

MARITIME AFFAIRS &



OPPORTUNITIES & CHALLENGES FOR

PAKISTAN

TABLE OF CONTENTS

Chairman Advisory Board, CLAS
Executive Director, CLAS
Executive Summary
Findings and Recommendations
Timeline of Maritime Affairs and Blue Economy of Pakistan
Blue Economy – Opportunities and Challenges for Pakistan
The Role of Marine Fisheries in Pakistan's Blue Economy
Why Pakistan needs to Expand Trade Connectivity through Gwadar Port
Investing in Coastal Tourism
In the Wake of Emerging Indo-Pacific Alliances such as QUAD, does Pakistan need to form Counter Alliances in order to Pursue its Maritime Interests?
Role of Government in Pursuing Pakistan's Maritime Interests
Significance of CPEC for Developing Blue Economy and Regional Connectivity
Prospects of Pakistan's Maritime Regional Collaboration
Maritime Laws Pertaining to Shipping, Ports, Costal Zones, and Explorations with Special Focus on Pakistan
Establishment of EEZ and CS under UNCLOS – Challenges and Opportunities for Developing Blue Economy
Blue Economy, Maritime Governence, and Law
Challenges for Pakistan's Maritime Interests in the Indian Ocean Region
Remarks by Senator Dr. Musadik Masood Malik
Remarks by DG NIMA
CONCLUSION

Message By CHAIRMAN ADVISORY BOARD, CLAS

The Centre of Law and Security CLAS is an independent, non-partisan private sector research and policy institution dedicated to providing thought leaders, policy makers and the public with instruments to better understand today's national security issues in light of national and international laws thereby providing the stakeholders tools to make informed decisions on country's domestic and foreign policies.

Our mission at CLAS is to engage government institutions, private sector and non-governmental organizations for promulgating effective national security strategies. Maritime Affairs is yet an unexplored area with tremendous potential for Pakistan to uplift its economic growth and enhance its national security. This area of study provides great opportunity for academic interaction and research based on Pakistan's capacity and policy options.

To fulfill the requirements of growing populations, states around the globe are seeking new avenues for the expansion of trade. Blue economy is one such untapped resource that is being looked at by policymakers and experts as an opportunity to enhance national economies. Special emphasis is being given to maritime affairs, and it is said to play a major role in the establishment of future international



economic order. It is about time that blue economy is given due importance in Pakistan. First step in this regard involves the spread of awareness through scholarly opinions and expert analyses.

The Centre for Law and Security seeks to understand and highlight the linkage between blue economy and national security, and examine Pakistan's present approach to it. Blue economy is being seen by the developed countries as a key contributor to national power, having an important role in altering future global alignments. We endeavor through the medium of this report to engage policymakers, experts to shape and elevate the blue economy debate. A key part of our mission is to inform and prepare the national security leaders of today and tomorrow.

Chaudhry Faisal Mushtaq Chairman Advisory Board, CLAS

Message By **EXECUTIVE DIRECTOR, CLAS**

Oceans are the most significant natural resource. Given the globalization of science and technology, many countries are benefiting from maritime resources. In 2012, the United Nations Conference on Sustainable Development called on countries to utilize their ocean resources in a sustainable way by adopting the concept of blue economy.

South Asian countries like India and Bangladesh have been able to develop and enhance their capabilities as far as their blue economies are concerned. In contrast, Pakistan's blue economy contribution stands at USD \$ 450 million per year which is way below its actual potential. Fish exports remain the main contributor, whereas, all other aspects of blue economy have been neglected. However, the realization was manifested by the declaration of the year 2020 as the 'year of blue economy'. In order to harvest maximum advantage of blue resources, a lot needs to be done at the level of policymaking.



The Centre for Law and Security has drafted this report titled, 'Maritime Affairs and Blue Economy: Opportunities and Challenges for Pakistan'. This report is a result of the interaction of experts that include policymakers, academicians, former Pakistan Navy officers, and researchers. The purpose of the report is to devise new and identify existing strategies that may advance Pakistan's maritime interests. It is imperative that Pakistan evaluates existing and potential future challenges and opportunities to strengthen its blue economy and forward its maritime interests.

Rehman Azhar

Executive Director, CLAS

EXECUTIVE SUMMARY

Pakistan has not explored the full potential of its coastline. In contemporary times, where Pakistan's economy is dwindling, it is high time for the policymakers and stakeholders to realize the importance of blue economy. Sea creates employment opportunities and wealth for people and for countries. Many countries have shifted their prime focus on developing the maritime sector of their economies to reap innumerable benefits. Most of the global trade is carried out through seas and oceans. In such a scenario, a country that has warm water ports can benefit greatly.

Given the vastness of oceanic resources, the blue economy is anticipated to be the remedy of economic woes of underdeveloped coastal states. Pakistan termed the year 2020 as the 'Year of Blue Economy', and vowed to overcome the hurdles and bottlenecks that have been stopping Pakistan from taking full advantage of its maritime resources, but there is a lot more that needs to be done. There is no doubt that Pakistan has great potential given the availability and functionality of its warm water ports. Therefore, there is great need to identify new strategies and mechanisms that will help advance Pakistan's maritime interests.

Pakistan has had an inconsistent maritime policy. There is conflict between the sustainable utilization of oceanic sources and conservation of the environment. At the same time, policy makers throughout the course of history have either neglected, or have been reluctant to recognize the vitality of the development of blue economy. The negligence seems evident by analyzing the deteriorating capacity of Pakistan National Shipping Corporation (PNSC) from owning more than 50 ships in the 1970s, to just 13 ships currently. The change in the mode of transportation of cargo from rail to trucks has further made cargo operations at ports inefficient.

The world has become a global village and countries have realized the importance of integration. Ports are

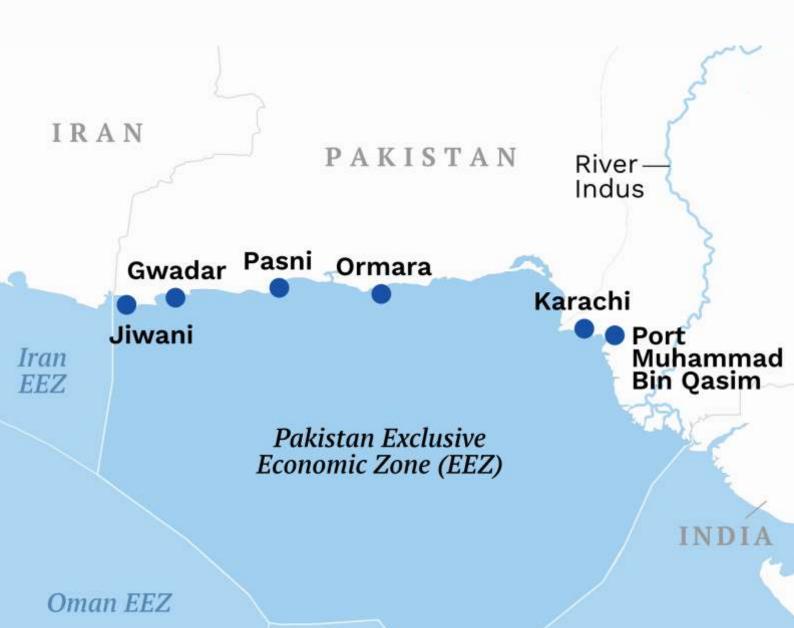


Maritime Affairs & Blue Economy

vital mediums that help states integrate their economies and resources. In order to achieve the goal of having an efficient and productive maritime economy, Pakistan must strive to overcome all such issues that increase transactional loads from transactional costs rendering the ports inefficient. A renewed and updated approach is required to subdue inflationary pressures, and to become a global exporter blending with the international economy.

In the modern world, it is not possible for any country to advance its interests and become prosperous through security-centric narratives and policies. A holistic approach in line with modern requirements needs to be put in place to achieve national security, which includes seeking opportunities for economic development. Pakistan needs to do away with its outdated approach of looking at its economy through the lens of security. Economic productivity goes on the backburner when security is given top priority.

There is need for a more coordinated, comprehensive, and all-encompassing policy plan with the collaboration of the government, private sector, and academia. A proactive and holistic approach shall allow Pakistan to harness the full potential of its 990km long maritime boundary, and realize the goal of economic development. It is pertinent for the policymakers and the stakeholders in Pakistan to develop comprehensive understanding of the international maritime laws and regulations.



India EEZ

FINDINGS AND RECOMMENDATIONS



- No economy in the world, can take off without the supply of sufficient energy. Our crude oil discovery ratio is 1 out of 3.5, which means, out of 3.5 wells drilled for exploration, 1 comes out productive, whereas, ratio of rest of the world is 1 out of 10. Twenty years ago, there were 55 overseas oil exploration companies operating in Pakistan, and today, there are only five companies left, all due to bureaucratic and legal hurdles. Pakistan will only have sufficient energy if there is more exploration through drilling. The Government should take necessary steps to attract offshore drilling companies and draft adequate policies to speed up explorations in seas.
- Pakistan National Shipping Corporation (PNSC) had a fleet of 55 ships some thirty years ago which has now been reduced to 5 ships. Pakistan has to pay USD \$ 2 2.5 Billion in freight to foreign ships annually which is a huge amount for a country that already has a huge current account deficit. Like China, the Government of Pakistan should endeavour to increase its shipping capacity to 60-80 ships. Not only will this significantly ease the burden on national exchequer, but will also speed up maritime trade.
- Pakistan's ports lack efficiency and port services are negligible. Goods clearance takes longer than usual eventually slowing down the entire supply chain and maritime trade industry. Modern technologies need to be introduced coupled with state of the art training of port employees. In order to ensure the swift and unhindered flow of goods and substances, Pakistani authorities need to sort out port operations.
- One of the major reasons behind the neglect of blue economy in Pakistan is the lack of research and development. It is very hard for researchers in the field of maritime affairs to carry out their work due to the unavailability of data. Websites of government departments related to maritime affairs are outdated, having insufficient data. In order to streamline and speed up scholarly research on maritime development, the institutions need to form proper data banks.
- It is not possible to expand trade without enhancing maritime connectivity. Connectivity is the one common aspect among world's leading maritime powers, such as, China, Japan, Singapore, Malaysia, and Hong Kong. In contrast, Pakistan has always been reluctant to connect its maritime activities with other countries. In order to realize the full potential of its blue economy, Pakistan should change its maritime outreach and move towards connectivity.



- It is about time that the new term 'geo-oceanic' be considered along with geo-economics and geopolitics. Pakistan should also keep an eye on geo-oceanic alignments and changes in the Indian Ocean Region. India's twenty ports in the Indian Ocean challenge Pakistan's maritime security more than what it actually perceives as potential threats. Maritime affairs and blue economy should be made integral parts of Pakistan's future national security policies and related documents.
- In order to realize the full potential of Pakistan's blue economy, students and youth need to be enlightened about the subject of blue economy. Organizations like the National Institute of Maritime Affairs (NIMA) should be able to run robust awareness campaigns among students and in the academia to sensitize people about the importance of seas and coastlines. Blue economy should be popularized among the masses as a key component of national security.
- Pakistan's policymakers must not shy away from adopting proactive policies regarding the maritime sector. Government bodies that deal with maritime affairs including the two standing committees of the Parliament should include experts and concerned people in order to stay updated with the changing maritime trends of the world.
- At the geopolitical level, Pakistan must strive to balance its relations between the two rivals, Iran and Saudi Arabia. National security experts should stop seeing Chabahar Port through the lens of competition. Pakistan should also adopt ways to reduce its reliance of oil import through sea, and find avenues of oil trade with Iran instead. The Iran-Pakistan Gas Pipeline Project can also be revisited and altered to include China, making it a project of regional connectivity.
- Pakistan's Territorial Waters and Maritime Zones Act 1976 seems to be outdated to meet the technicalities and requirements of modern age. The new law on maritime security was drafted four years ago but could not pass the National Assembly to replace the outdated 1976 Act. The Eighteenth Constitutional Amendment has included provinces as stakeholders but so far, no legislations have been passed to review previous acts and to bring them in line with the constitutional demands. Government should prioritize blue economy by speeding up new legislations related to maritime affairs.

- 11 Governance and management is another major challenge for Pakistan's maritime sector. At the federal and provincial levels, there is lack of awareness. There are coordination issues between ministries, and the between ministries and departments. There is no single authority to draft policy options for the betterment of economic activities related to the EEZ, and Continental Shelf. A lot of progress can still be achieved if maritime governance is improved by bringing it under the ambit of one single authority responsible for its management, administration, security and regulation.
- There has to be a well thought out development plan for the EEZ and the Continental Shelf. Not only think tanks but hardcore professionals should be made part of the policymaking process. Development plans needs to be implemented with efficient control and coordination in order to achieve desired objectives. This will not change in a span of one or two years, but with efforts that would last for more than a decade.
- 13 New technologies need to be injected in the fisheries sector in order to enhance the annual turnover. It is essential for the development of fisheries sector that the fishermen do away with outdated techniques. Further, fisheries lack deep sea fishing resources, fish Processing facilities, aquaculture, and balance between local fishing and big businesses. This Sector of the economy requires a lot of attention and adequate policies to realize its full potential.
- 14 There is lack of credible data for hydrographic and oceanographic surveys. The National Institute of Oceanography (NIO) has very few resources at its disposal. Only two universities in Pakistan have departments on oceanography, and those too are marred with minimal resources.
- 15 Pakistan needs proactive maritime security agencies to counter unlawful activities, Implementation of national legislation, and security of resources, offshore assets and platforms. There are significant resource constraints for maritime policing since it is a large area. Authorities need to take the issue of security seriously and allocate adequate funds to enhance the effectivity and response capacity of Maritime Security Agency and Pakistan Navy.
- Another security concern is the unresolved Sir Creek issue and undecided maritime boundary with India. This prevents Pakistan from exploiting hydrographic resources towards the eastern side of the EEZ. Since the issue is less complicated, it can be resolved if there is political will on both sides. The Government needs to take steps to bring the Indian authorities on board for an amicable solution of the Issue.
- 17 Pakistan has insufficient legislations to protect the environment of its waters. There is need to abide by internationally settled SDGs & CBD goals. Due to a lacking Implementation mechanism, there are challenges of pollution, environmental degradation, climate change, and sea level rise. Pakistan, being one of the most vulnerable countries to climate change and global warming, needs robust legislations and implementation mechanisms.





