

# **Exclusive Economic Zone & Maritime Potential of Pakistan**

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## **Abstract**

Pakistan's Exclusive Economic Zone (EEZ) is greatly important for economic development because of having plentiful resources. In the past, very little attention has been paid to the marine sector due to which its utility could not be considered. Under the aegis of SMEDA & United Nation Development Program shed light on the marine sector. Government policies were made but not fully implemented, resulting in resources are still untapped. Less coordination among authorities of different harbors in Pakistan leads to failure. China-Pakistan's relationship is largely leading to development in EEZ. Pakistan can be able to achieve an incredible position in the national and international seafood market which in turn will stimulate the nation's economy. The reason is, stakeholders do not have enough awareness, the government made attempts for land resources whereas attempts for sea resources have never been made as for land resources. Policies and decisions are wisely made for land resources, but unfortunately, the maritime sector is being overlooked just because of less research, negligence of the government, less coordination among concerning departments as well as inadequate capability in terms of technical aspects. Pakistan is suffering from a kind of Sea Blindness.

*Keywords: EEZ, Marine Resources, Harbors, Harmony among authorities.*

## **1. Introduction**

Pakistan is one of the 166 countries that have signed UNCLOS (United Nations Convention on the Law of the Sea, 1982). The UNCLOS has the structure of a variety of naval zones. Pakistan's territorial sea does have 12 NM breadths next to baseline whereas the contiguous zone has 24 NM width from baseline. Pakistan had declared its Exclusive Economic Zone (EEZ) which envelopes an area of 240,000 square kilometers (Shahzad, 2020). Later on, Pakistan acquired an extension of 150 NM with the authorization of a special claim. The current Exclusive Economic Zone is 350 NM which covers a total of 290,000 square kilometers. Pakistan belongs to a potential EEZ in the

Indian Ocean (Smith, (1986) Everything on the subject of the sea is included in the blue economy, e.g., hydrocarbon extraction, shipbuilding, shipbreaking, renewable energy, tourism, sea transportation, infrastructure, fishery, seabed mining, ports, and harbors, etc.

Pakistan maritime development sector has a vast area along the sea, and by the utilization of resources, it can be developed more, which would be significant in elevating the living standards of people. The country is rich in resources, but it is slipping behind owing to a lack of attention. World Bank (WB) categorized countries from low to medium and high income (Shahzad, 2020). By March 2020, oceans collection is up to around 5.6 billion dollars in the active project according to the statement of WB. The WB classified the members of the Organization of Islamic Countries (OIC) are with their revenue range. Out of 57 countries, only 7 countries are falling in the column of high-income countries while 18 and 34 OIC are low-income and middle-income countries respectively. Upper middle and high-income countries depend on oil and gas resources whereas least developed Islamic countries depend on non-oil products such as agricultural (Risks, 2018). The rich and poor countries have a big gap that is increasing day by day due to the outbreak of population and insufficiency of land resources (Shahzad, 2020).

Islamic states are mostly maritime nations that need to exploit sea resources properly. In order to utilize sea resources appropriately, EEZ mapping is entailed. Many of the states had submitted claims to UNO for the expansion of their EEZ and Continental Shelf. Some of them have been permitted currently. The Middle East and North Africa are tied around the Indian Ocean into an economically vibrant system. In past, trade was conducted peacefully but the Portuguese disturbed its peace by entering the Indian Ocean (Shahzad, 2020). A large number of people in Pakistan are employed in the Marine sector and most of the fishermen live near coastal villages.

Sindhis, Balochis, Kutchies, Zikries, and Makranis make up the majority of the fisherman. Because of the scarcity of land resources, high-income countries are now operating at sea. In Pakistan, there are several fish-catching hotspots along the Sindh and Balochistan coasts. Keti Bunder is a significant fishing center near Indus Delta whereas several catching centers are in Balochistan e.g. Ormara, Pasni, Kalamat, Gwadar, Jiwani, Kor Bandar, Ras ShumalBundar, Kapar, Sur, Peshukan, Bandari, Damb, and Gadani, etc. Pakistan's top exports are China, the United Arab Emirates, Thailand, Saudi Arabia, and Malaysia (Moazzam, M., 2014).

