is home to the well-known harbor of Bandar-gah Ormara. From 40 to 70 A.D., it had a maritime significance. Since it provides access to and controls over the Indus area, Ormara it has been a crucial strategic location since the reign of Alexander the Great.

Fishing is the port's principal industry, and it also carries fresh products to bigger harbors in Pakistan for repackaging and eventual export. The Makran Coastal Highway Project, also known as National Highway 10, has rejuvenated the port and brought in much-needed amenities along Pakistan's Arabian Sea coastline. This has made it possible for goods and cargo to be transported via Ormara and connected the port to the larger National Highway system. Jinnah Naval Base located near Ormara, is the country's second-largest naval base. The fish port received new equipment to improve the output of fresh produce for export around the world. It was jointly built by Belgium and Turkey on behalf of the Ministry of Defense and has increased economic activity in the area.

Ormara Port, is also strategically important for Pakistan’s naval presence and maritime trade, yet it is surrounded by complex security challenges. The coastline near Ormara is frequently used for smuggling activities, including fuel, narcotics, and other contraband, which undermines lawful trade and strains security patrols. Its closeness to the Jinnah Naval Base, one of Pakistan’s most significant naval facilities, makes it a sensitive site that could attract sabotage, espionage, or even direct attacks from militant groups. The broader region has a history of insurgent violence, and the Makran Coastal Highway, which connects Ormara to major cities, has witnessed ambushes and targeted killings, posing threats to both military convoys and civilian traffic. At sea, small unauthorized boats often exploit gaps in coastal monitoring, highlighting the challenges of maintaining consistent maritime domain awareness in remote areas. Local communities, who often feel disconnected or mistrustful of government and security forces, may be reluctant to share information about suspicious activity, leaving room for hostile actors to operate undetected. Environmental issues, such as illegal hunting and resource exploitation, add another layer of insecurity by disrupting livelihoods and fueling illicit networks. At the same time, the expansion of sensitive naval infrastructure increases the risk of cyberattacks, insider threats, and sabotage. Taken together, these factors show that Ormara is not only strategically significant for Pakistan’s maritime defense but also highly vulnerable, requiring comprehensive measures that integrate strong coastal surveillance, community engagement, environmental safeguards, and modern technological solutions.

Port of Pasni

On the Makran Coast, Baluchistan’s Bandar-gah Pasni serves as a medium seaport, fishing harbor, and naval base. Fishing, which is the main economic driver for the region's hinterlands, boosts traffic at Pasni. The port also receives shipments from other Pakistani ports to supplement local supplies of food and other goods because the land is not arable. Modern processing and packaging facilities are available at the fishing harbor to prepare and package goods for export. Turbat and Karachi are the destinations of a major portion of Pasni's exports. The harbor is owned by Pakistan's Maritime Affairs Secretary, and the Government of Baluchistan Port Authority (BPA) oversees operating it. Fisheries department research in the Baluchistan and Sindh region includes the Pasni Port. This port is one of many in these areas that serve as export hubs. Typically, the fish is prepared on the port's property, packaged for export, and sent to the many fishing harbors at Karachi Port. The facilities in this location are compliant with export regulations to EU nations, and the produce is wrapped for worldwide export. The port has excellent air and road connections to Pakistan's major cities. The Pasni Naval Base is a center of activity that has sparked the growth of the National Highways and the adjoining Pasni Airport. The Pakistan Navy, Air Force, and civil aviation terminals are all jointly housed at the adjacent airport.

Pasni, located further west along the Makran coast, serves as a fishing hub and a potential commercial port, yet it struggles with significant security challenges. The port and surrounding waters are often exploited by drug traffickers and smugglers moving goods between Pakistan, Iran, and international markets. Its road links, though improved by the Makran Coastal Highway, remain vulnerable to militant ambushes and blockades, disrupting both trade and civilian travel. Insurgency in Balochistan adds further instability, with security forces frequently targeted in nearby areas. Although Pasni is less militarized than Gwadar or Ormara, its position along the Arabian Sea makes it strategically important for maritime trade and fisheries. Poor infrastructure, limited investment, and weak regulatory oversight increase the vulnerability of its economy to criminal networks. Moreover, local resentment toward central authorities can reduce cooperation in intelligence sharing, providing space for illicit activities. Addressing these issues requires improving coastal monitoring, investing in local economic development, and building trust between communities and the state.