- 18 Emerging alliances in the Indo-Pacific are a daunting geopolitical challenge to Pakistan's national security. We need to adopt a comprehensive approach for our national security, and it should adhere to our maritime significance and consider where we are lagging behind. This is a time when alliances are forming, regional as well as international. In the rapidly changing geopolitical order, Pakistan needs to adopt the 'hedging' approach to find new partners like Russia, but not at the cost of spoiling its ties with the West.
- India has started looking at the Indian Ocean as India's ocean, and this presents a very important and challenging paradox for Pakistan. The convergence of Indo-pacific strategies of India and the US does not seem to go in Pakistan's favour. The way QUAD is progressing, it is going to strengthen India and is seen by the Chinese as the Asian version of NATO. So, in the wake of all such developments, Pakistan will need to further deepen its ties with China to see it as a 'counter balancer' in the Indian Ocean. The Belt and Road Initiative (BRI) is critical to Pakistan's geopolitical as well as national interests. Policymakers in Islamabad should keep BRI as their top priority in foreign policy making.
- 20 Pakistan needs to adopt three approaches to address the geopolitical challenges related to IOR. First is Equidistance, second is Alignment, and third is Autonomy. In the first choice, our government says that we are not a part of alliances. Secondly, for alignment, of course it is difficult to balance because of our economic dependency on both the Americans and the Chinese. So, if we cannot constitute alignment, then we can go for strict bilateralism. Thirdly, for autonomy, Pakistan lacks the resources. Autonomy can be maintained in the case of nuclear deterrence but autonomy cannot be achieved in science and technology. In QUAD, there is one committee for cooperation on science and technology, hence, Pakistan also needs something similar to stay in line with the developments.
- The blue economy in Pakistan seems to be largely ignored by its decision makers despite the fact that coastal and marine tourism can boost our economy at around \$5billion per annum. The Seaward area of Pakistan is ranked 74th out of 142 coastal states followed by the mangroves area of Pakistan which is ranked as sixth largest around the globe worthy of \$20 million. According to the liner shipping connectivity index, Pakistan has risen by 34.06 points changing its status of Ministry of Ports and Shipping to the Ministry of Maritime Affairs. There is urgent need to prioritize maritime development as the key sector of economic growth in the country. This can only by achieved if maritime affairs is given significant attention on all policy documents such as the economic development plans and national security policies.
- To attract more foreign and national investors there is dire need to alter the mercantile marine policies and to exempt taxes in order to achieve the required goal. Pakistan's coastal ecosystem is at an

advantage to catch a great amount of CO2 and because of that it can provide blue carbon solution at a reasonable cost. Plans are required to maximize the outreach of business community in order to attract mega investments. There is a need for more policy initiatives to attract and encourage investors' confidence. More maritime industrial zones should be constructed. Goals should be set to achieve "greener shipping" by 2050.

- Along with other developments, Pakistan needs to keep an eye on Indian naval modernization as it poses the only traditional threat for Pakistan in the Indian Ocean. To achieve this, self-reliance stands of vital importance. Sooner or later, Pakistan must strive develop an indigenous nuclear powered submarine to attain a credible second strike capability. This will counter any Indian hegemony and promote the strategic stability of the IOR.
- 24 Pakistan must develop a vast spectrum of marine tourism activities like harbour cruises, recreational fishing, maritime museums, sailing yachting, beach activities, windsurfing, scuba diving, snorkeling, sea kayaking, and many more. Investors should be motivated with incentives like tax reliefs, high-profit expectations, ease of documentation process, and security guarantee. Basic facilities like hotels, cafés, internal and external transportation, health facilities, internet, cell phone services, ATM machines, and credit or visa card acceptance must be provided all along the coast of Pakistan.
- Ship breaking has contributed enormously to the maritime economy of Pakistan due to cheap labour, low price of steel and employment. Pakistan is the leading country in this sector after India and Bangladesh. Pakistan has got the potential in this sector due to long beach, heavy tides and environmental conditions. It is a labour intensive sector and involves 20,000 people are directly involved in shipbreaking industry. It has the potential to create 1 million jobs. In 1960s, Gaddani was one of the largest shipbreaking yards in the world. It has the potential to generate almost 3 bn \$ through ship breaking.
- The domestic boat industry of Pakistan requires urgent government support before the traditional artisans and boat makers become extinct. Due to official apathy, traditional boat building is moving outside Pakistan. At one time, Pakistan was the largest builder of Dhows in the region. The informal sector involved in the boat-making industry is running side by side. It employs about 3,500 skilled labourers who earn a daily wage of \$14 approximately.
- 27 The Maritime Affair division's budget was reduced in 2020 to Rs. 2.6 billion, from Rs. 3.6 billion. This budget drop influenced Pakistan's maritime policy and consequently affected the sub-sectors of the maritime tourism industry. The shipping sector is highly capital intensive and requires long-term planning for financing.
- The time taken for the customs clearance process and documentary compliance in case of imports is 12 times longer than in UAE. The indirect cost associated with uncertainty and delays affects customer choices. Poor track and trace consignments, custom clearance, inexpedient schedule, transport-related infrastructure are bottlenecks that keep the industry from meeting its actual potential.
- 29 There is a shortage of trained and skilled professionals domestically and internationally due to the ever-expanding shipping market. Pakistan can train and produce skilled professionals to meet the demand of domestic maritime activity and supply of human capital to the international market.
- The country needs to invest heavily in Aquaculture to boost the fisheries sector and increase export seafood up to USD\$ 2 billion annually while concurrently increasing the country's food security.

TIMELINE OF MARITIME AFFAIRS AND BLUE ECONOMY OF PAKISTAN: DEVELOPMENTS AND EVENTS



by Sajid Khan, Research Officer, CLAS

1948

Government Shipping Office (GSO) was established at Karachi Port on 21st May 1948. It now functions under the Ministry of Maritime Affairs and is being maintained in accordance with Chapter 3 of the Merchant Shipping Ordinance 2001.

The 1950s-1960s

1955

After the partition of the sub-continent, there was no shipping industry in Pakistan. Soon after that, it was realised that Pakistan was in dire need of the shipbuilding industry and consequently, Karachi Shipyard and Engineering Works (KS&EW) came into being in 1955.

957

KS&EW was incorporated as a public limited company.

958

Pakistani officials who were pertinent to the discussion signed the UNCLOS the same day it was signed without ratification in 1958 at the first UNCLOS meeting. All of Pakistan's Maritime Zones are subject to the Exclusive Fishery Zone Act of 1975, which is carried out in full compliance with its provisions. The law enforcement agencies, PN and PMSA, are now responsible for upholding the rule of law in all zones.

960

In 1960, the first vessel was constructed and delivered to Karachi Port Trust (KPT). Currently, ships are only constructed by KS&EW. Since its inception in 1957, it has broadened the industrial base of Pakistan and the transferring of technologies.

963

The National Shipping Corporation (NSC) of Pakistan was established in 1963 and reached its zenith in the early 1970s. Pakistan's economic growth and national security depended on the expansion of the maritime industry. During times of increased tension in the region, a thriving shipping industry can protect and support domestic trade from unfavorable increases in freight and insurance costs, generate additional revenue, create additional jobs, and reduce the amount of foreign currency used for freight costs. National security benefits from a strong national merchant marine because it reduces reliance on foreign carriers, which may not be able to guarantee continuous supply in the event of a conflict.

There were around 400 fishing vessels present in Karachi Fish Harbor during 1966 and the figure increased to 17,686 in 2010.

The 1970s-1980s

1973

Beginning in 1973, containerised goods began to arrive at Karachi Port. The then-Prime Minister Ghulam Mustafa Jatoi inaugurated the arrival of 100 US containers brought by the American President Line for the first time in a fortnight. Since then, the majority of cargo freight has switched to containers and is increasing yearly.

974

Karachi Dock Labor Board is a regulatory body established under the Karachi Dock Workers (Regulation of Employment) Scheme, 1973, issued by Federal Government vide SRO 1693(I)/1973 dated 03.12.1973 in pursuance of Dock Workers (Regulation of Employment) Ordinance, 1973 which was later replaced by Dock Workers (Regulation of Employment) Act, 1974. The Board, as such, is established and functioning under an Act of Parliament to regulate the employment of dock workers at the Karachi Port and by virtue of its functions and duties is performing the role of Federal Government and is empowered to impose cess on cargo handled at the Karachi Port to generate funds for the welfare of dock workers registered with the Board.

975

With the declaration of an Exclusive Economic Zone (EEZ), Pakistan extended its jurisdiction up to 200 nautical miles from the coastline and added about 250,000 SM of sea area to its territory. Therefore the Exclusive Fishery Zone (Regulation of Fishing) Act, 1975 was promulgated for sustainable exploitation of the fishery resources beyond territorial waters. The Federal Government, under entry 36 of the Federal Legislative List, is responsible for fishing & fisheries beyond territorial waters.

The Gaddani Shipyard on the Balochistan coast is the only shipyard in Pakistan. There are around 127 plots in Gaddani where scrap and other stuff are transported to Karachi. It was one of the biggest shipyards in Asia in the 1980s. Over 30,000 workers produced nearly 1 million tonnes of scrap materials.

Ogb

Port Muhammad Bin Qasim, the second-busiest and largest port in Pakistan, is located in the city of lights, 15 kilometres from the National Highway. It is also connected to several larger islands close to Karachi, such as Bundle Island, Khiprianwala Island, and Buddo Island. Port Muhammad Bin Qasim was founded in 1980 and is named after the great Muslim conqueror Muhammad Bin Qasim, as the name suggests. The port has seen numerous alterations and advancements since that time.

The 1980s-1990s

1982

The Korangi Fisheries Harbour Authority (KoFHA) was established under Ordinance No. XVI of 1982 for making all arrangements for the planning, construction, operation, management and maintenance of Korangi Fisheries Harbour for exploiting fisheries resources beyond territorial waters.

1995

1997

Pakistan's mangrove forests have been rapidly changing due to human activities and have attracted worldwide attention in recent years. Between 1980 and 1995, the estimated degradation rate of these forests was 6%. Currently, only 15% of mangroves are considered healthy. Initially, more than eight species of mangroves were available. However, only three known species of mangroves are currently available along the coast of Pakistan, and the Avicennia marina accounts for about 95% of the mangrove population.

The 1990s-2000s

According to the Deep Sea Fishing Policy 1995 Pakistan enjoys special rights on resources up to 200 NM and Pakistan confirmed its baseline on 29 Aug 1996 when the Ministry of Foreign Affairs issued SRO 714(I) 96.

The United Nations Convention on the Law of the Seas (UNCLOS) was signed, coming into force on November 14th 1994. Pakistan became a signatory to UNCLOS on 10th December 1982 and was ratified on 26th February 1997. After becoming part of UNCLOS, the government of Pakistan acquired 240,000 Sq. Km of its coastal belt and formed the Pakistan maritime security agency (PMSA).

The UNCLOS 82 was implemented on 16 November 1994, and the Federal Government of Pakistan decided to ratify it on 26 February 1997 subject to the following declarations: "It was decided at that point in time that the Government of the Islamic Republic of Pakistan shall, at an appropriate time, make declarations provided for in articles 287 and 298 relating to the settlement of disputes".

The 2000s-2010s

2002

Gwadar port authority was constituted as an entity, after the enactment of GPA ordinance no. LXXVII of 2002, dated 17 October 2002, as an object to carry out construction, management and daily operations of the Gwadar deep water port. Gwadar Port is the second major monument of friendship between Pakistan and China after the Karakoram Highway, which connects Pakistan and China.

2005

The project to further expand Pakistan's continental shelf has been initiated by the joint work of the Pakistan navy, the Ministry of Science and Technology and National Institute of Oceanography.

2006

Gwadar Port Master Plan was prepared by consultants M/S Arthur D Little in May 2006. It furnishes the basic pillars for the future of Gwadar port authority. The sole purpose is to furnish the fast-growing, smart and economic development roadmap of Gwadar port Authority.

2007

The Sub-Office of Mercantile Marine Department at Gwadar was established in February 2007 and has an obligatory role towards the operation of the port and the allied shipping activities thereof.

Since 2008, Gwadar Port has handled around 6.453 million cargos from 205 ships. The Chinese Operator is working on increasing the number of ship calls at the port. Two ship-liners (COSCO & Sino Trans) are calling regularly at the port From May 2015; Container Business has also been started from Gwadar Port.

After 4 years of data collection regarding the expansion of continental shelf, Pakistan submitted its claim to UNCLCS.

According to the Deep Sea Fisheries Policy 2009, all deep sea fishing vessels operating in the EEZ (20-200 nautical miles) are obliged to land/export their catch from Korangi Fishing Port. The Korangi Fisheries Harbor Authority was established for the purpose of exploiting fishery resources beyond its territorial waters (12 NM).

The 2010-2020

In 2011, only 3,013,926 tonnes of scrap metal was produced and only 27% of melting steel was scrap by the industry.

- Port Qasim Authority (PQA) and JV GEL Pakistan (Pvt) Ltd and Global Energy Infrastructure Ltd (GEI) announced on 16 December 2011 the construction of a remote BOT-based floating LNG storage and regasification terminal in Pakistan's LNG zone and agreed to operate in Char-chan Waddo Creek. The agreement entered into force on the date of its signature. Effective from December 16, 2011.
- The functions and administrative control of the Authority after the devolution of the Ministry of Livestock & Dairy Development was transferred to the Ministry of Maritime Affairs, GOP in May 2011.

The second component is the Marine Protection Works (MPW), which will build three breakwaters and seawalls. M/s China Harbor Engineering Company (CHEC) won the contract. All three breakwaters and revetments have been constructed and construction was completed in May 2013.

Since May 2013, the port concession rights have been transferred to a new operator, viz China Overseas Port Holding Company (COPHCL). Since COPHC was awarded the concession, COPHC (Port Operator) has worked to improve port facilities, the environment and the port business. The port operator has invested more than US\$30 million in modernizing port facilities.

A long-term bilateral trade and economic corridor program has been agreed upon by the governments of China and the Islamic Republic of Pakistan, i.e. China Pakistan economic corridor. GPA participated in the planning and evaluating all his CPEC programs from 2013 to 2014. The following Gwadar Port and Gwadar Port City projects have been agreed upon and are currently in various stages of project implementation and approval in the early harvest/priority phase of CPEC.

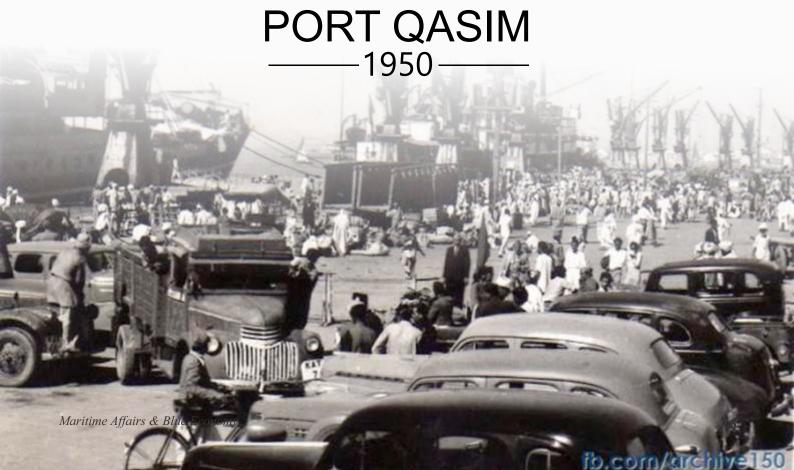
The recommendations made by Pakistan to expand its continental shelf from 200 to 350 NM was adopted by the UNCLCS after carrying out more than a year-long investigations and analysis.

