Blue Economy- Prospects & Challenges for Pakistan Cdr. Anees Muhammad Khan (Retd.)¹

Abstract

This study explores the Blue Economy: Prospects and Challenges for Pakistan, emphasizing the sustainable use of maritime resources for economic development and national security. It reviews global best practices, highlights the significance of equitable access to resources, and examines Pakistan's key maritime sectors—shipping, seafood, maritime infrastructure, coastal tourism, and resource exploration within the Exclusive Economic Zone (EEZ). Anchored in Structural Realism, the research argues that strengthening the blue economy is essential for reducing Pakistan's economic vulnerabilities and enhancing state power in a competitive geopolitical environment. Employing a predominantly qualitative approach, supported by relevant quantitative data, the study underscores the need for Pakistan to shift from a land-centric to a maritime-focused development model. Strategic recommendations call for policy reforms, investment in maritime industries, and integration of the Blue Economy into national plans like Vision 2025. A comprehensive framework combining environmental, social, and political considerations is vital for sustainable outcomes. Ultimately, the paper concludes that strong political will and regional cooperation are key to unlocking Pakistan's maritime potential and achieving long-term economic resilience and security. Keywords: Blue Economy, Pakistan, Economic Growth, Maritime Security,

Sustainable Development.

1. Introduction

Maritime is generally referred to as any activity which concerns oceans and seas. When coupled with economics, it obviously means all activities which generate or facilitate economic development in one way or the other through uses of oceans and seas. Maritime Economy is also generally referred to in academia as Blue Economy or Blue Growth (Askari, Tahir, & Shaheen, 2020) probably the term has been derived unconsciously from the blue colour of Ocean/Sea. The term blue resources are associated with sea, oceans, rivers etc. It's but obvious that Maritime economy flourishes in proportion to the maritime sector investment of any country. With regard to blue economy importance for Pakistan, more than 90 percent of commerce and all fuel imports are shipped via sea routes (Shahzad, 2020). However, Pakistan has till now not capitalized on its potential of Blue Economy.

The definition at the East Asian Seas (EAS) Congress (2012) of the blue economy is very close to the broad perimeters of the associated work which comes for

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the sustenance of Blue economy. Blue economy is thus a maritime centric economic model which uses all available tools for attaining the objectives of sustainable growth. The same is, however, to be attained while cognizant to the protection of the cost and eco system maintenance (United Nations Development Programme, 2021).

Regional countries with almost same resources and constraints are fetching the dividends from Maritime sector. Bangladesh & India has earned \$6 billion and \$7 billion respectively (China–Pakistan Economic Corridor, n.d.)

However, Pakistan is lagging far behind. It's a testimony of the Pakistan's non-resolve toward tapping benefits of blue economy that Pakistan Vision Document 2025 does not dwell on blue economy at all (Government of Pakistan, 2014).

With the development of Gwadar Deep sea port with its peculiar geographical location coupled with China Pakistan Economic Corridor (CPEC), a focus on the Government level has been given to explore maritime sector to the fullest with upto \$ 60 Billion CPEC project with Gwadar and North Arabian sea as its center stage. Even Kingdom of Saudi Arabia (KSA) has pledged \$10 Billion investment in Gwadar in 2019 in Oil refineries, however nothing has been done till date (Reuters, 2019).

Renewed focus on maritime sector can also be gauged from the fact that year 2020 was declared as the 'Year of Blue Economy' by the Government of Pakistan due immense potential of this field particularly after CPEC announcement (Ministry of Maritime Affairs, n.d.). Food Processing, Exclusive Economic Zone (EEZ) exploration, Liquid Petroleum Gas (LPG) & Liquid Nitrogen Gas (LNG) Terminals, Coastal Development & Shipping industry improvement were included for improvement. However, inspite of passing of two years, it has not been able to make any practical impact in improving the Maritime sector due political uncertainties, flawed polices and lack of implementation will, not to mention the dearth of Capital due economic turmoil of the country (Ali, 2022). In the shipping industry for the last 20 years no new ship has been registered. This is in contrast to the thriving shipping industry of country in 1970s.

Seaweed resources are used in medicines & fertilizer and coast of Sindh is known to have it in abundance. Although no survey has yet been conducted in this regard and no mechanism is in place yet about its tapping them in future (Shahzad, 2020). However, the resource exits. Similarly, Mangrove forest is stretched on 260000 hectares on the Pakistan's coast. The world's fifth largest mangrove forest is in the Indus Delta region (Shahzad, 2020). However, they are on decline now for numerous reasons.