Population outbursts, national and international conflicts are becoming the cause of reducing land resources. (Shahzad, 2020). The outburst of population emphasizes maritime nations to redirect their focus from land to seas due to scarcity of land resources. The United States of America and China are making policies to have great influence in seas as the US prepares India as a counter check on China is likely to play a further greater role in the Indian Ocean (Kaplan, R. D., (2011)). Maritime states have started looking towards blue resources to support big populations (Dirk, 2001).

### **1.1. Objectives**

- a) To identify the possible benefits of EEZ & the potential of manufacturing in Marine fisheries.
- b) To highlight the challenges of EEZ which can hinder the manufacturing progress.

## **2. Literature Review**

Shehzad (2020) threw a sharp light on almost everything related to Maritime Affairs of Pakistan in his book “Blue Economy”. The author explained Pakistan’s Exclusive Economic Zone (EEZ) and highlighted that it has much more potential to boost up the country’s economy. Future researchers would be able to get benefits out of this book. Being a maritime nation, Pakistan has enough potential to get benefits from the utilization of its maritime resources. But unfortunately, due to lack of awareness and mismanagement of govt. policies, our maritime resources are untapped. He also discussed concerns related to the security of oceans and seas that in the present time, oceans and seas are required to be more secured than past and China’s BRI (Belt & Road Initiative) has shifted the concentration of the whole world towards maritime transport, trade, and tourism. CPEC is a part of BRI that has been constructed by China to influence the region by the application of economic tools. Pakistan should have to have a deep study, proper planning, and harmonized framework to utilize its huge maritime resources.

Khan (2021) highlighted Pakistan’s maritime potential. He drew his opinion by analyzing Pakistan’s economy by exploring multiple dimensions and elaborated how the maritime economy can be beneficial. He stated that by strengthening sectors such as agriculture, tourism, trade routes, and the maritime domain, the country can attain high economic output. As Pakistan’s ports are close to the most important chokepoint, the mouth of the Gulf of Oman, the geostrategic position has enhanced Pakistan’s importance as a maritime state. The author divides Pakistan’s maritime sector into two categories, i.e., (a) Pakistan’s regular maritime trade & tourism and (b) Pakistan’s China Pakistan Economic Corridor (CPEC) oriented maritime trade & tourism. Maritime transport,

trade & tourism are being focused globally, especially after the emergence of the Chinese Belt and Road Initiative (BRI). Once the CPEC is complete as part of the BRI project, Pakistan's economy is expected to grow exponentially. However, it requires proper planning and transparency to get the full advantage in this regard.

In a research "Small Scale Fisheries in South Asia," the author has briefed about the main seasons of catching fishing. The main season is between August and September. During the Monsoonal season, due to high wind and rough seas fish catching activities get reduced. In March and April, fishing activities get rise due to smooth weather (2018). In the article "Development of Shipping Sector in Pakistan" the author has highlighted the importance of the strategic location of Pakistan. The long coastline is a gift to Pakistan which has a deep sea near Gwadar and near the Strait of Hormuz. The Transit joins sea with the Gulf States which are rich in oil and energy resources. Being a Maritime state, the Pakistan government needs to utilize its resources which are underwater (2017).

In the article "Economic Opportunities for Islamic Financing from Green to Blue Economy" the author has focused on the importance of shifting from a Green to Blue Economy by taking Pakistan as a case study. Pakistan is a rich country in resources, but water resources are still untapped due to the lack of awareness and absence of a will. In order to meet upcoming requirements and to develop a policy, high-income countries of OIC (Organization of Islamic Countries) must join hands to focus highly on Blue Economy (2020).

In the article "Economic Prosperity through Pakistan Marine Fishery" the author has explained the momentous role of the Marine fishery to boost up the country's economy and for the local inhabitants, it is a good source of food as well. Pakistan has taken steps forward to enhance its Marine Fishery sector but still needs to utilize resources at optimum level. Currently, Pakistan exports fish worth the US \$350-400 million annually. However, the national treasury can be augmented with value addition by the application of appropriate policies (2021). In the book "Maritime Security and the Law of the Sea" the author has addressed security threats that maritime states seek to respond them such as weapons of mass destruction, drug trafficking & smuggling, piracy, terrorism, illegal fishing. In order to respond to such security threats appropriately, implementation and interpretation by the UN Convention on the Law of the Sea towards maritime security must be allowed (Klein, N 2011).

