



SPECIAL EDITION

MARITIME WATCH

INTERNATIONAL MARITIME CONFERENCE 2025 (IMC-25)

**Harnessing Blue Economy Potential for
Sustainable Development**

4 - 5 November 2025



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CONFERENCE MESSAGES

MR. ASIF ALI ZARDARI

President of the Islamic Republic of Pakistan

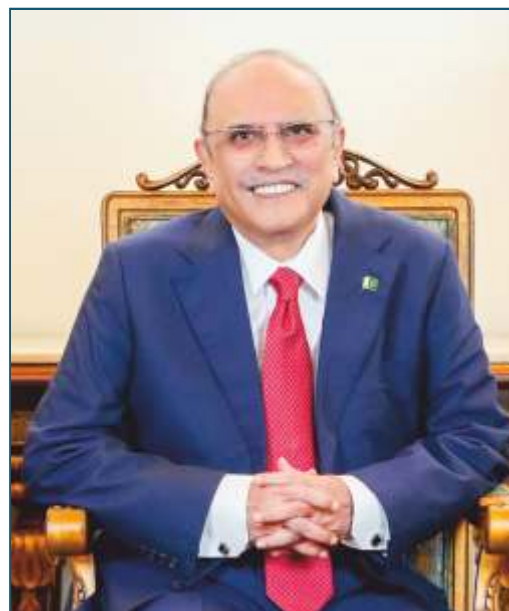
On the occasion of the 2nd Edition of the **Pakistan International Maritime Expo and Conference (PIMEC) 2025**, I extend a warm welcome to all delegates, exhibitors, and trade representatives, and wish them productive engagements during the event.

This Expo highlights the vast potential of Pakistan's maritime sector and provides an opportunity to explore ways of making the best use of our ocean resources within the framework of the Blue Economy. I am confident that the event, which also features an International Maritime Conference on the Blue Economy, will serve as a valuable platform for networking and knowledge sharing.

Pakistan's geographic location at the crossroads of major international sea routes gives us a strategic advantage, which we aim to make full use of, through effective policies and partnerships. PIMEC offers a forum where international experts, government representatives, academia, the armed forces, and stakeholders from maritime trade and industry can come together to realise our maritime potential. Given Pakistan's growing dependence on sea-based trade, the maritime industry is a key driver of sustainable growth and prosperity. PIMEC aims to bring together national and international stakeholders from across the maritime spectrum to strengthen cooperation and encourage new business opportunities.

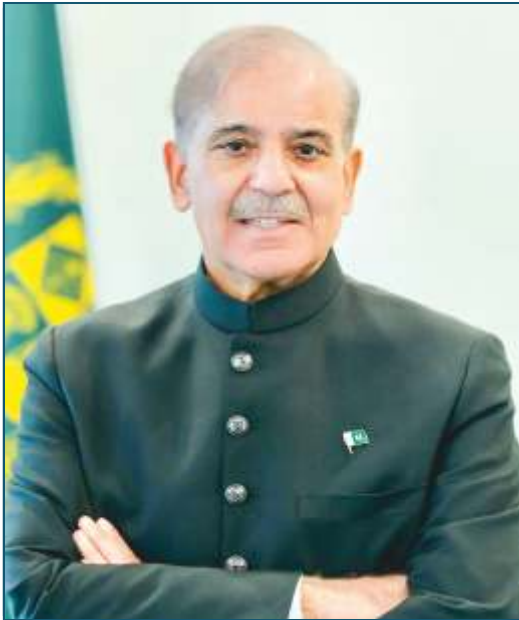
Despite many challenges, Pakistan continues to work closely with the international community to promote sustainable development in the maritime sector. I am confident that PIMEC will further strengthen our partnerships with friendly countries and help advance our shared goals of economic progress.

I commend the Ministry of Maritime Affairs and the Pakistan Navy for organising this important event. I wish PIMEC 2025 every success and hope it contributes meaningfully to the growth of Pakistan's maritime economy.



MR. MIAN MUHAMMAD SHEHBAZ SHARIF

Prime Minister of the Islamic Republic of Pakistan



It is with immense pleasure that, I on behalf of the Government of Pakistan, welcome the conduct of the 2nd Edition of '**Pakistan International Maritime Expo & Conference (PIMEC)**' 2025. This Expo will showcase the rich potential of Pakistan's maritime sector with an aim to draw attention towards maritime industry's contribution towards Blue Economy and in raising maritime awareness amongst the general populace.

PIMEC is manifestation of Pakistan's maritime capabilities in diverse fields with a focus on marine related commercial enterprises. This would provide an interactive platform to demonstrate maritime products, hence opening new doors for contracting, outsourcing, joint venturing and signing of MoUs for technical collaboration in the maritime field with national and international partners. It would not only benefit mutual relationships and interests but also help to conjoin the international community in pursuit of shared prosperity. In fact, it would be a unique opportunity for participating countries and their companies to be part of the dedicated business forum of PIMEC.

The role of port cities, such as Karachi and Gwadar, is pivotal to Pakistan's economic progress. The development of these ports is crucial for reaping the benefits of Blue Economy. The Govt fully supports Ministry of Maritime Affairs in its efforts to upgrade our ports through introduction of modern techniques and processes in port handling and initiatives in the shipping sector.

I would like to convey my deep appreciation to all the stakeholders, especially Pakistan Navy for taking this initiative under the auspices of Ministry of Maritime Affairs and for channelizing efforts in bringing this event to the acme of excellence in the cause of showcasing Pakistan's maritime potential in a business friendly and professional manner.

May it yield shared dividends to all the participants.

MR. MUHAMMAD JUNAID ANWAR

Federal Minister of Maritime Affairs of the Islamic Republic of Pakistan

It is a privilege to extend my warm greetings to all the distinguished participants, exhibitors, and delegates of the Pakistan International Maritime Expo & Conference (PIMEC) 2025. This premier event, jointly organized by the Ministry of Maritime Affairs and the Pakistan Navy, provides a unique platform to explore, engage, and unlock the vast potential of maritime sector and Blue Economy.

As the custodian of the nation's maritime domain, our Ministry remains steadfast in its commitment to sustainable utilization of marine resources, development of modern maritime infrastructure, and the promotion of education, innovation, and research within this critical sector. In today's rapidly evolving global maritime landscape, events like PIMEC serve as catalysts for collaboration, innovation, and investment. PIMEC 2025 offers an exclusive opportunity for interaction among policymakers, industry leaders, entrepreneurs, investors, and international stakeholders to deliberate on emerging trends and challenges in maritime trade, logistics, and governance. The discussions and exhibitions encompass diverse areas including port modernization, shipping industry reforms, maritime security, marine environmental protection, and the integration of digital and green technologies in maritime operations that are vital to Pakistan's economic growth and sustainability.



The Indian Ocean, with its vast reserves of living and non-living resources, presents immense opportunities for regional prosperity. Its wealth of petroleum, natural gas, and diverse marine life underscores the ocean's economic and ecological significance. In particular, the fisheries sector, including fish and shrimp, forms the lifeline for coastal communities in Sindh and Balochistan. By strengthening maritime industries, improving value chains, and fostering entrepreneurship, we can uplift these communities, enhance their livelihoods, and deepen their understanding of the importance of maritime education and environmental stewardship. In this context, the observance of Maritime Week alongside PIMEC 2025 highlights our national commitment to advancing the Blue Economy and celebrating Pakistan's maritime heritage.

The Government of Pakistan remains determined to integrate sustainability into all maritime development strategies and acknowledges the vital role the sector plays in achieving long-term national progress. I am confident that Pakistan's active participation in the upcoming elections of the “International Maritime Organization” (IMO) will further bolster our contribution to global maritime governance. The spirit of international cooperation is essential to ensure safer, cleaner, and more resilient seas, while advancing innovation, maritime trade, and climate adaptation that are key pillars for a prosperous and sustainable future. I urge all participants of PIMEC 2025 to use this forum to exchange knowledge, forge partnerships, and design innovative solutions that will propel maritime sector toward greater heights. These collaborations will complement our Ministry's ongoing efforts to modernize regulations, eliminate industrial bottlenecks, and fully harness maritime potential for national development.

I extend my heartfelt appreciation to all stakeholders, organizers, and participants for their dedication to making the 2nd Edition of PIMEC a grand success. I especially commend the Pakistan Navy for its visionary leadership and continued support in transforming this initiative into a reality. I am confident that PIMEC 2025 will set new benchmarks in promoting Blue Economy and will contribute significantly to strengthening regional and global maritime cooperation.



ADMIRAL NAVEED ASHRAF NI NI(M) T Bt

Chief of the Naval Staff (CNS)

It is with a sense of deep satisfaction and great pleasure that I welcome all the esteemed guests, national and international delegates, exhibitors and speakers to the '**Pakistan International Maritime Expo & Conference (PIMEC)**' 2025 at the Karachi Expo Centre.

In today's complex security environment, challenges such as maritime terrorism, piracy, illegal trafficking and environmental threats necessitate robust partnerships and advanced technological capabilities. Pakistan Navy remains steadfast in its mission to safeguard our maritime sovereignty and ensure the security of Pakistan's vital sea lines of communications. As custodians of the maritime domain, we recognize that security and development go hand-in-hand.



Realizing this national imperative, Pakistan Navy, has taken the initiative of organizing this Second Edition of PIMEC under the patronage of Ministry of Maritime Affairs, which is held biennially. Its maiden edition proved instrumental in providing a platform for harnessing the untapped potential of our Blue Economy. PIMEC-2025, therefore, will not only help consolidate the gains made so far but also provide a bespoke opportunity to engage with national and international maritime experts, policymakers and industry leaders on issues of maritime security, naval technology and cooperative strategies for regional stability.

I am confident that the event will go a long way in accruing the desired benefits from our rich, attractive and diverse maritime potential. Through PIMEC, let us also re-affirm our commitment and resolve towards preserving the sustainable use of oceans and marine resources, unlocking nature's ultimate source of life; to fuel economies, spur growth and benefit the mankind for our collective good and shared prosperity.

I am sure the event will play an instrumental role in promoting Blue Economy and providing the much needed fillip to our maritime economic growth.

Wishing PIMEC-2025 every success and all the participants a pleasant and rewarding experience.

VICE ADMIRAL AHMED SAEED HI(M) (RETD)

President of the National Institute of Maritime Affairs (NIMA)

The Blue Economy stands as a vital engine for global prosperity with oceans covering 71% of the Earth, sustaining nearly 3 billion livelihoods, carrying over 90% of international trade, and supporting 95% of digital communications. For Pakistan, the maritime domain holds immense promise, with over 1,000 km of coastline, an Exclusive Economic Zone of about 240,000 sq. km, and an extended continental shelf of nearly 50,000 sq. km. These endowments offer Pakistan a strategic gateway to harness the trillion-dollar potential of the Blue Economy for national growth and sustainable development.



At present, Pakistan's maritime sector contributes only 0.5% of GDP, despite its potential to exceed \$100 billion through targeted reforms and sustainable investment. Realizing this opportunity requires expanding shipping capacity, modernizing shipbuilding and repair facilities through public-private partnerships, and reviving the Gadani Ship Recycling Industry on green standards. Equally important is the modernization of fisheries and aquaculture through improved practices, value addition, and logistics efficiency, along with the responsible development of sectors such as seabed mining and coastal tourism. In this regard, NIMA commends the Ministry of Maritime Affairs for its proactive initiatives in undertaking targeted reforms, driving digital transformation, and enhancing Pakistan's shipping capacity by increasing the number of vessels in the national fleet.

The theme of this year's International Maritime Conference, “Harnessing Blue Economy Potential for Sustainable Development,” is thus both timely and forward-looking. NIMA remains dedicated to advancing research, innovation, and policy integration to steer Pakistan toward a resilient and inclusive maritime economy. Platforms like PIMEC and IMC are instrumental in promoting regional collaboration and strategic dialogue on sustainable ocean governance.

'Harnessing the Blue Economy is not merely an economic goal, it is a pathway to resilience, prosperity, and sustainable progress for generations to come'.

Sea the Future
PIMEC 2025

INTRODUCTION TO PIMEC 2025



The International Maritime Conference (IMC), held biennially under the banner of the Pakistan International Maritime Expo and Conference (PIMEC), serves as a premier forum for maritime dialogue in Pakistan. First convened in 2023, IMC brings together policymakers, naval leaders, industry experts, and academics to deliberate on emerging maritime challenges and opportunities within the framework of the Blue Economy. Organized by the Pakistan Navy in collaboration with the National Institute of Maritime Affairs (NIMA), IMC-2025 continues this tradition, providing a platform to exchange ideas, share best practices, and craft strategies for sustainable maritime growth and regional cooperation.



CONCEPT NOTE

The evolving maritime environment is being driven by economic priorities and regional competition. Long-term global prosperity is intrinsically linked to sustainable exploitation of marine resources within a secure and regulated environment. Over time, population growth has not only strained terrestrial reserves but has also burdened vast oceanic domains through unchecked and diversified exploitation. Oceanic strain coupled with degenerative effects of climate change is destabilizing marine ecosystems, triggering critical environmental challenges that demand anticipatory policies and preparedness to contain their impact.

Global shift towards sustainable use of ocean wealth has brought to fore Blue Economy in maritime discourse; an approach centered on cultivating maritime innovation through responsible ocean governance. While developed nations have leveraged Blue Economy for sustained growth, developing States are grappling with unemployment, food and economic insecurity challenges in aligning with UN Sustainable Development Goals (SDGs). To fully realize the promise of Blue Economy, developing countries must strengthen marine governance, prioritize scientific advancement, promote maritime learning and research, reinforce international best practices and foster collaboration across stakeholders through cohesive strategies.

Untapping Pakistan's maritime potential requires adoption of international best practices, strengthening regulatory frameworks and fostering collaboration across stakeholders. Areas such as marine biotechnology, smart port infrastructure, sustainable aquaculture, green shipping, international ship recycling standards and offshore energy offer significant economic prospects. Strengthening Blue Economy offers a path to economic diversification, food security, job creation and reduced dependency on land-based sectors.

In this context, the International Maritime Conference (IMC), organized under the banner of Pakistan International Maritime Expo and Conference (PIMEC), will serve as a forum to examine the unique constraints facing developing nations particularly Pakistan in adopting Blue Economy protocols. The discourse will focus on crafting action-centric, forward-looking strategies and identifying innovative pathways to unhinge economic potential in the maritime domain.

CONFERENCE DETAILS

The Pakistan Navy is set to host the Pakistan International Maritime Expo and Conference (PIMEC-2025) from 3 to 6 November, 2025 in Karachi. PIMEC is a flagship maritime event that brings together international stakeholders from naval forces, industry, academia and policy makers to deliberate on pressing maritime issues while showcasing Pakistan's growing potential as a maritime nation.

Within this framework, the International Maritime Conference (IMC-2025) will be held on November 4 and 5, 2025 organized by the Pakistan Navy in collaboration with the National Institute of Maritime Affairs (NIMA). Themed “*Harnessing Blue Economy Potential for Sustainable Development*,” IMC-25 reflects Pakistan's commitment to promoting responsible ocean governance and leveraging maritime resources for national and regional prosperity. Since its inception in 2007, the conference has emerged as a platform of global recognition bridging the gap between policy and practice.

The 2025 edition will feature a diverse array of participants including international delegates, maritime experts, industry leaders and scholars. Their collective engagement underscores the growing acknowledgment of Pakistan's pivotal role in shaping maritime discourse, especially in advancing the principles of the Blue Economy.

IMC-25 will highlight the urgent need to align economic growth with sustainability in the face of climate change, over-exploitation of marine resources and regional competition. By bringing together voices from both developed and developing nations, the conference will seek to evaluate best practices, share innovative solutions and foster partnerships aimed at unlocking the untapped potential of the seas.

The discussions will highlight vital themes such as , smart port infrastructure, green shipping, deep-sea mining sustainable aquaculture, marine biotechnology, offshore energy, and ship recycling standards. These emerging fields not only open new pathways for economic development but also foster employment, enhance food security, and lessen dependence on conventional land-based resources.

Admiral Naveed Ashraf NI NI (M), T Bt., Chief of the Naval Staff has emphasized importance of IMC-25 in advancing intellectual dialogue on the Blue Economy. By merging high-level policy discussions with the exhibition of cutting-edge maritime technologies, the event aims to create synergy between strategic thought and practical implementation enabling stakeholders to develop actionable frameworks.

As the conference unfolds, it is expected to provide a dynamic forum for evaluating constraints faced by developing nations, promoting collaborative research, strengthening marine governance and aligning with the UN Sustainable Development Goals (SDGs). In conclusion, IMC-2025, planned under the umbrella of PIMEC-2025, signifies Pakistan's vision of positioning itself as a responsible maritime nation. By uniting diverse global stakeholders, the event will not only highlight the immense potential of the Blue Economy but also strengthen Pakistan's role in driving sustainable prosperity through maritime innovation, regional cooperation and forward-looking strategies.

SESSION-WISE OVERVIEW OF IMC-25

Dr. Fasiha Safdar

The author is a Research Fellow at the National Institute of Maritime Affairs (NIMA).

Day 1

(4 Nov 2025)

Session I: Blue Economy – A Sustainable Pathway to Socio-Economic Uplift

The inaugural session will set the tone for the conference by emphasizing the immense potential of Pakistan's Blue Economy to contribute to national growth, employment, and regional integration. The discussions will revolve around how to mobilize finance, manage risks, and create enabling policy frameworks for investment in maritime sectors. Mr. M Kamran Nasir's keynote will highlight inclusive blue growth strategies, while national speakers such as Mr. Adnan Lodhi and Dr. Nadeem Javed will examine financing mechanisms and export-led maritime services. Dr. Hassan Daud Butt is expected to focus on transforming Pakistan into a regional transit hub by leveraging its coastline and strategic position, and Dr. Zainab Ahmed will bring in perspectives on public-private partnerships for integrated development. The session is expected to underline the need for institutional coordination, policy coherence, and sustainable resource management as foundations for a thriving blue economy.

Session II: Transformation of Maritime Industries to Reap the Dividends of Blue Economy

This panel discussion will explore how Pakistan's maritime industries shipbuilding, ship recycling, logistics, fisheries, and maritime services can evolve to meet global sustainability standards and benefit from the Blue Economy transition. The dialogue, moderated by Dr. Hassan Daud Butt, will include perspectives from both public and private sector leaders. Mr. Asif Ali Khan is likely to highlight progress and challenges in Green Ship Recycling at Gadani, while Rear Admiral Salman Ilyas HI(M) will discuss industrial modernization at Karachi Shipyard. Mr. Amer Bazl Khan will emphasize the integration of nature and culture in sustainable coastal tourism, using examples from the Indus Delta and Makran coasts. Dr. Shahid Aslam is expected to present on sustainable fisheries and aquaculture, and speaker Mr. Shahzad Saiyed will provide insights into international shipping and logistics best practices. Mr. Ammar Jaffri is expected to contribute to the discourse with his expertise in artificial intelligence and big data and shed light on the use of these technologies for maritime domain awareness, highlighting Pakistan's potential to build predictive surveillance systems. The discussion will conclude with a call for technology adoption, compliance with international conventions, and enhanced regional collaboration.

Day 2

(5 Nov 2025)

Session III: Maritime Security Challenges – Safeguarding Trade, Blue Economy and Global Connectivity

This session will address emerging maritime security threats and their implications for trade,

connectivity, and sustainable ocean use. Speakers will focus on how technology, governance, and climate resilience intersect in ensuring maritime safety. Mr. Saleh Al Jasser, Minister of Transport and Logistics Services, Kingdom of Saudi Arabia would present the case of KSA in promoting sustainable maritime technologies in maritime transport and logistics. Dr. Azhar Ahmad will explore how smart ocean technologies can support sustainable Blue Economy initiatives, while Dr. Nassar Ikram will focus on cybersecurity challenges facing maritime infrastructure. Mr. Arif Goheer will bring a climate science perspective, explaining how changing weather patterns, sea-level rise, and extreme events pose risks to coastal assets. Finally, Mr. Khalid Mehmood Shaikh will share lessons from post-flood recovery efforts in Sindh, emphasizing resilience-building. The session is expected to reinforce the link between maritime security, climate adaptation, and economic stability.

Session IV: Investment in Blue Economy – Opportunities for Sustainable Development and International Cooperation

The fourth session will spotlight investment opportunities and innovative technologies driving the sustainable use of ocean resources. The focus will be on attracting foreign investment and advancing technological partnerships for marine resource development. Mr. Jehanzaib Sikander will present on mapping Pakistan's deep-sea frontier using AI, robotics, and unmanned undersea vehicles showing how data-driven exploration can unlock mineral and biological resources responsibly. Shigeru Tanaka of the Deep-Sea Conservation Coalition will discuss balancing investment with marine environmental safeguards in deep-sea mining. Dr. Sardar Mohazzam will emphasize renewable ocean energy, highlighting the role of tides, currents, and offshore wind in Pakistan's clean energy mix. Dr. Arsalan A. Siddiqi will cover how emerging technologies and industrial innovation can transform blue industries. The session will likely conclude with an appeal for global cooperation, responsible investment, and capacity-building to ensure sustainable ocean governance.

Session V: Closing Session

The closing session will summarize key outcomes and reinforce the conference's policy direction. Keynotes by Dr. Zeng Xian Gian (Associate Prof. at Sichuan University, China) and Cdre Syed Misbah Uddin Ahmad (Retd), DG BIMRAD, Bangladesh, will offer regional perspectives, highlighting the role of industry and regional frameworks in promoting a resilient and inclusive Blue Economy. The conference recommendations, to be presented by Rear Admiral Javaid Iqbal HI(M), President NIMA, will consolidate the insights from all sessions, emphasizing actionable measures in areas such as investment facilitation, environmental compliance, maritime education, and regional cooperation. This session will mark the culmination of IMC-25 with a forward-looking agenda for sustainable maritime growth.

ARTICLES

MoMA's INITIATIVE FOR PAKISTAN'S PROPELLING/BOOSTING BLUE ECONOMY: A NEW HORIZON FOR GROWTH

Mr. Syed Kamran Hamid Hashmi

Mr. Kamran Hashmi with 40 years of professional experience, Mr. Kamran Hashmi is an expert on Geopolitics, Maritime Security, and Strategic Affairs. He has a keen interest in the Indian Ocean Region with deep insight into the dynamics of the Indo-Pacific Strategy and regional transformation due to cooperation agreements such as QUAD, I2U2, AUKUS, BECA, LEOMA, etc. Currently, he is associated with the National Institute of Maritime Affairs (NIMA) as a Senior Researcher.



Pakistan is blessed with over 1000 km of coastline and 290,000 sq km of sea area, yet the country has long failed to harness these valuable assets effectively. While maritime trade is critical for 91% of Pakistan's trade volume, its overall contribution to the GDP has remained disproportionately low. In the last few years Ministry of Maritime Affairs (MoMA) has played an important role in reinvigorating the Blue Economy of Pakistan, which includes use of modern technologies, implementation of new policies for ease of doing the business. The goal is to tap the maritime sector's potential to generate over \$100 billion annually and accordingly, national policies are being reviewed to achieve this goal. NIMA, in line with government directions, is undertaking efforts to mitigate sea-blindness across government institutions, academia, and media, while promoting maritime awareness. These concerted and synergized efforts will contribute to the realization of the true potential of the Blue Economy in Pakistan.

National Maritime Policy 25 is at the final stage of approval, which will be guideline for maritime stakeholders of Pakistan to harness true potential of maritime sector and to enhance its contribution in GDP. One of the main objectives of NMP 25 is to increase the number of ships in Pakistan National Shipping Corporation from 10 to 20 by the end of the year. The initiative is designed not only to cut sea freight bill and conserve foreign exchange, but also to support climate-smart maritime practices by strengthening a cleaner, more efficient domestic fleet. The recent induction of 2 AFRAMAX class tankers will further improve the lifting capacity of the PNSC.