The maritime sector is thus full of economic potential for Pakistan if focused attention is paid to it by the decision makers. This paper will attempt the same.

2. Statement of the Problem

This research paper is an attempt to explore the importance of developing Maritime or Blue economy for Pakistan which has a continental mindset since its Independence. Although with a coast line of 1000 Km plus stretching from Sir Creek in the East to Jiwani in the West, the nation and its decision maker's in particular were somehow ignorant or averse to this medium of economic development.

Famous US Maritime strategist Mahan's has mentioned six basic components/ elements of Maritime power which includes geographical position, physical conformation, territory, population, character of people and government (Mahan, 2012). Inspite of having potential of economic growth through Maritime sector, fifth and sixth element is somehow missing in Pakistan resolve for maritime growth. Although organizations like Pakistan National Shipping Corporation (PNSC), Port Qasim Authority (PQA), Karachi Port Trust (KPT), Pakistan Maritime Security Agency (PMSA), coast Guard were raised, however except for managing the import & export of goods, and securing Sea lanes of communication, nothing concrete has been done to fetch the economic benefits from Maritime sector.

By analyzing the different components of Maritime economic development, an effort has been made to analyze the subject with an objective of addressing the challenges and seizing of opportunities thereof for the Pakistan.

3. Objective of the Study

1. To be determine the policy shortcomings, implications and decision making related impediments which are impeding the progress through this medium

4. Research Questions

This research has been done with a view to find the answer to these elementary questions:

1. What is the primary reason for non-development of maritime sector of Pakistan inspite of being a Maritime State having a vast coast line and EEZ?

2. What are the impediments, opportunities and challenges which if overcome, will help the country to reap the financial benefits of Blue Economy?

5. Significance of the Research

This research aims to identify the Maritime domain areas such as exploration of its natural resources and developing its coastal belt for tourism & improving the fishing mechanism through dedicated policy initiatives which is likely to help the country to stand on its feet to a larger extent through economic development from Maritime sector. Although, Pakistan is a country which is presently in economic turmoil due its own flawed economic polices coupled by the devastating effects of the recent floods, however Self-sufficiency is the only viable option. Pakistan has all the ingredients of a maritime state, however, needs effort to capitalize on them. Thus, this study if taken seriously can guide the policy makers for initiating a good beginning in this regard.

6. Literature Review

The preliminary study of the literature on the subject ascertained that not much in tangible forms is available on the subject. Opinion based articles are there however exact tangible steps undertaken to improve the Blue Economy were hard to find. As per the government own estimates, Blue Economy is ranked as 7th in the world first 10 economies. Inspite of 350 NM of EEZ, which accounts for 36.4% of the country mainland, this economy is in its infancy (Senate of Pakistan, n.d.).

A book by an author on the Impact of Pakistan Maritime Affairs on Blue

Economy suggests that the total potential of income generation from blue economy in Pakistan is of the tune of \$ 66.5 Billion (Shahzad, 2020). A concept paper of the Ministry of Maritime Affairs (MoMA) tells us that the total fishery potential is \$ 1.5 Billion out of which in fishery sector Pakistan is fetching \$ 240 M per annum (Shahzad, 2020). It was deduced by another writer while writing on Maritime Awareness that due absence of maritime cognizance; Pakistan has not yet realized its maritime significance and opportunities (Azmie, 2017).

In order to find the tangible measures undertaken, Govt of Pakistan Maritime Institutes/ ministries reports/ publications and web sites were browsed. In this regard, study of MoMA Pakistan report of 2019-2020 suggested an ambitious mission ranging from developing ports, harnessing fish resources, developing maritime infrastructure, competitive shipping for seaborne trade etc. (Ministry of Maritime Affairs, 2019). The same were never met. It does not even have a mention of coastal tourism, mangrove forest, seaweed exploration etc. It stipulated a very good idea of the formulation of Institute of Maritime Affairs, under Pakistan Maritime Academy in Karachi, however the same is still a concept (Ministry of Maritime Affairs, 2019). The same source has also mentioned that Gwadar port will be licensed by the Federal govt for Afghan transit, however, the same is still not there (Ministry of Maritime Affairs, 2019).

In 2019-20, a total of 22866 MT of fish were caught accounting for 1% of GDP. Per capita consumption in 2019-20 was 1.9 kg. A conservative estimate by the Government of Pakistan source suggests that a total of 74000 tons a year fish is still not harvested due small boats and lack of infrastructure for improving this industry. It was also learnt through research article that Govt is working with World Bank for developing of Blue Economy Road Map. 40-45 Chinese's companies may also start up their set ups at Gwadar in connection with CPEC (Fisheries Data, 2020), however nothing concrete has happened yet.