### 3. Research Methodology

Primary & secondary sources are used during the research. The primary sources include interviews, reports, conference reports, and government publications. Whereas the secondary sources include newspaper articles, section books, journals, and internet articles. Both qualitative and quantitative data have been analyzed to make credible research.

### 4. Fishery Resources in Pakistan

Pakistan has a fishing area of around 300,270 square kilometers and a wealth of marine life resources. The fishery provides 1% of GDP and 4% of agricultural GDP, according to the Ministry of Maritime Affairs (2016-2017). The fishing business encompasses many sections of the seabed; Karachi is the true hub of the fishing industry. In Pakistan, fishery supply plays a vital role in the maritime development sector. It provides employment and food security in the country and exports a lot as well. If a fish catch is materialized suitably, fish exports may be increased to 3 billion dollars per year (Khan A. , 2016). The Indus River delta is also full of fish species e.g., Catla, Rohu, Mrigal, Grass Carp, and Silver Carp, etc. According to the Ministry of Maritime Affairs, 152,858 tons of fish were exports which were worth US \$ 394 million between 2016 and 2017. Heavy population created pollution on a large scale as domestic and industrial wastes are discharged into the sea which badly affected fish spawning ground. (Khan, M. A., Zaheen, W. M., & SHAUKAT, S., 2012) Numerous manufacturing units along with coastal areas discharge waste matter into the water. In Pakistan fishing is being undertaken in August and November while during the monsoonal season fishing activities get decreased. In the Monsoonal season, winds are high and seas are rough whereas in March and April again fishing activities are on peak. (Ali R. , 2018) In 1992 the country exported seafood worth 181 million US \$. According to the report of 2015 WWF, approximately 186,000 people are engaged in the fishing sector.

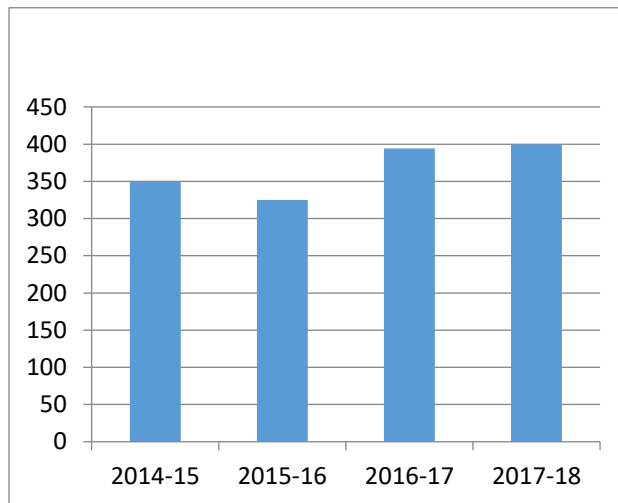
**Table 1.** Inland & Marine Fish Export from Pakistan

Year	Quantity (in tons)	Inland Fish Production (in tons)	Marine Fish production (in tons)	Export Quantity (value in million US \$)	Total (in tons)
2014-15	137,381	285,000	480,000	349	765,000
2015-16	127,910	295,000	493,000	325	788,000
2016-17	152,858	299,000	498,000	394	797,000
2017-18	155,000	305,000	502,000	400	807,000

Source: Ministry of Maritime Affairs

#### 4.1. Fish Catching Procedure

Fishing in Pakistan is being conducted on a large and small scale. Pakistani fishermen use different techniques for catching fish and marine fauna. One of the catching techniques is gillnetting. Fishermen hang gillnets for catching sardines, small fish along the coastline, and to catch marlins and tuna they hang large gillnets. Another technique is trawling in which fishermen hang a net bag behind a ship or fishing boat and trawls it (Ali R. , 2018). Sometimes nets are hanged around fish school perpendicularly to grasp fish. People can catch fish with hooks and lines in the water as well. Graph of export earnings is given here. A graph is mentioned below which shows fishery export earnings in million US dollars. During 2014-15, export earning was the US \$349 million but during the next year, exports decreased by worth US \$325. It can be seen that next year shows an increase in exports of fishery products. During 2017-18, fish was exported worth the US \$ 400 million.