To accrue the untapped potential of Blue Economy, modernization of commercial ports of Pakistan i.e., Karachi Port Trust, Port Muhammad Bin Qasim and Gwadar is being undertaken. In this regard in 2024 Pakistan Single Window & Port Community System (PSW) unveiled "PortVerse" (a national Port Community System) aimed at streamlining port operations and trade processes across stakeholders. It integrates stakeholders like shipping lines, terminal operators, and customs, providing real-time data, automating processes, and enabling better coordination and efficiency. PortVerse aims to reduce

delays, cut operational costs, enhance transparency, and improve Pakistan's competitiveness in global trade by unifying trade processes and data.

The second pillar of maritime sector in Pakistan is fisheries and aquaculture. Fisheries and Aquaculture play an important role in any country's economy. The trend is changing in the world, in 2023-24 aquaculture surpassing traditional fishing as the primary source of seafood production. Balochistan Fisheries and Aquaculture Policy 2025-2035 is the first of its kind for the province, approved by the Balochistan Provincial Cabinet in February 2025. It aims to promote sustainable fisheries and aquaculture, foster socio-economic growth through alternative livelihoods, and ensure responsible management of provincial resources. Key features include a ban on harmful practices like trawling, the establishment of the Balochistan Fisheries & Aquaculture Council, and a focus on improving governance, infrastructure, and enforcement. Similarly, National Fisheries and Aquaculture Policy (2025-2035) were released on July 9, 2025, to revitalize its underdeveloped fisheries sector by developing its marine and inland water resources, supporting sustainable economic growth, ensuring food security, and boosting seafood exports.

It is pertinent to note that Pakistan can now export fisheries product to the US for next four years. In FY 2024–25, seafood exports rose 11.4% to \$ 489.2 million, and with this approval, earnings could climb to nearly \$600 million next year, strengthening Pakistan's global seafood market position and supporting its blue economy. If these policies are implemented in a real spirit, Pakistan sea exports may rise to \$10 Bn. In this context, a 120-acre aquaculture park will be developed at Korangi Fish Harbor via a public-private partnership. The project, costing around Rs 3 billion, aims to yield 360–1,200 tonnes of annual seafood and will be a replicable model for Balochistan.

Balochistan is also hub of ship breaking and recycling in Pakistan. It was the biggest in the world in 1980s, Pakistan provided technical support to India and Bangladesh to establish their recycling. Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships is a global treaty that entered into force on 26 June 2025. It requires ships over 500 gross tons (GT) to maintain an Inventory of Hazardous Materials (IHM) and mandates that ships can only be recycled at facilities authorized by their competent authorities. Pakistan also ratified HKC for ship recycling on 30 Nov 2023. In July 2025, Pakistan's Economic Coordination Committee (ECC) formally recognized ship-breaking and recycling as an industry. This is a significant step aimed at modernizing and regulating a sector that has long been a major, but informal, part of the country's economy. In June 2025, Pakistan approved a Rs 12 billion plan to modernize the Gadani Ship-Breaking Yard into its first green ship-recycling facility, aligning with the Hong Kong Convention. The project includes waste treatment plants, safety and health upgrades, and community facilities. By mid-2026, around 31 green-compliant plots are expected to be operational, enabling Pakistan to attract international ship-recycling contracts. Due to International Maritime Organization (IMO) implementation of net-zero GHG emissions in steps like reduce emissions 30% by 2030, 80% by 2040 and reach full decarbonization by 2050. The countries are experimenting with making green shipping to reduce GHG emissions and it is expected that more than 15,000 ships will be recycled by 2032 and thereafter the number will be increased. The global ship recycling market was valued at \$7 billion in 2024 and will reach \$13 billion by 2030. The ship-recycling in Gadani supports

20,000–25,000 direct jobs and another 200,000–250,000 jobs indirectly, along with providing millions of tons of steel to the nation's other industries each year. Most of the small and medium industries in Gujrat and Gujranwala depend upon it, therefore revival of ship recycling industry is important for Pakistan.

In addition to these segments of maritime sector, Maritime Tourism is also a vital part. However, Maritime Tourism is almost nonexistence in Pakistan. MoMA brings it to limelight and recently a Pakistani company (Sea Keepers) got the license to operate ferry service between Karachi and Gwadar and later it will be expanded to Iran and Gulf countries. The new ferry service is expected to serve hundreds of thousands of tourists annually, particularly pilgrims traveling to Iran and Iraq, alongside workers and tourists bound for GCC states. Ferry service will alleviate pressure on land routes and reduce travel costs compared to air transport for the Pakistani diaspora and religious travelers, it will also lure other companies to operate ferry service in this route.

Notwithstanding the initiatives to enhance efficiency of existing maritime sectors, few other initiatives have also been undertaken by the Ministry. In mid-2025 the government announced the creation of a Pakistan Maritime Chamber of Commerce & Industry (MCCI) to unify all maritime sectors (ports, shipping, logistics, fisheries, marine services) under one forum. New MCCI (endorsed by the Pakistan Business Council and ship agent associations) is tasked with promoting investment, innovation and green technologies across ports and the Blue Economy.

Additionally, a new maritime corridor is being established between Pakistan and the East African Community, comprising eight countries – Burundi, Democratic Republic of Congo, Kenya, Rwanda, Somalia, South Sudan, Tanzania, and Uganda. This is home to more than 500 million people and a collective Gross Domestic Product (GDP) of approximately \$ 345 billion. The new maritime corridors will serve as a catalyst for enhancing bilateral trade relations between Pakistan and the EAC member states, which are undergoing rapid economic growth, present a substantial trade opportunity, particularly in agriculture, textiles, manufacturing, and technology sectors.

Furthermore, in August 2025, Pakistan offered 1,000 acres of land near Port Qasim to Chinese investors for the establishment of an Integrated Maritime Industrial Complex. The project will integrate shipbuilding, shipbreaking, repair, and recycling under one hub, using advanced robotic and technology-driven systems. It aims to revive Pakistan's declining Gadani shipbreaking industry, reduce dependence on imported ship-grade steel, and enable the construction of vessels seven to eight times larger than current capacity, with production timelines cut by 70%.

These initiatives collectively form a comprehensive strategy to leverage Pakistan's maritime sector as a core engine of economic growth, aligning with the national ambition of reaching a \$1 trillion GDP by 2035. By formally recognizing the ship-recycling industry, modernizing ports through digitization, implementing fisheries and aquaculture policy, and revitalizing the Karachi Shipyard, the government is systematically removing long-standing barriers to investment and operational efficiency. MoMA and NIMA are diligently working to revitalize the neglected maritime sector, a move poised to significantly boost Pakistan's economy.

PRESERVING THE DEPTHS: PAKISTAN'S JOURNEY TOWARD PROTECTING UNDERWATER CULTURAL HERITAGE

Dr. Aneela Khan

The author is a Research Fellow at the National Institute of Maritime Affairs (NIMA).

The oceans have always been silent witnesses to the rise and fall of civilisations. Beneath the water lie remnants of human history, including shipwrecks, submerged ports, ancient trade routes, and lost settlements, collectively known as Underwater Cultural Heritage (UCH). For Pakistan, a country blessed with a strategic coastline and a rich maritime history, the exploration and protection of its UCH present both a challenge and an opportunity.

Underwater Cultural Heritage (UCH) encompasses all traces of human existence that have remained partially or totally submerged in water for at least 100 years. These include ancient ports, shipwrecks, sunken cities, and archaeological remains. Recognising the importance of safeguarding such heritage, UNESCO adopted the 2001 Convention on the Protection of the Underwater Cultural Heritage. The Convention provides a legal and ethical framework for the preservation and management of underwater sites, emphasising research, protection, and public awareness over commercial exploitation. Pakistan, with its approximately 1,001 km long coastline along the north Arabian Sea and its proximity to historic maritime trade routes, holds immense potential for UCH exploration. From the ancient Indus Valley Civilisation to Islamic maritime trade, the waters off Karachi, Gwadar, Ormara, and Pasni possibly hold the promise of compelling revelations.



The region now known as Pakistan has a longstanding connection with the sea. The Indus River, one of the cradles of human civilisation, historically served as a vital artery linking inland cities like Mohenjo-Daro and Harappa to the Arabian Sea. Later, during the Islamic and colonial periods, the Makran coast became an essential link between the Middle East, Africa, and South Asia. Ports such as Banbhore (near modern Karachi) and Pasni were vibrant centres of trade, where goods, cultures, and ideas flowed. Banbhore, believed by some historians to be the ancient city of Debal, where Muhammad bin Qasim landed in 711 CE, holds immense archaeological value both on land and potentially underwater. The region's deep historical resonance suggests that Pakistan's coastal and offshore waters are likely to yield a wealth of submerged structures, shipwrecks, and artefacts of immense archaeological and cultural value.

Modern technologies, including satellite imagery, remote sensing, sonar imaging, and optical

Autonomous/Remotely Operated Vehicles (AUVs/ROVs), are radically reshaping the discipline of marine archaeology. These advanced tools enable researchers to explore and map underwater sites with remarkable precision and safety. Sonar imaging helps detect and visualise submerged structures. At the same time, remote sensing provides valuable environmental and spatial data. AUVs, operating independently, can access deep underwater areas, collecting high-resolution images and samples that were once impossible to obtain. Together, these innovations are unveiling new insights into our submerged cultural heritage.

Pakistan is currently in the process of ratifying the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage, a milestone officially announced in August 2025. In recent years, the country has taken significant steps toward aligning with international heritage protection standards. In October 2025, a National Consultation Workshop on the Convention was held in Islamabad, jointly organised by UNESCO Pakistan and the Department of Archaeology and Museums (DOAM). The event brought together policymakers, marine experts, and heritage professionals to deliberate on Pakistan's roadmap for effective management of Underwater Cultural Heritage (UCH). The National Institute of Maritime Affairs (NIMA), as a key stakeholder in policy formulation, emphasised the importance of initiating efforts to protect and preserve sunken vessels and crafts. Such preservation is vital, as further study of these sites can help determine the probable causes of their sinking. For instance, the Abasyn shipwreck near Karachi harbour is one of the worthwhile examples for underwater archaeological research.

Collaborative projects with countries with experience in UCH research, such as China, Italy, and Japan, could play a significant role in helping Pakistan establish a sustainable, modern underwater research infrastructure. These partnerships would not only provide access to advanced technologies, methodologies, and training but also foster knowledge exchange and capacity building for Pakistani researchers and institutions. Moreover, integrating emerging technologies such as Artificial Intelligence (AI) and Virtual Reality (VR) can significantly enhance the exploration, documentation, and preservation of underwater sites. AI-driven data analysis can help identify, classify, and interpret submerged artefacts with greater accuracy, while VR reconstructions can bring these hidden treasures to life through immersive digital experiences. Together, these innovations can transform Pakistan's underwater heritage into an interactive virtual diorama in maritime museums, promoting public awareness, tourism, and national pride in its maritime legacy.

The scope of Underwater Cultural Heritage in Pakistan is vast, untapped, and deeply intertwined with its cultural evolution. Exploring and protecting this heritage aligns perfectly with the country's broader vision of sustainable development and Blue Economy growth. Through scientific exploration, legislative action, and international cooperation, Pakistan can uncover a new chapter of its history beneath the waves. One that not only connects its ancient maritime heritage to a more informed future but also unlocks immense potential for cultural tourism, economic prosperity, and global recognition of its rich coastal civilisations.

NAVIGATING UNCHARTED WATERS: HOW MODERN TECHNOLOGY IS RESHAPING MARITIME LAW AND THE RULES OF WAR

Cdre Raheel Masood SI(M) (Retd)

The author is a Senior Research Fellow at the National Institute of Maritime Affairs (NIMA).

We live in extraordinary times. Emerging technologies seemed like science fiction just a few decades ago. Autonomous vessels navigating without crews, artificial intelligence making split-second battlefield decisions, and cyber weapons that can cripple a country's nervous system without firing a shot, are now a reality. These innovations are fundamentally changing how we think about warfare, security, and the laws that govern both.

For centuries, international law has provided the guardrails for human conflict and maritime conduct. These rules, painstakingly developed through treaties, conventions, and painful lessons from past wars, have helped maintain some semblance of order in an often chaotic world. But today, these legal frameworks face their most significant test yet: can rules written for a world of sailors and soldiers adapt to an age of algorithms and autonomy?



The Ocean's Legal Foundation Under Pressure

The United Nations Convention on the Law of the Sea (UNCLOS) has served as the constitution of the oceans since 1982. It carefully delineates who controls what waters, how ships should behave, who can extract resources, and how we should protect the marine environment. For decades, this framework worked reasonably well. But consider a ghost ship, a massive cargo vessel crossing the Pacific with no crew aboard, guided entirely by artificial intelligence and satellite navigation. Who is responsible when something goes wrong? Traditional maritime law assumes there's a captain making decisions, a crew carrying out orders, and a transparent chain of command. When machines replace humans in the decision-making loop, these assumptions collapse.

The challenges multiply underwater. Unmanned underwater vehicles now prowl the depths, conducting surveillance, mapping the seabed, and even potentially laying mines or conducting some clandestine operations. All without a human hand on the controls. Are these civilian research vessels or military assets? The distinction matters enormously under international law, but the technology has blurred the defining merits beyond recognition. Then there's the silent threat: cyberattacks. Imagine a sophisticated hack that disrupts or shuts down a major port's operations, disrupts global shipping routes, or manipulates navigation systems to cause collisions. This is not just merely hypothetical. Such attacks have already occurred. But

here's the legal puzzle: does a cyberattack that causes massive economic damage and endangers lives constitute an "armed attack" under international law? Can a nation invoke its right to self-defense against lines of computer code? These are not abstract questions. They are urgent dilemmas facing policymakers today and warranting redressal.

When Machines Go to War

The Laws of Armed Conflict (LoAC), also known as International Humanitarian Law (IHL), rest on principles forged in the crucible of human experience with war's horrors. Four fundamental ideas anchor everything: **distinction** (separating combatants from civilians), **proportionality** (ensuring attacks are not excessive relative to military advantage), **necessity** (using only the force required), and **humanity** (avoiding unnecessary suffering). These principles assume human judgment at critical moments. But what happens when we delegate lethal decisions to machines?

Autonomous Weapons Systems (AWS) represent the most profound challenge. Picture a drone that can identify, track, and kill targets without human intervention. It processes information faster than any person could, never gets tired, and feels no fear or hesitation. Sounds efficient, right? But can it truly distinguish between a farmer carrying a shovel and a soldier carrying a rifle? Can it weigh the military value of destroying a target against the risk of civilian casualties nearby? Can it recognise when someone is surrendering?

More troubling still: when an autonomous weapon makes a tragic mistake and kills innocent people, who bears responsibility? The engineer who designed the algorithm? The programmer who wrote the code? The commander who deployed it? The political leader who authorised its use? Our legal systems are built around human accountability, and autonomous weapons scramble that entire framework.

The war in Ukraine has become an unwitting laboratory for these dilemmas. Cyberattacks have targeted SCADA (Supervisory Control and Data Acquisition) systems used to monitor and control power grids, water systems, and communication networks. SCADA systems remain integral to maritime operations, controlling port management, ship engines, offshore platforms, and traffic management. Modern SCADA has evolved through cloud integration, IoT connectivity, and AI-driven predictive maintenance analytics. However, increased interconnectedness has amplified vulnerability to cyber threats, making maritime infrastructure particularly susceptible to sophisticated digital attacks.

Drones of all sizes fill the skies. AI assists in target selection and battlefield planning. Each innovation raises fresh legal questions about what constitutes legitimate warfare and where the boundaries lie. Cyber warfare presents its own labyrinth of legal challenges. A sophisticated cyberattack could shut down a hospital's power supply, disable air traffic control systems, or manipulate industrial facilities to cause catastrophic failures. Such attacks might kill people without explosions or bullets. Does existing law adequately address these scenarios? The Tallinn Manual (a scholarly attempt to apply traditional laws of war to

cyberspace) offers guidance, but it is non-binding, and consensus remains elusive.

Consider a specific scenario. A military cyberattack targets an enemy's air defence network but inadvertently causes widespread power outages, shutting down hospitals. Patients on life support writhe to death. Does this violate the principle of distinction, which requires protecting civilians? Was the attack proportionate? These questions have no easy answers.

Protecting Humanity in High-Tech Conflicts

International Humanitarian Law (IHL) exists to preserve human dignity even amid war's chaos. It protects civilians, requires humane treatment of prisoners, mandates care for the wounded, and prohibits the use of ferocious weapons. But emerging technologies are testing these protections in unprecedented ways and evolving to be stealthier, more lethal, and more punitive.

Armed drones have revolutionised warfare, allowing countries to strike targets thousands of miles away while operators sit in remote, conditioned and protected control rooms. Proponents argue that drones can be more precise than traditional weapons, reducing civilian casualties. Critics point to the blatant, ruthless reality. Numerous documented cases of drone strikes hitting weddings, funerals, and family gatherings have been observed. The technology may be precise, but intelligence is often imperfect. If not, then they remain intentional.

There is also the psychological dimension. Communities living under persistent drone surveillance describe the experience as psychological anguish. Never knowing when death might rain from a cloudless sky. Children develop anxiety disorders. Every day life chores become impossible. Does this constitute inhumane treatment under international law? Either we do not yet have clear answers, or we deliberately adopt an ostrich approach.

Now imagine "Swarm Drones". Dozens or hundreds of small drones operating as a collective, sharing information and coordinating attacks without human direction. If such a swarm makes a catastrophic mistake, how do we assign responsibility? How do we ensure compliance with humanitarian law when decision-making is distributed across a network of machines?

Then there is "Information Warfare" and the rise of "Deepfakes". AI-generated videos and audio are so convincing that they are virtually indistinguishable from reality. Imagine deepfake videos of atrocities that never occurred, or fake surrender announcements from military leaders, or fabricated evidence of war crimes. Such deceptions could incite violence, undermine peace negotiations, or poison international relations. Traditional humanitarian law does not directly address information manipulation, yet its effects can be as devastating as conventional weapons. Looking ahead, human enhancement technologies pose even stranger questions. Imagine soldiers with neural implants that enhance cognitive processing, exoskeletons that multiply physical strength, or genetic modifications that improve endurance. If such enhanced individuals are captured, how should they be treated? Are they still covered by protections for

prisoners of war? Could an arms race in human enhancement spiral out of control, with nations competing to create super-soldiers?

The recent Gaza conflict starkly illustrates how advanced technology intersects with humanitarian law's core principles. Despite sophisticated surveillance and precision-guided weapons, civilian casualties have been horrific. This raises serious questions: when states possess technology capable of great precision, does the high number of civilian casualties suggest violations of distinction and proportionality? Or does it reveal the limitations of technology in densely populated urban warfare? These questions go to the heart of whether humanitarian law can remain meaningful in an era of high-tech conflict.

Bridging the Gap Between Technology and Law

Legal experts broadly agree that existing international law continues to apply to new technologies. The principles remain sound; the challenge lies in interpretation and application. The Martens Clause (a provision of humanitarian law stating that even situations not explicitly covered by treaties should be judged according to the principles of humanity and public conscience) provides a safety net for novel scenarios.

But we need more than principles; we need practical mechanisms. Several initiatives are underway. The United Nations has convened expert groups to examine lethal autonomous weapons. The Tallinn Manual provides scholarly guidance on cyber operations. Various international forums debate how to apply existing law to new technologies. Yet progress is frustratingly slow, hampered by geopolitical divisions and divergent national interests. Technologically advanced countries often resist restrictions on emerging capabilities they have invested heavily in developing. Less advanced countries worry about being left behind in a high-tech arms race. These tensions obstruct the consensus needed for new treaties or protocols.

We need several things urgently. First, there is a need for enhanced transparency. Countries should be more open about their military AI capabilities and the safeguards they employ. Second, rigorous legal review processes for new weapons and technologies, ensuring compliance with humanitarian law before deployment. Third, mechanisms for accountability when things go wrong. Fourth, international dialogue that brings together not just diplomats and generals, but also technologists, ethicists, and civil society.

Pakistan's maritime context makes these issues particularly relevant. With over 1,000 kilometres of coastline, a vast Exclusive Economic Zone, and a strategic location at the crossroads of major sea lanes, Pakistan must navigate both the opportunities and challenges of maritime technology.

The Road Ahead

Technology will continue advancing at breathtaking speed. Artificial intelligence will grow more sophisticated. Autonomous systems will proliferate. Cyber capabilities will expand. Quantum computing may soon revolutionise encryption and communications. We cannot stop this march of innovation, nor

should we try. Technology offers immense potential benefits, but only if channelled with a particular code of ethics. We can and must ensure that innovation serves humanity rather than endangers it. This requires reaffirming our commitment to the fundamental principles that underlie international law: respect for human dignity, protection of the innocent, accountability for wrongdoing, and the conviction that even in war, some things remain impermissible.

The path forward demands several commitments. We must adapt our legal frameworks through thoughtful interpretation and, where necessary, by entering into new agreements. We must foster serious dialogue across borders and disciplines. We must insist on transparency and accountability from those developing and deploying powerful new technologies. We must educate the next generation of military leadership, policymakers, and citizens about these challenges.

Most importantly, we must remember that laws and principles exist not as abstract concepts but as practical safeguards for real people. The civilians caught in conflicts they did not start, the sailors navigating increasingly complex legal waters, the communities living under the shadow of new weapons. Their safety and dignity must remain our paramount concern.

The technologies reshaping warfare and maritime affairs offer both promise and peril. By advocating our response in enduring principles while remaining flexible enough to address novel challenges, we can navigate these uncharted waters successfully. Allowing technology to outpace our moral and legal frameworks is simply unacceptable. The stakes are simply too high, and the consequences of failure too devastating to contemplate. Getting this right is not optional. It is imperative for our collective future and the generations to come.



PAKISTAN'S BLUE ECONOMY: UNLOCKING PROSPERITY FROM THE SEAS

Cdre M Irfan Taj SI(M) (Retd) and Mr. Moshin H Lodhi

Pakistan's economic imagination has historically been shaped by its rivers, agriculture, and land based trade corridors. Yet the future of our growth, resilience, and global integration lies in the seas. With over 1,000 kilometers of coastline and an Exclusive Economic Zone of 240,000 square kilometers, extended by an additional 50,000 square kilometers after the 2015 United Nations Commission on the Limits of the Continental Shelf decision, Pakistan's maritime domain is far larger and richer than its policy priorities suggest. The concept of the Blue Economy, often described as the sustainable use of ocean resources for economic growth and improved livelihoods while preserving marine ecosystems, must now move from rhetoric to reality in Pakistan.



Renowned global thought leaders in the field, such as Gunter Pauli, have also emphasized this perspective. In his book “The Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs”, he argue that oceans should no longer be seen as a backdrop to trade and fisheries but as a dynamic source of innovation, sustainability, and job creation. He emphasizes that the Blue Economy is not just about exploiting marine resources but about creating systems that are regenerative, inclusive, and future-proof. For Pakistan, where economic challenges are deeply tied to limited exports, a growing debt burden, and vulnerability to climate shocks, this philosophy carries profound relevance.

Pertinent to note that around 95 percent of Pakistan's international trade by volume moves through seaports, with Karachi Port, Port Qasim, and Gwadar forming the backbone of this network; like an island nation. However, inefficiencies in port handling, outdated shipping fleets, and limited connectivity reduce competitiveness and increase costs. At a time when global supply chains are reconfiguring due to geopolitical tensions, Pakistan could position itself as a strategic logistics hub linking South Asia, Central Asia, and the Middle East. But this requires investment in modern port infrastructure, streamlined regulations, and a national shipping strategy that goes beyond dependence on foreign carriers.

Fisheries present another clear example of untapped potential. Pakistan's annual fish exports hover around 430 million dollars, but this figure represents a fraction of what could be achieved with better regulation, cold storage, and aquaculture development. Countries like Vietnam, with smaller coastlines but advanced aquaculture, generate seafood exports exceeding 8 billion dollars annually. By introducing modern fishing techniques, enforcing sustainable practices, and developing fish processing industries in coastal areas, Pakistan could multiply its earnings while safeguarding marine biodiversity.