Another source in his article about a proposal for a maritime strategy and furthering Blue Economy has suggested for setting up of a National Maritime Authority, development of coastal tourism, upgradation of Karachi Shipyard for ship building, setting up of integrated coastal zone management commission, zonal development of coastal areas, conduct of geological survey etc. (Asghar, 2020).

About the potential of EEZ in mineral, a source in his book has mentioned that one Square mile of sea bed may be covered with 70000 tons of minerals including manganese, aluminum, cadmium, iron, cobalt, and nickel, copper worth Billions of dollars financial worth in the open market (Shahzad, 2020).

About hydrocarbon, a source in his book informed that a recent attempt was made for its exploration in Jan 19 by Oil and Gas Development Corporation (OGDCL), Sui Southern Gas Company (SSGC) and ExxonMobil and 5500 meter deep drilling was conducted in Kekra 1 area in the Indus Basin however it could not succeed, However, the EEZ of Pakistan needs continuous exploration since it yields dividends sometime in 100 of attempts. Norway for example succeeded in its 78th attempt (Rao, 2020).

National Institute of Oceanography, Government of Pakistan (GOP) study

divulged that in year 2108 a combined survey by Pakistan and China was conducted to explore the natural resources on the seabed. However, even after four years, no result or headway is known (National Institute of Oceanography, n.d.).

International publications on the exploration of Indian Ocean however are skeptical of all the countries in the Indian Ocean region about the Blue economy prospects. A source has called the Indian Ocean a Wild West viz a viz Pacific ocean in this regard (Doyle, 2018).

The review of the literature thus made it aptly clear that although most of the areas of Blue Economy (BE) has been identified by researchers and even government own reports/publications, however, tangible results/actions on these proposals are by and far lacking.

The effort of the paper would be therefore to shortlist the measures which are tangible/ doable in a short and long term through whose initiation, the prospect of generating revenue for the country through BE may increase manifold.

7. Theoretical Framework

The relation between states since medieval ages has been based on Selfinterest, Power Politics and no political-morality concept. The same are the predominant factors of today's economically weak Pakistan, a testimony of Realism & Structural Realism. Economic development gives state the liberty of spending on strengthening its military, which is a must for the security of the country. Pakistan weak economic state is making its vulnerable amongst its enemies and it may ultimately yield to the question of its survival in line with Realism and liberalist School of thoughts. Structural Realism stipulates that behaviour of states is changed by imposing constraints by the anarchic structure of the system obviously for Selfinterest. If Pakistan is economically weak, it is vulnerable to above. Thus, Blue economy strengthening is in turn strengthening of the economy & military, the core factors for the survival of any state as per Realism. Similarly, like any other state, Pakistan needs to seek power, security and wealth for its survival and lessening its vulnerability in front of its enemies. Enhancing of trade nationally and internationally, international economic cooperation etc. are thus the tools for attaining the same in light of Rational Choice Theory (Rational Choice Theory, n.d.). Blue economy is a mean in this regard.

8. Research Methodology

The research is based on Qualitative Method of collection of information, and its onward synthesizing. Where required Quantitative data was also obtained from relevant sources. This paper is thus composed mostly of qualitative data and conceptual framework has been used to answer the research questions in the process.

9. Discussion/ Organization of the Study

The matter of this research paper has been divided into different portions for the better understanding of the reader as per the following broad headings:

a. General components of Maritime sector.

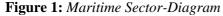
b. Opportunities & Challenges for Developing Blue Economy in Pakistan.

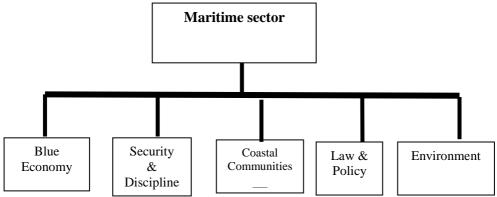
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c. Recommendations & Conclusion

9.1 General Components of Maritime Economy

Maritime is a Latin word which originates from Maritimus which broadly implies 'of the sea'. It can be defined as characteristics of those near to sea. It encompasses following (Maritime sector-Diagram 1) (Maritime Winter School, 2020).





Due limitation of this paper, focus would be on Blue Economy (BE) only. BE broadly consist of Shipbuilding, Fishing, Exploration of sea bed resources in the Exclusive Economic Zone (EEZ), Operating cruise ships & ferries, Ship breaking, Ports development & Coastal tourism (Rao, 2020). In the context of Pakistan, few are developed for long, while few are in its infancy stages. Generally, being a continental mindset country, Maritime sector is a neglected sector and its only now with CPEC and One Belt One Road (OBOR) concepts that this mindset has been largely stirred and the decision makers are now considering investing in these avenues for exploiting the benefits of Blue economy for the good of the country.