The project had been approved by the Pakistani government, so on April 23, 2015, PQA M/S Port Qasim Energy Power Company, Limited (PQEPCPL) signed an agreement to build a 1320 MW coal-fired power plant on 200 acres of land in the Eastern Industrial Estate of PQA, complete with a dedicated jetty. The Task is of public importance under China Pak economic corridor to meet the energy needs of the country.

From July to June of 2015-2016, the combined trade for both containerized and non-containerized imports reached 30.995 million tonnes, an increase of 19.9 per cent. In the years 2016–17, imports accounted for 83% of all trade in Port Qasim. POL imports accounted for more than 31% of all imported cargo, followed by containerized cargo, which accounted for 28% of all imported cargo, the LNG, which accounted for 11.6% of all imported cargo, and edible oil, which accounted for 8.3% of all imported cargo.

The product represented 17% of all out exchange through the port, complete commodity dealt with at the Port at 6.363 million tons, mirroring a diminishing of 14.9% as against the earlier year, this reduction was expected to Containerize freight, Concrete, and Rice, Steel curl and Unrefined petroleum setback. The products of containerized freight were the biggest gathering of commodities, which is a diminishing of 7.3% from 2015-16. The second biggest non-containerized gathering of products was concrete, which diminished by 56.7% from 2015-16.

The Pakistan Deep Water Container Port's new channel and basin now have a number of new navigational aids, including lights, VTS, radar, communications, and others. With M/s. Hutchison Port Holding (HPH), a concession agreement for the development, operation, and upkeep of the terminal has already been signed. In December 2016, commercial operations began on two berths.



The port handled 1,406 ship movements as a result of the record-breaking trade volume of 37.358 million tonnes in the fiscal year 2016-17. The core activity of containerized trade increased by 0.1 per cent, while non-containerized trade increased by almost 20.6 per cent.

On October 10, 2016, the implementation agreement for the establishment of a dedicated coal terminal at Marginal Wharfs 3 and 4 was signed by Port Qasim Authority (PQA) and M/S Huaneng Fuyun Port & Shipping (Pvt) limited. The project will be completed in accordance with its scope in nine months to facilitate coal handling for the Sahiwal Project.

More than two million TEUs can be handled annually at container terminals. Large, heavily loaded container ships up to 94,402 GRT with a capacity of 11,500 TUEs were safely handled by Pakistan's largest container ships, which had a maximum length of 347 meters and a maximum beam of 45.2 meters. At Port Qasim, there is a facility for the nation's first integrated cargo container control facility (IC3). It also accounted for a total trade of 38% in 2016/2017.

The Collectorate of Customs collected 414.437 billion rupees in duties and taxes on imports passing through the port during the financial year 2016-17, representing a significant increase of 31.2% over the corresponding period. PQA is a major contributor to the national exchequer.

Port Qasim Authority (PQA) generated a total revenue of Rs over the fiscal years 2016–17. 13,088.65 million rupees, representing a 22.54% increase over the 2015–16 period. During the reporting period, expenses totalled Rs.9,192.19 million Rupees, after deducting Rs. 1, 540.31 million from the provision for income tax. PQA had a Rs net surplus.3,428.43 million dollars during the fiscal year 2016-2017, compared to Rs.2,596.914 million, which shows a significant increment of 32%.

In 2012, KPT began the second phase of re-constructing the old berths 15-17A, which was completed in May 2017.M/S. Ssangyong & Dangyoung 28 J.V. of Korea won the project work. However, M/s. Atkins of the United Kingdom was hired to oversee the entire project. All berths are functioning. The project's final report is currently in the works.

- The contract for the quay wall building was won by M/s China Harbour engineering company (CHEC). So far, roughly 97% of the work has been completed. Three of the four berths have been completed, and the fourth is expected to be finished by December 2017.
- PQA handled the Chestine Maersk, the largest ship, which berthed at QICT Berth No.7 in February 2017, making it the largest vessel in Pakistani maritime history to berth at a container terminal or port.
- The number of ships called during the fiscal year 2016–17 reached 1,406—an increase of 2.5 per cent from the previous year. Over the past four years, the shipping industry has experienced an annual growth rate of over 7.8% on average.
- With a cargo volume of 37.358 million tonnes handled during the financial year 2016-17 compared to 33.321 million tonnes during the corresponding period of the previous year,

2015-16, trade through the Port reached its highest level ever. This represents a significant increase of 12.1%. Furnace oil, diesel oil, chemicals, coal, LPG & LNG, and grain all contributed to the 12.1% increase in total traffic between 2016 and 2017.

- The project was approved by the ECC in April 2007, and as a result, PQA and PGPL signed an IA on April 28, 2007, which was later amended by an SIA on January 5, 2017, to establish an LNG Terminal in Port Qasim Authority. Because PGPL and PGPCL intended to transfer PGPCL's rights and responsibilities under the IA, M/S PGPL requested the novation of SIA and bifurcations of land. The Novation Agreement is now in effect.
- The project known as "Construction of Gwadar Port Eastbay Expressway" has been approved for funding under CPEC at a cost of Rs. 14.062 million to address the issue of port connectivity to the highway network. A company called GPA which specialises in project management has been chosen. The Prime Minister officiated at the project's groundbreaking ceremony on November 22, 2017, which is currently in the process of being implemented.
- The COPHC began internal development of the Pilot Zone—the Free Zone's initial area—and began marketing during the initial phase of execution. By the end of 2017, the drainage system, power, water, road, and telecom infrastructures will all be finished.
- The GPA Housing Complex's current structures and other facilities for GPA officers and employees were built in 1990 and 2004. The "Up-gradation of GPA Housing Complex" project began in January 2017 with a cost of Rs.519.921 million to improve the living conditions of GPA officials. This includes residence of chairperson, recreational places, water supply system and among other various things.



BLUE ECONOMY: OPPORTUNITIES AND CHALLENGES FOR PAKISTAN



by **Asfand Yar Khan Research Associate, CLAS**

Oceans are the most common medium for international trade. Due to robust trade and economic activities via ports, coastal areas are home to the world's biggest cities. Globalization has further enhanced the significance of maritime trade and ocean economy. According to experts, blue economy will be the major determinant of international economic order in years to come. Pakistan's former Prime Minister Imran Khan termed 2020 as the 'year of blue economy'. Furthermore, the United Nations Conference on Sustainable Development 2012 highlighted the significance of blue economy in bringing social equality and improving the lives of people.

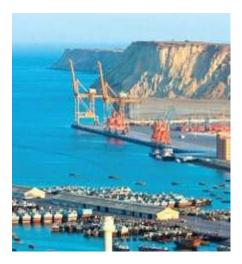


In recent decades, world's largest economies have been advancing their maritime interests by adopting robust policies, and diverting adequate resources. China's 11th Strategic Economic Plan (SEP) 2006-2010 included blue economy as an essential component of economic development, whereas, the 12th SEP 2011-2016 showcased China's blue economy target to add 10% to the Gross Domestic Product (GDP) by the year 2015. Moreover, recent economic surveys showed that the US' ocean economy produced up to 48 million jobs in the last decade, and pitched in USD \$ 6.6 trillion to the national exchequer.

Though unexplored, Pakistan's blue resources have tremendous potential to contribute to the country's economic engine. Pakistan's maritime sector can be broadly divided into 6 sub-sectors; mineral resources, aqua culture, renewable energy, maritime transport and infrastructure, fisheries and maritime tourism. Up to 95% of Pakistan's trade is carried out through its coastline. If utilized to its full potential, Pakistan's maritime sector can create up to 2 million employment opportunities. Moreover, the China Pakistan Economic Corridor (CPEC) focuses on maritime trade as it aims to integrate regions through Gwadar Port in the Arabian Sea.

According to estimates, Pakistan's blue economy has the potential to add USD \$ 100 billion to the national exchequer. On the contrary, the country only manages to earn USD \$ 450 million, far below its actual potential. Pakistan's coastline is ranked 74th in the world with a length of 1050 kilometers including continental shelf which is about 50,000 sq.km, and the Exclusive Economic Zone which is nearly 240,000

Maritime Affairs & Blue Economy



sq.km. Pakistan also has 160,000 hectares of mangrove forests which is the 24th largest area in the world. Experts believe that Pakistan's coastline has the capacity to accommodate six deep water ports in the Arabian Sea.

Fisheries are Pakistan's chief blue economy resources that contribute 1% to the GDP annually. Despite its massive potential, the sector is constantly shrinking since 2010 due to lack of facilities and incentives. Fisheries exports account for only USD \$ 9 million as Pakistan's fish markets have not been made accessible for foreign investors. According to the World Bank (WB) and Food and Agriculture Organization (FAO), Pakistan's marine and fisheries potential can

boost up the country's economy within few years provided if the resources are utilized efficiently and in a sustainable manner. The WB Report on Pakistan's fisheries sector also pointed out Pakistan's inability to reach largest seafood markets such as the US, Japan, and the European Union.

Pakistan receives its entire stockpile of petroleum through shipping. This immensely adds to the strategic significance of Pakistan's coastline. Moreover, 86% of Pakistan's trade depends on the sea. The development of Gwadar Port under the China Pakistan Economic Corridor will speed up the economic activities in the Arabian Sea, paving way for more economic growth and employment opportunities. Improvement in the communication infrastructure will open new markets for Pakistan's perishable products grown in the north, such as, cherries, apples, and apricots from the regions of Gilgit-Baltistan and Khyber Pakhtunkhwa.

There is great scope for offshore drilling in the Arabian Sea. The Ministry of Petroleum has been actively pursuing KEKRA-1, which is an offshore drilling project of the coast of Karachi. There are reports of abundant oil and gas reserves under the Arabian Sea which are yet unexplored. Further explorations can enhance Pakistan's energy security and fulfill its ever-growing energy requirements. Moreover, Saudi Arabia has expressed its desire to establish an oil refinery at the Port of Gwadar with a capacity to produce 300,000 barrels of oil per day. The longstanding Gulf ally will also establish reservoirs of Liquefied Natural Gas (LNG). Such mega investments will establish a key link between Pakistan's coastline and energy security. The large scale processing, storage, and transport of petroleum will involve a good number of sectors, and will open new employment opportunities for the people of Sindh and Baluchistan in particular.

Coastal areas of Pakistan have breathtaking landscapes and eye-catching sceneries. The Country is blessed with unique and beautiful places like Ormara, Hammerhead, and Astola Islands close to the Port of Gwadar. These areas have great potential for tourism and entertainment. It is about time that Pakistan adopts a comprehensive policy on maritime tourism in order to streamline and attract foreign tourism. Some inspiration can be derived from the booming maritime tourism sectors of countries like Maldives, Mauritius, Thailand, Singapore, and Malaysia. The fruits of Pakistan's coastal geography, if fully exploited, can significantly add to the economic development.

Despite the numerous potentials linked to Pakistan's coastline, there are a few challenges arising out of domestic as well as geopolitical realities. Pakistan's strategic location places its coastline at a significant position in geopolitics. Since the wellbeing of Pakistan's maritime sector is closely linked to China, the emerging anti-China Indo Pacific alliances such as the QUAD and AUKUS will most likely challenge Pakistan's maritime interests. At the local level, the unholy collusion of hostile powers is deteriorating the security situation of Baluchistan. Since the economic growth is tied with peace and security, it is important for Pakistan to engage with stakeholders across the board to bring peace and stability within its borders. Only then will Pakistan be able to exploit the massive potential of its blue economy.

THE ROLE OF MARINE FISHERIES IN PAKISTAN'S BLUE ECONOMY



by Imran Altaf
Research Officer, CLAS

A blue economy, consisting of marine or oceanic resources, has enormous and untapped potential to drive economic growth in Pakistan. The majority of fishermen in Pakistan operate mostly on small-sized boats. They use nets and other traps to capture fish, whereas some collect seafood from the sea floor or use harpoons to kill bigger species. The Pakistani government has done little to preserve these resources resulting in rising marine pollution levels. Fisheries are a common source of earnings for people residing in coastal towns. Can fisheries become a more prudent industry in Pakistan's national economy?



The term "Blue Economy" was coined in 2010. The World Bank defines blue economy as "a sustainable use of ocean resources for economic growth, improved livelihood, jobs, and ocean ecosystem health". It includes a variety of industries, such as marine transportation, fisheries, tourism, aquaculture, offshore drilling, renewable energy resources, waste management, maritime research and development, ship-building, and ship-breaking, among others. The concept of 'Blue Economy', like the concept of 'Green Economy,' contributes to human development, progress, well-being, and social equity. Pakistan's fisheries sector plays a substantive role in order to overcome the poverty ratio and accomplish the goal of food security. It also moderately participates in economic and social growth that makes no more than 0.4% Gross Domestic Product of the total economy.

Maritime Affairs & Blue Economy

Pakistan's maritime industry provides employment, food and income to a large number of households in Pakistan. The fisheries sector in Pakistan makes a significant contribution to the national economy and provides jobs to about one per cent of the country's labour force. It is the most important economic activity in the coastal areas of Pakistan. The Government of Pakistan needs to focus on expanding the fisheries sector by adopting a national aquaculture policy that would promote sustainable aquaculture techniques while stimulating investment in fisheries projects simultaneously. The fisheries sector is critical to Pakistan's economy as it serves food security, enhances tourist experiences, assists community manufacturers, contributes to GDP growth through exports, and generates profits for financiers, who can then reinvest in other sectors such as manufacturing or agriculture.

In Bangladesh, Singapore and China, different models are being applied to improve revenue generation from marine fisheries. The fisheries models used in Bangladesh, Singapore and China are the same. This model is called the "closed-loop" model because it assumes that there is a closed loop between the



production of fishing gear and the catchability of that fish. In this model, it is believed that as quotas are lowered and more fish are caught per net pound of gear, the total number of fish caught will increase. It is also possible to use this model in Pakistan by adjusting the assumptions based on local data on the number of fish caught by each country's fishing effort.

Pakistan is rich in marine fishery resources. The catch consists of more than 30 species of shrimp, ten species of crab, five species of lobster, and 70 commercial species of fish, including sardine, hilsa, shark, mackerel, butterfish, pomfret, sole, tuna, seabream, Jewfish, catfish and eel. Fish are the most important of these organisms due to their enormous export and revenue potential. Imports and exports of a country serve as crucial indicators of its economic standing. In Pakistan, the livelihoods of nearly 400,000 people are directly or indirectly attached to the fisheries industry. In addition, Pakistan has significant potential to cultivate fresh and saltwater aquatic populations under controlled conditions in coastal areas.