Equally important is the frontier of renewable energy and climate resilience. Offshore wind and tidal energy are technologies being harnessed worldwide to combat carbon dependence. Pakistan's coastal

regions, particularly Sindh and Balochistan, offer significant potential for such projects, which could complement national energy security. Marine biotechnology, another emerging area of the Blue Economy, holds promise for pharmaceuticals, cosmetics, and food industries. The ocean is a living laboratory, and those who invest in research today will reap economic and strategic rewards tomorrow.

Yet, perhaps the greatest challenge is not the absence of resources, but the absence of vision. Maritime awareness remains low in Pakistan, confined largely to professionals in shipping and naval circles. The wider policy discourse, academia, and even business communities have yet to fully grasp the centrality of the seas to national development. Countries such as Norway, Singapore, and even smaller island states have built prosperity by integrating ocean-based strategies into national planning. Pakistan must adopt a similar whole of nation approach, anchored in a National Blue Economy Policy that defines objectives, sets measurable targets, and provides the enabling environment for public-private partnerships.

The Blue Economy is not an abstract ideal. It is a pathway to economic diversification, employment generation, and sustainable development. For Pakistan, it is also a matter of sovereignty. If we fail to harness and secure our maritime wealth, others will shape the region's seaborne trade, fisheries, and marine science to their advantage. If we succeed, however, the Arabian Sea can be more than just a geographical boundary; it can be the launchpad of a more prosperous, resilient, and self-reliant Pakistan.

As a parting note, a powerful reminder from Gunter Pauli resonates with the Pakistani nation and its policymakers: "The Blue Economy is about seeing opportunities where others see limitations." The key takeaway for readers is clear — the opportunities are immense, the need is urgent, and the time to act is now.



BLUE ECONOMY: PAKISTAN'S MARITIME FUTURE

Mr. Waliullah Masroor

The author is an Assistant Professor, at Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), Balochistan.

Blue Economy emerged as a transformative model considering ocean resources with sustainable development, economic growth, and biodiversity conservation. For a maritime nation like Pakistan, with over 1,000 km of coastline along the Arabian Sea. Pakistan with an Exclusive Economic Zone (EEZ) of 240,000 square kilometers and extended continental shelf rights giving an additional opportunity of 50,000 square kilometers. With all these statistics the potential of the Blue Economy of Pakistan is vast but largely underutilized. Harnessing this potential requires strategic planning, institutional reforms, and innovative approaches to balance economic opportunities but with the attention of environmental sustainability is very important.



Understanding the Blue Economy, which encompasses all economic activities linked to oceans, seas, and coastal resources. These include traditional sectors such as fisheries, shipping, ports, and domestic trade. However, alongside the traditional sectors emerging opportunities like marine biotechnology, renewable ocean energy, coastal tourism, carbon trading, and climate change mitigation services are supporting Blue Economy in a modern style. Significantly, the Blue Economy emphasizes sustainability, ensuring that marine ecosystems are preserved while supporting socioeconomic benefits for present and future generations.

For Pakistan, where a large portion of the population depends on agriculture, fisheries, and coastal livelihoods, the Blue Economy is not merely an opportunity, but it is a strategic necessity. Along this opportunity the coast of Balochistan is a major player which can shift struggling country's economy to well sound and strong economy. Understanding the marine sector of Pakistan that is anchored around its major ports: Karachi Port, Port Qasim, and Gwadar Port. Currently, Karachi and Port Qasim handle almost 95% of the country's trade, making maritime transport the backbone of Pakistan's external economic relations. Gwadar, as part of the China-Pakistan Economic Corridor (CPEC), has the potential to emerge as a regional transshipment hub linking Central Asia, the Middle East, and Africa. The fisheries sector, employing around 390,000 people directly and 400,000 indirectly, contributes to national food security and export earnings. However, overfishing, habitat degradation, and lack of modern infrastructure limit its full potential. For example, the shipbreaking industry in Gadani which is known among one of the world's largest, with concern from ocean savers that it is contributing to pollution, and threatening marine life.

Despite these activities, Pakistan's contribution from the maritime sector to GDP is less than 1%, compared to the global average of around 5%. This reflects underutilization and poor governance of marine resources management.

Opportunities in the Blue Economy. Sustainable fisheries management and expansion of aquaculture can significantly enhance food security and exports. Balochistan's coastline offers rich fishing grounds that can be ruled through modern gear, cold chain infrastructure, and fish processing facilities. Aquaculture, particularly shrimp and sea bass farming, has strong export potential if backed by subsidized project, scientific research and quality standards.

The development of shipping and ports which are already contributing 95% of Pakistan's trade transported by sea, efficiency in shipping and logistics is central to support economic growth. Expanding Gwadar Port and modernizing existing ports can transform Pakistan into a regional maritime hub. Gwadar Port needs to be connected with railway to other metropolitan cities of country. Development of dry ports, ship repair facilities, and integrated logistics parks can further strengthen maritime commerce.

Pakistan's Makran coast, with beaches like Ormara and Kund Malir, holds great potential for eco-tourism. Investments in marinas, resorts, and cruise services can attract both domestic and international tourists, provided security, infrastructure, and environmental safeguards are ensured. However, Kartarpur model also could be introduced for Hinglaj Matta (Nani Mandir), I believe this has more eco-tourism attraction than Kartarpur because of the location.

The Arabian Sea offers opportunities for offshore wind and tidal energy projects. With Pakistan's rising energy demand, investment in marine renewables can diversify energy supply while reducing carbon emissions. Despite all these opportunities we have significant challenges to Blue Economy in Pakistan. Fragmented responsibilities across ministries (maritime affairs, fisheries, environment, provincial governments) lead to policy incoherence. The good news is that Pakistan National Fisheries and Aquaculture Policy is ready. Similarly, Balochistan has already prepared fisheries policy and Act.

The second most challenge is overexploitation and Pollution. Overfishing, untreated industrial effluents, and plastic pollution threaten marine biodiversity. Appreciably, Ministry of Climate Change has taken this challenge seriously and it is in the process of recruiting experts to address this challenge with the following way forwards;

- a. A unified National Maritime Policy should be implemented, integrating fisheries, shipping, energy, and environmental management under a coordinated framework. Strengthening the Ministry of Maritime Affairs with cross-sectoral authority will enhance governance.
- b. Our fisheries resources need to be managed properly. For this purpose, Introduction of catch quotas, vessel monitoring systems, and licensing reforms are inevitable. Promote aquaculture through subsidies, technical training, and export certification.

bodies. Invest in oceanographic surveys, fisheries pressure data, biotechnology labs, and climate monitoring systems.

- d. Leverage platforms such as United Nations Convention on the Law of the Sea (UNCLOS), Convention on Biological Diversity (CBD), and the Indian Ocean Rim Association (IORA) for regional cooperation. Seek investments through Blue Bonds and climate funds for sustainable marine projects.
- e. Finally, Gwadar should be developed not just as a port, but as a Blue Economy hub. This port should be equipped with housing fisheries processing zones, maritime training institutes, and renewable energy projects.

Pakistan's future prosperity is closely linked to its maritime industry. The Blue Economy gives us an opportunity to sustainable growth by integrating trade, food security, energy, climate resilience, and innovation. However, realizing this potential requires visionary leadership, scientific research, community participation, and institutional reforms. If properly addressed, Pakistan's maritime future can shift the country from a land-centric economy to a balanced land-sea economic power, securing livelihoods, strengthening resilience, and positioning Pakistan as a key player in the regional and global maritime landscape.



PAKISTAN, INTERNATIONAL COMMITMENTS, AND THE PROMISE OF THE BLUE ECONOMY

Ms. Ifrah Naseem Malik

The author is a Senior Environmental Officer at WWF, Pakistan.

The present decade has been declared as the United Nations Decade of Ocean Science for Sustainable Development (2021–2030). It would be absolutely correct to say that oceans generate goods and services that sustain all life functions. If one were to put a value to these services, the estimate is around 2.5 trillion US dollars annually, making the ocean the seventh largest economy in the world (Reviving the Ocean Economy Report, WWF). Yet Pakistan, with its 1,000 kilometres of coastline and an Exclusive Economic Zone (EEZ) of 240,000 square kilometres, extended by 50,000 square kilometres under UNCLOS has immense but underutilized potential.

The National Maritime Policy 2025 is therefore a timely blueprint. By placing sustainable livelihoods, research, and biodiversity conservation at the forefront, it provides the strategic direction needed to unlock Pakistan's Blue Economy. Yet the success of this policy depends on how effectively Pakistan aligns its national agenda with its international commitments, ensuring that obligations become enablers of opportunity.

Under the United Nations Convention on the Law of the Sea (UNCLOS), Pakistan has both sovereignty and responsibility in managing marine resources. Article 61(3) obligates states to maintain harvested species at levels of maximum sustainable yield while considering the needs of fishing communities. For Pakistan, where fisheries provide direct and indirect livelihoods for nearly a million people, generating over USD 400 million in exports annually (PBS 2023-2024), honoring this obligation is not optional it is a pathway to prosperity.

The Rio Conventions: the United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (CBD), and United Nations Convention to Combat Desertification (UNCCD) further align Pakistan with global priorities. The Kunming Montreal Global Biodiversity Framework strengthens this vision with clear targets to expand Marine Protected Areas to 30%, restoring critical marine habitats, reduce marine pollution, and ensure fair sharing of ocean resources. Pakistan's National Biodiversity Strategy and Action Plan (2017–2030), although originally framed around the Aichi Biodiversity Targets and now being realigned with the 2030 Kunming Montreal Global Biodiversity Framework, focuses on halting biodiversity loss, restoring ecosystems, and using resources sustainably. It sets 20 national targets that include awareness, habitat protection, species recovery, and sustainable practices. A key priority is the blue economy, with emphasis on conserving marine and coastal areas, promoting sustainable fisheries and aquaculture, restoring habitats, reducing marine pollution, and ensuring fair sharing of ocean resources for climate resilience and livelihoods.

Furthermore, Pakistan's Nationally Determined Contributions (2021) prioritize expanding coastal



areas under protection through the establishment of new Marine Protected Areas and the designation of extensive no-take zones, thereby strengthening biodiversity conservation while also supporting local fisheries and promoting eco-tourism livelihoods.

The Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat provides another practical example of where global commitments deliver local value. Wetlands such as mangroves and estuaries sustain fisheries, regulate aquaculture, and support eco-tourism. A 2016 Mangroves for the Future (MFF) study valued Indus Delta mangroves at USD 20 million per year for fisheries alone, and over USD 100 million annually when factoring in shoreline protection, fuelwood, grazing, and carbon storage. These figures demonstrate that honoring Ramsar's principles is not a conservation need but an economic opportunity.

Lastly, conventions such as Convention on the Conservation of Migratory Species of Wild Animals (CMS) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) ensure the protection of migratory species and regulate trade in sensitive marine species and resources that hold both ecological and economic importance. At the national level, beyond the National Maritime Policy, instruments such as the Climate Change Policy (2021), the National Environment Policy (2005) and broader provincial frameworks reinforce sustainable resource use, the designation of Marine Protected Areas, and the development of Natural Capital Accounting (NCA) systems for coastal, ecotourism, and marine ecosystems to better quantify benefits and guide management. Their effectiveness, however, depends on staying closely aligned with the international commitments that Pakistan has undertaken.

It remains clear that for Pakistan, the blue economy will only succeed if international commitments are translated into practice and kept in alignment with national policy. This alignment ensures that fisheries remain sustainable, coastal ecosystems resilient, and marine opportunities economically viable. Pakistan is beginning to shift its perspective, recognizing that conventions are not mere obligations but strategic tools for national gain.

“With the National Maritime Policy 2025 as a guiding framework, and international commitments as anchors, Pakistan's maritime future can become both a frontier of conservation and a driver of national prosperity.”

THE ROLE OF BUSINESS IN BUILDING PAKISTAN'S BLUE ECONOMY

Ms. Khola Junaid

The author is a researcher currently employed at Oxford Policy Management as a research intern and a student of National Defence University, Islamabad, Pakistan. Her areas of interest include strategic studies, maritime security, sustainable economic development, and the evolving role of the business community in advancing Pakistan's blue economy.

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Pakistan's vast marine resources remain largely untapped. With about 1,000 km of coastline and an Exclusive Economic Zone of roughly 240,000–290,000 km², Pakistan is strategically positioned for a thriving blue economy. Over 90% of the country's trade (including oil and coal) flows by sea, yet today the maritime sector contributes only a fraction of GDP. For example, ocean-derived income is about \$300–450 million annually (≈ 0.1 – 0.4% of GDP). Seafood exports in 2021 were just \$239 million, though China alone imported \$247 million in Pakistani seafood by 2023. These figures contrast sharply with the potential: experts estimate Pakistan could generate several billion dollars and unlock a \$100+ billion ocean-economy opportunity. This introduction sets the stage: Pakistan's marine sector could drive growth, and the business community must lead this transformation. Innovative Business Models and Market Creation

Entrepreneurs and firms are introducing new blue-economy models, especially in fisheries and aquaculture. For example, super-intensive shrimp farming is turning Pakistan's saline coastal lands into “blue gold.” In Sindh's Dhabeji area, private companies (including Al-Karam Group's Dhabeji Aqua Foods) operate large RAS (Recirculating Aquaculture System) shrimp farms. These projects use advanced technology to achieve year-round yields on otherwise unproductive land. By reusing water and controlling conditions, farmers can raise shrimp at much higher densities with minimal ecological impact. This not only generates rural jobs but also builds export capacity: Dhabeji Aqua Foods' 400-acre farm includes an on-site processing plant to supply international markets.

- **Aquaculture clusters:** These efforts are spawning clusters of aggrotech startups and impact investors in coastal zones. In Dhabeji, entrepreneurs are pioneering automation and IoT farm monitoring to boost efficiency. Such ventures reclaim saline land, increase productivity, and deepen technical know-how in local communities.
- **Value-added processing:** Pakistani businesses are also creating new markets by moving beyond raw catch. For instance, seafood processors are targeting high-value markets in China, the Middle East and Europe. In 2023 China imported \$247M of Pakistani seafood, and companies are seeking to meet global food-safety standards (EU-approved facilities) to further diversify exports. Industry analysts note that adding value (e.g. ready-to-cook products) could double or triple export earnings, as seen in India and Vietnam.

- **Tourism and services:** On the coast, businesses are exploring eco-tourism and marine leisure. The pristine beaches of Balochistan, for example, could host private hotels and tour projects. Experts urge public-private partnerships to develop tourism infrastructure responsibly. Gwadar Port's deep waters (7 million tonnes capacity) have already attracted proposals for hospitality and logistics ventures, envisioning it as a regional business hub. While government planning is needed, companies can create marine services (ferrying tourists, dive centers, coast-friendly resorts) that tap into the estimated \$1–2 billion annual potential of maritime tourism.

In a nutshell, Pakistani businesses are pioneering innovative blue-economy models – from high-tech shrimp farms to export-oriented fisheries – thereby opening new markets and value chains.

Sustainable Resource Management and Corporate Social Responsibility (CSR)

Sustainability is central to the blue economy, and many corporations are investing in marine resource stewardship. By adopting responsible practices and supporting communities, businesses can ensure long-term productivity of the oceans. Key examples include:

- **Corporate Fisheries Programs:** Engro Corporation and its foundation exemplify CSR in fisheries. In partnership with WWF-Pakistan, Engro Foundation launched the Sustainable Fisheries Entrepreneurship project in Karachi coastal villages. Since 2016, this initiative has trained thousands of small-scale fishers in better fishing methods and alternative livelihoods. Such programs improve income for fishers while promoting catch conservation. Engro's engagement shows how industry can rebuild trust with fishing communities and embed sustainability (e.g. enforcing no-take zones, using selective nets).
- **Community Infrastructure:** Industry experts have called for businesses to help modernize fishing infrastructure. Recent seminars (e.g. WWF-Pakistan forums) highlighted the need for new fishing jetties with modern processing and safety facilities, financed partly by private sector or PPPs. Upgrading harbors and cold chains would cut post-harvest losses and make fisheries more profitable, especially for artisanal fishers. For instance, the Karachi



Fish Harbour is undergoing a Rs1.5 billion rehabilitation (water supply, drainage, electrification) with stakeholder input. Business participation through investment or management can accelerate such projects.

- **Environmental stewardship:** Several companies are planting mangroves and cleaning coasts as part of CSR. While detailed cases are few, some textile and energy firms report mangrove afforestation in Sindh and beach cleanups in Karachi as eco-CSR efforts. These activities not only restore fish nursery habitats but also signal corporate commitment to a healthy marine ecosystem.

Through CSR and sustainable practices, the business community can protect marine resources while growing. WWF experts emphasize that involving local fishers in management (e.g., community quotas, cooperatives) and enforcing regulations require industry-led awareness programs. In effect, companies are being called to partner with government agencies in “co-management” of fisheries, ensuring that growth does not deplete the resource base.

Skills, Human Capital and Technology Investment

The blue economy's success depends on skilled workers and technology. Businesses are investing in human capital to meet this need:

- **Technical training:** The expansion of shrimp and aquaculture farms directly creates a demand for trained workers. As one analysis notes, developing shrimp farming clusters can “train local workers in aquaculture technologies” and create climate-resilient jobs. In Dhabeji, new farms employ village youth for pond operations, feed management, and quality control, effectively building a labor force versed in modern RAS methods. Likewise, companies like AquaHatch are not only producing shrimp seed but also advising small growers, transferring skills in breeding and farm management. Private hatcheries thus serve as training hubs that de-risk the entry of new farmers.
- **Research and innovation:** Private sector R&D is emerging in blue sectors. For example, Karachi Shipyard & Engineering Works (a state-owned firm working commercially) has built over 500 vessels since 1955, including naval and merchant. Such shipbuilding projects develop local engineering talent and maritime expertise. Similarly, PNSC's push to upgrade its fleet (12 modern vessels) is spurring training in logistics and navigation. In the IT sphere, Pakistani startups are exploring IoT sensors and data platforms for marine health monitoring and fishing forecasts innovations that require software engineers and marine scientists, often working with entrepreneurs.
- **Academic partnerships:** While less documented, some private companies sponsor internships and scholarships in maritime institutes. The industry's growing interest in technology has also led to short courses on aquaculture for fishers (often run by NGOs like WWF with corporate backing). Over time, businesses can deepen engagement by funding university research or in-house training programs for port, shipping, and fisheries professionals.

Investment in skills and technology ensures that Pakistan's workforce can operate and maintain

advanced maritime projects. Already, the shrimp aquaculture boom promises thousands of new jobs in Sindh's rural areas. By coupling on-the-job training with modern tools, businesses help build human capital that will drive the blue economy.

Collaboration and Policy Engagement

The business community is also engaging in policy dialogue and public-private partnerships to create an enabling environment:

- **Public-Private Partnerships (PPPs):** Companies are partnering with government on major blue projects. A high-profile example is the UAE's AD Ports Group: in 2025 it opened an Islamabad office and pledged \$250 million to develop a Karachi port facility over the next decade. This investment, facilitated by MOUs with Pakistan, reflects how international business can co-create port infrastructure. Domestically, firms have participated in the Gwadar Port development under CPEC, building hotels, utilities and logistics hubs through joint ventures. Similarly, private concessionaires operate and expand infrastructure at Port Qasim and KPT terminals, blending private efficiency with public ownership.
- **Financial incentives:** Industry has advocated fiscal measures to boost blue sectors. In 2019 Pakistan amended its Merchant Marine Policy to attract shipping operators: resident ship-owners now enjoy up to 11 years of tax exemptions (no customs duty or income tax) and guaranteed berthing priority. Such incentives were lobbied by business groups to increase Pakistani-flagged tonnage. At the smaller scale, the government has directed agencies like the Small and Medium Enterprises Development Authority (SMEDA) to offer loans and training for "blue economy" startups. These programs aim to de-risk investment in maritime SMEs.
- **Industry associations and think tanks:** The private sector is active in blue economy forums. Groups like the Pakistan Business Council (PBC) and Karachi-based chambers publish reports and policy briefs on fisheries and aquaculture. Business representatives have joined government working groups (e.g. on the National Maritime Policy) and international conferences (AMAN). Their input helps shape regulatory structures, such as harmonizing fishing laws or streamlining port customs. Collaboration with academic and research institutions (NIMA, NIO Karachi, local universities) is also encouraged to map resources and train personnel, following expert recommendations.

Through dialogue and joint planning, businesses help refine governance for the blue economy. For instance, industry feedback influenced maritime strategy documents and budget allocations. When the federal budget (2023–24) prioritized aquaculture and provided technical grants for Gwadar, it was after consultations with private stakeholders who highlighted these needs. Such multi-stakeholder engagement – a hallmark of blue economy theory – ensures that policies and financial systems support sustainable marine ventures.

Current Progress, Gaps and Recommendations

There are encouraging signs of business engagement, but much work remains. Progress

FY24–25, reflecting rising trade volumes. Karachi Port's container throughput hit 2.65 million TEUs, signaling logistics expansion. The fisheries sector too is growing steadily: total fish production approached 720 thousand tonnes in FY2024, up 0.8% from last year. China, Japan and the Middle East are now major buyers of Pakistani seafood, and domestic shrimp output is rising as new farms mature.

Despite progress, major gaps persist. The blue economy contributes only 0.3–0.4% to GDP, with PNSC lifting just 10–11% of national cargo. Outdated equipment and “maritime blindness” remain common in small fisheries and shipbreaking. Quality issues also hinder growth. Pakistan lost EU seafood market access in 2007 due to hygiene lapses, and only a few plants are now certified. Aging port infrastructure further limits efficiency compared to regional peers.

Conclusion

The private sector has an indispensable role in Pakistan's blue economy. As producers, investors, employers, and innovators, businesses can turn Pakistan's long coastline into a driver of sustainable growth. Case studies show that entrepreneur-led projects – whether super-intensive shrimp farms or marina developments – can yield profits and prosperity for coastal communities. At the same time, corporate CSR and PPPs ensure that this growth is inclusive and environmentally sound. In sum, unlocking Pakistan's marine wealth hinges on vigorous business engagement: only by marrying commercial ambition with stewardship can Pakistan chart a blue economy path that delivers jobs, exports, and ecological resilience for generations to come.



SMART PORTS AS CATALYSTS FOR PAKISTAN'S BLUE ECONOMY

Lt Cdr Dr. Waqas Khaliq Bhatti, PN

The author is a Research Fellow at the National Institute of Maritime Affairs (NIMA).

Pakistan depends on ports to facilitate maritime economy and over 95 percent of international trade is conducted through ports. Nevertheless, Karachi Port, Port Qasim and Gwadar Port are getting confronted with congestion, inefficiency, environmental pressure, and the absence of digitalization. The concept of smart ports, i.e. ports powered by digitalisation, automation, Artificial Intelligence (AI) and green technologies has demonstrated transformative impacts on efficiency, sustainability, and competitiveness on a global scale. In this study, the author will address whether major ports in Pakistan can be made smart ports. Karachi Port is the oldest port that needs to be digitalized to manage congestion. Port Qasim is an industrial hub that requires smart logistics. With a unique opportunity of being a born-smart port in the China-Pakistan Economic Corridor (CPEC), Gwadar Port is a developing port. The paper proposes a step-by-step approach: Karachi and Qasim modernisation with the help of automation and digital twin technologies, and Gwadar as an example of green, AI-based smart port infrastructure. This shift is critical to policy support, investment in ICT systems, skills development and international cooperation.



Introduction & Background

The world is quickly digitalizing its ports and is heading towards the so-called smart port paradigm that embraces Industry 4.0 technologies such as IoT, big data analytics, and blockchain. The change does not only increase efficiency but also addresses the issue of sustainability and improves resilience to global disruptions. The most prominent ones include the Port of Rotterdam, Singapore, and Hamburg that adopted digital twins, AI-powered predictive maintenance, and blockchain-powered logistics.

Ports in Pakistan are however not as digitised as the international standards. Karachi Port handles over 60 percent of the national trade yet it is marred by congestion and inadequate infrastructure. Port Qasim is an industrial cargo handling port which lacks real time data systems. Gwadar Port is still at its infancy, which implies that it has the strategic advantage of starting with digital-first planning. Thus, the Pakistani maritime economy desperately requires an intelligent system of port policy that would keep pace with the tendencies of the global economy.