9.2 Opportunities & Challenges for Blue Economy Developing in Pakistan

The chancellor of Australian National University Mst. Julie Bishop has said recently that we are just beginning to glimpse the enormous challenges and opportunities presented to us by oceans, in our case the mighty Indian Ocean (The Blue Economy Challenge, n.d.). That's exactly true for Pakistan; Maritime sector is one of the most ignored of the country. Inspite of country vast dependence on the import of oil through sea routes, maritime sector was never developed. Only now the country mindset has changed a bit due CPEC. No major material is available on the subject in the past, only recently few of the researchers have ventured into research in this arena. Major economic activities which can contribute toward reaping benefits from Blue Economy shortlisted for this paper are listed below:

- a. Maritime Infrastructure Development
- b. Development of Shipping Industries (Making & Breakage)
- c. Sea food Sector Development

- c. Exploration of EEZ for Natural Resources & Hydrocarbons
- d. Development of Coastal Tourism

9.3 Maritime Infrastructure Development

Generally, Maritime Infrastructure development includes Ports & Waterway development and Maintenance (Van Oord. (n.d.). Pakistan has three Ports at Karachi, Port QASIM & Gwadar. Karachi & Port Qasim are the two operational sea ports of Pakistan. Gwadar deep Seaport has also now been fully developed and it has a very important role viz a viz CPEC. Now it is the challenge to develop it to fullest inspite of tactical and strategic challenges.

a. **Karachi & Bin Qasim Port** Karachi takes the maximum burden of all sea based imports & Exports, handling about 60% of the country load (Port of Karachi, n.d.). The same need to be enhanced to upto 85% for the economic reasons (Port of Karachi, n.d.) Although, Port Qasim is also taking its bulk of share. However, Karachi port extension is now needed for generating more economic activity.

b. **Gwadar Deep Seaport**. A new port was developed in Gwadar for the economic good of the country. However, for long it was dormant due lack of business and law & order situation in Baluchistan. Lack of infrastructure for transporting of good to inland Pakistan, Afghanistan & China is another reason. However, after the announcement of CPEC, a new life was inserted in the project. However, till date, a lot need to be done. The paraphernalia infrastructure of road etc. are yet not constructed. Law & order situation is still not of the require standard which can give full confidence to the investors.

9.3.1 Challenges & Way Forward

The opportunity of trade through Karachi & Gwadar needs to be tapped by countering the challenges as below:

a. Policies which are counterproductive for generating businesses be immediately retrieved and business friendly polices be initiated. Pakistan maritime interest can be gauged from the fact that Merchant Marine shipping policy which was amended in 2001 due its failure to achieve its objective is still in practice. In a recent meeting in Oct 22 of Senators, it was again reiterated that contracts be made on Free on board (FOB) basis than Cost Insurance and Freight (CIF).

b. Government has to bring political & military stability in the Gwadar/ Baluchistan region for the real prospects of business through this port.

c. Polices hurdles in the CPEC needs to be addressed so that the projects in the pipeline be unfolded in the near future. A strong will is require for the same which unfortunately is lacking at the moment.

d. The prevailing political situation is unlikely to settle in less than a year period therefore it is very likely that this sector will be on the receding hand of the policy makers unless addressed.

e. The KSA promised investment in 2019 in Gwadar was in jeopardy

for four years due lack of above mentioned factors. Only recently, on the perusal of the present Government KSA has announced in Oct 22 visit of the crown prince to Pakistan for the announcement of the establishing of oil refinery in Gwadar (Dawn, 2022). This will be a very good omen for the operationalization of Gwadar port coupled with CPEC related investment. State must capitalize on this opportunity before it is lost again due lack of general will of the state to develop maritime sector.

9.4 Development of Shipping Industries (Making & Breakage)

Ship building & ship breaking are two part of this industry. They're discussed below.

Ship Building Industry. Pakistan National Shipping Corporation a. (PNSC) is the only organization of the country which runs the country fleet for economic gains. Established in 1963, today it owns a total of only ten merchant vessels, including oil tanker, Bulk Carriers, and Multipurpose cargoes ships. (Pakistan National Shipping Corporation, n.d.). It's a clear indication of not fetching the economic befits from seas. No new vessel has been registered in last 20 years. Karachi Shipyard, the country only ship building entity obviously must have lost the human expertise in 20 years of ship Building. MV Islamabad was made decades earlier. Presently, it does not have the capacity to venture into big projects and secondly given an opportunity it might develop the same but no major opportunity is given to it. It is a profit earning entity but if not given proper business, it will lose its professional touch (Rao, 2020). Pakistan Navy Joint Projects are handled by Shipyard along with construction of tugs and small Boats (Karachi Shipvard & Engineering Works, n.d.)