**Source: Ministry of Maritime Affairs**

#### 4.2. Fish Processing

Fish Processing is the oldest industry and the processing of seafood in Pakistan started in the 1960s. Since the year seafood is being canned and frozen. Different ways are there to process seafood. Some of them are appended below:

- Salting/Drying: For the preservation of fish, solar drying is a trendy method with the combination of salting.

- Freezing: One of the most significant methods of preserving or processing fish is freezing that causes minimal loss of quality.
- Canning: Airtight containers are used to seal fish in cans and tins to preserve fish for a long period.
- Fish Meal Processing: it is made by few steps such as cooking, pressing, drying, grinding fish or fish waste into a solid.

### **4.3. Fishing Harbors**

Harbors have been built in Pakistan, which is of great importance in the fisheries sector. There are four harbors in Pakistan i.e., Karachi and Korangi fish harbor are in Sind province whereas Gawadar and Pasni fish harbors are in Baluchistan. (Ali R. , 2018)

#### **4.3.1. Karachi Fish Harbor**

Karachi Fish Harbor was built in 1955-56 at a 5-kilometer distance from Karachi's commercial port. The harbor was intended to handle only 400 fishing vessels. Because the harbor handled over 2000 vessels by the late 1970s, it had taken channel congestion into consideration which leads overcrowding. (Ali R. , 2018) Fishermen's Cooperative Society had been taking care of the harbor's maintenance and operating system. Under the promulgation of the 1973 Constitution, the harbor was transferred to Sind Government in 1974. In 1980, the Asian Development Bank allocated Rs. 250 million for the harbor development project. The Karachi Fish Harbor Authority was established in 1984 and has a total area of 310,000 square meters. The broadening project comprised storage facilities, water, and power supply, dredging and broadening of the channel from 90 to 120 meters, whereas construction of floating pontoons, slipway, and infrastructure of boat repair yard, new fish shed of 2500 sq. meter, new water supply, and electricity facilities, ice supply berth, bunker fuel supply berth, firefighting equipment included. In order to meet expenditure, European Economic Community offered a grant of US \$ 12 million. In 1990 the expansion task was completed. Installation of an awning, overhead tank & washbasin, hatch opening, small and hora boats with fiberglass lining in a fish hold & on deck, protection from oil & grease with fiberglass lining, forklift trucks, plastic pallets, on-board flake ice plants, stainless steel hydraulic hand pallet trucks, plastic fish crates, plastic baskets, insulated plastic containers were completed as per international standard during 2007-2012.

#### **4.3.2. Korangi Fish Harbor**

Karachi fish harbor was found for limited fish vessels but later on, it had been experiencing vessels excessively, a further harbor construction was required. In order to avoid congestion on Karachi fish harbor, the Korangi Fish Harbor Authority (KFHA) was established in 1982 but its function began in 1983. The second fishery development project was approved by Asian Development Bank (ADB) in 1978 which was worth 25.338 US million dollars. Pakistan could have increased the foreign exchange earnings by utilizing the unexploited fishery resources in the sea. Weak infrastructure entails harbor under optimum utilization. (Ali R. , 2018) The total project cost incurred so far is Rs. 916 million. The project facilities comprise of public sale hall, an administrative building, a generator building, provision of service and utilities, power and utilities, sewerage and water, reclamation of 180000 sq. meter port area, and boat building and repair facilities. Moreover, provision for navigational aid equipment, internal development of the industrial area was undertaken. The project was completed in 1992. Presently, deep-sea fishing crafts are using Korangi's landing facilities.

#### **4.3.3. Gwadar Fish Harbor**

Gwadar Fish Harbor was established by Baluchistan Coastal Development Authority. (Ali R. , 2018) In Baluchistan coastline is longer than Sind where it has one important fish harbor. Pakistan obtained 23 % of the total fish catch from Baluchistan. Out of which Gwadar has its 37% share. Gwadar project construction was completed in 1992.

#### **4.3.4. Pasni Fish Harbor**

Baluchistan Coastal Development Authority established Pasni Fish Harbor. (Ali R. , 2018) Due to the best-suited location along the Mekran coast, the Asian Development Bank (ADB) agreed to the provision of financial assistance to construct a fishery harbor at Pasni. The fishery project was initiated in 1987, which completed in 1989. In order to improve the socio-economic conditions of fishermen's society, ADB and the Baluchistan government-provided financial assistance worth Rs. 495 million and Rs. 68 million respectively.