Pakistani Ports: Current Issues

Karachi Port

Urbanization, traffic congestion and absence of automation restrict the Karachi Port, the busiest in Pakistan. Vessel turnaround time exceeds that of the global standards, mainly due to manual records and ineffective cargo management. Cybersecurity preparedness and digitalization with logistics and customs is limited and introduces risks and inefficiencies.

Port Muhammad Bin Qasim

Port Muhammad Bin Qasim handles primarily the imports of industrial cargo and bulk commodities as well as the imports of energy. It enjoys the benefit of industrial connectivity but lacks advanced ICT logistics optimisation systems. The absence of trade documentation and blockchain-based predictive maintenance systems limit its capacity to respond to the global supply chain standards. The problem of environmental sustainability is also brought up by high carbon footprints of bulk cargo handling.

Gwadar Port

Gwadar, the entry point of CPEC, is in the development phase. It also has the advantage of being designed as a modern deep-sea port with very limited legacy constraints as compared to Karachi and Qasim. However, political issues, lack of connectivity to the hinterland, and insufficient investments in ICT-based systems are the barriers to the development of Gwadar.

Opportunities for Pakistan Digitalisation & Automation

- IoT-based cargo monitoring, AI-based scheduling, and digital twin models have the potential to reduce congestion and turnaround times to a minimum.
- Gwadar can be the first smart port in South Asia through cold ironing, integration of renewable energy and emission monitoring systems.
- Customs and trade documentation can be digitalised to promote transparency and reduce the cost of transactions.

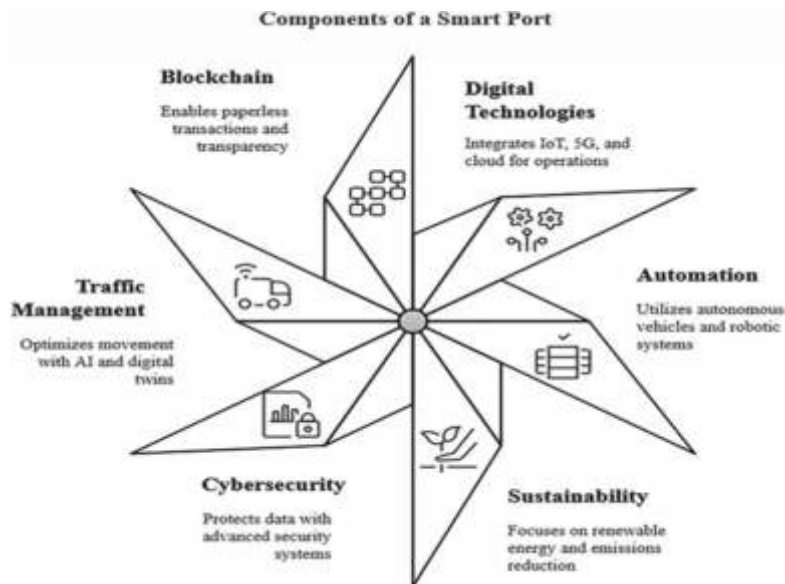


Figure 1. Components of a Smart Port. Adapted from "A decade of Smart Port Concept: A comprehensive review of past, present, and future implications" by Boadu, Thompson, Godavarthy, Boateng, and Penneigh (2025), Australian Journal of Maritime & Ocean Affairs. Advance online publication.

<https://doi.org/10.1080/18366503.2025.2546729>

- Gwadar is strategically located on the Belt and Road routes and has an opportunity to cooperate with Chinese and European technology providers to create a smart port.
- AI, robotics and port informatics specialised training will create a workforce capable of working in next-generation ports.

Policy Recommendations

Karachi Port

Karachi Port needs to be digitally transformed in a short time to enhance operational capacity and cut down on congestion. Introduction of automated cranes, blockchain-based clearance, and AI-controlled traffic management systems will guarantee faster cargo processing and improve transparency. Moreover, the digital twin technology should be incorporated to model the complex operational conditions, anticipate congestion, and control traffic flows in a more efficient way. Such initiatives will enable Karachi Port to continue being the main maritime gateway of Pakistan and at the same time attain international standards of efficiency.

Port Muhammad Bin Qasim

An intelligent logistics network must be created to enhance the competitiveness of Port Muhammad Bin Qasim and to serve the industrial hinterland, connecting industrial zones with real-time tracking and monitoring based on the IoT. This will guarantee the flow of cargo is smooth and the reduction of delays in supply chain. Also, preventive maintenance stream can decrease the emergency breakdown in bulk handling equipment, to enhance reliability and throughput. Port Muhammad Bin Qasim to meet the demands of larger volumes of trade and make industries productive.

Gwadar Port

Gwadar Port can be constructed as a born-smart port, and the technologies are not added later. It includes the application of AI-based port management systems, blockchain-related documentations, and renewable energy to attain sustainable growth. At the same time, Gwadar can be designed as a green shipping hub in the region based on the IMO 2050 decarbonization agenda, which will promote the environmental friendliness of the operations and attract environmentally friendly global shipping lines. This proactive approach will not only render Gwadar a more significant regionally but will also render Pakistan a more significant part of sustainable maritime trade.

National Maritime Digitalization Strategy

At the national level, it is necessary to have a coherent framework to drive the digital transformation of the ports and logistics sector in Pakistan. The development of a National Maritime Digitalization Strategy should be spearheaded by an inter-ministerial committee (that incorporates the Ministry of Maritime Affairs, the Ministry of IT and the Ministry of Planning Development & Special Initiative). The plan should promote the use of Public-Private Partnerships (PPP) to raise investment and

sustainability of technological upgrades. Through establishing a transparent policy framework and resource mobilisation, Pakistan will be able to align its ports with the digitalisation trends in the world and increase its overall competitiveness in the maritime sector.

Implementation Framework

Karachi Port ought to be the first to implement smart systems, including blockchain-based customs clearance and AI-powered traffic management, in the short term. In conjunction with these reforms, specific digital skills training initiatives should be introduced to equip the maritime labour force with the technological change. It will also be important to enhance cybersecurity infrastructure to secure data and build confidence in online platforms.

Port Muhammad Bin Qasim needs to implement IoT-based cargo management systems to enhance efficiency and visibility in supply chain operations in the medium term. Predictive maintenance tools based on AI are to be operationalised in order to guarantee the reliability of equipment. On the national level, the development of unified data-sharing platforms among ports, customs, and logistics providers will improve the coordination and allow making a decision in real-time.

Over the long-term, Gwadar is expected to become a full-scale smart and green port, becoming the leader in the sustainability and innovativeness of the maritime sector in Pakistan. At this point, all the key ports of Pakistan are to be incorporated into one national digital maritime ecosystem, which will be connected to the global supply chains without any problems. Such a change will make Pakistan a more technologically developed and friendly to the environment maritime state.

Conclusion

Smart port transformation of the ports in Pakistan is not an option but a strategic requirement in the age of digitalisation and sustainability in which global trade competitiveness is determined by these factors. As the most important maritime gateway of the country, Karachi Port needs to lose its long-standing tradition of inefficiency, congestion, and outdated operations and adopt automation, blockchain-based clearance, and AI-driven operational systems. Port Muhammad Bin Qasim as one of the most important points of contact between industrial clusters with the global markets must be transformed into a digitalized industrial city where logistics, industry, and ICT will be combined in a harmonious ecosystem that ensures the cargo flow in real-time and improves productivity. Gwadar Port is a ground-up port and should be positioned as a model born-smart and green port that meets and exceeds global sustainability requirements, which is consistent with the IMO 2050 decarbonisation targets. All these will reform Pakistan to rebrand itself as a competitive maritime nation in the digital trade era. This will entail the coordinated policy alignment of the ministries, massive investment in ICT infrastructure, and institutional and workforce capacity building. By doing so, Pakistan can not only ensure that its ports become regional trade centers but also globalized smart gateways, which will enhance the country in global supply chains and ensure economic stability in the long term.

STRATEGIC IMPERATIVE OF A ROBUST PAKISTANI SHIPPING FLEET

Mr. Muhammad Subhan Saleem

The author is a Research Assistant at Center of Research and Innovation in Maritime Affairs (CRIMA) and an MPhil Scholar of International Relations at Minhaj University Lahore.

The shifting world order and evolving regional politics have once again made maritime power the center of global politics. The wars in Ukraine and Gaza, the Houthi's push into the Red Sea and, rising tensions in the Indo-Pacific region have prompted nations to remember that the ocean is not just a trading zone but a battlefield of strategic survival. A modern navy can protect Sea Lanes of Communication (SLOCs), but it is the merchant fleet that keeps a nation's economy alive. Without domestic and national flagged shipping vessels, trade is subject to external shocks, hostile powers, or foreign shipping lines unwilling to take risks.



Today, Pakistan stands at the edge of maritime transformation and the destiny of this country is tied to the oceans as never before with 95% of its trade is dependent on maritime transportation. Yet while its ports are vibrant, its shipping industry is surprisingly small. Pakistan National Shipping Corporation (PNSC) owns a small fleet of 12 ships that only carries 5 % of Pakistan's total seaborne trade and the rest of the 95 % maritime trade is dependent on foreign flagged vessels and shipping lines. This overreliance on foreign shipping lines exposes Pakistan to an economic crisis and creates strategic vulnerabilities during peace and conflict times. With aspirations to become a regional transit hub through China-Pakistan Economic Corridor (CPEC) and other connectivity initiatives like the International North-South Transport Corridor (INSTC), this deficiency in national shipping fleet is unacceptable. The shipping fleet around the world is once again being seen not as a commercial but as a strategic essentiality for sovereignty. The supply chain disruption caused by Russia-Ukraine War, attacks of Houthis in Red Sea and everywhere are evidence that merchant shipping has once again emerged as a frontline security concern. Navies can secure SLOCs, but only national merchant fleets can guarantee the continuity of trade. Maritime autonomy is therefore not a choice anymore, but the necessity for true strategic depth in the 21st century.

Historically, the region where Pakistan is located was known as "The Golden Sparrow", not only because of its agricultural productivity but untapped immense potential of its maritime zones. Due to overpopulation, hunger and climate change the region faces resource pressures and the blue economy offers a parallel frontier, but this will remain limited unless Pakistan invests in blue economy infrastructure especially national shipping fleet. A robust national shipping fleet is thus imperative for Pakistan's blue economy, without it, Gwadar, Karachi and Port Qasim cannot become geo-economic hubs. Exam-

ples elsewhere confirm this lesson. Iran, while facing sanctions for years has kept trade flowing through its state-owned tanker fleet. China with industrial and strategic ambitions has not only built the world's largest navy but also world's largest shipping industry. Singapore with no natural resources has built a wealth axis by uniting a fleet with cutting edge port facilities illustrating a simple truth that ports without ships are half the source of power.

For Pakistan, progress must be incremental but strategically focused. Pakistan can handle 25% of its cargo with a fleet of more than 60 ships and to reach full autonomy would mean a fleet of more than 100 ships and likely 120 ships including tankers, bulk carriers and cargo vessels. Such maritime autonomy was needed yesterday and for tomorrow this cannot be achieved through government procurement alone. A combination of public-private partnerships, international cooperation and domestic shipbuilding is necessary. Karachi Shipyard and Engineering Works (KS&EW) is now building Pakistan's first cargo ship and the initiative needs to be expanded to Gwadar and Ormara also. The expansion of Pakistan's shipbuilding capacity can be enhanced through harmonious reforms in registry, shipping finance, and leasing, making it economically feasible also. The stakes in building a national shipping fleet and enhancing shipbuilding capacity is higher than that of economics, it serves as a new cornerstone of Pakistan's national security. A robust national shipping fleet insulates Pakistan from freight shocks, prevents foreign exchange outflows on freight payments, and ensures continuity of supply chain during crisis. Most importantly, it aligns the blue economy with national security, making maritime trade a source of strategic power rather than a point of threat.

Pakistan must now move from "Sea Blindness" to "Sea Consciousness" as maritime security cannot depend on naval power alone. The country's sovereignty depends on its ability to keep trade flowing at all times. A domestically built shipping fleet with blue economy is not just a development venture but a key pillar of Pakistan's survival and development in an era of global chaos.



BLUE ECONOMY AND ITS LINKAGE TO SDG's

Ms. Iram Zahid

The author is a Senior Research Associate at the National Institute of Maritime Affairs (NIMA).

Blue Economy is one of the key elements in attaining Sustainable Development Goals (SDGs), with a particular focus on sustainable utilization of ocean resources to promote economic growth, livelihoods, and jobs and maintain the health of ocean ecosystems. The strategy forms part of the holistic growth projected by the SDGs, which covers most of the economic activities that are related to oceans, seas, and coastal localities.

Some of the businesses in the Blue Economy are fisheries, maritime transport, tourism, offshore renewable energy, and marine biotechnology. When these spheres are used in a sustainable way, they will be able to reconcile the economic growth with the ecological maintenance. To give an example of this, the sustainable fisheries and aquaculture do not only offer a stable source of food but also generate a large number of jobs. Such activities play a very crucial role in lifting communities out of poverty and the provision of food security which is a direct effect on SDGs 1 (No Poverty) and 2 (Zero Hunger).



The Blue Economy will be able to make the lives of the coastal and island communities much less underprivileged. The sustainable practice of fishing guarantees the economic sustainability and stability in the long run. The fisheries industry alone utilizes millions of people around the world which are the main source of income to many developing nations. Food and Agriculture Organization (FAO) says that the fisheries and aquaculture industry sustains the livelihood of 10-12% of the world. This significant contribution explains why sustainable practices are important in order to sustain the stocks of fish and help make the sector viable.

The oceans are an important source of protein to the billions of people on food security grounds. Sustainable fishing and fish farming can be used to sustain fish population to provide a constant food source. Good oceans promote sound marine ecosystems that are vital in terms of fish. It is however threatened by overfishing. According to the reports provided by FAO, more than 34 percent of fish stocks in the world are overfished, and they require a sustainable approach in the management to avoid depletion and the provision of food security.

Another important element of the Blue Economy that would help SDG 7 (Affordable and Clean Energy) is offshore renewable energy. The renewable energy sources such as wind, wave, and tidal energy have potential and can help decrease the use of fossil fuels in the world and increase energy security. Offshore wind alone, according to the estimates by the International Renewable Energy Agency (IRENA), could supply as much as 18 times the present global demand of electricity. The Blue Economy can do a lot by investing in these sustainable energy solutions in relation to mitigation of

climate change.

Shipping, tourism, and fisheries are all maritime industries, which contribute to the economic growth and employment, which is consistent with SDG 8 (Decent Work Economic Growth). These sectors present a lot of job opportunities with more than 90 percent of the world trade in terms of volume generated by the shipping industry alone according to the International Maritime Organization (IMO). The natural resources in the coastal waters can be generated through sustainable tourism that produces a lot of revenue and employment. The Travel & Tourism sector is estimated to generate 9.1% of the global GDP in 2023, which is the same figure as in 2022 and only a quarter of the 2019 record, according to the World Travel & Tourism Council (WTTC). A sustainable environment of these industries guarantees sustainable economic benefits in the long run as well as enables environmental conservation.

Oceans are very important with regards to climate change mitigation, which is in accordance with SDG 13 (Climate Action). The Blue Economy encourages actions, which will reduce climate change, including blue carbon programs, which preserve and recycle coastal ecosystems, including mangroves and seagrasses. Such ecosystems absorb a lot of carbon dioxide and these serve to minimize the concentrations of greenhouse gases in the atmosphere. The International Union of Conservation of Nature (IUCN) states that the coastal ecosystems have the capability of sequestration of carbon up to 10 times the rate of the terrestrial forests hence important in the fight against climate change.

The main focus of the Blue Economy is conservation and sustainable use of oceans, seas, and marine resources, which directly affect SDG 14 (Life Below Water). This involves fighting the illegal fishing, protecting the marine habitat, and reducing the marine pollution. Illegal, Unreported, and Unregulated (IUU) fishing is one of the greatest threats to marine biodiversity and sustainability of fish stocks. IUU fishing activities are estimated by FAO to cost between 26 million tonnes of fish products each year worth between 10-23 billion dollars. To safeguard the marine ecosystems and the marine biodiversity, it is necessary to raise the level of enforcement and to promote sustainable practices.

Ocean pollution, particularly the use of plastics poses a danger to ocean well-being. The United Nations Environment Programme (UNEP) records that over 8 billion metric tonnes of plastic get into oceans every year, damaging the oceans and organisms. It is important to reduce plastic waste and enhance waste management. Other initiatives such as the Global Partnership on Marine Litter (GPML) address this problem by partnering and innovating.

In spite of the positive aspects, the Blue Economy is challenged with such issues as overfishing, ocean pollution, and climate change. Overfishing leads to the depletion of the fish stock, marine pollution destroys the ecosystems and human health, and climate change results into the increase in the sea level, the souring of the ocean and extreme weather conditions.

To overcome them, it is necessary to resort to international collaboration, effective policies, and investments in sustainable technologies. Governments, industries and communities must work together to find out effective solutions. As an example, the introduction of stricter rules governing fishing activities

and the creation of marine protected areas should be used to rebuild the fish population and ensure the marine biodiversity. Marine protected areas (MPAs) have been found to be useful in preserving biodiversity as well as restoring fish stocks. The Marine Conservation Institute estimates that approximately 8 percent of all oceans globally are enclosed in MPAs of which 2.9 percent are fully protected. The need to expand these areas and manage them properly are important in conservation of the marine areas.

Marine pollution can be addressed through the reduction of plastic waste and better management of waste. Such projects as ocean clean-up eliminate ocean plastic, whereas policies against single-use plastic decrease pollution. Another way of fighting climate change is by investing in renewable energy and blue carbon programs. The Blue Economy can advance SDGs by promoting sustainable maritime economic opportunities to promote economic growth and employment opportunities and maintain ocean well-being and health.

Stakeholders, policymakers, and communities should be able to work together to achieve the potential of the Blue Economy. We can also meet the SDGs and attain a sustainable future of the oceans by being sustainable, encouraging innovation, investing in research, and creating awareness about ocean conservation. Collectively, we will be able to build a world where economic success and sustainability in the environment will be synonymous, making sure that the planet will be healthy to the upcoming generations.

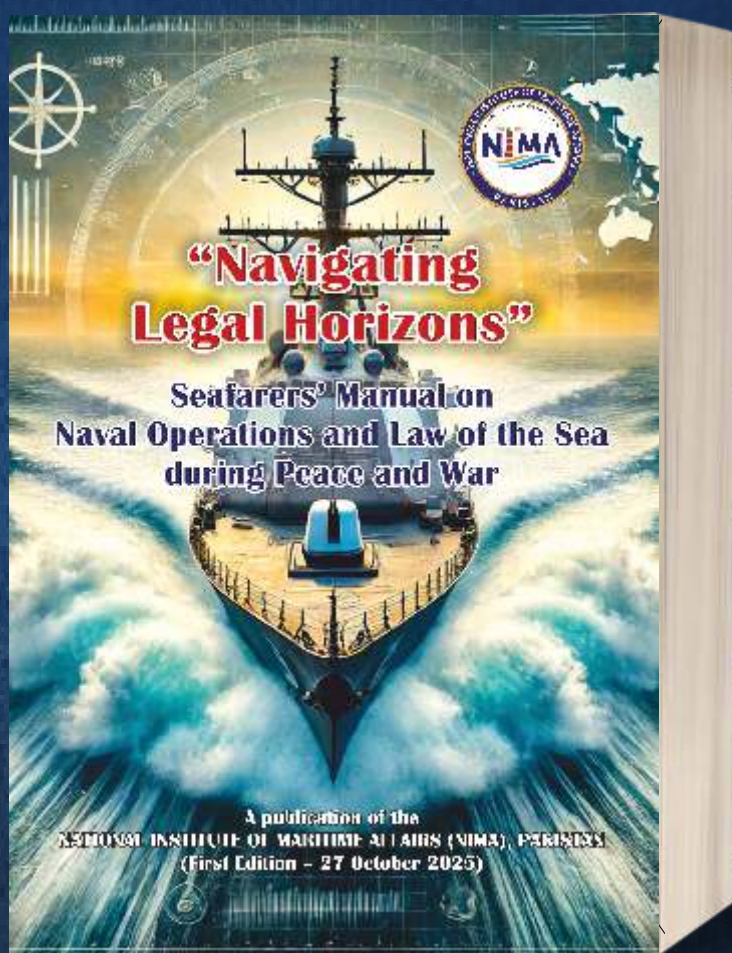


NIMA PUBLICATIONS (2025)

Title: “Navigating Legal Horizons”

Authors: Vice Admiral Ahmed Saeed HI (M) (Retd) & Cdr Raheel Masood SI (M) (Retd)

The manual addresses critical dimensions of maritime law and operations. It traces the historical evolution of maritime governance, from colonial legacies to contemporary realities. It meticulously examines Pakistan's maritime zones and boundaries, contextualising our strategic interests within the broader Indo-Pacific landscape. It explores the Law of Armed Conflict, international humanitarian law, and the delicate balance between military necessity and humanitarian obligation. Most significantly, it confronts the challenges that will define 21st-century naval warfare: autonomous weapons systems, cyber-maritime threats, and the integration of artificial intelligence into naval operations.



Title : “The Geopolitical Implications of the INSTC: A Comparative Analysis of Central Asia, South Asia, Europe and Pakistan”

Authors: Mr. Syed Kamran Hashmi, Ms. Iram Zahid, Dr. Baber Bilal Haider & Dr. Ihsaan Qadir

The study explores Pakistan's strategic integration into the International North-South Transport Corridor (INSTC) and its linkage with CPEC. It highlights how Pakistan can leverage its geographic advantage to enhance regional trade and connectivity. The paper assesses the corridor's geopolitical and economic implications for Pakistan and the broader Eurasian region.

Title “Developing National Action Plan for Reducing GHG Emissions from Shipping in Compliance with IMO Regulations”

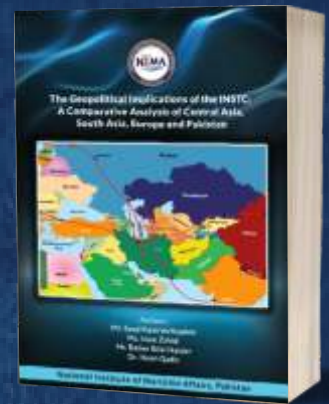
Authors: Mr. Wajih Ur Rehman, Dr. Fasiha Safdar & Ms. Saba Zeenat

The shipping industry contributes nearly 3% of global greenhouse gas emissions, driven by heavy reliance on fossil fuels. To curb this, the International Maritime Organization (IMO) has introduced measures under MARPOL Annex VI and adopted the 2023 IMO GHG Strategy targeting net-zero emissions by 2050. In support, member states are encouraged to develop National Action Plans (NAPs) to guide domestic mitigation efforts. Pakistan, however, has yet to ratify Annex VI and lacks a framework for monitoring or reporting emissions from its commercial and fishing fleets. This study proposes a strategy for developing Pakistan's NAP for reducing GHG emissions from shipping, identifying policy, institutional, and technical measures required to align national maritime operations with IMO standards and global climate commitments.

Title: “Sustainable Coastal and Marine Tourism Policy Options for Pakistan”

Authors: Dr. Aneela Khan, Cdr. (R) Asim Mehmood & Ms. Khadeja Rehman

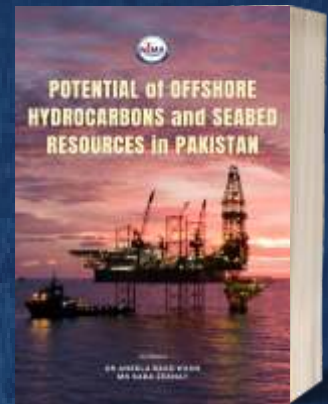
This study assesses the current state of Coastal & Marine Tourism in Pakistan, proposes a three-pillar framework sustainable infrastructure, institutional reform, and environmental-community integration and highlights the role of AI in enhancing efficiency and sustainability. It emphasizes aligning CMT development with the Sustainable Development Goals through investment, policy reform, and regional cooperation. If managed responsibly, Pakistan's CMT can become a major pillar of its Blue Economy, promoting growth, culture, and environmental stewardship.