The development of Gwadar as a transit and transhipment port as part of China Pakistan Economic Corridor will further stimulate Pakistan's maritime potential and inefficient mechanisms for supplying quality fish to the market. The country's blue economy remains largely undeveloped, to say the least. Research done by Pakistani and Chinese Economists suggests that Khyber- Pakhtunkhwa, Azad Jammu and Kashmir and Gilgit-Baltistan are the major cold-water fish potential areas of Pakistan. They possess a rich variety of freshwater habitats, including major rivers, streams and lakes. These freshwater resources offer significant opportunities for the development of inland fisheries and aquaculture. CPEC can facilitate Pakistan in the domain of fisheries as China is the world's largest producer, consumer, processor and exporter of fisheries and well understands Asian and other markets for fish.

To reap the benefits of this untapped potential, Pakistan must ensure favourable policies and substantial investments to achieve its blue economy objectives. The importance of marine fisheries in Pakistan's blue economy can be attributed to the catch per unit effort rate, which is higher than those obtained elsewhere in the region. The volume of landings makes up a large share of total annual production. There are no significant restrictions on access to natural resources, and Pakistan has many fishermen who have limited access to formal employment opportunities.

Pakistan is blessed with rich natural resources. The importance of a comprehensive national maritime policy cannot be overstated, as the country gradually but steadily turns to the oceans for long-term economic growth and development. What steps can be taken to improve maritime sectors, including fisheries, to get more benefits and raise the contribution of this industry to Pakistan's GDP? Pakistan can take advantage of fish resources and improve the fisheries sector by adopting modern techniques like Global Positioning System technology which can help fishermen know where their catch is located. Another way to enhance the fisheries sector in Pakistan is by using drones to map out areas with high fish populations to enhance seafood exports. Pakistan needs to securitise its Blue Economy, which can ensure Human security through maritime dimensions to safeguard the livelihoods of not only the coastal region but it also boosts Pakistan's economy.



WHY PAKISTAN NEEDS TO EXPAND TRADE CONNECTIVITY THROUGH GWADAR PORT



by **Rameen Mufti Research Officer, CLAS**



Pakistan needs to expand trade connectivity at Gwadar Port to benefit from its economic potential and ensure regional maritime security by opening global access. World Trade Organization defines trade connectivity as the import and export of other countries with the selected economy. Pakistan has low trade connectivity and a disappointing rank on UNCTAD's liner shipping connectivity index. Karachi and Port Qasim are reaching full capacity. Gwadar Port's geo-strategic location can make it an attractive alternative and potential hub for international trade. However, Pakistan has to address its fault lines at Gwadar Port.

Countries like China, UAE and Singapore are at the forefront of maritime trade. Port of Singapore, once a small port, is amongst the busiest ports in the world, handling over 130,000 ships annually from around 120 countries worldwide. According to the World Bank, the country has a trade-to-GDP ratio of 338 which has opened new markets, increased employment and improved the standard of living in Singapore. The Shanghai Port in China, on the UNCTAD liner connectivity indicator, is the most connected Port in the world. Jebel Ali Port in Dubai, the 12th largest in the world, has increased global trade and business licenses in recent years. These countries face constant security threats; the Port of Shanghai is trying to stop the rise in piracy and armed robbery since 2020. Global trade remains the countries' top priority that is being protected through effective security measures.



Pakistan, seemingly, is prioritizing region-centric maritime security over global trade as far as Gwadar Port is concerned. The Port has minimal international shipping except for a few fishing boats and dry bulk ships. On the flip side, Pakistan Navy has increased its presence at the Port by acquiring land and establishing Task Force-88, Regional Maritime Security Patrol, Coastal Security, and Harbor Defense Force. The purpose of these forces is to prevent maritime terrorism, expand its footprints into the South Indian Ocean and form maritime security partnerships across the region. Pakistan, like other successful models, can prioritize maritime security and trade connectivity.

Gwadar Port has untapped economic and trade potential. The Port's strategic location is pivotal to global trade but is limited because of

Pakistan's security priorities. Gwadar Port is around 600 km from the Strait of Hormuz: busy sea lanes that supply a large chunk of the world's oil. It is also the shortest route from land-locked Afghanistan and Central Asia to the Arabian sea. The global oil demand has turned keen eyes towards Central Asia's energy resources. The export of these resources to Europe, China, Russia and Africa has been made difficult due to the United States' influence in the Strait of Malacca. Gwadar Port can be the alternative to provide a safe, warm water route for Central Asia to the rest of the world. If Pakistan realises this potential, it can open the country's access to new markets and a chance to speed up its economic growth.

Aligning economic priorities at Gwadar Port through cooperation with countries near the Strait of Hormuz can benefit Pakistan. Collaboration with the Port of Salah in Oman can give Pakistan access to the Red Sea, the Greater Indian Ocean and the East Coast of Africa. India, Iran and Pakistan are affected by instability in Afghanistan. Iran is facing the Afghan refugee crisis because of the fall of Islam Qala, and Pakistan is fighting against extremism and widespread terrorism. Afghanistan can be pushed to reduce external intervention if Chahbahar and Gwadar ports cooperate by discouraging trade with the landlocked country. Pakistan has been slow to respond to economic collaboration between Gwadar Port and Port of Salah but has readily signed a MoU for security cooperation. There is also no cooperation between Chahbahar and Gwadar Port in sight because of Pakistan's strained relations with India and the Indo-China rivalry. The collaboration can enable Pakistan to achieve regional security and economic growth.

The tight security set up at the Gwadar Port that includes deployment of a large number of troops does not portray a favourable business environment for local residents as well as international investors. Resident businessmen face difficulties while accessing the main Port area. Alarmingly, loss of livelihoods has led to widespread protests in the Port city and adjoining areas. Terrorist attacks by militant and separatist organizations pose more challenges for the business community. On the other hand, Pakistan has given port access to Russia, Iran and China setting off alarms in Delhi and Washington. India is fearful of China as the latter threatens Indian interests in the greater Indian Ocean Region. On the other hand, the United States fears the safe passage of its energy resources through the Strait of Hormuz from Central Asia and the

Pacific.

The lack of access to Gwadar Port has agitated the indigenous population. The story of a modern metropolis Gwadar, after seven years into its making, has worn thin. The local population still lives in poverty with little access to clean drinking water and necessities. Chinese investments in Pakistan's fisheries industry may undermine the livelihoods of local fishermen belonging to Gwadar and adjoining areas. After authorities decided to cordon off 24 square kilometres of the Port City for the protection of Chinese workers, locals began to fear relocation. These events have slowed down the Chinese-backed development of Gwadar Port and stagnated Pakistan's economic growth. Pakistan can ensure the participation of the local population of Gwadar and adopt an inclusive approach to reduce disharmony and resentment.

Trade and maritime policies are crucial to steering the ship towards trade connectivity. In the case of Pakistan, the country's failure to produce efficient policies displays its disorientation. An example of this is the Strategic Trade Policy Framework 2022-2025, which reiterates the Chinese expectations of Gwadar Port as a way to link Pakistan and the rest of the world. It barely suggests policy measures for trade connectivity at Gwadar Port past the current international stakeholders such as Iran, Russia and China. It also fails to offer a plan for increasing transshipment or improving the port's infrastructure. Pakistan can introduce a policy for Gwadar Port that focuses on the country's vision for trade connectivity, economic growth and security.

Trade connectivity, through Gwadar Port, is important for Pakistan's economic and security goals. To do so, Pakistan can follow in the footsteps of successful countries by prioritizing trade connectivity and economic growth. It can open global access to Gwadar Port, form collaborative linkages with other ports, and develop effective shipping infrastructure and competitive sea lines. On the security front, Pakistan needs to adopt a holistic approach by including national and international stakeholders. It can address the grievances of the indigenous population to ward off the local threat. Security cooperation with other ports near the Strait of Hormuz can reduce conflicts in international waters. Pakistan can adopt more digital security measures like Optical Character Recognition (OCR) can make storage and handle more transparent. Deep learning in x-ray screening can identify threats in baggage, carry-on bags, stores and cargo. By adopting these policy measures, Pakistan can be successful at expanding trade connectivity in Gwadar Port.



INVESTING IN COASTAL TOURISM



by Rania Yaqub
Research Officer, CLAS







Pakistan has a vast coastline stretching nearly 1000 km and an incredible prospect for coastal tourism with regard to its rich cultural and historical resources. Yet, the sector remains weak compared to other regional successes, such as the Kerala state in India and the Maldives. While many coastal countries invest in this sector, subsequently uplifting their blue economy, coastal tourism has become one of the fastest expanding avenues, contributing to a multi-trillion dollar tourism industry. Pakistan falls behind in truly profiting from its coastal resources due to a lack of development and access while facing constrictions across various local governing bodies.

Until the 1970s, Pakistan's coastal tourism was soaring. Unlike now, back then the Clifton beach in Karachi used to be an attraction for picnics and swimming for the locals as well as foreigners, and events like weekly sailing regattas would be held. The city's beaches are now calamitous because of pollution that has made the harbour resemble a sewer more than a harbour, and no local businesses rely on tourism to thrive. If waste management and sewage infrastructure were upgraded, the megacity housing millions of people could yield substantial income from beach activities, water sports, or functional cottages at beaches available for tourists.

The mangroves in Sindh are similarly spread over 600,000 hectares and need exigent care due to their critical role in economic and environmental regimes. Freshwater from the Indus river depletion has also left a taxing impact on the mangrove ecosystem. Along with the rising population and pollution, it has impacted the livelihoods of local communities. It is pivotal to attend to the mangrove ecosystem as not

Maritime Affairs & Blue Economy

only is it responsible for derailing coastal erosion, but proper care can generate significant revenues from mangrove tourism. Visitors can be attracted by the wildlife-watching, fishing, boating, and hiking experiences available. The Indus River Delta-Arabian Sea mangroves along the coastline of Sindh and continuing onto Gujrat in India are currently the seventh largest mangrove forest in the world, with an incredible potential to generate ecotourism.

Towards the West, the Balochistan coastline also covers approximately 3000 hectares of Mangrove forests. The province possesses an array of enthralling beaches, including Astola Island, Gwadar, Ormara, Pasni, and Somiani. The coastline is lined with muddy cliffs and rocky land appealing to adventure seekers. At the same time, ornithologists find sites such as Hingol, Jiwani, Miani Hor, and Pasni most intriguing due to the migratory birds found there. Not only does the province offer picturesque beauty, but it also invites history enthusiasts with its historical monuments, including forts, graveyards, mosques, and tombs. However, the majority of Balochistan is uninhabited. While this keeps the region well-preserved and sheltered from overtourism, it remains inaccessible for many due to the lack of human activity.

Pakistan had a mere one per cent share of the amount spent by tourists in South Asia in 2017, which amounted to a sum of \$31.4 billion as reported by Dawn. This is a staggering figure, as by 2030, maritime tourism is predicted to be the greatest value-adding segment of the ocean economy, only increasing with an expected 3.5% per annum rate. In Pakistan, factors such as lack of infrastructure for domestic and foreign tourists, poor hygiene conditions, absence of training groups and hospitality staff, bureaucracy in land acquisition, communities unaware about profiting from local tourism businesses, and the scarcity of a waste disposal or sewage system, are just a few examples that add onto the bigger problem.

Constructive dialogue on generating profits through Blue Economy began in 2019 in Pakistan, approximately a year after the World Bank had already launched its ProBlue initiative of helping countries globally with resources to invest in their blue economy. While Pakistan joined the bandwagon late, it is imperative for the state to invest in programs for our maritime tourism to contribute to our blue economy. Measures such as creating tourist destinations across the massive coastline strip can generate significant revenues for the state as taxes. Ecotourism can be used to create awareness among foreign tourists by highlighting environmental and cultural practices through local businesses, which would benefit from the added income.

Ports could be open for travel by cruise ships for locals and tourists. The cruise industry could profit significantly from tourists if such sea travel routes through cruises are established. There is also immense untapped potential for the hotel industry, as luxurious hotels could be constructed along the coastline, offering tourists a scenic view of the ocean as well as water sports such as jet-skiing, scuba diving, or even sport fishing. Local fishermen could be encouraged with incentives to offer cultural cuisines to promote the local dishes and attract tourists to the areas. Islands near Karachi, such as the Baba and Bhit, should be decongested while reclaiming more beaches along the massive coastline of Pakistan. The potential in the maritime tourism sector for Pakistan is astonishingly profitable as long as our state leaders and institutions truly recognise the gem that lies in the country's backyard.

PERSPECTIVES ON BLUE ECONOMY AND MARITIME AFFAIRS

In the Wake of Emerging Indo-Pacific Alliances such as QUAD, does Pakistan need to form Counter Alliances in order to pursue its Maritime Interests



by Prof. Dr. Zafar Nawaz Jaspal
Dean Faculty of Social Sciences, Quaid i Azam University Islamabad



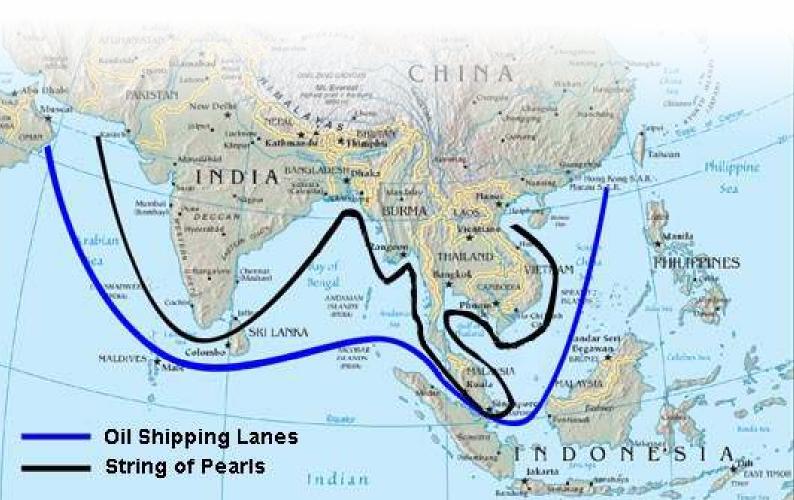
Pakistan needs to adopt a comprehensive approach for its national security, which should adhere to its maritime significance. In the wake of emerging Indo-Pacific alliances such as QUAD, what will be Pakistan's response? This is the time when alliances are forming, regional as well as international. While interdependence is needed in light of the events such as COVID outbreak that demand more cooperation, at the same time we find systemic rivalry at the international level between China and the United States or in the simplest manner "Pax-Americana" and "Pax-Sinica".