### **5. Potential to Support EEZ**

#### **5.1. Gateway to the Persian Gulf**

The Arabian Sea is more significant all over the world because it is very near to the Gulf States (Khan R. , 2021) and the Strait of Hormuz. China is constructing a corridor to reach the Strait of



Hormuz easily and safely. Gwadar port has handed over to Chinese authorities China Overseas Port Holding Company (COPHC) as it will import and export through Pakistan. (Khan, M 2013) It is indeed spending a huge amount on this project. Through this strait, about 17 million barrels of oil (40% of global consumption) are shipped. (Shehzad, 2020)

### **5.2. Import/Export Trade**

The most important sea directions are Sea lines of Communication (SLOC) between various ports which are used for imports and exports. The busiest sea route of the world and the largest deep-sea route is the north Arabian sea. (Shehzad, 2020) Top importing countries of fishery products are China, Thailand, UAE, South Korea, Malaysia, Saudi Arabia, Sri Lanka, Vietnam, Kuwait, and European Union. More than 500 species of fish belong to *Culpeaharengus* (Sardines), *Carcharhinus amblyrhynchos* (Shark), *Tenualsailisha* (hilsa), *Thunnus albacores* (mackerel), *Peprilusparu* (butterfish), *Brama brama* (pomfret), *Pegusalascaries* (sole), *Calamus bojando* (seabream), *Thunnus thynnus* (tuna), *Epinephelusitajara* (jewfish), *Siluriformes* (catfish), *Anguilla rostrata* (eel fish), shrimps, crabs, and lobster. (Nazir.2015)

### **5.3. Seaweed Resources, Mangrove Forests & Minerals**

In the coastal area of Pakistan, abundant seaweed resources are found. There is the accessibility of different types of benthic algae belonging to Phaeophyta, Rhodophiya, and Chlorophyta. (Afzal, 2005) Seaweed is a perfect source for medicines and fertilizers. (Saifullah, 2002) Fishery resources are supported by Mangrove forests. These are considered as the nursery of marine fauna. (Cutler, J 2014) It provides provision of nursery environment for many commercial fish and shellfish and protects the coastline by diminishing erosion caused by storms, waves, tides. In the bottom of the sea, a variety of minerals can be found such as natural gas, gold, petroleum oil, zinc, aluminum, cadmium, cobalt, Iron ore, copper and nickel, coal, chromite, and many more.

### **5.4. Employment**

Pakistan Fishery Sector employs about a million people, e.g. fishermen and employees in other sectors of trade, etc. It offers employment roughly 130,000 (full-time) and 90,000 (part-timer) in the most important harbors e.g., Karachi, Korangi, Gwadar & Pasni harbor (Ali R. , 2018) Other people are those who are correlated with trade and subordinate industries. The fishery contribution to the labor force is 1% following the marine fishery department.

### **5.5. Demand of food**

The fishery industry supports the meat resources of the country. As a sub-sector of agriculture, it plays a considerable role in the nation's wealth and towards the food security of the country. (Nazir, 2016) Hence, it is an important element of food/ health security. The fishery sector needs to be more advanced and improved.

## **6. Challenges to Marine Sector**

### **6.1. Bordering Conflicts& Security Issues**

Many maritime nations are using a heavy amount on the security they are having internal or perimeter conflicts. (Klein, N. , (2011)) The maritime enlargement segment is unresponsiveness on the subject of development concerning the sector. The North Arabian Sea has one of the busiest sea lanes which remain busy most of the time for importing and exporting but non-state actors have created a threat to maritime trade. The safety of traffic has to be ensured all the time.