Title: “Potential of Offshore Hydrocarbons and Seabed Resources in Pakistan”

Authors: Dr. Aneela Khan & Ms. Saba Zeenat

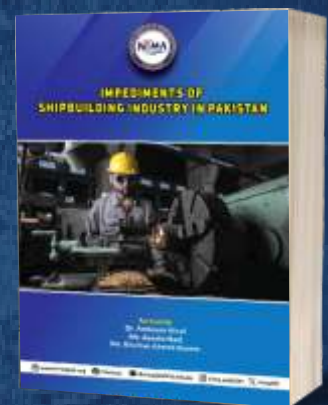
This study provides a comprehensive assessment of Pakistan's offshore hydrocarbon (crude oil and gas) and mineral (polymetallic nodules and sulfides) potential by examining geological characteristics, tectonic settings, and exploration activities. It identifies key resource-rich basins and mineral zones within the EEZ, including the Extended Continental Shelf, while evaluating environmental concerns and the effectiveness of current regulatory frameworks for sustainable offshore resource development.



Title: “Impediments of Shipbuilding Industry in Pakistan”

Authors: Dr. Ambreen Afzal, Ms. Ayesha Ibad & Mr. Ghufraan Ahmed Naeem

This study examines the challenges facing Pakistan's shipbuilding industry and explores strategies to overcome them. Globally, shipbuilding has grown rapidly with rising maritime trade, led by countries like China, South Korea, and Japan. As a strategic and capital-intensive sector vital for global commerce, it is now evolving through green technologies and automation in line with IMO and UN SDG targets. Strengthening Pakistan's shipbuilding capacity could significantly boost its economic and industrial growth.



Title: “Empowering Women in Coastal Communities in Pakistan through Sustainable livelihood”

Authors: Ms. Sana Fatima, Ms. Maryam Hayat & Ms. Iram Zahid

This research investigates the empowerment of women in Pakistan's coastal communities through sustainable livelihood development, capacity-building initiatives, and the promotion of socio-economic resilience to enhance gender equity and community sustainability.



Title : “Socio-Economic Impact of Marine Eco Tourism at Churna Island on Local Communities”

Authors: Dr. Mushaiyada Mairaj, Ms. Komal Shabbir & Ms. Hania Ajaz

Marine ecotourism is increasingly recognized as a strategy for promoting sustainable livelihoods and environmental conservation. This study examined the socioeconomic impacts of marine ecotourism at Churna Island, Pakistan. Using survey data, stakeholder interviews and policy analysis, this research explored how marine ecotourism contributes to income generation, employment and environmental awareness among local communities. Local communities can play a vital role in fostering sustainable tourism through fishing practices, water sports, tour guiding and small-scale enterprises such as food stalls, decorative amenities and handicrafts. Results indicated that ecotourism has the potential to create new livelihood opportunities and enhance conservation awareness; however, its growth remains constrained by weak regulatory mechanisms and inadequate infrastructure. The study concludes by emphasizing the need for integrated management, policy support and community-based frameworks to ensure that ecotourism at Churna Island develops as both an economically viable and environmentally sustainable sector.

Title : “National Action Plan For Sustainable And Resilient Fisheries And Aquaculture In Pakistan”

Authors: Dr.Nazia Sher, Ms. Safia Noor & Ms. Aimen Ali

This research develops a comprehensive National Action Plan for Sustainable and Resilient Fisheries and Aquaculture in Pakistan. It examines the sector's current challenges, weak governance, poor infrastructure, outdated practices, and vulnerability to climate change while identifying pathways for reform. Using a qualitative and policy-oriented approach, the study integrates governance analysis, environmental assessment, and socio-economic evaluation. It proposes adaptive solutions such as climate-smart aquaculture, integrated agriculture-aquaculture systems, mangrove restoration, and recirculating aquaculture technologies. The report emphasizes institutional coordination, research investment, and gender inclusion to enhance productivity and resilience. Ultimately, it envisions a climate-resilient fisheries sector that ensures food security, livelihoods, and sustainable growth within Pakistan's blue economy framework.



NIMA NEWS

NIMA Delegation Explore Advancements at Karachi Shipyard & Engineering Works

On 01 Aug 2025, Deputy Director NIMA-K along with NIMA researchers visited Karachi Shipyard & Engineering Works (KSEW) as part of ongoing research on “Ship Building Industry in Pakistan”



Manager Ship Building KSEW Capt Imran and Cdr Shaheen welcomed the team and briefed the team on the shipyard's operations, indigenous shipbuilding, and technological advancements. The team also met with PDPNMIO Cdre Umar Riaz, who further briefed the team on the shipyard's strategic role and ongoing projects.



The visit fostered academic-industry collaboration and gave needful insights into Pakistan's ship building capabilities and Challenges.

KPT GM (Ops) Rear Admiral Ateeq ur Rehman Abid Visits NIMA Islamabad

On 01 August 2025, Rear Admiral Ateeq ur Rehman Abid SI (M), GM (Ops) KPT, visited NIMA Islamabad and met with President NIMA, Vice Admiral Ahmed Saeed HI(M).



They discussed enhancing collaboration between NIMA and KPT, focusing on maritime strategy, AI integration, and future joint initiatives for sustainable maritime development.

NIMA Marks Youm-e-Istehsal Kashmir: Reaffirms Unwavering Support for Kashmiri Struggle

On 5 August 25, NIMA observed Youm e Istehsal Kashmir, expressing solidarity with the people of IIOJK. The event featured discussions on the conflict's historical context and



condemnation of India's human rights abuses. NIMA's President reaffirmed Pakistan's support for Kashmir's right to self-determination and called for international accountability.



A unified resolution was adopted, stating, "We see you, we hear you, and we stand with you." The event concluded with the resolve that Kashmir will be part of Pakistan, Insha'Allah, and Pakistan Zindabad.

Mr. Tahir, Dy Secy, Min of Defence (MoD), Accompanied by a Team of Interns, Visited NIMA

On 7 Aug 25, Mr. Tahir, Dy Secy at the Min of Defence (MoD), accompanied by a team of interns, visited the National Institute of Maritime Affairs (NIMA). The session was hosted by Mr. Kamran Hamid Hashmi, Senior Coordinator at NIMA. Ms. Khadeja Rehman, RA, introduced NIMA's key functions; followed by Mr. Wajih ur Rehman shed light on the Blue Economy Potentials,



Ms. Irum Zahid highlighted the Geostrategic Significance of the Indian Ocean. The visit concluded with an engaging Q&A session and closing remarks by Vice Adm Ahmed Saeed HI(M), President NIMA.



Delegation from Renewable Resources Pvt led by Mr Attiq ur Rehman (CEO) Visited NIMA.

On 8 Aug 25, A delegation from Renewable Resources Pvt led by Mr Attiq ur Rehman (CEO) visited NIMA. The other members included Dr. Irfan Mirza (President WWEA), and Dr. Shoaib Ahmed (Director).



The discussions were focused on how to integrate renewable energy solutions to support sustainable and climate-resilient growth in Pakistan's Blue Economy. Both parties

committed to sharing expertise and exploring collaborative projects.

NIMA Warns of Health Risks as Pink Tide Turns Gadani Jetty Waters Toxic

Recently a strange phenomenon occurred at Gadani Jetty area that once used to be a beautiful blue water lagoon, turned into a pink-foul-smelly wetland. NIMA's marine scientists unearthed the truth behind this mystery. Upon hearing the media reports, President NIMA directed the NIMA scientists' at Karachi Chapter to conduct an onsite investigation and collect samples for laboratory tests to further substantiate the facts. This being a very rare occurrence, drew extraordinary attention of marine environmental experts and local public. It also sparked an online debate. NIMA SMEs responding to the exigency, reached the affected area and conducted their onsite inspection procedures. Sea water in and around the jetty area was physically examined for its odor and distinctive characteristics. Moreover, samples from the affected areas were also preserved for physio-chemical parameters' examination at the laboratory. In some areas dead fish were also observed.

In marine scientific community, such 'pink tide' is characterized by its distinctive discoloration of seawater, caused by blooms of color-producing microorganisms such as salt-loving bacteria or sea plants commonly known as Halophilic Organisms or Algae. These microbes release natural pigments of various shades i.e. pink, red, green or yellow, depending on environmental conditions and presence of specific algal or microbial species. It is noteworthy that such 'pink tides' have been appearing in different parts of the world i.e. Australia, United States,

Mediterranean, and Southeast Asia. In South Asian region, similar happenings had been reported along the Indian, Sri Lankan and Pakistani coastlines. In Pakistan, this 'pink tide' at Gadani marks the 3rd documented incident; near Karachi in 2017 and along the Makran coast in 2021.

The lab tests of samples collected by NIMA SMEs, revealed several environmental stressors that exacerbated this unusual bloom. The seawater temperature measured near the jetty area was 36.5°C, considerably higher than average sea water (< 24.5 – 29.50C> in coastal zones). Localized heating of this water body caused burgeoning of algal and bacterial growth. Salinity was observed close to 48 parts per highthousands (ppt), a significant increase over typical oceanic levels of 35 ppt. Whereas, turbidity level (suspended particles present in water) reached 47 Nephelometric Turbidity Unit (NTU), as compared to the normal range of 1 – 5 NTU. Nutrient analysis detected Ammonium at 2.256 mg/L (normal range 0.0018 – 0.036 mg/L) and Phosphate at 5.739 mg/L (normal range 0.0095 – 0.285 mg/L); both readings observed much above the normal concentrations; a nutrient enriched environment supported bacterial and algal growth. The pH value indicated 6.94 (normal range 7.5 – 8.3), indicating slightly acidic behavior. Moreover, TDS of the water measured at 47,886 mg/L as equated to the usual range of 30,000 – 40,000 mg/L. Conductivity level of the affected water was gauged around 96,032 mg/L

as compared to normal range of 22,750 mg/L. In this backdrop, NIMA's scientists concluded that a combination of factors, like highly nutrient enriched environment due to lack of sea water

circulation pattern (caused by faulty jetty's design) contributed towards unusual rise in salinity and temperature inside this lagoon. It provided optimal conditions for color-producing bacteria and algae to flourish in Gadani jetty waters. It is important to note that these specific conditions do not typically happen in open waters due to natural dilution of all above cited parameters.



Highlighting the impacts of 'pink tide' on humans, the NIMA team emphasized that it is utterly important that whenever such Harmful Algal Bloom (HAB) is observed in or around the costal zones, a direct contact with the affected water is to be avoided i.e., swimming, wading, or engaging in water associated activities. These blooms can cause health issues like skin irritation. Some HABs produce toxins that can contaminate marine organisms and prove harmful if consumed as dead fish has been reported around these areas as well. It is, therefore, highly recommended not to consume sea food caught from these affected waters until authorities have confirmed it to be safe for human consumption. Based on these conclusive evidence, NIMA's team strongly suggested

that Balochistan Environmental Protection Agency (BEPA) stipulated safety protocols be immediately complied with to ensure safety of related coastal communities and visitors. In addition, the concerned authorities are to initiate design modifications around the jetty area to improve water flow circulation pattern. President NIMA Vice Admiral Ahmed Saeed HI(M) (Retd) urged that safety of the coastal communities and conservation of our vital marine ecosystem must take precedence at provincial and national levels.

NIMA & PBF Launch International Conference Series on Blue Economy: Shaping Pakistan's Maritime Future

On 8 August 25, NIMA in collaboration with the Pakistan Business Forum (PBF), launched an International Conference series titled "Blue Economy: Pakistan's Maritime Future."



The initiative aims to stimulate high-level dialogue, drive sector-specific policy actions, and encourage investment in maritime industries to unlock the full potential of Pakistan's Blue Economy.

The series will take place across various provincial capitals, starting in Karachi in October, followed by events in Quetta/Gwadar, Lahore, Peshawar, and Azad Jammu & Kashmir (AJK).

President NIMA Addresses Water Preservation Seminar at Minhaj University

On 13 Aug 25, President (NIMA) delivered a keynote address at a seminar on Water Preservation organized by Minhaj University.



In his remarks, he highlighted the urgent need for sustainable water management, the importance of public awareness, and the role of academic institutions in promoting responsible water use. The session emphasized collaborative action to tackle Pakistan's growing water challenges.

NIMA Celebrates 78 Years of Independence with Tributes to Founding Leaders

On 13 August 25, The National Institute of Maritime Affairs (NIMA) celebrated Pakistan's 78th Independence Day with great enthusiasm and patriotism. The event commenced with the national anthem, followed by heartfelt tributes presented by researchers and interns to the nation's founding leadership and national heroes. A choir team presented soul-stirring national songs, filling the atmosphere with patriotism and national pride. President NIMA,

Vice Admiral Ahmed Saeed HI(M), lauded the efforts of the entire team and emphasized the importance of self-accountability in fulfilling our responsibilities as Pakistanis.



The event served as a reminder of the nation's unwavering commitment to building a stronger and more prosperous Pakistan. NIMA reaffirms its dedication to contributing to the country's maritime sector and national development. Pakistan Zindabad.

NIMA Explores Maritime Collaboration with South African Honorary Consul

On 20 Aug 25, The National Institute of Maritime Affairs (NIMA) welcomed HE Majjid Bashir



Ahmed, Honorary Consul of South Africa, and Lt Gen Sarfraz Sattar HI(M) Retd, for a meeting with Vice Admiral Ahmed Saeed HI(M) Retd, President of NIMA.

During the briefing, NIMA's functioning and initiatives were showcased to the dignitaries, who expressed their appreciation for the Institute's efforts in promoting maritime affairs.

The discussion centered around fostering collaboration between NIMA and the South African maritime community, including think tanks, through joint initiatives.

Oman-Pakistan Maritime Partnership Reinforced at NIMA Meeting in Islamabad

The National Institute of Maritime Affairs (NIMA) in Islamabad hosted a high-level Omani delegation led by Commodore Abdullah Bin Sultan Al Jabri on 21 August, 2025.



The meeting aimed to enhance maritime cooperation between the two nations, focusing on Blue Economy, maritime tourism, smart port operations, regional trade connectivity, best practices in conserving biodiversity, etc.

Both sides reaffirmed their commitment to advancing shared maritime interests at the regional and global levels.

NIMA Organizes Webinar on Protecting Pakistan's Lakes and Wetlands from Mountains to Coast

On 27 Aug 25, To commemorate World Lakes Day, NIMA hosted a webinar titled "From Moun-

tains to Coast: Safeguarding Pakistan's Lakes and Wetlands". Dr Faseha moderated the session, renowned Conservationist Mr. Jamshed Iqbal Chaudhry from WWF-Pakistan shared his inspiring journey in wildlife and wetlands conservation. He highlighted the vital role of lakes in sustaining biodiversity, livelihoods, and climate resilience.



NIMA researchers and online participants gained valuable insights on how to protect Pakistan's lakes and wetlands, from the highlands of the Himalayas to the coast of Arabia sea.

NIMA Organized a Special BoA Meeting to Bid Farewell to its Outgoing Chairman

Islamabad, 27 August, 2025, The National Institute of Maritime Affairs (NIMA) organized a special Board of Advisors (BoA) meeting to bid farewell to its outgoing Chairman, Admiral Muhammad Zakaullah NI (M) Retd.



Ms Sana presented a snapshot of the past two years' activities. The BoA members then acknowledged Admiral Zakaullah's exceptional leadership, strategic vision, and patronage to NIMA's growth and Pakistan's maritime affairs. President NIMA, Vice Admiral (R) Ahmed Saeed HI(M), thanked him and wished him well for his future endeavours. In his farewell remarks, Admiral Zakaullah appreciated the efforts of the BoA members and NIMA's team in making the platform more vibrant, effective, and productive, highlighting that NIMA has made its mark as an international maritime think tank.

NIMA Delegation led by Vice President Dr. Babar Bilal Haider visits Ministry of Planning, Development & Special Initiatives (MoPD&SI)

On 26 Aug 25, NIMA delegation led by Vice President Dr. Babar Bilal Haider visited the Ministry of Planning, Development & Special Initiatives (MoPD&SI) for a meeting chaired by Secretary Mr. Awais Manzur Sumra.



NIMA delivered a comprehensive presentation on the potential of Pakistan's Blue Economy and pathways to maximize its benefits. The MoPD&SI team showed keen interest in areas such as ship recycling, green shipping practices, international compliance, and fisheries management.

President NIMA Called on Federal Minister for Maritime Affairs

Islamabad 27 Aug 25, Vice Admiral Ahmed Saeed HI(M), Retd, President National Institute of Maritime Affairs (NIMA), called on Mr. Junaid Anwar Chaudhry, Federal Minister for Maritime Affairs, at his office.



The meeting was focused on upcoming events, i.e., PIMEC-25.

The discussion also highlighted the following significant developments; Establishment of the Pakistan Maritime Chamber of Commerce and Industry (MCCI), Fast-track revision of national maritime policies, Securing 25,000 metric ton tuna fishing quota from the Indian Ocean Tuna Commission (IOTC), Announcement of Mercantile Marine Department (MMD) provincial offices to facilitate of seafarers and Allocation of PKR 12 billion for the ship recycling industry in line with the Hong Kong Convention (HKC) implementation framework.

The Hon Minister lauded NIMA's contributions in maritime research & policy formulation. He also underlined the importance of introducing innovative projects. He reaffirmed the Government's commitment to extending full support for sustainable growth of the maritime sector.

President NIMA Paid a Significant Visit to Cadet College Hassan Abdal

On 29 August, 25, Vice Admiral Ahmed Saeed HI (M)), (Retd.), President of the National Institute of Maritime Affairs (NIMA), paid a significant visit to Cadet College Hasan Abdal. Upon arrival, he was warmly received by Brigadier Nasir Saeed Khattak SI (M) (Retd), Principal of the esteemed institution. During his visit, the Admiral delivered an engaging speech on the Blue Economy, a topic of growing importance in today's maritime world. The cadets showed keen interest in the subject, posing thoughtful and insightful questions that reflected their intellectual caliber.



The visit concluded with a positive note, as Principal expressed his gratitude to President NIMA for sharing his expertise with the cadets. The Principal also showed keen interest in establishing a formal partnership between Cadet College Hasan Abdal and NIMA, suggesting a potential Memorandum of Understanding (MOU) to further strengthen their collaboration and promote maritime education. This development holds promise for fruitful future interactions between the two institutions, potentially benefiting both NIMA and Cadet College Hasan Abdal in their shared pursuit of maritime excellence.

NIMA Highlights Strategic Importance of Blue Economy at KCFR Seminar

The National Institute of Maritime Affairs (NIMA)

actively participated in a seminar on "The Prospects of the Blue Economy in Pakistan" organized by the Karachi Council on Foreign Relations (KCFR) on 28 August, 25.



President NIMA, Vice Admiral Ahmed Saeed HI (M) (Retd), delivered the keynote address, highlighting the strategic importance of Pakistan's coastline and its Exclusive Economic Zone. This event brought together experts, policymakers, business leaders, and members of the diplomatic and academic community to discuss the immense potential of Pakistan's maritime resources in driving sustainable economic growth. Other notable speakers included Chairperson KCFR Nadira Panjwani, and Special Assistant to Chief Minister (SACM) Qasim N. Qamar. NIMA's participation in the seminar underscores its commitment to promoting maritime awareness and development in Pakistan, contributing to the country's economic growth and sustainable development through the blue economy.

Two-Day Workshop Stresses Compliance with Hong Kong Convention for Ship Recycling Industry

A two-day awareness workshop on the Hong Kong Convention (HKC) and ILO instruments applicable to the ship recycling industry was conducted in Karachi, from 26 to 27 August 25. The workshop, organized by the International Labour Organization (ILO) and the Inter-



national Maritime Organization (IMO) in collaboration with the Norwegian Ministry of Foreign Affairs, has brought together key stakeholders from the Pakistan Ship Breakers Association (PSBA), Ministry of Maritime Affairs (MOMA), IMO, ILO, National Institute of Maritime Affairs (NIMA), Balochistan Development Authority (BDA), Gadani Labour Union, and Karachi Port Trust (KPT). As a key stakeholder in the implementation of the HKC, NIMA has been actively working towards promoting safe and environmentally sound ship recycling practices in Pakistan. In this regard, NIMA has identified significant gaps in safe practices at Gadani, particularly in relation to the HKC's safety requirements. Commander Anees Muhammad Khan (Retd), a subject matter expert on IMO ILO HKC 2009, has attended the workshop as a representative of NIMA, contributing to the discussions on bridging these gaps and ensuring compliance with international standards as identified by NIMA in its detailed research on the subject.

NIMA at Researchathon 2025: Inspiring Youth for a Sustainable Future

On 03 Sep 25, Dr. Nazia Sher represented NIMA as a Judge at the Researchathon 2025 hosted by Agha Khan Higher Secondary School, Karachi. The event showcased over 350 innovative projects, including nearly 50 focused on Climate Change and Sustainability.



This collaboration strengthened ties between NIMA and Agha Khan Schools, opening new avenues for joint efforts in marine conservation, climate resilience, and youth-led innovation for a sustainable future.

NIMA's Advocate Attends DEHUKAM Maritime Capacity Program in Türkiye



NIMA's Sher Afzal Khan Babar Advocate High Court in August 2025 joined professionals from thirteen nations at a DEHUKAM Capacity Building Program in Türkiye. The program enhanced understanding of key maritime challenges through lectures by International Court of Justice (ICJ) & I International Tribunal for the Law of the Sea (TLOS) judges and visits to the key organizations of the maritime administration of republic of Türkiye.

NIMA-K Team Visits KPT to Enhance Research and Environmental Cooperation:

On 03 Sep 25, Cdr. Owais Naseer PN, Deputy Director NIMA-K along with their team visited Karachi Port Trust (KPT). They were received



by Mr. Fayyaz Rasool (Manager MPCD) and Mr. M. Nadeem while the port tour was conducted by Mr. Salis Younsi.

The visit further strengthened collaboration under the NIMA–KPT MoU with a focus on research, environmental management, and sustainable port operations.

Farewell & Best Wishes to Ms. Saba Zeenat on Her Journey to World Maritime University



On 05 Sep 25, The NIMA family bid a warm farewell to Ms. Saba Zeenat, our talented Research Associate, as she embarks on an exciting new academic journey. We're thrilled she was selected to pursue her Master's at the prestigious World Maritime University in Sweden. The NIMA team extends its best wishes for her future endeavours and looks forward to continuing support for her research pursuits.

Celebration of Pakistan Navy Day

On 08 Sep 2025, National Institute of Maritime Affairs (NIMA) celebrated Pakistan Navy Day to acknowledge the Navy's achievements and its vital role in safeguarding Pakistan's maritime



frontiers. Researchers from NIMA Islamabad and Karachi delivered speeches emphasizing the Navy's contributions in defending national waters and supporting the growth of the Blue Economy. The session concluded with the address of Director IOSC, NIMA, Dr. Babar Bilal Haider, who highlighted Pakistan Navy's journey from its humble beginnings at the time of Pakistan's independence to its present stature as a strong and modern force.

NIMA's Ms. Iram Zahid Represents Pakistan in U.S. IVLP on U.S Innovation in Water Resource Management

On 10 Sep 25, Ms. Iram Zahid, Research Associate at the National Institute of Maritime Affairs (NIMA), was selected to represent Pakistan in the prestigious International Visitor Leadership Program (IVLP) United States.



Innovation in Water Resource Management. She was among 10 distinguished participants, including policymakers, engineers, and govern-

ment officials from Pakistan. The program began in Washington, D.C., followed by visits to Nebraska and California to study agricultural water use, infrastructure, and governance. Participants engaged with organizations such as Lindsay Corporation, State Water Contractors, and the California Department of Water Resources. The tour concluded in San Francisco, fostering knowledge exchange and international cooperation in water resource management.