This systemic rivalry gives rise to three caveats and questions along with it. Firstly, alliances have been rebooting. The world is changing and that is the first caveat for Pakistan. Secondly, emerging alliances in the Indo-Pacific are a daunting geopolitical challenge to Pakistan's national security. Lastly, in this maritime century, the continuity of sea blindness hinders Pakistan's economic prosperity immensely. Now the questions that rise are about the meaning of Indo-pacific and the nature of its geopolitical construct. The term "alliances" is still missing in several places, except in the NATO 2022 defense corporation, but the rest have reclassified it as partnership, dialogue, or working together. Moreover, in Pakistan's literature, the official statements refer to it as the "Asia-pacific". However, the US and rest of the world uses the term "Indo-Pacific" instead. When looked into, it is a maritime undervalue of Asia. It is regarded as a singular and integrated geopolitical construct, wherein tremendous geoeconomic complexities as well as security challenges exist.

Analysing the Indo-Pacific construct, it seems to be a term being used to bring in India which is Pakistan's arch rival, as a balancer against China. The Indo-Pacific strategies of both Biden and Trump administrations focused on the containment of China. This "contain China" construct derives a conclusion that the Indo-Pacific construct is a geo-poilitical construct, and not merely a geo-economic construct. Nevertheless, analyzing the Taiwan Strait developments, one would find the Indo-Pacific strategy as a military or a strategically defined construct.

It is imperative to consider how Pakistan qualifies in this scenario. In 2005, the Americans started talking about the 'String of Pearls', to which the Chinese disagreed. Though, Gwadar has a commercial dimension, but cannot be simply seen as just a commercial footprint. While Pakistan and the Chinese refuse to agree with the notion of 'String of pearls', rest of the world especially the Americans see the String of pearls as an important geopolitical arrangement. Indians came up with their own idea of what they call "Necklace of the diamonds". The Necklace of the diamonds versus the Strings of pearls is a way of looking at the moving alliances, and whether it is an economic cooperation of sorts.

In this context, what is important is the BRI. When we look at this, it can be discovered that China has managed its presence in more than 100 countries without firing a single bullet. This alarms other world powers. The US came big by the world's consent but then at the same time they are looking at the Chinese progressively and economically rising towards buildup. There is an international transport corridor from Bombay to Central Asia via Iran. The first time when this was launched in April 2010, Hillary Clinton the former US Secretary of the State used the term 'new silk route' and then they started working on it. Then it was discovered in 2013 that India considered itself as the net security provider in the Indian Ocean Region. The National Security Strategy 2017 by Trump Administration confirmed India as a role playing nation in South Asia, Indian Ocean and beyond. Hence India started looking at the Indian Ocean as India's ocean, making it a very challenging paradox for Pakistan. The convergence of Indo-Pacific strategies of India and the US coupled with Modi's "Look East Strategy" further add to Pakistan's geopolitical worries.





At the time of its inception, QUAD was meant to address non-traditional security challenges but after rebooting in 2017, it moved away from its non-traditional security domain to a military security pact. The Australians or Japanese do not admit it, but in the first virtual QUAD summit 2021, remarks by Prime Minister Modi and President Biden included the words security not in a non-traditional sense, but in a comprehensive manner. The way QUAD is progressing, it is going to strengthen India, and is seen by China as the Asian version of NATO. Hence, not only the Chinese, but the whole world is now focusing on it. Next in the order is AUKUS. It may destabilize the entire Nuclear Non Proliferation Regime construct. For the first time, Uranium enriched weapon will be used for a propeller and this nuclear propelled submarine would be handed over to Australia. In this scenario, Pakistan will have to focus on it sooner or later if it is given an opportunity to purchase in similar fashion. The U2 and I2 arrangements for the West Asia Alliance, and NATO's strategic concept of 2022, all show that the geo-strategic environment is becoming more complex in the Asia-Pacific or for some, the Indo-Pacific.

Pakistan has at its disposal, three approaches. First is equidistance, second is Alignment, and third is Autonomy. Each choice has its merits and demerits. In order to be able to choose one, Pakistan would define its economic, security, and normative interests in the region, including those in the Indian Ocean and beyond. In the first choice, Pakistan would declare its neutrality, but it will be a tight rope to walk on. Pakistan is caught between its traditional allies, and strategic partners. The question here is whether how Pakistan manages the emerging systemic forces, and drift towards alliances. Secondly, for autonomy, Pakistan lacks the resources. Autonomy can be maintained in the case of nuclear deterrence, but not in case of science and technological innovations. In QUAD, there is one committee for cooperation on science and technology. Pakistan too needs something similar, but its resources are very limited. Thirdly, for alignment, of course it is difficult to balance due to Pakistan's economic dependency on both the Americans and the Chinese. So, instead of alignment, Pakistan can go for strict bilateralism. For that, naturally Pakistan needs to consider a self-help strategy for which the maritime strategy and blue economy are very important. If we have to focus on it then obviously we can go for Auxiliary arrangements like dialogue processes or bilateralism. Instead of aligning itself entirely with one bloc, Pakistan needs to balance between both. Within this changing strategic environment, Pakistan needs to work very intelligently and shrewdly to tap into its own resources, including its maritime resources.

ROLE OF GOVERNMENT IN PURSUING PAKISTAN'S MARITIME INTERESTS



by **Prof. Dr. Huma Baqai Rector, MITE Karachi**



Maritime is not just one sphere but a much diverse economy where various sectors meet. Pakistan arrogates a huge Exclusive Economic Zone of 240,000 square kilometres and a continental Shelf providing extra 50,000 square kilometres. Despite of such enormous resources with rich coasts and an ocean to contribute, it is still lacking the potential to enhance its maritime affairs. The whole world is eyeing towards their coasts while Pakistan has abandoned its blue resources. Blue economy contributes USD \$1.5 trillion annually to the global economy. According to the global investment trends, 35% of global green investment can be generated from the power sector, 29% from transport and 11% could be raised from water infrastructure.

The blue economy in Pakistan seems to be largely ignored by its decision makers. It still

stays an undiscovered area. On the other hand, China is keener to promote Maritime silk route than the Belt and Road Initiative (BRI). However, ameliorating the position of mangroves and ecofriendly enhancement of ports that are referred to in CPEC is a good initiative. The objective now is to enhance the prolonged development of marine life. In essence, the blue economy furnishes 0.45% to GDP as \$1 billion, and 0.2% of GDP is provided by the marine fisheries which are excessively exploited. By 2020, nearly 30% of the marine life and 44% of coastal reefs had been ruined. Up to 95% of the marine life is contaminated by micro plastics and other chemicals. Currently, Pakistan's maritime domain is exposed to bad governance, lack of technology, marine pollution and devastation of mangroves.

Coastal and marine tourism can boost our economy by injecting up to USD \$ 5 billion annually. The Seaward area of Pakistan is ranked 74th out of 142 coastal states followed by the mangroves area of Pakistan which is ranked sixth largest around the globe. It is said to have a worth of USD \$ 20 million. According to the Liner Shipping Connectivity Index, Pakistan has risen by 34.06 points changing its status of Ministry of Ports and Shipping to the Ministry of Maritime Affairs.

According to the Joint Secretary, Ministry of Maritime Affairs, Mr. Kamran Farooq Ansari, there are contradictions between provinces regarding the policies and initiatives of maritime operations bestowed

upon them by the Eighteenth Constitutional Amendment. To attract more foreign and national investors, there is dire need to alter the mercantile marine policies and to exempt taxes in order to achieve the required goals. Pakistan's coastal ecosystem is at an advantage to catch a great amount of CO2 and because of that it can provide blue carbon solutions at a reasonable cost.

Furthermore, the shipping capacity of Pakistan has slumped from 50 ships in the 1970s to around dozen in the 2000s. Much of the shares are being held out by the foreign investors in the domain of national imports and exports cargo where Pakistan only holds about 7% of the shares otherwise the scenario could have been different and Pakistan could have saved \$1.5 billion annually. Further, initiatives taken under the Pakistan Merchant Marine Policy (2001) as objectives of setting new goals of enhancing the maritime fleet share of cargo from 5% to 40% by 2020 as well as raising vessel capacity to up to one million tons. Although, new goals have been determined but are unsure about how many of them have been considered. The entire value of Pakistan's blue economy field rests at more than \$100 billion but the revenue only rises up to \$450 million annually. The year 2020 was termed as the blue economy year by Pakistan and was incorporated in the state vision by 2025. There is a need for more policy initiatives to attract and encourage investors' confidence. More maritime industrial zones should be constructed. Goals should be set to achieve "greener shipping" by 2050 and Pakistan is in dire need to advocate the issues between education and maritime research.



SIGNIFICANCE OF CPEC FOR THE DEVELOPMENT OF BLUE ECONOMY AND REGIONAL CONNECTIVITY



by Cdre. Baber Bilal Haider (Retd) SI (M)
Former Director, National Institute of Maritime Affairs



Basic components of maritime economy of Pakistan are shipping, ports and harbours, fisheries, maritime tourism, and the ship recycling sector. Referring to the significance of Fisheries sector, it is basically a guarantor of the country's food security. On the other hand, ship recycling sector provides raw materials for the industries primarily concentrated in Gujranwala, Sialkot, and Wazirabad. This raw material is utilized for the production of cutlery, utensils, industrial machinery, fans, and sewing machines etc. So, the raw materials from old ships enable a significant influx of foreign exchange in Pakistan.

Globally, maritime tourism industry is one of the most beneficial industries, but Pakistan generates no significant revenues from it due to its lack of attention to the Sector. Karachi has a 70 kilometres long extensive coastline, stretching from Cape Monze in the west to Port Qasim in the east, and has a number of beaches, including Paradise Point, Hawke's Bay, Sandspit, French Beach, Sunehra Beach, but Mubarak Village, and Sea View, but their condition is miserable and went from bad to worse due to the discharge of sewage lines directly into the Arabian Sea. The undeveloped topography of Karachi's beaches, among other things, makes them dangerous. Due to lack of facilities, Pakistan has been unable to profit from maritime tourism.

Maritime Affairs & Blue Economy



Unfortunately, Pakistan has been reliant on foreign shipping since 1947 to transport goods for import and export. In 1947, Pakistan had three merchant ships; by 1971, the number of merchant ships had increased to 74; and, unfortunately, the number of merchant ships has now been reduced to 13. Until 1974, Pakistan had a private organisation that collaborated with the Pakistan National Shipping Corporation (PNSC), both owning half the number of merchant ships out of 74. Since there is no public-private partnership currently, the PNSC is left with just 13 merchant ships. This is very unfortunate because last year,

Pakistani ports handled 110 million tonnes of cargo, and only 8.5% of the cumulative cargo was handled by Pakistani flag carriers. This is a national security concern as in times of war or need; foreign vessels may refuse to come to Pakistan to lift cargo.

Economic treaties are now taking priority over security pacts, and CPEC serves as a prime example. Historically, Pakistan too focused more on security pacts and lesser on economic arrangements. Pakistan's shift from membership of the SEATO and CENTO security pacts in the 1950s to signing of CPEC proves that economic security is considered more crucial in modern times. China had prioritized economic growth, and is now the world's leading economy. On the other hand, China's naval and military might are weaker as compared to those of US and Russia.

Pakistan is of great economic importance to China for a variety of reasons. The two countries are working on a number of joint ventures. Referring to the China Pakistan Economic Corridor (CPEC), the Gwadar port is a critical component that, once fully operational, will connect China with the rest of the world. China is eager to accelerate development in Gwadar under the umbrella of CPEC. A large chunk of the country's total investment falls in this Region. Gwader port is supposed to supplement cargo to Afghanistan and Central Asia. Russia also plans to use Gwader to reach markets in the Middle East and Africa. Port Qasim and the Karachi Port handled roughly 10 million tonnes of cargo in 2021. On the other hand, the Gwader Port is expected to handle 400 million tonnes of cargo annually, which is four times more than Port Qasim and Karachi Port collectively. So, the future of Pakistan's economy greatly depends on Gwader Port.

When it comes to business and trade, maritime security is of vital importance as waters outside the Pakistani border line should be safe for merchant ships. Fortunately, Pakistan is the first country in the Region to be allotted an additional 50,000 square kilometres of sea area in 2015. The Arabian Sea is a lifeline for Pakistan's future, as it is a source of trade, business, and food. Land area of any country cannot be increased, and as far as Pakistan is concerned, its population is increasing at a rate of 2.8% per year. Therefore, the reliance of Pakistan's economy on seas will be greater than ever. According to experts, the Pakistani fisheries sector earns USD \$ 400 million annually, and has the potential to earn up to USD \$ 2 billion. Pakistan must investigate the impact of maritime economy because it supplements the national economy, and the national economy is a key component of national security. The National Security Policy 2021 is also centred on national economy, establishing a crucial linkage between the two terms.

PROSPECTS OF PAKISTAN'S MARITIME REGIONAL COLLABORATION



by Prof. Dr. Nazir Hussain
Dean, Faculty of Social Sciences, University of Wah



There are 190 odd recognized countries in the world. 150 countries are located at the coastlines, whereas, the remaining 44 countries are landlocked having no direct access to seas or oceans. Pakistan is one of the 150 countries located to the north of the Arabian Sea. Unfortunately, blue economy has remained a neglected concept in Pakistan. One reason for the lack of research on maritime affairs in Pakistan is the unavailability of data. Websites of maritime related Pakistani offices are not properly updated. In order to streamline and speed up research on maritime development, a proper data bank is the need of the hour.

Pakistan has a 1050km long coastline. There is a widely accepted belief that Pakistan's maritime boundary has the capacity to accommodate up to three ports. Actually, Pakistan's coastal boundary has the potential to hold six major ports. It is evident from the available data and research that Pakistan does not lack natural potential. The issues lie in our efforts and policymaking. Today, blue economy of the world accounts for USD \$ 1.5 trillion turnover annually, and it is expected to reach USD \$ 3 trillion by 2030. Pakistan's blue economy alone is said to have a potential of USD \$ 100 billion; but unfortunately, the country has not been able to harness it. Pakistan's shipping capacity is seriously lagging behind with less than ten operational ships under the Pakistan National Shipping Corporation (PNSC).

The survival of Pakistan's economy depends heavily on the Arabian Sea. Almost 95 percent of Pakistan's trade is carried out through its ports. Moreover, Pakistan receives its entire supply of oil through the sea which makes it vulnerable to traditional security threats. Any blockade of the oil supply in a war-like scenario would not only be a decisive blow for the economy, but for the military muscle as well. In order to extract maximum advantage of blue economy, connectivity is of vital importance, which Pakistan lacks substantially. Connectivity is the one common aspect among world's leading maritime powers, such as, China, Japan, Singapore, Malaysia, and Hong Kong. Singapore is said to be the most connected maritime country of the world. On the other hand, Pakistan has always been reluctant to connect its maritime activities with other countries. Hence, it is not possible to expand trade without enhancing maritime connectivity.