### **6.2. Inadequacy of Policymaking**

Pakistan doesn't have enough of its ships. In the beginning, Pakistan had 76 ships while it has only 11 ships now. People do not get registered their ships here in Pakistan because of its complex policies. Pakistan had been charged a huge amount in billions of dollars annually for foreign ships because it had not enough ships. Improper fishery management affects badly fish production as shellfish productions have decreased from 47500- 28166 tons in 2008. (Fishing Industry 2002 UCLES Unit 6)

### **6.3. Limited Research& Unresponsiveness**

Exclusive Economic Zone possesses huge natural resources but unluckily they are still unexplored because of inappropriate policies. Overfishing causes a long-term problem in the fishery which originated due to overcapacity. Fishery management in Pakistan is underdeveloped due to a lack of awareness and limited research. According to the Ministry of Climate Change 2012, manifold steps have been taken to address challenges related to climate change but implementation on a broad level is required. (Ali R. , 2018) Public and private sector projects are not paying attention to the sea, they do not know that if effective work is done in the Marine development sector, the country will be able to experience more progress and will have higher export earnings from the fisheries sector.

#### **6.4. Piracy & Smuggling**

Pakistan's south is surrounded by water (Indian Ocean) which touches different African countries as well. Somalia is one of them which is notorious for piracy. Afghan insurgents smuggle narcotics and weapons from bordering countries. (Mumtaz, 2011. Narco-Terrorism and Drug Trafficking) In addition, the Indian Ocean has a passage for the illegal immigrants who cross borders of adjoining countries with the help of agents. Some illegal immigrants are not able to reach their destination because they have a shortage of food and only a few reach their destination. They are from underdeveloped or less developed countries moving towards more developed countries e.g., Europe and the Middle East. (Shehzad,2020)

#### **6.5. Inadequacy of effluents facilities**

Inadequate facilities of effluents are severely affecting the marine ecosystem because of unprocessed domestic and industrial discharge.

Karachi Harbor is the busiest and polluted harbor in the country. (Alamgir, (2018)) Without any appropriate effluent system, the coastal areas of Karachi are being used for most of the industrial unit's effluents. (Khan, M. A., Zaheen, W. M., & SHAUKAT, S., 2012) Toxic pollutants affect spawning grounds for fish badly. (Shahzad, A., & Ahmed, W, 2009) Nations which have not completely landlocked countries, Sewage, oil plastics, radioactive wastes, and industrial effluents destroy ecosystem by every nation not completely landlocked. (Beg, M. A. A., (1995))

Improper management and population load is the main hurdle the process of development.

### **7. Findings**

Exclusive Economic Zone (EEZ) offshore water is rich in fauna and numerous species. The collaboration of China will be helpful to make a significant economic corridor between South Asia and East Asia. Under the aegis of SMEDA, Pakistan is developing its fishery sector by contributing to the provision of necessary services. FAO is also paying attention to improve marine fishery resources. In order to develop the maritime sector, Islamic countries must do arrangements by making favorable policies, rules, and regulations through Islamic Finance Industry. With appropriate use of finance, many Islamic countries would lead towards reduction of poverty and unemployment. It must be realized that countries seek to expand their economies with respect to the sea.

Little institutional investment in the marine development sector is challenging inadequately. The government has not been making effective policies in this respect. Policies and decisions are wisely made for land resources, but unfortunately, the maritime sector is being overlooked just because of less research, negligence of the government, less coordination among concerning departments as well as capability in terms of technical aspects. Pakistan is suffering from a kind of Sea Blindness. It is pertinent to mention that government policies are made without ultimate interest towards the blue economy. As a maritime nation, Pakistan is full of resources on land and sea. In order to expand the marine sector, Pakistan established ports and harbors but the main four fish harbors are not handled in coordination with them.

It is noticed that Karachi Fish Harbor is under the Government of Sind, Korangi fish harbor under the MINFAL (Ministry of Fishery, agriculture & Livestock) Government of Pakistan, Gwadar fish harbor-port is under Ministry of Communication, Government of Pakistan, and Pasni Fish harbor is under Baluchistan Government. It shows that government policies lack harmonization and collaboration concerning harbor management. The estuarine environment is also affected by improper facilities of discharging wastes on a local and industrial level. A few numbers of industrial units have appropriate effluent facilities whereas mostly domestic and industrial waste is discharged into the sea, results in deterioration of the estuarine environment. Maritime Development Sector makes policies but implementation is not being done. The seabed is rich in plenty of living and nonliving resources.