NIMA-K Team Engages Communities on Eco-Tourism



On 18 Sep 25, (NIMA-K) research team visited Mubarak Village and Sonehri Beach to engage with local communities on their perspectives about Eco-tourism.

The activity also included air and water quality assessments to evaluate the current environmental status of coastal communities of Pakistan. This activity reaffirmed NIMA's commitment to sustainable coastal development, community engagement, and evidence-based environmental research.

NIMA Joins Beijing Xiangshan Forum on Global Security Dialogue

On 19 Sep 25, The National Institute of Maritime Affairs (NIMA) participated in the opening of the Beijing Xiangshan Forum on Security, attended by over 300 officials and 200 scholars worldwide.



In his address, Chinese Defense Minister Dong Jun emphasized that the world stands at a crossroads, urging dialogue over confrontation.

NIMA Participates in Beijing International Dual-Use Technology Exhibition 2025

On 20 Sep 25, The Third Beijing International Dual-Use Advanced Technology Equipment Exhibition was held at the Beijing Exhibition Hall from 18 to 20 September, showcasing China's advancements in dual-use technologies across sectors including unmanned systems, electronic information, cyber security, and emergency response. The event featured leading enterprises in aerospace, robotics, intelligent security, satellite manufacturing, and maritime defense, highlighting innovations across emerging domains.



President NIMA and the Director IOSC also participated, representing NIMA at this major international exhibition.

NIMA Hosts Life Sanctuary Pakistan Founders to Explore Collaboration on Wildlife & Marine Conservation



22 Sep 25: National Institute of Maritime Affairs (NIMA) hosted the founders of Life Sanctuary Pakistan — Mr. M Humair Anwar, Ms. Zoufshan Asim, & Mr. Mubasher Mir. The initiative, Life Sanctuary, is dedicated to wildlife rescue, rehabilitation, and conservation. It is also raising public awareness on the importance of environmental stewardship. The meeting provided an excellent opportunity to exchange ideas and explore potential collaborations in the areas of sustainability, eco-conservation, and community engagement. It was also suggested to add marine life to this project. Their visit underscored the shared commitment to protecting the marine & wild life for future generations.

VCNS Bilgrami's Paid Farewell Visit to NIMA President

On 23 Sep 25, Vice Admiral Ovais Ahmed Bilgrami VCNS HI(M) SI(M) TI(M) paid a farewell visit to President NIMA, Vice Admiral Ahmed Saeed HI(M) (Retd). During the meeting, he commended NIMA's valuable research initiatives and contributions in shaping maritime thought and policy. The President, in turn, lauded Vice Admiral Bilgrami's exemplary



services to the Pakistan Navy, with particular appreciation for his pivotal role in the successful conduct of AMAN Dialogue 2025. The interaction was marked by mutual respect, acknowledgment of professional excellence, and recognition of distinguished contributions to national maritime security.

Cadet College Hassanabdal Delegation Visits NIMA for Maritime Awareness & Collaboration



On 23 Sep 25, A delegation comprising cadets, faculty members, and the Principal of Cadet College Hassanabdal visited NIMA to explore avenues of collaboration in maritime awareness and education. The cadets actively participated in the Youth Climate Summit jointly organized by NIMA and PCF, where Cadet Yahya Azeem

represented the institution on the Youth Panel. The visit concluded with a comprehensive briefing on NIMA's research activities, followed by an engaging interactive discussion with President NIMA and his team.

NIMA Representatives Attend Galle Dialogue 2025 Inauguration in Colombo

On 23 Sep 25, The Galle Dialogue 2025 officially inaugurated in Colombo.



To mark the occasion, a Networking Dinner held, attended by Dr. Baber Bilal Haider, DIOSC NIMA, and Mr. Kamran Hashmi, NSC NIMA. The event brought together over 60 delegates from around the world, representing academia, defence, and the diplomatic community.

NIMA Observes World Maritime Day with Seminar on Ocean Sustainability

On 25 Sep 25, NIMA marked World Maritime Day with a seminar on the theme "Our Ocean, Our Obligation, Our Opportunities" featuring talks by Commander Anees Khan (Retd), Dr. Kanwar Javed Iqbal (Sustainable Fisheries), Dr. Fasiha Safdar (Climate Change & Rising Seas), Ms. Neelam Pari (Marine Pollution) and Ms.

Maham Nadeem Malik (Youth Engagement). Chief Guest Mr. Rab Nawaz, Senior Director



WWF-Pakistan, emphasized collective action, while Commodore Raheel Masood SI(M) (Retd), Director Projects NIMA, reaffirmed Pakistan's commitment to sustainable maritime development.

NIMA Experts Highlight World Maritime Day Theme on Media



On 25 Sep 25, On World Maritime Day, Dr. Mushaiyada and Ms. Komal from the National Institute of Maritime Affairs (NIMA) appeared on media (GTV) at 9:00 AM to discuss this year's theme — Our Ocean, Our Obligations, Our Opportunity. The session emphasized the importance of maritime awareness, sustainable use of ocean resources, and Pakistan's role in ensuring a secure and prosperous Blue Economy.

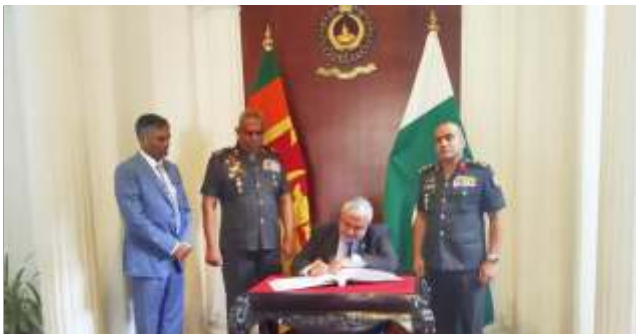
"Together, we must recognize our shared responsibility and seize the opportunities to safeguard our blue future."

NIMA-K Promotes Maritime Awareness on World Maritime Day



On 25 Sep 25, On World Maritime Day, NIMA-K set up a stall at the Pakistan Maritime Museum to highlight the importance of maritime awareness. Mr. Wajahat Abbas also delivered a lecture at PMSA, emphasizing the significance of this year's theme and the need to strengthen Pakistan's maritime sector.

NIMA Delegation Participates in Galle Dialogue 2025 on Maritime Security



On 28 Sep 25, The National Institute of Maritime Affairs (NIMA) delegation, led by Vice President Cdre. Dr. Babar Bilal Haider, actively participated in the Galle Dialogue 2025 in Sri Lanka. The delegation engaged in high-level discussions on contemporary maritime security, regional stability, and cooperative strategies for

ensuring a safe and sustainable maritime domain.

NIMA's presence underscores its commitment to contributing Pakistan's strategic perspective to this vital international forum.

NIMA Meets Galle Dialogue Committee



On 28 Sep 25, NIMA VP Cdre. Dr. Babar Bilal Haider & Mr. Kamran Hashmi met with the Galle Dialogue 2025 Management Committee, ensuring continued partnership to strengthen regional maritime cooperation.

NIMA Contributes to Dialogue on China's Global Governance Vision at ISSI

Vice Admiral Ahmed Saeed, President NIMA, on 1 October 2025 shared his views at the International Seminar on 'Global Governance Initiative (GGI): China's Vision of a Just and Fair Order' hosted by Institute of Strategic Studies Islamabad (ISSI), in collaboration with China Media Group (CMG).



Speakers from Pakistan, China and Bangladesh highlighted GGI's 5 core concepts and its linkages with Global Development Initiative (GDI), Global Security Initiative (GSI), and Global Civilization Initiative (GCI). They reaffirmed support for GGI as a framework for inclusive, people-centered & effective global governance.

NIMA Calls for Regional Cooperation on Water and Climate Data Sharing



At Pak Institute for Conflict and Security Studies (PICSS) on 4 October, Cdre. Anees Muhammad Khan (Retd) from NIMA discussed the impact of climate change on intra-state relations, with Ms. Romina Khurshid Alam as Chief Guest. Dr. Aneela Khan stressed to use satellite imagery and climate-hydrological modeling for flood risk assessment, warned about the absence of a Pakistan-Afghanistan water treaty and rising pollution, and proposed an apolitical Climate-Indus Observatory for data sharing in South Asia.

NIMA Contributes to National Dialogue on Underwater Cultural Heritage

The National Consultation Workshop on the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage was held in Islamabad on 6 & 7 Oct 2025. The bringing together experts, government representatives, and heritage professionals to discuss Pakistan's commitment to protecting its submerged heritage. Organized by the Department of Archaeology and Museums (DOAM) and



UNESCO Pakistan, the workshop highlighted the need for policy coordination, research, and awareness. Dr. Aneela Khan and Lt Col Tariq Mehmood from the NIMA actively participated in the discussions.

NIMA Participates in 7th China-Pakistan Marine Information Conference at Harbin Engineering University



The 7th China-Pakistan Marine Information (CPMI-25) Conference was held at Harbin Engineering University (HEU) from 11-13 Oct 25. From NIMA, President Vice Admiral Ahmed Saeed HI (M) Retd presented a keynote address in the inaugural session on the topic 'influence of emerging technologies on maritime security'. Dr Aneela Saad Khan presented a paper on the 'Prospects of deep-sea mining in the Indian Ocean'.

NIMA Showcases Research Initiatives and Joint Project Prospects at CPMI-25, China

On 12 Oct 25, 2nd day at the 7th CPMI in Harbin Eng University China, President NIMA, Vice Admiral Ahmed Saeed, presented an overview of NIMA's initiatives. It was followed by a discussion session on prospects of joint project pro-



posals related to the use of the latest acoustic technologies for research. These projects included Underwater Marine Heritage Conservation & Deep-Sea Mining. Dr. Aneela elaborated on the related details.

NIMA Karachi Hosts Global Maritime Trends Conference 2025



On 14 October 25, NIMA in collaboration with The Nautical Institute Pakistan and Monson Winds Maritime Services, organized the Global Maritime Trends Conference at NIMA Karachi. Capt. Nish Wijayakulathilaka, Global VP of The Nautical Institute (UK), delivered a thought-provoking presentation on emerging trends and technologies in the maritime sector. The event concluded with a note of thanks by Cdre. Irfan Taj, followed by networking and exchange of souvenirs among maritime professionals and academia.

NIMA Signs MoU with HACRA for Collaboration on Underwater Cultural Heritage

On 17 October 25, NIMA and HACRA (Heritage, Archaeology & Cultural Research Associates) signed an MoU under the framework of the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage. The occasion



was graced by Vice Admiral Ahmed Saeed, President NIMA, Dr. Bilal Haider, Vice President NIMA, alongside researchers Dr. Fasiha Safdar, Dr. Aneela Khan, and Mr. Wajih ur Rehman, with Ms. Heba Hashmi, CEO HACRA, representing her organization. This partnership marks a key step forward as Pakistan advances toward the ratification of the Convention and the preservation of its submerged cultural heritage.

NIMA and NMUC Strengthen Pakistan–Malaysia Maritime Cooperation



The National Institute of Maritime Affairs (NIMA) in collaboration with the Netherlands Maritime College University (NMUC), Malaysia on 20 October 2025 organized an international seminar titled “Modern Trends in Global Maritime Supply Chain – Prospects for Collaborations between Pakistan and Malaysia.” President NIMA warmly welcomed all participants, emphasizing the importance of academic & professional cooperation in promoting the maritime industry. Distinguished speakers, including Dr. Capt. Norzali Bin Mohd. Zain, Dr. Hassan Daud Butt, Prof. TS Hj. Tomingan Bin Kamaror & Dr. Baber Bilal Haider shared insights on key areas, i.e., quality human resource, technical innovation, and policy

modifications, which are essentially required to transform ports operation into an efficient supply chain. In his concluding remarks, the Chief Guest, Dato Capt. Razali Yacoob commended NIMA's initiatives and highlighted the need for joint research, academic exchanges, and maritime industry partnerships. He suggested as step one to introduce mutual exchange programs.

Chairman BoA Admiral Zafar Abbasi Commends NIMA's Vision and Achievements

On 22 October 25, Admiral Zafar Mahmood Abbasi NI(M), Former Chief of the Naval Staff and Chairman of the Board of Advisors, NIMA visited the National Institute of Maritime Affairs. He received a detailed briefing on NIMA's role in maritime research, policy formulation, and capacity building. Admiral Abbasi expressed deep satisfaction with NIMA's progress as a leading maritime think tank, commending Vice Admiral Ahmed Saeed HI(M) and his team for their dedication. He conveyed best wishes and reaffirmed his full support for NIMA's continued growth and maritime excellence.

NIMA Launches Groundbreaking Maritime Manual at Prestigious Book Launch

On 27 October 25, the National Institute of Maritime Affairs (NIMA) proudly unveiled its flagship publication, "Navigating Legal Horizons: Seafarers' Manual on Naval Operations and Law of the Sea during Peace and War," at a grand ceremony at the Serena Hotel. The event was well attended by esteemed guests, including senior military officials, members of the judiciary, diplomats, legal experts, maritime professionals, and media representatives.

Authored by Vice Admiral Ahmed Saeed HI(M) (Retd), President NIMA, and Cdre Raheel Masood (Retd), Senior Research Fellow at NIMA, the manual provides comprehensive

guidance on navigating the complexities of modern maritime law. It synthesizes key international frameworks, including UNCLOS and International Humanitarian Law, while addressing pressing issues such as cyber-maritime security and AI-enabled autonomous weapons systems.

The manual received widespread acclaim during a reviewers' session featuring distinguished legal experts. Mr. Christoph Sutter, Head of the ICRC delegation in Pakistan, praised the manual's integration of humanitarian principles, describing it as an "Ethical Guide" for Pakistan's maritime community.

Senator Mushahid Hussain highlighted the manual's timely release during a period of global transition, emphasizing Pakistan's strategic maritime position. President NIMA thanked the ICRC for their partnership and acknowledged the support of the Friends of NIMA.

Chief Guest General Zubair Mahmood Hayat NI(M) (Former CJCSC) commended the manual as a visionary document that reflects a commitment to maritime governance grounded in the rule of law, ethical responsibility, and strategic wisdom. He emphasized that adherence to international maritime law is not only a legal obligation but also a strategic imperative for Pakistan. One minute silence was observed to show solidarity with Kashmiri people.



NATIONAL NEWS

MARITIME TRADE & ECONOMY

PIMEC 2025 to Showcase Pakistan's Maritime Strength and Drive Blue Economy Vision: CM Murad Ali Shah

PTV World 06 AUG 2025



The Sindh Chief Minister Syed Murad Ali Shah chaired the second PIMEC 2025 Steering Committee meeting, highlighting the event as a strategic platform to promote Pakistan's blue economy and maritime potential. He assured full Sindh Government support, appreciating Pakistan Navy and Ministry of Maritime Affairs for leading the initiative, scheduled for November 3–6, 2025 at Karachi Expo Centre.

Ship carrying 4,000 Tons of MOP Fertilizer docks at Gwadar Port

Daily Independent 07 AUG 2025



A commercial vessel carrying 4,000 tons of Muriate of Potash (MOP) fertilizer docked at Gwadar Port for Agven's factory in the North

Free Zone, marking the first time the facility will process raw MOP for domestic use and export. Agven, already importing and repacking DAP shipments for Afghanistan and other markets, has an annual SOP production capacity of 20,000 tons, establishing it as a key player in Gwadar's industrial growth. The meeting was attended by key stakeholders, including provincial ministries, Karachi Mayor, Commander Karachi, armed forces, and law enforcement officials. Chief Minister Shah announced maritime development projects, including the Bhutto Highway Extension, to improve port connectivity and trade efficiency, while participants recognized PIMEC 2025 as a milestone for maritime diplomacy and investment.

Pakistan Urges China to Fast-Track Gwadar Industrialization

The Daily CPEC 11 AUG 2025



Pakistan has asked the Chinese operator of Gwadar Port, COPHC, to submit a time-bound business plan with clear investment schedules and performance indicators. Authorities emphasized operationalizing the North Free Zone and expanding facilities such as refueling, LPG handling, and ship-to-ship transfers, while infrastructure upgrades like electricity, water, a desalination plant, expressways, and a potential railway link are underway. While appreciating Pakistan's facilitation, Chinese officials

requested more cargo allocation and shipping routes, as Islamabad pressed for a five-year roadmap to establish Gwadar as a regional trade hub.

Expert Urge to Unlock Pakistan's \$100 bln Maritime Potential Amid Celebrating 78th Independence Day

APP 13 AUG 2025



Experts at a pre-Independence Day session in Islamabad urged coordinated action to harness Pakistan's maritime potential, estimating the blue economy could contribute over \$100 billion annually, and highlighted investments in shipping, shipyards, offshore oil exploration, digital corridors, and climate-friendly initiatives like mangrove protection and "Green Ports." Concluding the session, speakers called on policymakers to adopt the blue economy as a central pillar of national strategy, supported by evidence-based planning and consistent implementation

Government Halves Karachi Port & Port Qasim Charges to Boost Trade

The Daily CPEC 13 AUG 2025



Deputy Prime Minister and Foreign Minister Senator Ishaq Dar chaired a high-level meeting to review port efficiency, focusing on reducing congestion, improving logistics, and modernizing infrastructure to boost imports and exports. Attended by senior officials, including SAPM Tariq Bajwa, Pakistan Railways Secretary Syed Mazhar Ali Shah, and NLC DG Maj Gen Farrukh Shahzad, the review follows the government's recent decision to cut Karachi Port charges by 50% as part of broader maritime sector reforms.

PM Shehbaz Invites Chinese Investors to Boost Pakistan's Maritime, Industrial Sectors

The Nation 21 AUG 2025



Prime Minister Shehbaz Sharif invited Chinese firms to invest in Pakistan's maritime industries, fisheries, and processing, assuring full support, especially in Special Economic Zones. The Shandong Xinxu Group expressed interest in green ship-breaking, maritime industrial projects, and fisheries development.

Pakistan Fisherfolk Forum's Fatima Majeed appointed head of Sindh Fisheries Department

Dawn 22 Aug 2025

Fatima Majeed, a climate activist and senior vice-chairperson of the Pakistan Fisherfolk Forum, has been appointed chairperson of the Sindh Fisheries Department, becoming the first woman from the fishing community to hold the



position. Her appointment, announced under PPP Chairman Bilawal Bhutto Zardari's vision of women empowerment, recognizes her activism for climate justice and fisherfolk rights. She assumes leadership as Pakistan aligns with global sustainability goals under the WTO Fisheries Subsidies Agreement.

Pakistan PM Orders Port Overhaul to Speed Cargo Clearance, Drive Export-Led Growth

The Nation 26 AUG 2025



Prime Minister Shehbaz Sharif has directed authorities to improve port efficiency, streamline customs, and strengthen inter-agency coordination to speed up cargo handling and delivery. The government is modernizing port systems with advanced technology, including AI-based risk management and enhanced scanner checks, to boost trade and facilitate Central Asian access.

ECC Approves Rs 330mn Reimbursement to PNSC, Ministry of Industries to Lead Coniston Arbitration

Profit Pakistan today 01 SEP 2025

The ECC approved 330.526 million rupees



reimbursement to PNSC for vessel release costs in South Africa. The Ministry of Industries will lead the Coniston arbitration over a 15 million dollar claim against PSM.

PNSC's total expenses since 2017 exceed 479.5 million rupees, including legal and insurance costs. The arbitration aims for a settlement between 6 to 11 million dollars to limit financial losses. PSM must contest or expedite arbitration, ensuring PNSC has no further obligations, with a progress report due in three months.

Gwadar at Core of Pakistan–China–Africa Maritime Link

Daily CPEC 05 SEP 2025



Pakistan aims to develop Gwadar into a regional trade and logistics hub through the China–Gwadar–Africa maritime corridor, inviting Chinese investment in warehouses, cold chains, shipbuilding, and maritime industrial projects. Federal Minister Muhammad Junaid Anwar Chaudhry highlighted plans for fleet expansion, logistics training, feeder vessel services, and a dedicated freight hub to strengthen the blue economy and regional trade links.

Pakistan Targets \$600 Million in Seafood Exports with China Partnerships, Aquaculture Push

Arab News 05 SEP 2025



Pakistan aims for \$600 million in seafood exports for FY 2025–26, with China as its largest market, leveraging aquaculture, frozen seafood, and live seafood preservation technologies. Joint ventures with Chinese firms will expand value-added seafood, poultry, and frozen fruits and vegetables exports while improving cold chain infrastructure for global markets.

Pakistan Offers Ports to Kazakhstan for Regional Trade

Business Recorder 09 SEP 2025



Pakistan has offered its ports, including Karachi, Port Qasim, and Gwadar, to Kazakhstan as gateways for regional trade, highlighting multimodal corridors, incentives, and spare capacity. Kazakhstan showed strong interest in expanding maritime cooperation and establishing long-term trade collaboration with Pakistan.

Karachi Port Jumps Massive 344 Places to 61st in Global Rankings

Pakistan Observer 10 SEP 2025



Karachi Port has jumped 344 places in global rankings, moving from 405th to 61st, highlighting major improvements in Pakistan's maritime infrastructure and its role in handling 54 percent of national trade. Investment opportunities at Port Qasim and Gwadar, including cargo terminals, shipyards, SEZs, and tourism, have attracted strong interest from a visiting US trade delegation.

PIMEC 2025 Strengthens Maritime and Trade Ties with China

The Daily CPEC 12 SEP 2025



PIMEC 2025 is strengthening Pakistan-China maritime and trade ties through high-level delegations, B2B engagement, and discussions on fisheries, aquaculture, and advanced fishing technologies. Innovations showcased, including next-generation vessel engines and krill pumping vessels, will be further promoted at the

3–6 November event in Karachi, focusing on shrimp farming, deep-sea fishing, export zones, and technology-transfer joint ventures.

CPEC Second Phase Spurs Green Growth, Maritime Expansion

The Daily CPEC 20 SEP 2025



The second phase of CPEC emphasizes green industrialization and strengthening Pakistan's maritime economy through renewable energy, eco-industrial zones, and climate-based finance. Gwadar's Maritime Action Plan (2025–2029) includes port expansion, smart technologies, marine tourism, shipbuilding, aquaculture, and training programs with China, aiming to balance growth with environmental sustainability under the BRI.

Gwadar Marine Innovation Lab Boosts Fishing Economy

The Daily CPEC 20 SEP 2025



Gwadar will get a Marine Innovation Lab at PCSIR's Precision System Training Centre to modernize its fishing industry.

The lab will introduce CNC precision boat manufacturing and sustainable fibreglass vessel development for safer, durable, and competitive boats. The initiative is part of CPEC-driven efforts to skill local youth for emerging industrial opportunities.

PSAA Warns Of an Impending Crisis in Maritime Trade due to the FBR's unilateral Tax Registration Requirement

Trade Chronicle 20 SEP 2025



The Pakistan Ship's Agents Association (PSAA) opposed FBR's plan requiring non-resident ship owners to register, obtain NTN, and file taxes, warning it could disrupt maritime trade. PSAA urged authorities to restore the previous system and engage in dialogue to protect imports, exports, and ease of doing business.

Pakistan to Host Maritime Week in November, Minister Calls for Urgent Global Action to Protect Oceans

Profit Pakistan today 25 SEP 2025



Pakistan will observe Maritime Week from

November 1–7, 2025, showcasing its maritime potential and launching initiatives like upgrading Gaddani Ship Yards, digitizing ports, and expanding the shipping fleet. The government plans EEZ surveys, Gwadar Port development, and maritime incubators, emphasizing sustainability, climate adaptation, and youth and community engagement for a green blue economy.

Pakistan to Become Respected Maritime Nation: President

Dunya News 25 SEP 2025



President Asif Ali Zardari emphasized Pakistan's bright maritime future, highlighting the sector's role in trade, connectivity, and economic resilience. Reforms focus on port upgrades, modernization, digitization, and strengthening national shipping to enhance global supply chain integration.