It is about time that the new term 'geo-oceanic' be considered along with geo-economics and geopolitics. Pakistan should also keep an eye on geo-oceanic alignments and changes in the Indian Ocean Region. India's twenty ports in the Indian Ocean should worry Pakistan more than what it actually sees as potential threats, for instance, the Chabahar Port. Moreover, the disclusion of maritime security and blue economy from Pakistan's first National Security Policy (NSP) points out to our 'sea blindness'.

In order to realize the full potential of Pakistan's blue economy, students and youth need to be enlightened about the subject. Organizations like the National Institute of Maritime Affairs (NIMA) need to run awareness campaigns among students and in the academia. Furthermore, Pakistan's policymakers must not shy away from adopting proactive policies regarding the maritime sector. Government bodies that deal with maritime affairs including the two standing committees of the parliament should include experts and concerned people in order to stay updated with the changing maritime trends in the world. Blue economy should be popularized among the masses as a key component of national security. At the geopolitical level, Pakistan must strive to balance its relations between the two rivals, Iran and Saudi Arabia. National security experts should stop seeing Chabahar Port through a lens of competition. Lastly, Pakistan should reduce its reliance of oil import through sea and find avenues of oil trade with Iran. The Iran-Pakistan Gas Pipeline Project can also be revisited and altered to include China, making it a project of regional connectivity.

MARITIME LAWS PERTAINING TO SHIPPING, PORTS, COASTAL ZONES, AND EXPLORATIONS WITH SPECIAL FOCUS ON PAKISTAN



by Vice Admiral Ahmad Tasnim (Retd) HI (M) SI (M) SJ Tbt
Former Chairman Pakistan National Shipping Corporation (PNSC)
Former Chairman Karachi Port Trust (KPT)



Blue economy cannot be divorced from the land economy. The classic definition of economy states that the goods and services must flow freely, efficiently, timely, and without any hindrance to achieve desired results over the ocean and land. Unfortunately, this does not happen in Pakistan. No economy in the world, whether blue or land, can take off without the supply of sufficient energy. Our crude discovery ratio is 1 out of 3.5, which means, out of 3.5 wells drilled for exploration, 1 comes out productive, whereas, ratio of rest of the world is 1 out of 10. In Alberta Canada, the number of wells drilled in a year is between 4000 and 6000, whereas, in Pakistan, only 100 wells are drilled on average in a year which is embarrassingly low. Pakistan will only have sufficient energy if there is more exploration through drilling. Twenty years ago, there were 55 overseas oil exploration companies operating in Pakistan, and today, there are only five companies left, all due to bureaucratic and legal hurdles. Such criminal negligence has led Pakistan to an unprecedented energy crisis, eventually halting economic growth.

The New York Times reported that Chinese President Xi Jingping upon finding the Chinese shipping capacity very low in 2013, ordered the authorities to enhance shipping capacity of the country. By 2022, China owned double the number of ships then the second largest shipping nation which is Greece. Up-to 40



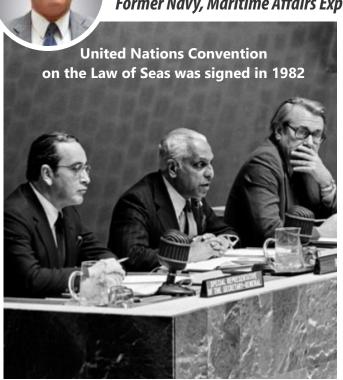
percent of the US' trade is carried out by Chinese ships. So, according to the NYT, in case of any US-China conflict, China will be able to halt the supply of US bound crucial materials. In contrast, the Pakistan National Shipping Corporation (PNSC) had a fleet of 55 ships some thirty years ago which has now been reduced to 5 operational ships. Currently, Pakistan has to pay USD \$ 2 – 2.5 Billion in freight to foreign ships annually which is a huge amount for a country that already has a dwindling economy. If Pakistan had kept increasing its shipping capacity, it would have been able to save USD \$ 1.5 billion a year.

There is lack of knowledge in Pakistan as far as offshore drilling is concerned. Drilling of an onshore well costs up-to USD \$ 10 million,

whereas, an offshore well cost ten times more. Naturally, Pakistan's offshore structure resembles that of Angola which is rich in oil and gas. Unfortunately, Angola has drilled up-to 400-500 wells, whereas, Pakistan has only managed to drill five wells in 75 years. In order to ensure the swift and unhindered flow of goods and substances, Pakistani authorities need to sort out operations at the ports because they are not efficient.

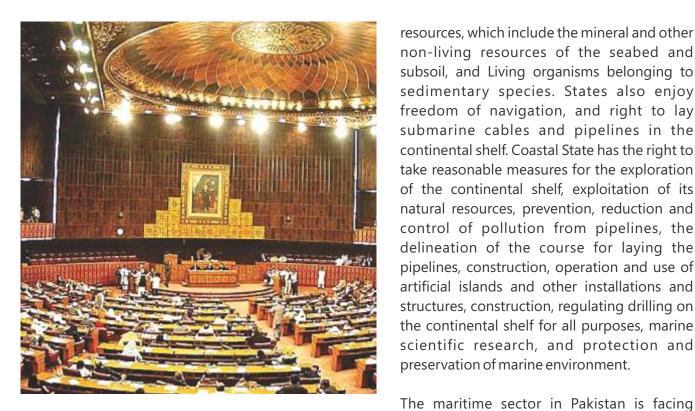
ESTABLISHMENT OF THE EXCLUSIVE ECONOMIC ZONE (EEZ) AND CONTINENTAL SHELF (CS) UNDER UNCLOS — CHALLENGES AND OPPORTUNITIES FOR DEVELOPING BLUE ECONOMY

by Cdre. Zafar Mansoor Tippu (Retd) TI (M)
Former Navy, Maritime Affairs Expert



Pakistan acquired extended continental shelf through the United Nations in 2015. Stakeholders in Pakistan's coastline include the federal government and two provincial governments of Sindh and Baluchistan. Pakistan enacted Territorial Waters and Maritime Zones Act in 1976. whereas, the United Nations Convention on the Law of Seas was signed in 1982. The concept of Exclusive Economic Zone (EEZ) got matured in 1976; therefore, it was also included in the 1976 Act. Pakistan's EEZ expands to nearly 240,000 square kilometer, and is believed to be rich in biodiversity and hydrocarbons. Pakistan ratified the UNCLOS on 26th February 1997, and declared its baseline on 29th August 1996. Pakistan's maritime boundary with Iran was decided in 1997, with Oman in 2000, and with India it remains undecided.

The project for the extension of continental shelf was initiated in 2005, document was submitted in 2009, and the approval by the United Nations (UN) was granted in 2015. As far as the EEZ is concerned, the coastal state has sovereign rights for the purpose of exploring and exploiting, and conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil. Other activities for the economic exploitation and exploration of the EEZ include the production of energy from water, currents and winds. On the other hand, in the continental shelf area, the state possesses sovereign rights for the purpose of exploring it and exploiting its natural



resources, which include the mineral and other non-living resources of the seabed and subsoil, and Living organisms belonging to sedimentary species. States also enjoy freedom of navigation, and right to lay submarine cables and pipelines in the continental shelf. Coastal State has the right to take reasonable measures for the exploration of the continental shelf, exploitation of its natural resources, prevention, reduction and control of pollution from pipelines, the delineation of the course for laying the pipelines, construction, operation and use of artificial islands and other installations and structures, construction, regulating drilling on the continental shelf for all purposes, marine scientific research, and protection and preservation of marine environment.

numerous challenges related to the governance, socioeconomic, research, security, and environment domains. Legislations and its implementation is a big challenge. The new law on maritime security was drafted four years ago but could not pass the National Assembly to replace the outdated 1976 Act. The Eighteenth Constitutional Amendment has included provinces as stakeholders but so far, no legislations have been adopted to review previous acts. Laws that abide by international standards too fail to achieve desired results because of the challenges that lie at the implementation stage. The legislations on the EEZ and continental shelf are outdated as international maritime laws have been evolving with time. Governance and management is another major challenge for Pakistan's maritime sector. There are

coordination issues between ministries, and between ministries and departments. There is no single

authority to govern economic activities related to EEZ, and the Continental Shelf.

There has to be a well thought out development plan for the EEZ and the Continental Shelf. Not only think tanks but hardcore professionals should be made part of the policymaking process. Development plans need to be implemented with efficient control and coordination in order to achieve desired objectives. This will not change in a span of one or two years, but with efforts that would last for more than a decade. Moreover, a large number of Pakistani seafarers are working abroad. Their skillset is required in Pakistan to streamline and professionalize the maritime sector. There are very limited numbers of researchers and scientists working in the field of maritime research. Government needs to invest a lot on research and development. New technologies need to be injected in the fisheries sector in order to enhance the annual turnover. It is essential for the development of fisheries sector that the fishermen do away with outdated techniques. Further, fisheries lack deep sea fishing resources, fish Processing facilities, aquaculture, and balance between local fishing and big business.

There is lack of credible data for hydrographic and oceanographic surveys. The National Institute of Oceanography (NIO) has very few resources at its disposal. Only two universities in Pakistan have departments on oceanography, and those too are marred with minimal resources. Moreover, there are insufficient funds and investments by the government for the private sector. Also, there are insufficient platforms, technology, support infrastructure, manpower, expertise, and local industrial base. There are significant resource constraints for maritime policing since there is a large area to cover. More personnel

and patrolling are required to counter unlawful activities, Implementation of national legislations, and security of resources, offshore assets and platforms. Another security concern is the unresolved Sir Creek issue and undecided maritime boundary with India. This prevents Pakistan from exploiting hydrographic resources towards the eastern side of the EEZ. It is a very easy issue to resolve if there is political will on both sides. Furthermore, Pakistan has insufficient legislations to protect the environment of its waters. There is need to abide by internationally settled SDGs & CBD goals. Due to a lacking Implementation mechanism, there are challenges of pollution, environmental degradation, climate change, and sea level rise.

Blue economy brings wide range of opportunities for the economic development of Pakistan. It has the potential to produce employment, increase exports, generate revenue, and introduce new technologies. Moreover, large scale investments in renewable energy, oil and gas exploration, mineral extraction, and maritime tourism can produce huge profits and revenues. Though already late, but Pakistan has not missed the boat yet. A lot of progress can still be achieved if maritime governance is improved by bringing it under the ambit of one single authority responsible for its management, administration, security and regulation. Unfortunately, lack of coordination between different departments and inefficiency are the root causes of poor maritime governance and mismanagement



BLUE ECONOMY, MARITIME GOVERNANCE, AND LAW



by Dr. Shaheen Akhtar
Professor, Department of International Relations,
National Defence University (NDU)



The term blue economy came into being in 2012 following the conference held under the United Nations on sustainable development and growth. The basic aim was to highlight the sustainable use of coastal and marine resources for economic benefits. The 2030 agenda put forward by the United Nations directly refers to sustainable economic growth and blue economy through SDG 14. World Bank defines blue economy as "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems". SDGs have been incorporated by Pakistan into its domestic development program indicating its awareness regarding the potential of blue economy.

The coastline of Pakistan is 1050 km long along with the EEZ expanding to 240,000 square kilometres approximately. In excess of that, Pakistan's Continental Shelf is nearly 50, 000 square kilometres wide, making Pakistan one of the most significant coastal states. Due to its vital geostrategic position, Pakistan offers significant maritime trade opportunities. In addition, the construction of Gwadar as a transit and transshipment port under CPEC yielded Pakistan with immense potential as one of the key player in the Indian Ocean Region. Blue Economy of Pakistan offers wide range of opportunities peculiar to the geostrategic and economic realities of the country including fisheries, coastal tourism, and maritime transport, and newly originating arenas of aquaculture, marine biotechnology, deep seabed mining, resources extraction, and oceanic renewable energy. The fisheries sector is a major source of nutrients and food in the country capable of raising USD \$1.2 billion annually, and creating up to 1.8 million job opportunities. Pakistan exports fish to many European countries, and it is a key exporter of seafood to China. However, due to poor techniques, it generates lesser revenue than its actual potential. The fisheries sector contributes just 0.4 percent to the GDP.

Pakistan has a significant maritime tourism potential with its diverse natural, religious and cultural tourism resources. Tourism was given its industry status in 1989, and to develop beaches and water sport activities, Pakistan had constituted a Beach Development Authority under Pakistan National Tourism Policy 1990 (NTP 1990). In order to promote water sports, this long run policy was placed under the ambit of Ministry of Culture, Sports, Youth Affairs and Tourism to collaborate with the concerned governments of Sindh and

Maritime Affairs & Blue Economy



Balochistan. Pakistan had significant coastal and maritime tourism in the 1970's, but gradually the industry declined due to lack of coordination, poor governance, and security concerns. Instead of prioritizing marine tourism, the government has been keener to promote land based tourism. If exploited properly, it can significantly lift the living standards of coastal communities. Pakistan must explore the vast spectrum of marine tourism activities such as, harbour cruises, recreational fishing, maritime museums, sailing yachting, beach activities, windsurfing, scuba diving, snorkeling, sea kayaking, and many more. Smooth and efficient system should be introduced in terms of tax relaxations, high profit expectations, smooth and easy documentation as well as security guarantees to encourage investors and tourists both. All the basic amenities like hotels, cafes, internal and external transportation, health facilities, internet, cell phone services, ATM machines, and credit card acceptance should be ensured by the authorities.

Ship breaking has also contributed significantly to maritime economy of Pakistan due to cheap labour, and low price of steel. Pakistan's ship breaking sector was prioritized over those of India and Bangladesh due to long beaches, heavy tides and favourable environmental conditions. It has the potential to raise over one million jobs as it is one of the most labour intensive sectors. In 1960s, Gaddani was one of the largest shipbreaking yards in the world. It has the potential to generate up to USD \$ 3 billion annually. The shipping industry is of paramount significance in any economy in the current era as 80 percent of world trade is carried out through the sea. 95 percent of Pakistan's trade with other countries is carried through the sea and almost all resources and minerals are imported via maritime routes. The shipping sector of Pakistan is governed by several organizations under both international law and a National Shipping Policy. Pakistan National Shipping Corporation (PNSC) is the largest and the only Pakistani flag shipping Company in Pakistan with a capacity to lift 10-11 percent of Pakistan's cargo. Under the United Nations Liner Code 1974, a country can lift 40 percent of its cargo in its own ships, which can even be raised to 60 percent. In terms of capacity, Pakistan has seven oil tankers, five bulk carriers, and a total fleet of 57 ships, making it the smallest fleet as compared to regional countries. India has a total fleet of 1801, Bangladesh 468, Sri Lanka 90, and Iran, despite long-standing international sanctions, maintains 893 ships. Pakistan does not possess a single general cargo or container ship. Pakistan needs to acquire more oil tankers and bulk carrier ships, as it depends on imported oil. According to official sources, PNSC imports only 26 percent of liquid and only 3 percent of dry bulk cargo of the country, while the rest is imported through foreign vessels. The amount of trade is increasing every year, whereas, the share of PNSC is going down which should not be the case. In 2018, the total seaborne trade from Pakistan was estimated at 100.247 million tons, and PNSC was trading only 12.76 percent of it. In 2020, total seaborne trade of Pakistan was 94.321 million tons, where the PNSC share was 8.80 percent. In 2021 total seaborne trade of Pakistan was 110.271 million tons, where the PNSC share was 11.09 percent. This costs Pakistan a whopping 5 billion



USD freight charges annually.