The fishery has been offering employment to people for centuries that lived along Pakistan's coastline. Their main source of income has been fishery. The fishery sector needs to be more developed. A large proportion of marine capture production is considered "trash fish" and used as fishmeal. (Fanning, P., Medley, P., Khan, M. W., & Valinassab, T, 2016) In order to improve the fishery sector including harbors in Pakistan, Asian Development Bank (ADB) and European Community (EC) gave Pakistan 98 million US \$ whereas for the construction of Pasni Harbor, ADB financed with 27 million US \$. In past, Pakistan had to pay the fare in dollar currency but now with the policy change, the country pays fare in local currency. Pakistan can generate huge earning by paying attention and utilizing maritime resources appropriately.

Coastal areas of Karachi are being discharged with effluents of industrial units that destroy an ecosystem. (Khan, M. A., Zaheen, W. M., & SHAUKAT, S., 2012)

Climate change threatens Pakistan's ecosystem as it has been facing challenges such as glacial melt, inconsistent monsoons, recurrent floods, high standard temperatures, sea-level rise, and greater occurrence of droughts. (Ali R. , 2018)

Pakistan provides an attractive playground for transnational business which can be fruitful for the nation's economy. (Khan R. , 2021)

## **8. Conclusions**

We only take the sea for tourism because we do not know its significance as it has been referred to as sea blindness in the paper. Pakistan's provinces Sind and Baluchistan have different landing points with their significance. Fish catch is being conducted at two main destinations i.e Sind coast and Baluchistan Coast. The country has Fishing Harbors in Sind and Baluchistan which are most important for the country e.g. Karachi, Korangi, Gwadar, and Pasni Harbor. By the 1970s the work on harbor projects was done under the tutelage of the Asian Development Bank. Karachi fishery harbor authority and later on Korangi fishery harbor authority was established to utilize fisheries resources in the sea. In 2014, Fisheries Development Board (FDB) launched a project to improve fisheries and aquaculture which is aided by European Union (EU). Several countries have redirected sights from land to seas to acquire energy security. Some OIC countries are suffering from human causalities and economic failures e.g. Libya, Syria, and Iraq. Numerous difficulties are faced by OIC member countries that are why they are weak in the field of development in the sea. Because of suffering from sea blindness, fewer resources are being explored at sea. Under the aegis of Islamic finance, Musharka, Ijar, and Sukuk, Muslim countries can meet requirements of the development in sea economy.

## **Recommendations**

- Comprehensive measures like one window operation, concession in taxes, and less investigation from FBR, will encourage ship owners to get their ships registered and continue their businesses in Pakistan.
- In order to achieve a stable economic position in the national and international seafood market, Pakistan should take the help of SMEDA, EC, ADB & Islamic Finance Banking, etc.
- For the protection of the marine environment from domestic and industrial hazardous waste, the effluents treatment facility should be following the required standards. By

considering different challenges (smuggling, piracy, security issues, terrorism, environmental issues etc., government should evolve standard & effective policies, and ensure their implementation.

- Marine pollution and overfishing should be reduced through fish resource protection measures. Technological advancement and development of the Chinese fishery industry will help to boost Pakistan's marine fishery sector. Currently, requisite and standard research is not being carried out due to some unfortunate circumstances.
- Government should conduct training sessions for the awareness and interest of stakeholders as well as they should ensure in-depth research with the help of experts. Through collective Islamic finance, blue resources can be exploited in the Indian Ocean
- In order to provide a path forward to address challenges related to climate change, and implementation by Pakistan's national climate change policy is required on a broad level.
- Coordination of international and intergovernmental organizations would build comprehensive aquaculture (Ali A. &, 2019).