Sindh Government launched the Benazir Fishermen Card to provide direct monthly financial assistance to eligible fishermen

Daily Independent 25 SEP 2025

The Sindh Government launched the Benazir Fishermen Card on September 25. The program provides direct monthly financial assistance to eligible fishermen. It aims to support the livelihoods of coastal communities.

The initiative is part of Sindh's social welfare and economic support measures. The card ensures



timely and transparent disbursement of funds to beneficiaries.

Karachi's Port Qasim Ranks 9th in World Bank's Container Port Performance Index

Profit Pakistan today 27 SEP 2025



Karachi's Port Qasim ranked 9th in the World Bank's Container Port Performance Index (2020–2024), reflecting reforms, modernization, and efficient operations. Improved berth management, digital tools, and private operator contributions, along with dredging for larger vessels, have enhanced connectivity, investment, and Pakistan's position as a regional logistics hub.

Five-Year Maritime Plan Poised to Transform Gwadar into Trade Hub

Daily Times 29 SEP 2025

The five-year Maritime Affairs Action Plan (2025–2029) aims to transform Gwadar into a



regional trade hub, aligning with CPEC and enhancing connectivity with China, Central Asia, the Middle East, and Africa. Key projects include port expansion, Free Zone Stage II, East Bay Expressway Phase II, airport-port integration, smart technologies, and sustainable maritime practices.

CM Maryam Nawaz Sharif Meets Participants of 55th Staff Course of Pakistan Navy War College

Urdu Point 29 SEP 2025



Chief Minister Punjab Maryam Nawaz Sharif met a Pakistan Navy War College delegation from 15 countries, expressing support for Palestinians and highlighting health initiatives, infrastructure projects, and security measures. She also emphasized industrial development through interest-free loans to 13,000 entrepreneurs, earning praise from the delegation.

Pakistan Highlights Geo-Strategic Role in Regional Connectivity

The Daily CPEC 01 OCT 2025



Federal Minister Abdul Aleem Khan highlighted Pakistan's strategic role in connecting South Asia, the Middle East, and Central Asia via trade corridors, including the Islamabad-Tehran-Istanbul route. He emphasized CPEC, regional cooperation under ECO and SCO, and the need to remove trade barriers while promoting peace through infrastructure and digital connectivity.

Role of Fisherman Backbone In Coastal Economy Of Balochistan: Irshad

Urdu Point 06 OCT 2025



Vice Chairman of BFCS Irshad Pars Maggi highlighted fishermen as the backbone of Balochistan's coastal economy and emphasized protecting their rights and welfare. Participants called for better infrastructure, modern boats, and easy loans to strengthen livelihoods and create jobs in coastal areas.

PIMEC Strategic Platform To Advance Pakistan's Blue economy, says CM Murad

The Nation 08 OCT 2025



Sindh CM Murad Ali Shah chaired PIMEC 2025's steering committee, highlighting the event as a platform to boost Pakistan's Blue Economy through exhibitions, conferences, and business engagements in Karachi from November 3–6, 2025. He emphasized departmental coordination for logistics and security, while Pakistan aims to replicate Egypt's Suez Canal free zone model in its ports.

Pakistan Seeks to Replicate Egypt's Swiss Canal Free Zone Model in its Port

Arab News 15 OCT 2025



Pakistan plans to replicate Egypt's Suez Canal free zone model to boost industrial and trade activity around its major ports. Maritime Affairs Minister Junaid Anwar Chaudhry said Egypt will assist in designing port-based economic zones to attract investment.

The initiative aims to expand Pakistan's maritime connectivity with Africa, Central Asia, and the Middle East. Proposed "Pakistan Houses" abroad would promote trade, logistics, and industrial partnerships. Both nations agreed to form working groups for feasibility studies and joint ventures in maritime and industrial development.

Naval Chief Visits us to Strengthen Maritime Security Cooperation

The Nation 17 OCT 2025



Chief of Naval Staff Admiral Naveed Ashraf visited the US to strengthen maritime security and defence cooperation, meeting officials from the US Navy, Coast Guard, and State Department. Discussions focused on regional stability, joint training, and maritime initiatives, reaffirming strong Pak–US naval relations.

Sindh Plans Mini Fish Harbours at Ketu Bunder and Shah Bunder

Profit Pakistan today 18 OCT 2025

Sindh CM Murad Ali Shah approved a Rs1.35 billion project to build mini fish harbours at Ketu Bunder and Shah Bunder, easing Karachi Fish Harbour congestion. The three-year initiative will support small-scale fishermen, improve fish handling, create jobs, and include eco-friendly waste systems and sustainability training.

PORTS & SHIPPING

Minister Advocates Fast Launch of Pakistan Ferry Service

The Daily CPEC 02AUG 2025



Federal Minister Muhammad Junaid Anwar Chaudhary called for the swift launch of Pakistan's first ferry service to support pilgrims and boost regional maritime connectivity. Reforms aim to digitize ferry licensing, cut processing times, and encourage private investment, offering a secure and affordable alternative for Zaireen traveling to Iran.

Pakistan Navy, ANF Seize Illicit Drugs Worth \$38m Near Balochistan's Pasni Coast

Dawn 07 AUG 2025



The Pakistan Navy and Anti-Narcotics Force seized 1,250kg of narcotics worth \$38 million near Balochistan's Pasni coast. The consignment included 1,100kg of hashish, 50kg of crystal meth, and 100kg of heroin being smug-

gled via the Arabian Sea. The recovered drugs were handed over to ANF for legal proceedings.

The Navy termed the operation a demonstration of its resolve to curb illegal maritime activities. Similar successful counter-narcotics operations were carried out in 2023 and 2024

Government Finalizes Recommendations to Reduce Container Dwell time at Karachi Port, Port Qasim

Profit Pakistan today 19AUG 2025

The government finalized measures to reduce container dwell time at Karachi Port and Port Qasim, aiming to streamline clearance, ease congestion, and align with global standards. Key proposals include pre-arrival filings, virtual adjudication, 24/7 operations, AI-based risk profiling, e-auctions, and infrastructure upgrades, while reducing free container time from five to three days with penalties for delays.

Pakistan Boosts Shipping Capacity as PNSC Grows to 12 Vessels

Metis Global News 28AUG 2025



PNSC expanded its fleet to 12 vessels with two Aframax tankers, Swan Lake and P. Aliki, enhancing energy transport efficiency for smaller ports. Federal Minister Muhammad Junaid Anwar Chaudhry reaffirmed the goal of a 20-ship fleet, aiming to cut \$4.6 billion in annual

freight costs and strengthen national energy security.

AD Ports Group's Karachi Terminals in Pakistan Sign Dredging Agreement to Expand Throughput

Dry Bulk Magazine 15 SEP 2025



AD Ports Group and Van Oord signed a dredging agreement to expand Karachi Gateway Terminal, increasing container capacity to 1 million TEUs and doubling bulk vessel capacity. The \$300 million project, completing by Q1 2026, aims to boost operational efficiency, regional trade, and economic growth.

Star Shipping Oversees Third Project Cargo Shipment from Karachi and Port Qasim

Breakbulk News 19 SEP 2025

In September 2025, Star Shipping coordinated its third project cargo movement via Karachi Port and Port Qasim, handling oversized and standard containers requiring specialized transport. The operation involved close coordination with terminals, transport companies, and international agencies to ensure safe multimodal delivery.

Ship Recycling Market Stabilizes

Marine link 22 SEP 2025

Global markets showed slight stability as oil

Rank	Location	Sentiment	Dry Bulk USD / LDT	Tankers USD / LDT	Containers USD / LDT
1	Pakistan	Steady	420 / LDT	440 / LDT	450 / LDT
2	India	Steady	410 / LDT	430 / LDT	440 / LDT
3	Bangladesh	Weak	400 / LDT	420 / LDT	430 / LDT
4	Turkey	Weak	250 / LDT	260 / LDT	270 / LDT

rose 0.17% this week despite monthly and yearly declines. Dry bulk indices fell 2–3% except Cape (+1%), steel plate prices stayed steady, and Pakistan's vessel recycling remained limited due to regulatory and infrastructure challenges.

Port Qasim Expansion Announced to Boost Pakistan Exports

The Daily CPEC 23 SEP 2025

Federal Minister Muhammad Junaid Anwar Chaudhry unveiled plans to boost cement and clinker exports at Port Qasim, including two new berths and a 30,000-ton storage facility. Existing facilities will be upgraded, and the Sahiwal berth used for clinker, aiming to modernize operations, improve logistics, and enhance export competitiveness.

Historic Royal Navy Frigate to Sail 6,000 Miles from Pakistan to Clyde as Floating Museum

Marine Insight 23 SEP 2025

HMS Ambuscade, later Pakistan's PNS Tariq,



will become a floating museum on the River Clyde, highlighting its Falklands War service and 30-year Pakistan Navy history. Developed by Clyde Naval Heritage and Tricolor Collective, it will showcase shipbuilding heritage and educational programs, sailing 6,000 miles from Karachi.

Karachi Port Trust Requests 600 Acres of land for Truck Terminal to Ease Traffic Congestion in Karachi

Profit Pakistan today 23 SEP 2025



Karachi Port Trust proposed a 600-acre truck terminal along the Northern Bypass to ease port-area congestion, supported by Minister Muhammad Junaid Anwar Chaudhry. The plan, discussed in the National Assembly committee, includes managing truck entry, e-tags, and addressing port encroachments and hazardous materials.

Pakistan Needs Modern Ports to Handle Larger Vessels'

Business Recorder 26 SEP 2025

Pakistan aims to modernize ports to handle larger vessels and higher cargo, with CM Sindh Murad Ali Shah proposing expansions, new ports, and better logistics integration. Development of harbors, berths, and storage, along with international collaboration and mini sea ports,

will ease congestion and boost trade and economic growth.

PNSC Approves \$193 Million Purchase of Three Vessels to Expand National Fleet by 2026

Profit Pakistan today 10 OCT 2025



PNSC approved a \$193 million purchase of three oil tankers—MT Karachi, MT Lahore, and MT Quetta—to expand Pakistan's fleet by 2026, enhancing cargo and energy transport. This move supports reducing reliance on foreign carriers and is part of a broader plan to acquire 12 more ships through public-private partnerships, hailed by Minister Junaid Anwar Chaudhry as a step toward a self-reliant shipping sector.

Pakistan Offers to Modernise Sudan's Ports, Boost Trade

The Daily CPEC 17 OCT 2025



Pakistan offered AI-based and technical support

to help Sudan modernize Port Sudan under its Blue Economy Vision 2030. Both sides discussed port upgrades, logistics, and joint industrial projects, including a tractor assembly venture at Gwadar Free Zone and a proposed direct shipping line to boost trade. Meanwhile, PNSC approved a \$193 million purchase of three oil tankers—MT Karachi, MT Lahore, and MT Quetta—to expand its fleet by 2026, marking a major step toward a self-reliant and modern shipping sector.

MARITIME SAFETY, SECURITY & TECHNOLOGY

PNS Shamsheer, USS Fitzgerald Hold Joint Exercise

The Daily CPEC 01 AUG 2025



Pakistan Navy Ship Shamsheer and US Navy Ship USS Fitzgerald held a bilateral exercise in the North Arabian Sea to enhance interoperability and maritime cooperation, reinforcing Pakistan–US defence ties amid regional tensions.

Pakistan's Merchant Navy and the Role of the Maritime Training Institute in Enhancing Maritime Security in the Arabian Sea

Business Day 03 AUG 2025

Pakistan's Merchant Navy, backed by the Maritime Training Institute (MTI), is emerging as



a key regional maritime player. MTI-trained officers enhance global shipping, safety, and cooperation, complementing Pakistan Navy operations and supporting CPEC and Gwadar's maritime growth.

Pakistan Naval Chief Awarded 'Legion of Merit' as Pakistan, Türkiye Deepen Naval Ties

Arab News 05 AUG 2025



Pakistan Navy Chief Admiral Naveed Ashraf received Türkiye's “Legion of Merit” during his visit to Ankara. He met Turkish defense officials to discuss maritime cooperation, joint training, and exercises. Visits to Istanbul Naval Shipyard and Golcuk Naval Base highlighted progress on the MILGEM project, reinforcing strong Pakistan–Türkiye defense ties.

Sindh, PMSA holds Health Camp for Coast Community

Daily Times 06 AUG 2025

PMSA, with Sindh's Health Department and



partner NGOs, organized a health camp at Ketī Bandar, providing free medical care to 700 residents and promoting maritime safety and hygiene awareness for coastal communities.

Pakistan, Turkish Navies Conclude First Bilateral Amphibious Exercise in Karachi

Arab News 06 AUG 2025



Pakistan and Turkish navies held their first bilateral amphibious exercise to enhance interoperability and tactical readiness, marking a milestone in their growing maritime cooperation and regional security partnership.

Pak Navy Chief Meets Azerbaijan Military, Navy Leadership

The Nation 08 AUG 2025

Naval Chief Admiral Naveed Ashraf visited Azerbaijan, meeting naval and defence leaders to discuss maritime cooperation and regional security. He emphasized joint training and



exercises, reviewed defence collaboration, and laid wreaths at the Alley of Martyrs, strengthening Pakistan–Azerbaijan defence ties.

Pakistan Navy Completes Karachi Port Security Exercise

The Daily CPEC 09 AUG 2025



The Pakistan Navy held a two-day Port Security and Harbour Defence Exercise at Karachi Harbour and Port Qasim, testing joint readiness and threat response. The drills, involving PMSA and other agencies, reinforced maritime security and protection of vital infrastructure.

Pakistan Navy Celebrates 78th Independence Day with Traditional Zeal and Patriotic Fervour

Daily Independent 14 AUG 2025

Pakistan Navy marked Pakistan's 78th Inde-



pendence Day with a Change of Guard ceremony at Mazar-e-Quaid. Naval cadets assumed duties as Commodore Tasawar Iqbal laid a wreath on behalf of the Naval Chief. Flag hoisting and prayers nationwide reaffirmed the Navy's resolve to defend the country.

AI Integration to Modernize Pakistan's Port Infrastructure

Times of Karachi 15 AUG 2025



Federal Minister Junaid Anwar Chaudhry announced full AI integration at Pakistan's ports by August 14 through the new AIMS system, making his ministry the first to adopt AI operations. He reported record profits of Rs109.7 billion and outlined new digital and bunkering initiatives to boost efficiency, transparency, and investment.

Pakistan Receives its Third Chinese Built Submarine

Maritime Executive 17 AUG 2025

Pakistan received its third Hangor-class subma-



rine from China on August 14, marking a key milestone in naval modernization. Built on the Type 039B design, the submarines—four from China and four from Karachi Shipyard—will replace the Agosta 90B fleet and boost Pakistan's strategic and underwater warfare capabilities.

Commodore Sohail Ahmad Takes Over as Commander Central Punjab



The Daily Times 22 AUG 2025

Commodore Sohail Ahmad Azmie assumed command as Commander Central Punjab (COMCEP) at Naval Complex Walton, Lahore, succeeding Rear Admiral Jawad Ahmed. A decorated officer with key command and staff roles, he now oversees Navy units from Bahawalpur to Wazirabad and serves as Commandant of Pakistan Navy War College.

Pakistani Fishermen Demand Release of 15 Detained by Indian BSF

The Nation 27 AUG 2025



India's BSF arrested 15 Pakistani fishermen near Kuch Creek on August 25, alleging border violation. The Pakistan Fisherfolk Forum denied the claim, saying the fishermen were in Pakistani waters and urged the UN to act for their release.

Pak Navy Hands Over Command of Combined Task Force 151 to Brazil

APP 28 AUG 2025



Pakistan Navy handed over command of CTF-151 to the Brazilian Navy in Bahrain, marking the end of Commodore Sohail Ahmad Azmie's tenure. During PN's command, major operations like SEA SPIRIT strengthened global maritime cooperation and security.

Pakistan to Boost Naval Training, Joint Maritime Operations with Bahrain

Arab News 02 SEP 2025



Pakistan and Bahrain agreed to boost naval training and regional maritime security cooperation. Discussions covered joint patrols, anti-piracy, and knowledge-sharing, with Bahrain keen on learning from Pakistan's multi-domain operational experience.

Pakistan Navy Marks Navy Day with Tributes and Maritime Vision

The Daily CPEC 08 SEP 2025



Pakistan Navy celebrated Navy Day on September 8, honoring heroes of the 1965 war and Submarine Ghazi's deterrence. Admiral Naveed Ashraf highlighted maritime defense, combat readiness, and the upcoming PIMEC-25 to boost investment and the Blue Economy.

PM Pays Tribute to Pakistan Navy for Defending Maritime Borders

Dunya News 08 SEP 2025



Prime Minister Shehbaz Sharif honored the Pakistan Navy on Navy Day, praising its bravery, strategic role, and contributions to the Blue Economy and maritime security. He urged the nation to salute naval heroes and wished continued progress for the Navy and Pakistan.

Pakistan, Denmark Agree to Build Faisalabad WWTP project

The Express Tribune 19 SEP 2025



Pakistan and Denmark signed a concessional loan agreement to build a 33 MGD Eastern Wastewater Treatment Plant in Faisalabad. The plant will treat 200,000 cubic meters of wastewater per day, improving urban infrastructure, public health, and environmental protection. Denmark's DSIF is providing highly favor-

able financing with 35% concessionality making the project more affordable for Pakistan.

Danish engineering firms, known for expertise in green water treatment, are expected to participate in construction. This project marks a key step in Pakistan-Denmark cooperation on sustainable infrastructure and green development initiatives.

Pakistan Sets Course for Sustainable Seas from Shipyards to Solar Boats

Mettisglobal News 25 SEP 2025



Pakistan will introduce its first solar-powered fishing boat, maritime incubators, and digital pollution monitoring at Karachi Port. Scientific surveys in the EEZ and development of Gwadar Port and Free Zone will follow IMO standards. The initiatives aim to balance economic growth with marine conservation and address climate and pollution pressures.

Pakistan Maritime Week (November 1–7, 2025) will showcase maritime potential, with plans to expand the shipping fleet and modernize Gaddani Ship Recycling Yards.

Minister Chaudhry emphasized regional cooperation and honored seafarers, fishermen, scientists, and port workers for their contributions.

Us Navy Ship Concludes Visit to Karachi Port

Business Recorder 27 SEP 2025



USS Wayne E. Meyer visited Karachi from September 24–26, enhancing Pakistan-US naval cooperation. The ship's officers met with Pakistan Fleet Commander to discuss regional maritime security. Crews engaged in professional exchanges, training, and sports activities. Cross-ship visits shared operational insights between navies. The visit reinforced commitment to maritime stability and future collaboration.

Senior Pakistan Navy Delegation Visits Sri Lanka for Galle Dialogue-2025

Business Recorder 27 SEP 2025



Pakistan Navy delegation visited Sri Lanka from September 23–26. They participated in the Galle Dialogue-2025 organized by the Sri Lanka

Navy. The delegation was led by Rear Admiral Faisal Amin and Commodore Baber Bilal (Retd). The visit emphasized Pakistan's role in regional maritime cooperation. It strengthened Pakistan-Sri Lanka relations and collaboration in the Indian Ocean.

Sindh Minister for Livestock and Fisheries, Muhammad Ali Malkani Instructs to Develop Online Portal for Swift Resolution of Problems of Livestock Farmers

Urdu Point 08 OCT 2025



Sindh Minister Muhammad Ali Malkani announced an online portal and helpline to quickly address livestock and fisheries issues, ensuring 24-hour complaint resolution. He emphasized digital tools for transparency and efficiency, alongside a preview of PIMEC 2025 in Karachi.

Gwadar Port Monitoring Station Boosts Maritime Safety

The Daily CPEC 18 OCT 2025

CHEC installed a Weather and Tidal Monitoring Station at Gwadar Port to enhance maritime safety and operational efficiency, providing real-time data on tides, weather, and water quality. A Hong Kong–Punjab MoU will further boost trade, investment, and industrial collaboration under CPEC.

MARITIME ENVIRONMENT POLICY, & LAW

Maritime Minister Urges Port City Journalists to Champion Blue Economy Awareness

APP 07 AUG 2025



Minister Junaid Anwar Chaudhry urged media to focus on Pakistan's blue economy, emphasizing aquaculture, sustainable fisheries, mangrove restoration, and coastal protection. He highlighted climate risks to port cities and announced initiatives and training to promote community-centered maritime sustainability stories.

Urumqi Resumes Pakistani Seafood Imports, Exports Rise

The Daily CPEC 09 AUG 2025



Urumqi Airport resumed fresh seafood imports from Pakistan after two years, with a 1,292-kg consignment reducing transit time and costs. Pakistan's exports of dental instruments to China also rose 4% in early 2025.

Pakistan to Become First South Asian Nation to Ratify UNESCO Underwater Heritage Convention

Shia waves 09 AUG 2025



Pakistan will be the first South Asian country to ratify the 2001 UNESCO Convention to protect underwater cultural heritage, using non-invasive technologies and strict scientific rules. Plans include registering historic maritime sites in Karachi and establishing a maritime museum, with UNESCO offering technical support.

At UNSC, Pakistan Urges Secure Maritime Domain

The Nation 13 AUG 2025



Pakistan urged the UN Security Council to keep oceans peaceful, oppose militarization, and uphold UNCLOS, highlighting its role in regional

security and responsible use of technology. The country reaffirmed commitment to maritime cooperation, climate resilience, and supporting developing states.

Junaid Anwar Chaudhry Vows Preventive Measures to Protect Karachi Ports, Marine Life

PTV News 24 AUG 2025

Maritime Minister Junaid Anwar Chaudhry called for preventive measures at Karachi ports to stop pollution from sewage and industrial waste, protect marine life, and safeguard coastal communities. He urged stormwater treatment, monitoring, and large-scale interventions to prevent ecological and economic losses worsened by climate change.

Karachi Monsoon Rains Flush Industrial Waste into Sea, Threatening Marine Life

Arab News 26 AUG 2025

Monsoon floods in Karachi washed industrial waste and garbage into the Arabian Sea, damaging marine ecosystems and fish nurseries from Manora to Korangi Creek. Experts warn that pollution, worsened by inadequate waste collection, is harming fisheries and forcing fishermen to travel farther for catches.

400 War-Hit Ships Eyed for Recycling

Express Tribune 09 SEP 2025

Pakistan plans to recycle 400 abandoned Russian and Ukrainian ships at Gadani, upgrading it into a green shipbreaking hub under the Hong Kong Convention. Modern facilities, eco-friendly operations, and a National Center of Excellence will support sustainable practices and boost the maritime economy.



Seawater Intrusion Displaces Fishing Community

The Express Tribune 13 SEP 2025

Seawater intrusion in Sindh has submerged 3.5 million acres, displacing fishing communities and threatening livelihoods. Experts cite reduced Indus flows and weak social protections, while leaders aim to improve welfare, jobs, and fish exports.

Balochistan Fisheries Department to Launch Crackdown on Illegal Trawling

ARY News 15 SEP 2025

The Balochistan Fisheries Department has launched a crackdown on illegal trawling to protect marine ecosystems and safeguard coastal livelihoods. The initiative follows Chief Minister Mir Sarfaraz Bugti's emphasis on sustainable development and fishermen welfare.

A review team, including DG Atiqullah Khan and marine experts, assessed coastal areas in Gwadar and identified challenges faced by local fishermen. Measures will be taken to prevent unauthorized fishing, preserve biodiversity, and ensure long-term sustainability of the fishing industry. Parliamentary and fisheries officials stressed the campaign's importance for both ecological balance and economic interests of coastal communities.

Sindh Fisheries Department to Prioritize Coastal Fishermen, Enforce Strict Regulations

Daily Independent 24 SEP 2025



Sindh Minister Mohammad Ali Malkani announced priority measures to address coastal fishermen's issues. Only biometrically verified fishermen with valid ID cards will be allowed to operate at sea.

All fishing vessels must be registered and tracked via a Vessel Monitoring System (VMS). The government aims to prevent illegal fishing and ensure compliance with territorial limits.

These steps will protect marine resources, support sustainable livelihoods, and enforce penalties for unauthorized activities.