The domestic boat industry of Pakistan needs dire support from the government before it's too late. Due to some of the official in differences and lack of interest in this sector, traditional boat building has moved outside Pakistan. Pakistan used to be the largest builder of dhows in the region. The informal sector involved in the boat-making industry is running side by side.cup to USD \$14. In Karachi, small boats are used for tourism, local transport, whereas, larger vessels are in the business of carrying cargo in the region. Government intervention is required in introducing incentive schemes and facilitation services for the registration of boats and the development of boat engines that are efficient and durable in extreme weather conditions.

Furthermore, Pakistan has suffered sea blindness in its maritime policy for a very long time. The supreme regulatory authority is the Ministry of Maritime Affairs. No budgets are allocated to all of the three ports, meaning their operations are carried out by what they earn with the approval from Ministry of Maritime Affairs. After announcing the year 2020 as the year of Blue Economy, the Government amended Merchant Marine Policy 2001 in the year 2019. The amended policy provides a range of incentives to private investors like reduction in gross tonnage tax, first berthing right to flag carriers, and acceptance of freight charges in Pakistani rupees along with US dollars, long term finance facility, and other fiscal incentives.

Pakistan has a high compliance cost as compared to other regional countries such as India and Korea. The high compliance cost is associated with documentary requirements for customs clearance. On average, Pakistan requires 400 hours while India and Korea require 270 and 196 hours, respectively. Similarly, the time taken for the customs clearance process and documentary compliance in case of imports is 12 times longer than in the UAE. The indirect cost associated with uncertainty and delays affects customer choices. Poor track and trace consignments, custom clearance, inexpedient schedule, transport-related infrastructure are bottlenecks that keep the industry from meeting its actual potential.

Pakistan has a large EEZ with a long coast. Maritime sector is pertinent for economic growth, employment generation and food supply. It is now a requirement to draw up a comprehensive marine policy that must include each and every sector of the blue economy to ensure optimal use of ocean resources, rather than sticking to few ordinances and regulations. This will require all stakeholders' input; the stakeholders having the responsibility of governance are of core importance to kick start the development of blue economy. It is now important to overcome and fill the gaps in procedural rules as well as ameliorating service delivery to leverage the real potential. PNSC and private entities should be more autonomous to boost investments and competition. The country needs to invest heavily in Aquaculture to boost the fisheries sector and increase exports of seafood to USD \$ 2 billion annually, while concurrently increasing the country's food security. There are a number of environmental issues in the coastal zone of Pakistan which have a direct bearing on public health. The Karachi coastline's growing pollution level, which is tied to the increasing volume of trade via shipping industry through Karachi port, is severely contaminating the mangrove forests and marine life in the area. This needs to be addressed.

CHALLENGES FOR PAKISTAN'S MARITIME INTERESTS IN THE INDIAN OCEAN REGION (IOR)



by Dr. Masood ur Rehman Khattak

Department of Politics and International Relations,
International Islamic University Islamabad (IIUI)



The Indian Ocean Region is the largest ocean covering 20% of the water on earth's surface. As well known, it is a very important and crucial Region in the world. It has emerged as most significant for security, strategy, and economy in the Asia-Pacific Region. Almost 80% of the world's seaborne trade and oil passes through the Indian Ocean. The Indian Ocean provides major sea routes connecting the Middle East, Africa, and East Asia with Europe and the Americas, and is said to be home to 40% of the world's oil and gas reserves. Up to 50% of the world's container ships, and one third of the bulk cargo traffic takes place through the Indian Ocean Region.

In the domain of maritime affairs, the greatest threat faced by Pakistan today comes from India. 90% of the Indian trade is carried out through sea and they are growing it at a rapid pace. Annually, over 100,000

merchantmen transit the waters of the Indian Ocean carrying cargo worth up to USD \$ 1 trillion. India has EEZ of 2.02 Million square kilometres along its entire coastline of 7516 kilometres touching 13 coastal states and union territories. The population of India has crossed the one billion mark, which means they require more trade and resources to fulfill their needs. Moreover, the Indian economy is rapidly growing at 8.7% annual GDP. It has a whooping USD \$ 2.8 trillion economy and by 2045, India is projected to become a USD \$ 5 billion economy. Hence, in this context, India seeks to control the Indian Ocean Region for smooth and secure trade. India is spending a lot of money on refurbishment of their maritime security. They aim to have a huge naval force in the next ten to fifteen years. Today, India's five nuclear submarines pose the greatest threat to Pakistan's security. On the other hand, Pakistan does possess partial second strike capability but an ultimate second strike capability or mutually assured destruction can only be achieved through nuclear submarines and long range sea-launched ballistic missiles (SLBMs).

Sun Tzu says in his book titled' the Art of War', "If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also

Maritime Affairs & Blue Economy



suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle." Indian Navy is backed by a Satellite named 'Rukmini' that helps its fleet monitor the Indian Ocean Region as it has a 2000 nautical mile footprint. The Satellite provides real time inputs to warships, submarines, maritime aircrafts, and naval assets regarding any movements in the high seas. Rukmini has also reduced Indian Navy's dependence on foreign satellite communication services to connect its vessels. So, Indian navy is aware of the movements and positions of Pakistan's warships and submarines at all times. This poses a grave threat to Pakistan's maritime security.

Aircraft carriers are just a symbol of power for the Indian Navy because they cannot be effective against Pakistan in wartime. Apart from this, India added new destroyers (warships) to its naval arsenal which will play an important role in managing warfare at sea. Along with this, with Russian assistance, India plans on adding frigates and anti-submarine corvettes in the next ten to fifteen years posing another grave security challenge for Pakistan. Indian authorities also seek to sign a USD \$ 2.6 billion deal with the US to acquire advanced Romeo Sikorsky Helicopters designed to hunt down submarines.

There are 4000 Indians suspiciously working in Iranian territories in close proximity with Baluchistan, Gwader Port, and Karachi. The Indian Naval Commander Kulbhushan Yadev was said to be operating from the Chabahar Port under the guise of a businessman. India has allocated USD \$ 500 million to disrupt the China Pakistan Economic Corridor (CPEC) and the story of spies does not end at Kulbhushan. There must be many more Indian spies operating from Iran with the aim to undermine Pakistan's security and economic growth. Now, imagine the consequences on Pakistan's maritime trade if an oil tanker carrying crude for Pakistan is struck by a boat full of explosives near or within the maritime borders of Pakistan. An act such as this may jeopardize the entire blue economy of Pakistan, therefore, it must be perceived as a challenge by concerned authorities. Since a conventional war is no more an option for India, it seeks hybrid and indirect ways to undermine Pakistan at the international level. In 2008, India established a Technical Services Division where Kulbhushan Yadev was attached. This notorious Division is said to be responsible for major high profile terrorist attacks on Pakistani soil.

Pakistan needs to be self-reliant instead of depending on other countries to improve and upgrade its maritime operational capabilities. There is dire need to introduce network centric, electronic, surveillance, and reconnaissance capabilities to counter challenges posed to Pakistan at the maritime front. Moreover, Pakistan needs to deepen its defence cooperation with China to include long range air defence systems, and night vision capabilities. In order to ensure survival and avoid Indian hegemony in the Indian Ocean Region, Pakistan needs to maintain credible nuclear deterrence by acquiring second strike capabilities, C4I Systems, deep underground tunnels, and mobile ground based capabilities.

SENATOR DR. MUSADIK MASOOD MALIK

Minister of State (Petroleum Division)



"The only way to protect a country holistically is to secure it diversely."

A country's agenda is a reflection of its story, written through careful nation-building and a logical structure. Pakistan's story, in its seventy-five years of existence, is of security and not of liberties, freedoms, rights, development, growth, innovation and human ingenuity.

This raises a significant question on whether security is the only narrative on which Pakistan will exist and prosper. If so, then this 'meta-story' overshadows all national avenues from economic development to social rights. The country is, thus, stuck in an indefinite cycle of hopelessness and

impossibilities. To break free, people need to assume national security and believe they are safe. Pakistan is safe; it has no security issues or pathos of existence. It is like any other country struggling through minor economic challenges.

Once this trust stands, the country can create stories of hope and possibilities. It will open new avenues for the protection and prosperity of the country. Countries that have looked beyond this security dilemma have achieved the ultimate frontier of imagination. Transponders and mutation, which were once fictitious fantasy, are today's reality. Through human ingenuity, they have reached unprecedented heights of innovation. They have created a cell phone that enables people to communicate at a vast distance, and have expressed human monoclonal antibodies in the ovary lines of rats, mice and guinea pigs.

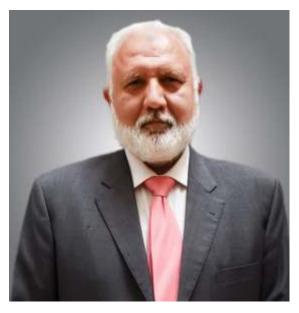
Pakistan, too, can achieve the ultimate frontier of imagination if it looks beyond the security question, and its people begin to imagine a country they would like for future generations. Maritime is the centre of this journey. Pakistan has geographical and strategic significance not only to its neighbours but also to the world. It can become a global exporter and a connection point between Central Asia, the western borders of China and the rest of the world. China has realised its fault lines in developing the East over the Western provinces. Sea routes through Pakistan are pivotal and one of the most effective means to connect the Western Provinces of China with the rest of the world and head-start its development. Thus, it is high-time that Pakistan, with China, works towards this shared goal.

However, it must be realised that maritime transformations are not accidents. They require extensive strategic deliberations. China has the world's most efficient ports and Singapore has the singular most efficient port. UAE, too, has become a hub of global transportation. The countries have recognized that integration is essential to become one with the 'global fabric' which is possible through 'efficient' and 'low-cost' ports. Therefore, Pakistan must work towards an efficient maritime economy. Inefficient ports, marred with high transaction loads from transactional costs and corruption, are creating inflationary pressure that will hinder the prospects of becoming a global exporter and blending in with the rest of the world.

Maritime Affairs & Blue Economy

VICE ADMIRAL ABDUL ALEEM (RETD) HI (M)

Director General National Institute of Maritime Affairs (NIMA)



Pakistan has a total land mass of 0.8 million square kilometres and water mass of 0.3 million square kilometres. The maritime economy is essential to its prosperity and development. However, policy and strategic impediments, over the years, have prevented the country from reaching its full maritime potential.

The public departments for maritime affairs are undergoing major challenges. To begin with, the public officials exhibit disinterest and lethargy towards development and innovation. They lack synergy and cancel out all constructive and destructive interferences.

Furthermore, there are several ministries working for maritime affairs with diverse interests. Fishery is controlled

by the Ministry of Maritime Affairs and Ministry of Food and Security. Similarly, offshore oil exploration comes under the Ministry of Maritime Affairs and Ministry of Science and Technology. Maritime security has the advantage of being part of the Ministry of Defense only which has promoted its development over the years. Pakistan navy enjoys respect within the international community and is receiving better equipment and more funds for the submarines contrary to the past. This shows that maritime affairs in the public sector must be led by one ministry that overlooks its challenges in a comprehensive manner.

Pakistan has had a conflicting maritime vision. The vision for economic sustainability conflicts with conservation of environment and continental mindset. This has led to strategic failure with devastating consequences.

Gwadar port is ideal for trans-shipment and transit. It was inaugurated in 2007 under operational control of the Port of Singapore Authority. The government of Pakistan, at the inaugural ceremony, announced the building of Karachi Port. This pushed out of Gwadar into Karachi, leaving it idle. This was a bad strategic move as the Karachi port is 100 nautical miles off route, and Gwadar port showed far more economic prospects for the country. Pakistan also succumbed to the continental mindset and was unable to push either Singapore or China towards developing the port and increasing economic activity. Port Qasim and Karachi see over 30 ships every day, Gwadar port only gets a little over a ship every month.

Karachi port, too, is inefficient and costly owing to lack of initiative and failed policies. The transport of cargo has been moved from rail to truck which has reduced the port's cargo operations from 17 to 7 hours. Pakistan owns only 13 ships which has caused a loss of 8 billion dollars through foreign carriers. The Chief Justice of Supreme Court took a suo moto notice against using coal terminals in Karachi port to protect the environment which was substituted with terminals in port Qasim. This raised the cost of using terminals by 30 percent.

Maritime Affairs & Blue Economy

In comparison to Pakistan, countries like Bangladesh and Maldives have increased their maritime capabilities. In the early days of Covid-19, the prices of ships fell. Bangladesh grabbed this opportunity and increased its ships from 42 to 80 in a span of two years. Similarly, Maldives, when declared unsuitable for tourism by the United Nations in 1960s, took up the challenge and has become amongst the best countries for maritime tourism.

Pakistan, from the lessons of its neighbours, should exert efforts towards making a comprehensive maritime policy and ensuring its apt application to build an efficient and cost effective maritime economy.



CONCLUSION















Pakistan's Maritime Policymakers and stakeholders have been suffering from sea blindness for a very long time. After declaring the year 2020 as the 'year of blue economy', the Government amended Merchant Marine Policy 2001. However, substantial changes in laws and procedures seeking the overhaul of the country's maritime sector are yet to be adopted. Separate budgets are not allocated to the three ports and their operations are carried out from what they earn with the approval of Ministry of Maritime Affairs. This causes hiccups in routine port operations as port authorities run out of finances.

Pakistan has a sufficient Exclusive Economic Zone (EEZ) coupled with a 1050 kilometres coastline. This highlights the potential of Pakistan's maritime resources in boosting economic growth, creating employment, and securing food supply. It is unfortunate that Pakistan was not able to draft a comprehensive marine policy concerning all relevant sectors of the blue economy. A holistic marine policy would require input from all the stakeholders relevant to the field of blue economy. Such a policy will enable equitable and sustainable development of Pakistan's maritime resources.

Pakistan lacks adequate credible data, research, and maritime education institutes and departments in universities. Moreover, there are insufficient funds and investments by the government for the private sector. There are insufficient platforms, technology, infrastructure, manpower, and expertise as far as the field of blue economy is concerned. In order to avail the fruits of blue economy, the Government needs to invest in the development of maritime research and education. If possible, Government may apply public-private model to make it attractive for investors.

The Eighteenth Constitutional Amendment has added the voice of two provinces of Sindh and Baluchistan as stakeholders in Pakistan's coastline. There are unresolved issues between the two provinces and federal government regarding the control of ports and maritime boundary. No adequate mechanisms have been established to divide coastal resources equitably between provinces and federal government. More than a decade has passed since the Eighteenth Constitutional Amendment, but its complete implementation is yet to be seen. There needs to be a government department comprising all the stakeholders in charge of Pakistan's entire maritime affairs and blue economy.