## References

- (2018). *The state of World Fisheries and Aquaculture*. FAO.
- Afzal, R. M. (2005). *Pharmaceutical Biology of Seaweeds from Karachi Coast of Pakistan*. Karachi : University of Karachi .
- Ahmed, Q. A. (2015). seasonal change. *Pakistan Journal of Marine Sciences*, 24(1,2), 19-28.
- Alamgir, A. K. ((2018)). Alamgir, A., Khan, M. A., Shaukat, S. Impact of indiscriminate disposal of untreated effluents in Korangi creek. *Alamgir, A., Khan, M. A., Shaukat, S. S., & Kazmi, J. H. (2018). Impact of indiscriminate Applied Water Science, Alamgir, A., Khan, M. A., Shaukat, S. S., & Kazmi, J. H. (2018). Impact of indiscriminate dis8(6), 1-13.*
- Ali, A. &. (2019). *Employers' Perspective on China-Pakistan Free Trade Agreement*. Karachi, Pakistan .
- Ali, R. (2018). Small Scale Fisheries in Pakistan. In S. S. Giri, *An Overview of Small Scale Fisheries in South Asia* (p. 81). Islamabad, Pakistan: National Agricultural Research Centre.
- Beg, M. A. A. ((1995)). Ecological imbalances in the coastal areas of Pakistan and Karachi Harbour. *Pakistan Journal of Marine Sciences*, 4(2), 159-174.
- Dirk. (2001). UNESCO. *Costal Regions and Small Islands Platform*.
- Fanning, P., Medley, P., Khan, M. W., & Valinassab, T. (2016). Comprehensive assessment of Pakistan's marine fisheries resources to 2015. *Fisheries Resources Appraisal in Pakistan Project (FRAPP)*, (p. 9).
- IUCN. (2005). Mangroves of Pakistan: status and management. *International Union for Conservation of Nature*.
- Kaplan, R. D. ((2011)). *Monsoon: The Indian Ocean and the future of American power*. Random House Incorporated.
- Kazmi, Q. B., & Sultana, R. (2008). Economics of Shrimps & Prawns of Pakistan. *In Proceedings of Fifth World Fisheries Congress*.
- Khan, A. (2016). *Sindh Government set to place complete ban on fish*. Business Recorder.

- Khan, M. A., Zaheen, W. M., & SHAUKAT, S. (2012, Decmber 02). Biodiversity in benthic communities of Chinna creek. *FUUAST Journal of Biology*, 19-24.
- Khan, R. (2021). Blue Economy and Pakistan's Maritime Potential. *International Journal of Knowledge, Innovation and Entrepreneurship*, 9(1), 51-53.
- Khan, S. A. (2015). Continental Shelf Extension: A gateway to future dividends. *Defence Journal*, 19(4), 31.
- Klein, N. . ((2011)). *Maritime Security and the Law of the Sea*. Oxford University Press.
- Moazzam, M. (2014). Update on the neritic tuna fisheries of Pakistan with special reference to frigate tuna (*Auxis thazard thazard*). *Moazzam, M. (2014). Update on the neritic tuna fisheries of Pakistan with special referFourth Session of IOTC Working Party on Neritic Tuna*, 29.
- Nadir, M. (2013). *Geopolitik Pakistan-Pakistan's Weltanschauung*. Lahore: University of the Punjab.
- Nazir, K. Y. (2016). *Nazir, K., Yongtong, M., Hussain, K., Kalhoro, M. A., Kartika, A study on the assessment of fisheries resources in Pakistan and its potential to support marine economy*.
- Risks, H. (2018, April). International Monetary Fund (IMF). . *World Economic Outlook* .
- Saifullah, H. S. (2002). Seaweed Resources of Pakistan. *ISESCO Seminar on Utilization of Marine Resourcea*, p. 166.
- Shahzad, A., & Ahmed, W. (2009). Chemical pollution profile of Rehri creek area. *Journal of the Chemical Society of Pakistan*, 31(4), 592-600.
- Shahzad, S. M. (2020). Economic Opportunities for Islamic Financing-From Green to Blue Economy. *Int. J. of Multidisciplinary and Current research*, 8.
- Shehzad, S. (2020). *Impact of Pakistan Maritime Affairs on Blue Economy in backdrop of CPEC*. Lahore, Pakistan.
- Smith, R. W. ((1986). *Exclusive Economic Zone Claims: An Analysis and Primary Documents*. Martinus Nijhoff Publishers.



Weeks, D. S. (2013). Research Staff Member at Joint Advanced War Fighting Division.  
*Regional Maritime Security Dynamics, Imperatives and Interdependencies.*

### Acronyms

ADB	Asian Development Bank
EC	European Community
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization
FBD	Fisheries Development Board
FBR	Federal Board of Revenue
KFHA	Korangi Fish Harbor Authority
MINFAL	Ministry of Food, Agriculture, and Livestock
OIC	Organization of Islamic Countries
SLOC	Sea Line of Communication
SMEDA	Short and Medium Enterprise Development Authority
UNCLOS	United Nation Convention on the Law of Sea
UNDP	United Nation Development Program
UNO	United Nation Organization
WB	World Bank