Port of Jiwani

It is close to the ports of Chabahar, Iran, and Gwadar, Pakistan, both 60 kilometers to the east 110 kilometers west (Xu, 2025). Jiwani and the nearby hinterlands have grown because of its proximity to major shipping centers. The Jiwani military airport is utilized to carry fresh produce, and the Makran Highway (to Karaschi), which connects it to important cities, respectively. Port Jiwani, which is in Gwadar Bay, is very significant from a naval perspective. It is close to the Persian Gulf, the Gulf of Oman, and the Straits of Hormuz, which are all important shipping lanes. A Pakistan Air Force airfield is also part of the Pakistan Naval Base in the harbor (Menon, 2021).

It has been facing several security challenges that disrupts its activities. In 2024, remote-control bombing targeted Coast Guard patrols in the Ganz and Panwan areas of Jiwani , injuring personnel, showing militant and criminal networks are active in the area (Baloch, 2024). Then in 2025, Jiwani has been a focus of anti-smuggling operations. The Pakistan Coast Guards seized 1,864 kg of high-quality hashish and 7.2 kg of brown sugar in the Kontani area of Jiwani, valued at about USD 31.7 million, aimed for export via sea routes (Baloch, 2025). Also, in 2025 authorities arrested 84 people in Jiwani for attempting illegal sea crossings to Iran, reflecting its role as both a transit and smuggling hotspot. Trade via Jiwani remains much more limited compared to larger ports like Gwadar or Karachi, but its fishing sector and small-scale fish-freezing industries continue to be local economic pillars (Khan, 2025). While there has not yet been a large publicly reported figure for major bulk cargo handled there in 2025, the government has been exploring plans to develop the port further under CPEC-related and other regional infrastructure frameworks, to add multipurpose berths, logistics zones, secure berthing, and industrial linkages.

Maritime Potential and Challenges

Pakistan's trade extends beyond its South Asian neighbors to encompass a diverse range of countries worldwide. These international trade partnerships are essential for Pakistan's economic growth and diversification, providing opportunities for export and import, technology transfer, and the development of economic infrastructure. Pakistan's trade relationships with various countries reflect its position as a significant player in the global trade landscape. These international trade partnerships play a vital role in Pakistan's economy, with key trading partners including Saudi Arabia, the United Arab Emirates, Syria, Jordan, Yemen, Oman, Qatar, Lebanon, Kuwait, and Iraq in the Middle East. In this framework, Pakistan's ports serve as critical nodes for the country's external trade, yet they face persistent challenges that hinder their efficiency, competitiveness, and long-term viability. Despite significant geographic advantages, infrastructural shortcomings and policy-related issues have limited the ability of major ports like Karachi, Port Qasim, and Gwadar to fully realize their potential.

(millions of US$)	2005	2010	2015	2023
Merchandise exports	16 051	21 410	22 089	28 470
Merchandise imports	25 357	37 807	44 168	50 128
Merchandise trade balance	-9 306	-16 397	-22 079	-21 658

Table I: International Merchandise Trade of Pakistan
Source: (Maritime profile: Pakistan, 2023)

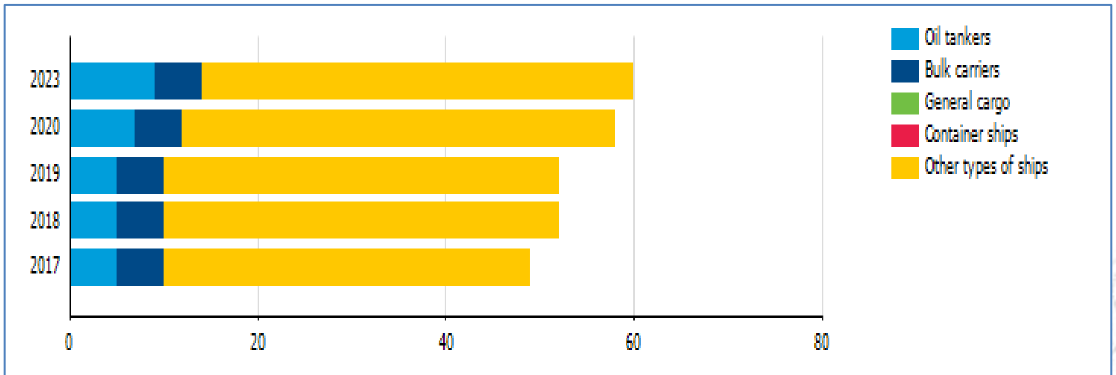


Figure II: National Fleet by type of Ship
Source: (Maritime profile: Pakistan, 2023)