In order to achieve desired economic development, Pakistan needs to divert its focus towards blue economy. Neighbouring India and Bangladesh have significantly improved their revenues through blue economy. Nevertheless, Pakistan has not missed the bus yet. It is still waiting for us to harvest blue resources estimated at USD \$ 100 billion only if policymakers realize the importance of maritime affairs in due time. We must board it now or never.

Contributor Profiles



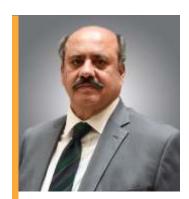
DR. FAISAL MUSHTAQ

Chairman Advisory Board, Center for Law and Security



REHMAN AZHAR

Executive Director, Center for Law and Security



DR. ZAFAR NAWAZ JASPAL

Dean Faculty of Social Sciences, Quaid i Azam University, Islamabad



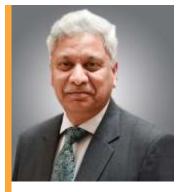
DR. HUMA BAQAI

Rector
Millennium Institute of
Technology & Entrepreneurship



Cdre. (R) **BABER BILAL HAIDER**SI (M)

Former Director NIMA



PROF. DR. NAZIR HUSSAIN

Dean Faculty of Social Sciences, University of Wah



Vice Admiral **AHMED TASNIM**(R)HI (M), SI (M), SJ, SBt

Former Chairman, Pakistan National Shipping Corporation (PNSC)



Cdre. (R) **ZAFAR MANSOOR TIPPU**

TI (M)

Former Navy, Maritime Affairs Expert



DR. SHAHEEN AKHTAR

Professor, Department of International Relations, National Defence University

Contributor Profiles



DR. MASOOD UR REHMAN

Department of Politics and

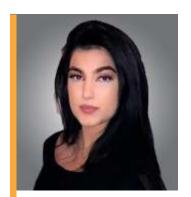
International Relations,

International Islamic

University Islamabad (IIUI)



MR. ASFAND YAR KHAN
Research Associate,
Centre for Law and Security
(CLAS)



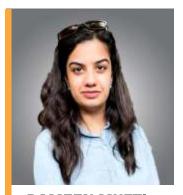
SYEDA ZAHRA SHAH
Research Associate,
Centre for Law and Security
(CLAS)



SAJID KHANResearch Officer,
Centre for Law and Security
(CLAS)



IMRAN ALTAF
Research Officer,
Centre for Law and Security
(CLAS)



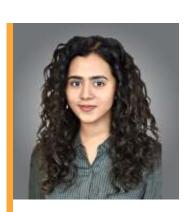
RAMEEN MUFTI
Research Officer,
Centre for Law and Security
(CLAS)



YUMNA SOHAIL

Research Officer,

Centre for Law and Security
(CLAS)



RANIA YACUB

Research Officer,

Centre for Law and Security
(CLAS)

Mr. Chaudhry Faisal Mushtaq (TI)

Chairman Advisory Board, Center for Law and Security

Chaudhry Faisal Mushtaq – Tamgha-i-Imtiaz, is a Former Education Minister and a Former Minister for Human Rights, Population & Social Welfare, Minorities and Baitulmal in the Interim Government of Punjab, and is recognized as the 500 most influential Muslims of the world for three consecutive years by the Royal Islamic Strategic Studies Center, Jordan, he is a leading national academician, education reformer and a social entrepreneur. He is a member of many of the government's committees on education and ICT at national level and is appointed as the National Book Ambassador for the last three successive years by the National Book Foundation, Pakistan.

Mr. Rehman Azhar, Executive Director

Center for Law and Security

Mr. Rehman Azhar currently holds the post of Executive Director at the Centre for Law and National Security. He also serves as an anchor, news producer and special correspondent at Express News Television, and has over 10 years of experience in dealing with foreign policy and national security concerns of Pakistan. He also has worked with international public policy institutes such as Centre for Ethics and Rule of Law (CERL), University of Pennsylvania Law School; Amnesty International, USA; Equality Now, USA; United Nation General Assembly (Legal Committee), USA; and Center for International Media Ethics (CIME),

Dr. Zafar Nawaz Jaspal

Dean Faculty of Social Sciences, Quaid i Azam University, Islamabad

Prof. Dr. Zafar Nawaz Jaspal is an Islamabad-based analyst and professor at the School of Politics and International Relations, Quaid-i-Azam University. He has a PhD in International Relations from Quaid-i-Azam University Islamabad and his research interests include International Politics, Strategic Studies, Nuclear and Missile Proliferation, Biosecurity, Weapons of Mass Destruction, Terrorism and Countermeasure, Arms Control/ Disarmament and Nuclear Non Proliferation Regime, Asymmetric Conflict, Religious Extremism/Radicalization in Pakistan, Terrorism and Counter-Terrorism, Pakistan's Domestic Politics, and Foreign/Strategic Policy.

Dr. Huma Baqai

Rector MIITE, Karachi

Prof. Dr. Huma Baqai is the Rector of Millennium Institute of Technology and Entrepreneurship, Karachi. She has previously served as an Associate Professor of Social Sciences & Liberal Arts, and was also former Associate Dean, Faculty of Business Administration, at IBA Karachi. She has been working with both national and international media as an international relations expert and political analyst since 1999. She is a scholar, reviewer, author, and co-editor of two books titled Pakistan-Afghanistan Relations: Pitfalls and Way Forward in 2021 and Making Sense of Post COVID-19 Politics in 2020. She has authored twenty-nine national and international research articles published in renowned journals. In addition, Dr. Baqai is the Vice Chairperson of Karachi Council for Foreign Relations (KCFR) and serves on several advisory & governance boards.

Cdre. (R) Baber Bilal Haider SI (M)

Former Director NIMA

Commodore Baber Bilal SI(M) is a Retired Naval Officer and currently working as Director Indian Ocean Study Centre (IOSC) at National Institute of Maritime Affairs (NIMA), Islamabad. Previously, he also served as Director NIMA. During his distinguished career, he has served on various Command and Staff appointments to include Commanding Officer of Frigate and Corvette, Director PNTS, Deputy Naval Secretary, Commanding Officer PNS Dilawar, and Directing Staff NDU. Presently, he is Research Fellow at NDU in International Relations Department pursuing his PHD. He is also visiting faculty in Bahria University Islamabad. His areas of interest include Indian Ocean Region, Maritime Diplomacy, Traditional and Non-Traditional security threats in IOR, and Maritime security.

Prof. Dr. Nazir Hussain

Dean Faculty of Social Sciences, University of Wah

Prof. Dr. Nazir Hussain is currently the Dean, Faculty of Social Sciences at the University of Wah. He has also served as Dean, Faculty of Social Sciences at Quaid-i-Azam University Islamabad. He has done his Post Doc Research Fellowship at the French Institute of International Relations, Paris and holds a PhD from Bahauddin Zakriya University Multan. He also has a Diploma in Conflict Resolution from Uppsala University, Sweden. His research interests include Middle East/Gulf, Confidence Building Measures, and a wide range of security issues.

Vice Admiral Ahmed Tasnim (R) HI (M), SI (M), SJ, Sbt

Former Chairman, Pakistan National Shipping Corporation (PNSC)

Vice-Admiral Ahmad Tasnim HI(M), SI(M), SJ, SBt is a retired three-star rank admiral in the Pakistan Navy who is notable for his command of the Hangor, a submarine, that sank the Indian Naval Ship Khukri on 8 December 1971 during the third war with India. This was the first submarine kill since World War II, and the only one until a Royal Navy's Conqueror sank an Argentine cruiser during the Falklands War fought in 1980s. In 1990s, he was appointed Chairman of the Karachi Port Trust and the Pakistan National Shipping Corporation while serving in the Navy until retiring from his service in 1994. In 1965, as Lieutenant-Commander, he was the executive officer and Second-in-Command of the Pakistan Naval ShipGhazi, and participated in second war with India in 1965. Upon returning to Pakistan, he was decorated with Sitara-e-Jurat for his actions of valour in 1972.

Cdre (R) Zafar Mansoor Tippu TI (M)

Former Navy, Maritime Affairs Expert

Cdre Tipu served in the Pakistan Navy for 36 years. His career spanned a wide range of specialized fields. He is a hydrographer by profession and holds a specialization in Anti-Submarine Warfare. He held various important appointments during his career which include command of SV Behr Palma, Director Naval Training, Hydrographer of Pakistan Navy, Defense Attaché of Pakistan at Qatar, and Judge Advocate General of Pak Navy. Cdre. Tipu is a graduate of Pakistan Navy War College, UK's Joint Command and Staff College, and National Defense University. He has represented Pakistan in various international forums and has also chaired international meetings related to regional hydrographic matters. Being a Hydrographer, he was responsible for surveys of maritime areas under Pakistan's jurisdiction and fulfillment of various national obligations for navigational safety, etc. Cdre Tipu was

involved in the project for the extension of Pakistan's continental shelf. He was part of the team which finalized the claim documents submitted to the UN and later led the Pakistan delegation which successfully interacted with the UN Commission on Limits of Continental Shelf. It resulted in the addition of over 50,000 sq km area in Pakistan's Continental Shelf. He retired from Pakistan Navy in 2018.

Dr. Shaheen Akhtar, Professor

Department of International Relations, National Defence University

Dr. Shaheen Akhtar is currently the Associate Professor at the Department of IR, Faculty of Contemporary Sciences, National Defence University Islamabad. She has a PhD in International Relations from the Quaid-i-Azam University Islamabad, and a Postgraduate Diploma in Conflict Resolution from Uppsala University Sweden. She is also the Editor of Journal of Contemporary Sciences. Her areas of specialization include Regional security, conflict resolution and peacebuilding in South Asia (Kashmir and Sri Lanka), Non-traditional security; energy, water, climate change and gender issues in the region, and Foreign policies of Major Powers.

Dr. Masood ur Rehman Khattak

Department of Politics and International Relations, International Islamic University Islamabad (IIUI)

Dr. Masood Ur Rehman Khattak is a Lecturer at the School of Poitics and International Relations, International Islamic University Islamabad. He has previously served as the Political and Security Advisor at the Embassy of Japan, Islamabad. He has a PhD in International Relations.

Mr. Asfand Yar Khan

Research Associate, Centre for Law and Security (CLAS)

Mr. Asfand Yar Khan is currently serving as a Research Associate at the Centre for Law and Security. Mr. Asfand completed his MSc Defence and Strategic Studies from Quaid-i-Azam University Islamabad in 2016. His areas of focus include international politics, counterterrorism, geostrategic stability, nuclear proliferation, blue economy and national security. He pursued research on Police Reforms and Counterterrorism during his MSc. Prior to this, Mr. Asfand has worked at the Institute for Strategic Studies, Research and Analysis (ISSRA), NDU as a Research Probationer where he undertook high end research and participated as conducting officer in various seminars and conferences including the National Security Workshop 2021. Mr. Asfand has also worked at the National Counter Terrorism Authority (NACTA), and the Centre for Global and Strategic Studies (CGSS), where he remained indulged in research work and event management.

Ms. Syeda Zahra Shah Subzwari

Research Associate, Centre for Law and Security (CLAS)

Syeda Zahra Shah Subzwari is a Research Associate at the Centre for Law and Security (CLAS). Ms Subzwari completed her LL.B (Hons) from the University of London. Before this, Ms Subzwari was employed as a Young Expert at the National Commission on the Status of Women (NCSW), Ministry of Human Rights (MoHR) under the Huqooq-e-Pakistan Project funded by the European Union Delegation. She worked directly under the Chairperson and received further assignments from Legal Expert UNFPA, National Gender Expert UNFPA, and Gender Advisor UNW. Her notable contributions include the following:

- She assisted the Legal Expert UNFPA in drafting the Gilgit Baltistan Commission on the Status of Women Act 2021 under Pakistan's commitment to the UN to Develop provincial CSWs.
- The Compilation and onward submission of the Concluding observations; paragraphs 32(a), 32(b), 34(a) and 40(c), as requested by the Ministry of Human Rights on Pakistan's fifth periodic report of the UN CEDAW committee.
- Mapping existing policies, legislation, programmes and reports against international commitments on women's rights. Gender-Based Violence (GBV) and Sexual and Reproductive Health (SRH).
- She drafted the concept note for Pakistan's membership of the Commission on the Status of Women(2022-2025) 66th session held in New York on 14th - 22nd March 2022. She drafted the work plan for the commission ahead of its visit to attend.
- She drafted the concept note and Objectives for the Consultation on Reserved Seats for Islamabad (ICT) Women in the National Assembly (NA).

Mr. Sajid Khan

Research Officer, Centre for Law and Security (CLAS)

Mr. Sajid Ullah khan is a Research officer at the Centre for Law and Security. Mr. Sajid completed his LLB from Bahria University Islamabad in 2019. He has studied masters in international financial regulations and corporate law (LLM) from Brunel University London in 2020. He has also completed Postgraduate Diploma in Law from BPP University London in 2022 and is now pursuing Bar-at-Law. His areas of focus include international financial regulations concerning financial crimes and an expertise in corporate laws. During his masters (LLM), he pursued research on the doctrine of piercing the corporate veil.

Mr. Imran Altaf

Research Officer, Centre for Law and Security (CLAS)

Mr. Imran Altaf is a Research Officer at the Centre for Law and Security. He completed his MSc Law majoring in International Relations from Jilin University, China in 2022. His areas of focus include international politics, CPEC, and Pakistan's relations with its neighboring countries. He pursued research on Pak Iran Relations during his MSc.

Ms. Rameen Mufti

Research Officer, Centre for Law and Security

Ms. Rameen Mufti is a Research Officer at the Centre for Law and Security. She completed her undergraduate degree in Government and Public Policy from the National Defence University and PGcert in Data Science and Artificial intelligence from the University of Liverpool, UK. Her areas of focus are climate change, counter terrorism, economic development and national security.

Ms. Yumna Sohail

Research Officer, Centre for Law and Security

Yumna Sohail is currently working as a Research Officer at the Centre for Law and Security. She has done her Undergraduate Degree in Peace and Conflict Studies from the National Defence University Islamabad in 2022. Her areas of focus include international conflicts, politics, counterterrorism, border security, onflict resolution, peace making and national security.

ACKNOWLEGMENTS

CLAS would like to thank the following individuals for their effort and contribution towards publication of this report:

Asfand Yar Khan *Editor*

Syeda Zahra Shah Subzwari *Editor*

M. Ali Raza *Administrative Support*

Waleed Shoaib *Graphic Design*









- 051 4866181-87 Ext 201
- info@clas.org.pk
- No. 68, South Street, Sector H-11/4, Islamabad
- f centreforlawandsecurity