Pakistan Launches Mangrove Plantation Drive amid Push for Environmental Restoration

Arab News 28 SEP 2025

Pakistan Navy has launched a mangrove plantation drive along the southern coast to combat climate change and protect coastal communities. Mangroves play a vital role in preserving biodiversity, preventing erosion, and strengthening coastal resilience. The campaign is in collaboration with Sindh and Balochistan

forest departments and the IUCN, with Rear Admiral Faisal Amin inaugurating it. Under its environmental program, the Navy has planted 8.7 million mangroves from Shah Bandar to Jiwani, providing employment opportunities for locals.

These efforts address climate vulnerability, seawater intrusion, and promote marine conservation and sustainable development for future generations.

Pakistan Launches Rs 90 Million Initiative to Protect Sea Turtles During Shrimp Trawling

Profit Pakistan today 09 OCT 2025



Pakistan launched a Rs90 million project to protect sea turtles during shrimp trawling operations. The initiative provides Turtle Excluder Devices (TEDs) free of cost to fishermen, along with training and monitoring.

It aims to prevent accidental turtle deaths while maintaining shrimp catch efficiency and reducing net damage.

The project supports Pakistan's bid to regain US certification for shrimp exports and meet global sustainability standards.

Successful implementation could triple shrimp export volumes and expand access to major international markets.

Rains Bring Windfall for Fishermen

Express Tribune 09 OCT 2025



Monsoon rains have boosted fish and shrimp populations along Sindh's coast, benefiting local fishermen. Freshwater inflow from rivers into the Arabian Sea has created ideal conditions for marine life to thrive. Fishing activities have resumed in areas like Ibrahim Hyderi, Ketī Bandar, and Badin after weeks of closure.

Fishermen reported their catches have nearly doubled, reviving hopes for coastal livelihoods. The rains are seen as a natural blessing that rejuvenated the sea's ecosystem and economy.

Coastal Ecosystems Key to Pakistan's Blue Economy, Says Maritime Minister

Profit Pakistan today 12 OCT 2025



Federal Maritime Affairs Minister Junaid Anwar Chaudhry emphasized protecting Pakistan's coastal ecosystems as vital to the nation's Blue

Economy. He highlighted their role in supporting migratory birds, fisheries, and eco-tourism under global conventions like Ramsar and CMS.

The minister warned against unchecked coastal development and pollution threatening mangroves and wetlands. He urged stronger conservation, community participation, and eco-friendly tourism to sustain livelihoods and biodiversity. Pakistan's coastal zones, part of the Indus Flyway, were described as critical for both wildlife and coastal economic resilience.

Fishermen Return After Long Captivity in India

Express Tribune 14 OCT 2025



Fifty-four Pakistani fishermen imprisoned in India for years returned home via the Wagah Border after long detentions. They had been arrested between 2017 and 2021 for allegedly crossing maritime boundaries near Sir Creek.

The Edhi Foundation facilitated their reception and transport to Karachi, where families welcomed them with joy. Several fishermen described harsh conditions and mistreatment during their captivity in Indian jails. Their release brought emotional reunions, highlighting the human cost of unresolved maritime boundary disputes.

Workshop in Gwadar Highlights Fishermen's Financial Challenges and Sustainable Solutions

Daily Independent 16 OCT 2025

A WWF and IUCN–organized workshop in Gwadar addressed fishermen's financial struggles and promoted sustainable fishing practices. Experts emphasized improving fish preservation, market value, and access to modern equipment and storage facilities. Speakers called for fishermen's inclusion in policy-making to support marine conservation and local livelihoods. The event highlighted the need for financial independence through training and community-based initiatives. It underscored that sustainable fishing is key to both economic growth and environmental balance in coastal areas.

Six Trawlers Involved in Illegal Fishing Seized

Dawn 16 OCT 2025

The Pakistan Coast Guards and Balochistan Fisheries Department jointly seized six trawlers engaged in illegal fishing and confiscated 245 banned nets from Karachi's coastal area. Operations were conducted along Ormara, Pasni, and Jiwani, targeting unlawful trawling and smuggling activities. Officials stated that trawling harms marine ecosystems and threatens the livelihoods of local fishermen. Some trawlers were also suspected of smuggling weapons and narcotics. Local fishing communities welcomed the crackdown as a step toward sustainable marine resource protection.

Pakistan to Launch National Action Plan to Protect Endangered Sharks in Arabian Sea

Bussines Recorder 18 OCT 2025

Pakistan is launching a National Action Plan to



protect endangered shark species in the Arabian Sea, aligning with global conservation standards. The initiative targets banned species like hammerhead, thresher, and whale sharks, threatened by unsustainable fishing. The plan follows the FAO's IPOA-Sharks framework, promoting sustainable fishing and stricter enforcement. Federal and provincial cooperation will ensure better monitoring, awareness, and data transparency. It reflects Pakistan's growing focus on marine biodiversity protection and sustainable seafood trade.

Fishermen from Pasni End Month-long Fishing Boycott

Dawn 20 OCT 2025

Fishermen in Pasni have ended their month-long boycott, resuming fishing along the Makran coast after reaching an agreement with local authorities.

Under the deal, all boat captains (Naakhuda) must be local residents, while fishermen from other regions can continue working. The agreement aims to ensure fairness, unity, and local empowerment in the fishing community.

The announcement was made by JI Balochistan chief Maulana Hidayatur Rehman at the Pasni Press Club. Officials urged cooperation among all stakeholders to maintain harmony and support fishermen's livelihoods.

INTERNATIONAL NEWS

MARITIME TRADE AND ECONOMY

Asia-US Freight Rates Fall Further Amid Tariff Disruption

Port technology International 5 August 2025

Sea freight rates between Asia and the US are forecast to continue falling through the remainder of 2025, as ongoing tariff chaos, overcapacity and shifting trade dynamics disrupt traditional shipping routes.



According to market intelligence provider Xeneta, spot container rates to the US West Coast dropped by 58 per cent since 1 June, while rates to the US East Coast fell by 46 per cent over the same period. This downward trend reflects an excess of shipping capacity amid uncertain trade policies and –ongoing US China tariff tensions. A sluggish European Union (EU) economic outlook and stalled trade talks have increased blanked sailings, impacting the market. Shipping firms are rerouting vessels to bypass Red Sea chokepoints and tariffed US ports, balancing freight capacity.

Parliament Passes Merchant Shipping Bill, 2025 after Rajya Sabha Adoption

Press Information Bureau 11 August 2025

The Parliament passed the Merchant Shipping Bill, 2025 today as the Rajya Sabha approved the bill today. The bill is a landmark legislation aimed at modernising India's maritime frame-

work, aligning domestic laws with international best practices & International Maritime Organisation (IMO) conventions, ensuring that India's maritime sector remains equipped, ready and relevant to the contemporary and future challenges. The bill was presented for consideration by the Union Minister of Ports, Shipping & Waterways (MoPSW), Shri Sarbananda Sonowal in the Rajya Sabha, as the bill was passed by the Lok Sabha on August 6 during the ongoing session.

The Ministry of Ports, Shipping and Waterways (MoPSW) has set a new benchmark in legislative reform, steering through a record number of maritime sector legislations in a single Parliament session. The historic feat underscores the government's commitment to transforming India into a global maritime leader and building a robust foundation for a Viksit Bharat.

Puerto del Norte Opens in Matamoros, Boosting Mexico-US trade

LMT Online 13 August 2025

Tamaulipas Governor Américo Villarreal Anaya inaugurated Puerto del Norte in Matamoros on August 2, marking Mexico's first new major port in two decades after 24 years of inactivity. The port, launched with the vessel Integrador, will boost competitiveness by cutting transport time for vehicles from Monterrey by up to five hours compared to Altamira. Villarreal, backed by President Claudia Sheinbaum and Navy Secre-



tary Raymundo Morales Ángeles, called it a “historic day” that positions Tamaulipas as Mexico's new maritime frontier. The port will support industries in Nuevo León, Coahuila, and San Luis Potosí, benefiting steel, shipbuilding, and auto sectors.

Regional leaders highlighted its role in complementing Laredo's international trade bridges, enhancing USMCA trade flows and supporting nearshoring supply chains.

South Korea Bets Big on Reviving Troubled US Shipbuilding To Woo Trump

The Global Economics 26 August 2025



US and South Korean companies signed 11 non-binding agreements in the areas of shipbuilding, nuclear energy, aerospace, gas and critical minerals.

South Korean President Lee Jae Myung is relying on his commitment to “Make America Shipbuilding Great Again” during his formal visit to the US as the two countries discuss various aspects of their trade agreement. Lee plans to tour a shipyard owned by South Korea's Hanwha Group to show his investment plans.

As part of South Korea's commitment to invest \$350 billion in US projects, shipbuilding was one of the key investment areas, with \$150 billion allocated to that industry. Hanwha, which purchased the facility last year, plans to spend

\$5 billion to increase its production from two vessels annually to 20 according to a statement from Lee's office. In contrast, Hanwha Ocean's shipyard in South Korea is ten times bigger and produces a vessel every week.

Turkey Implements Barriers to Prevent Shipping to and From Israel

Long War Journal 02 Sept



Turkey is enforcing a de facto ban on Israel-related maritime traffic, blocking Israel-flagged or owned ships from Turkish ports and barring Turkish-flagged vessels from calling at Israeli ports. President Erdogan framed it as a “new sanction” over the Gaza conflict. So far, port authorities have conveyed the measures verbally, requiring shipping agents to confirm vessels and cargo have no Israeli ties or hazardous materials. The policy has already affected operations: on August 22, an Israeli-owned cargo ship bound for Turkey was redirected to Greece. The restrictions aim to prevent Israeli-related maritime activity while impacting trade between the two countries.

Maritime Trade Faces Slowdown Amid Global Uncertainty

UN News 24 Sept 25

Global maritime trade is witnessing mounting pressures as growth forecasts drop significantly. According to the UNCTAD Review of

Maritime Transport 2025, trade is expected to slow to just 0.5% in 2025 after achieving 2.2% growth last year. Experts point towards rising costs, tariff wars, and geopolitical uncertainty as major contributing factors. With container trade volatility rising, many developing economies that rely heavily on shipping are expected to face economic setbacks. The report further highlights the need for diversified supply chains and resilient port logistics.

UN Global Supply Chain Forum 2026 set to take place in Saudi Arabia

UN Trade and Development (UNCTAD) 22 October 2025

The second edition of the UN Global Supply Chain Forum (GSCF) will be held in November 2026 in the Kingdom of Saudi Arabia, in partnership with the Saudi Ports Authority (MAWANI), as announced by UN Secretary-General Rebeca Grynspan at UNCTAD16 in Geneva. Organized biennially by UNCTAD, the forum brings together governments, business leaders, and experts to address global supply chain disruptions caused by geopolitical tensions, climate impacts, and shifting trade patterns. It aims to identify actionable solutions for creating more sustainable, inclusive, and resilient logistics systems.

The 2026 forum will tackle pressing challenges amid rising geopolitical instability, shifting tariffs, and economic uncertainty. Global shipping, which handles over 80% of world merchandise trade, remains fragile. Seaborne trade grew 2.2% in 2024 but is projected to slow to 0.5% in 2025, stabilizing at around 2% annually through 2030. The event provides a critical platform for enhancing trade resilience and strengthening international logistics systems.

PORTS AND SHIPPING

China's Cosco Seeks at Least 20% as Beijing reshapes \$23bn Panama Ports Deal

Financial Times 8 August 2025



China's state-owned Cosco seeks a 20–30% stake in a \$23 bn ports deal involving 43 global ports, including key Panama assets. The move follows the expiration of exclusive negotiations for BlackRock and MSC, who had planned to acquire the ports from Hong Kong billionaire Li Ka-shing's CK Hutchison. Under current discussions, Cosco may gain stakes in 41 ports, excluding the two Panama ports, amid US concerns over Chinese influence highlighted by former President Trump.

Panama Canal Authority is Planning to Build its First Port Terminals

The Maritime Executive 12 August 2025



The Panama Canal Authority plans to tender two LPG ports linked by a pipeline, enabling

cargo transfer from the Atlantic to Pacific without using the canal. Rising Chinese ethane demand could drive LPG shipping, and diverting LPG through the pipeline would free canal slots for larger vessels like LNG carriers.

Turkish Ports Asking ships to declare they are not linked to Israel, shipping sources say

Arab News 21 August 2025



Turkish ports now informally require shipping agents to declare that vessels and cargo have no ties to Israel, including military or hazardous goods, following Ankara's trade cutoff over the Gaza conflict.

Qingdao Port Hybrid and Electric Vehicle Exports up 16 Times

Sea Trade Maritime News 26 August 2025

Qingdao Port's vehicle exports rose 23% year-on-year, driven by a 1,617% surge in new energy vehicles (hybrid and electric) from January to July. Its expanding ro-ro network now links Southeast Asia, the Middle East, and Africa, strengthening global automotive logistics and supporting China's Belt and Road markets.

Port Houston Achieves Record Container Growth as Infrastructure Investments Accelerate

Captain 27 August 2025

Port Houston posted record growth in July, with

container volumes up 21% to 392,829 TEUs and year-to-date volumes rising 6% to 2,562,506 TEUs. Loaded imports grew 19% and exports, mainly resins, rose 18%. General cargo increased 10% YTD, with steel imports up 41% in July. Total tonnage reached 32.65 million short tons, marking strong overall performance.

U.S. Imports Seen Well Below Average for Rest of 2025

Freightwaves 30 Sept 25

U.S. monthly container imports are projected to drop below 2 million TEUs for the rest of 2025, following a peak season boosted by tariff-related frontloading, according to Global Port Tracker. Imports averaged 2.35 million TEUs in 2024 and 2.5 million TEUs so far in 2025. Analysts cite slowing consumer spending, labor market cooling, inflation, and economic uncertainty as factors, with Morgan Stanley forecasting 3.7% retail growth in 2025, down from 5.7% in 2024.

Qatar Ports See Robust Growth Momentum in Nine-month Period

The Peninsula 30 Sept 25



Qatar's Hamad, Ruwais, and Doha ports handled 1.11 million containers, 1.34 million tons of general/bulk cargo, 488,000 tons of building materials (up 136%), and over 91,000 RORO units from January to September, with 2,276

vessel calls (+11%) and transshipment up 7% year-on-year. These ports enhance supply chain efficiency, link Asia, the Middle East, Africa, Europe, and America, and support Qatar's economic diversification by boosting export, re-export, and maritime trade opportunities.

Container Shipping News Recap of September: Margins Tighten, Rates Drop, and Regional Trades Surge

Global Maritime Hub 29 Sept 25



Global container shipping margins have dropped below 10% for the first time in 18 months, reflecting a cooling market after 2024's record profits. While Intra-Asia trade remains resilient, Far East–Europe rates have fallen sharply due to weaker export demand, competition, slower European imports, and increased blank sailings. Bangkokmax-class vessels are rising as the preferred choice in Southeast Asia for short-haul and feeder routes, driving strong charter demand. Carriers like Maersk, Hapag-Lloyd, and PIL are diversifying intra-Asia services to offset losses on long-haul lanes. Port congestion in Singapore, Manila, and other gateways is affecting short-term capacity. Freight rates continue to soften amid fluctuating fuel costs and moderate cargo demand. Analysts expect gradual recovery in early 2026 but advise caution given market volatility.

MARITIME SAFETY AND SECURITY

The Philippines and India will hold their first joint maritime exercises next week in the South China Sea where China's aggression has caused alarm.

Naval News 02 August 2025



Indian naval ships will begin joint maritime drills with the Philippines on August 3, highlighting growing cooperation and shared commitment to a free, rules-based Indo-Pacific, said Indian Ambassador Harsh Kumar Jain.

Australian Navy Tests Viability of Logistics Drone Integration

GovConExec 12 August 2025

The Royal Australian Navy tested the Callisto 50 logistics drone during Exercise Talisman Sabre 25, demonstrating its potential for naval missions. The drone can carry up to 26 kg, has a 5–20 km range, and features a camera and autopilot, enabling deliveries that free crew for rest or priority tasks.

US Issues Sanctions Against Greek Shipper of Iranian Oil

Al Jazeera 21 August 2025

The US has imposed new sanctions on Iran, targeting a global network of companies and 12 vessels owned by Greek shipper Antonios

Margaritis. The move aims to disrupt Tehran's oil exports and follows previous rounds restricting Iran's ability to sell oil internationally.



Ukraine Strikes Russian Targets in Multiple Black Sea Ports| The Maritime Executive

24 Sept 25

Russia declared states of emergency along the Black Sea coast after Ukraine launched a major attack on Novorossiysk seaport on September 24. Sea and aerial drones targeted the area, prompting authorities in Gelendzhik and Sochi to order ships and tourists to seek shelter. Russia reported intercepting 25 Ukrainian drones over seven regions and the Black Sea, though casualty figures remain unclear.

Missile attack on cargo ship off Yemen wounds 2 and sends crew fleeing

Defense News 30 Sept 25

Houthi rebels launched a missile that set the Dutch cargo ship Minervagracht ablaze in the Gulf of Aden on September 23, wounding two crew members who were evacuated. The attack caused substantial damage, forcing all 19 sailors to abandon the vessel.

The Chinese naval and air combat drills at Scarborough Shoal is the latest deployment of high-end military forces at the disputed feature to counter Philippine and American forces in the South China Sea.

Naval News 30 Sept 25

A Chinese H-6 bomber carrying YJ-12 supersonic anti-ship missiles conducted patrols over Scarborough Shoal, accompanied by Type 054A frigates and J-16 jets, as part of National Day combat drills to assert control over the disputed South China Sea area.

OCIMF Launches Focused Inspection Campaign on Ship Hardening To Strengthen Onboard Security Defences

Ship management International 30 Oct 2025

The Oil Companies International Marine Forum (OCIMF) has launched a Focused Inspection Campaign (FIC) under its SIRE 2.0 tanker inspection programme to enhance maritime security across the global tanker fleet. Initiated on 1 October 2025 for a minimum of six months, the campaign targets crew familiarity with company procedures, vessel hardening, and access control, specifically addressing SIRE 2.0 question 7.2.1. Inspectors will evaluate these aspects during every inspection, ensuring Masters and crews can implement effective security measures in high-risk areas. An interim review in February 2026 will assess preliminary findings and guide updates. Since SIRE 2.0's launch, over 24,000 tanker inspections have been conducted globally, and insights from the campaign will identify trends and inform best practices. OCIMF encourages operators and crews to review procedures to ensure preparedness. Dave Cudbertson, OCIMF Programmes Director, emphasized that "security at sea begins with preparedness and familiarity," supported by Russel Pegg, who highlighted the campaign's role in reinforcing vessel resilience and operational readiness.

MARITIME ENVIRONMENT, POLICY AND LAW

Trump Halts Work on New England Offshore Wind Project that's Nearly Complete

AP NEWS 5 August 2025

The Trump administration halted the nearly complete Revolution Wind offshore project near Rhode Island, citing national security concerns, despite 80% of turbines installed and prior federal and state approvals.

Methanol And Ammonia Shipping Fuels Are Becoming a Reality, New Report Shows

Offshore Energy 19 August 2025



Methanol and ammonia show promise as zero-emission shipping fuels, but wider adoption requires coordinated action from the IMO and policymakers. New infrastructure and supply chains must be developed, with piloting and demonstration crucial for sector decarbonization, according to the Global Maritime Forum.

IUB Signs MoU with DEHUKAM for Maritime Research, Policy Collaboration

Bdnews 21 August 2025

Independent University Bangladesh's CBoBS and Ankara University's DEHUKAM signed an MoU on Aug 17 to promote joint research, academic exchanges, and policy initiatives in maritime law and ocean governance.



Ghana Adopts a New Fisheries Law to Curb IUU Fishing

The Maritime Executive 24 August 2025



Ghana passed a new fisheries and aquaculture law on August 19 to combat IUU fishing, protect local fishermen, and maintain access to global seafood markets. The law doubles the inshore exclusion zone from 6 to 12 nautical miles, supporting sustainable fishing and preventing industrial trawler competition.

Biofuel-capable, Diesel-electric Cement Carrier Arrives Home

Offshore Energy 25 August 2025

MV Tamarack, an eco-friendly cement carrier, completed its maiden transatlantic voyage to the Port of Montreal on August 22, 2025. Built for the Great Lakes, the 122.9-meter vessel features a 10,700 cbm cement hold, diesel-electric propulsion, HVO biofuel capability, and energy-efficient systems, marking a major milestone in North American shipping.

First Treaty to Protect Marine Life in High Seas to Take Effect in January World's First-ever Pact Aims to Fight Threats like Climate Change, Over-fishing and Deep-sea Mining

20 Sep 2025



The Marine Biodiversity Treaty will enter into force on January 17, 2026, after Morocco became the 60th nation to ratify it. Covering two-thirds of the world's oceans, the treaty protects up to 10 million species and addresses threats like climate change, overfishing, and deep-sea mining, marking a historic step for global ocean conservation.

First Climate-Neutral Sailings Using Biofuels Set for the Norwegian Coast

The Maritime Executive 30 Sept 25

Hurtigruten and Havila Voyages will run historic climate-neutral demonstration voyages along Norway's coast. Hurtigruten's Richard With, refitted with hybrid-battery systems and using 100% biofuel, will start its 3,100-mile round trip on October 29, supporting Norway's push for emission-free fjord travel.

The Kingdom of Bahrain Sponsors Impossible Metals to Apply for a Deep Sea Mining Exploration Contract in International Waters

Impossible Metals 09 Sept 25

Impossible Metals Bahrain, backed by the Kingdom of Bahrain, has applied for a polymetallic nodule exploration license in the Clarion Clipperton Zone with the ISA, marking the first West Asian/Arab participation. The initiative aims to combine clean-energy mineral

sourcing with environmental responsibility and sustainable deep-sea research.

World Maritime Day 2025 Focuses on Marine Environment

Marine Link 25 Sept 25

World Maritime Day 2025, observed on 25 September, highlights the shipping industry's role in protecting oceans, reducing pollution, cutting emissions, and preserving biodiversity. IMO Secretary-General Arsenio Dominguez emphasized the sector as part of the solution through regulations, technical support, and global collaboration. He urged the maritime community to build on progress, including the upcoming entry into force of the High Seas Treaty, commitments from the UN Ocean Conference, and ongoing negotiations on a global plastic pollution agreement.

Establishment of Ghana's First Marine Protected Area

Citi News Link 28 October 2025

On 7 October 2025, Ghana approved its first Marine Protected Area (MPA) the Greater Cape Three Points MPA which is covering 700 km² along the Western Region coast. This science-based initiative protects crucial spawning and nursery grounds, endangered sea turtles, and marine biodiversity, aiming to restore depleted fish stocks, support coastal livelihoods, and reduce reliance on imports. Successful implementation requires social support for fishers, community co-management, and strengthened maritime enforcement using VMS, AIS, and partnerships like Global Fishing Watch. Ghana must align with IMO conventions (MARPOL, BWM), Port State Measures, and consider PSSA designation to manage shipping impacts. Legal gazetting, clear boundaries, and updated nautical charts are essential for regulatory compliance, ecological protection, and sustainable fisheries development.



Harnessing Blue Economy Potential for Sustainable Development

3 - 6 November 2025







Vision: To be an internationally acclaimed Centre of Excellence contributing significantly towards Pakistan's Maritime Affairs.

Mission: To function as a premier think tank of Pakistan in maritime policy research, carry out advocacy & capacity building, and maintain repository of authentic data to provide input & solutions to relevant stakeholders.

Objectives

- **Provide** policy input in maritime domain.
- **Develop** and advocate national narrative on maritime issues.
- **Contribute** towards national / international processes and governing instruments for sustainable maritime Economy (Blue Economy).
- **Facilitate** dialogue & collaborate with national and international partners.
- **Produce** quality research reports and publications on maritime subjects.
- **Enhance** public awareness and understanding of maritime issues.
- **Maintain** repository of authentic maritime database.
- **Provide** consultancy and expertise on maritime related projects
- **Achieve** self-sustenance and conducive infrastructure.
- **Promote** use of new technologies and AI in maritime domain.