The following are some of the most pressing challenges

- **Capacity and Congestion:** Pakistan's major ports, particularly Karachi Port and Port Qasim, frequently operate at or near full capacity. Security protocols, and recently Indian refusal to allow Pakistan shipment through its ports has disrupted regional shipping routes. As a result, international carriers have shifted the routes to and from Pakistan (Aminuddin, 2025). The lack of deep berths and modern container-handling equipment has resulted in inefficiencies, longer vessel turnaround times, and increased demurrage charges. Additionally, the limited integration of port infrastructure with inland transport networks such as rail and highways further compounds logistical bottlenecks.

- **Governance and Regulatory Inefficiencies:** The port and maritime sectors in Pakistan are plagued by bureaucratic maneuvering, overlapping institutional mandates, and fragmented policy frameworks. Multiple agencies often operate without coordination, leading to delays in decision-making, project approvals, and implementation. Regulatory uncertainty and a lack of transparency in concession agreements and bidding processes have deterred foreign and domestic investment in port development (Akhtar, 2024). Moreover, inconsistent enforcement of maritime safety, customs, and environmental standards contributes to operational inefficiencies and limits the ports' ability to compete with regional counterparts like Dubai and Colombo.

- **Environmental and Sustainability Concerns:** Environmental degradation around port areas has emerged as a significant challenge, particularly due to oil spills, industrial discharge, and poorly managed solid waste. Pakistan's ports lack robust environmental protection frameworks, resulting in harmful impacts on coastal ecosystems, fisheries, and public health. Gwadar Port, while strategically important, has raised concerns over the long-term sustainability of development in a region already vulnerable to water scarcity and ecological fragility. Additionally, the absence of green port practices such as renewable energy use, emissions control, and waste recycling prevents Pakistan's ports from aligning with global sustainability trends.

- **The New Geopolitical Shifts:** The evolving global geopolitical landscape presents a complex set of challenges for Pakistan's maritime ambitions. As regional rivalries and global power competitions intensify particularly in the Indo-Pacific and Indian Ocean regions, Pakistan's ports are increasingly affected by strategic alignments, economic dependencies, and security tensions. One major dimension is the growing strategic rivalry between China and the United States, with Pakistan closely tied to China through the China-Pakistan Economic Corridor (CPEC) and the development of Gwadar Port. While this alliance brings investment and infrastructure development, it also places Pakistan under international scrutiny and raises concerns among rival regional powers, particularly India, which views Chinese involvement in Gwadar as a strategic encroachment. Furthermore, Pakistan's proximity to key maritime chokepoints and its dependence on external trade routes make it vulnerable to regional instability, including tensions in the Strait of Hormuz, the Gulf of Oman, and unrest in Afghanistan and Iran. These developments can disrupt shipping lanes, raise insurance and freight costs, and threaten the security of port operations.

Conclusion

By leveraging its ports and enhancing their infrastructure and efficiency, Pakistan can not only facilitate the flow of goods but also attract foreign investment and promote regional trade integration. However, it is equally essential to address the challenges that impede the full realization of Pakistan's maritime trade potential, including infrastructure development, trade diversification, and maritime security. Strategic planning, public-private partnerships, and investments in modernization will be key to overcoming these obstacles and ensuring the continued growth and resilience of Pakistan's seaborne trade. In a rapidly changing global landscape, Pakistan's ports and maritime trade routes remain vital conduits for economic development and regional connectivity. By fostering a conducive environment for trade, Pakistan can harness the full potential of its seaborne trade links, strengthening its position as a key player in the global trade network.

Recommendations

- Knowing what blue economy holds, Pakistan should focus on more infrastructure and advancement in the technology and methods used in the ports to enhance the trade between countries without bearing any loss.
- It should work on fulfilling all the requirements and necessary arrangements as mentioned in different sea conventions to keep up the development in blue economy.
- All the ports should be made fully functional and more efforts should be made on increasing ships and berths on each port.

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