The Human expertise of making merchant ships & the requisite infrastructure is on decline. The same need to be arrested. However, this is the least priority area of the state. It's not even part of Vision 2025 and Year of Blue economy projects.

b. **Ship Breakage Industry**. In 80s this industry was flourishing very well and was a source for employment for more than 30000 workers at Gaddani, the world third largest ship breaking yard (Mapper, 2022). Presently, it is a source of employment for 12000 workers (Shahzad, 2020i). In 202-2021 only 15 ships were scrapped, thus on decline (Cruise Mapper, 2022b) because of lack of concentrated efforts by the state and changing policies. This area has lot of potential to fetch finances for the national exchequer.

9.4.1 Challenges & Way Forward

a. Ship building industry is proportional to more business. Since our polices are not very encouraging for the maritime sector so obviously there is no requirement for more ships to PNSC and thus no order to Karachi Shipyard & Engineering Works (KS&EW). It's a vicious cycle. Economics generate everything. Thus, it's time to be instrumental as a state to ensure initiation and completion of CPEC related maritime projects, initiation of oil refinery

projects of KSA and development of coastal tourism, Exploration of EEZ, fishing industry. This will be an impetus to more seaward security, thus more Naval and coast guard ships construction as well. These all will generate combinedly an economic activity which will be centered on seas. Thus, more requirement for goods and people transportation, oil import and this way this Shipping industry will flourish.

b. The ship breaking industry also needs Government support. Although few international regulations are only hindering the ship breaking industry at Gaddani (Cruise Mapper, 2022), Recycling regulations and competition from China, Bangladesh & Turkey are also the factors (Shahzad, 2020). However, focused attention and discussion with international and national stake holders by the government are required for a way out in this regard

9.5 Sea Food Sector Development

Pakistan's total population is around 230 million soles (Worldometer, 2022). Recent floods in the country have exposed the already scarcest food resources in the country. Thus, fish per force has to be one of the staple foods of the country, a shift from wheat centric diet of the nation for the obvious reasons. Already the food consumption of fish has increased to 20.3 kg in 2018 from 9 kg in 1961 (Rao, 2020). Total fisheries production (metric tons) in Pakistan was reported at 655245 metric tons in 2020. Although fisheries contribute to one percent to GDP (Fisheries Data, 2020), however it is far less than the actual potential and requirement of the country.

9.5.1 Challenges & Way Forward

a. This is the mainstay of generating more economic activity because it is an established industry and just need refinement and guidance by the state through facilitation and relaxing of policies pertaining to deep sea fishing.

b. Revision of Deep Sea fishing policy 1995 is required. As of year 2020 data seafood exports of Pakistan are limited to \$450 million only. Subject to proper deep sea fishing policy, it can be enhanced to \$2-2.5 billion (Askari, Tahir, & Shaheen, 2020b).

c. Due low processing value, International Market has placed Pakistan's catch in lower category, thus its rate is much lower than the standard rate of almost \$ 7 per kg (Askari, Tahir, & Shaheen, 2020c). Improving the processes will increase the rate and thus more revenue for the industry.

d. Reportedly, China is planning investing in Lasbela region for a fishing port. It will improve the fishing Manifold. The same need to be pursued by the state

e. Effective fishermen management, provision of technical assistance, renovation of Fishermen jetties, development of business plans are some small steps, however, they if taken will help in the flourishing of this industry.

9.6 Exploration of EEZ for Natural Resources & Hydrocarbons

EEZ needs to be explored for Natural Resources & Hydrocarbons. In this regard following are relevant:

a. Natural Resources. Pakistan's EEZ like any other is full of

Natural resources including fish etc. However till recently no exact details were known particularly about Pakistan's EEZ mineral resources. However, it has been now learned that one Square mile of sea bed may be covered with 70000 tons of minerals including manganese, aluminum, cadmium, iron, cobalt, and nickel, copper worth Billions of dollars financial worth in the open market. However, these resources are still untapped and there is no mechanism in place yet to explore it in near future.

b. **Hydrocarbons**. A study was conducted in 2009 about the hydrocarbon deposits in Pakistan's EEZ. It was concluded that country has two basins i.e. Indus & Makran's in Arabian Sea (Haq, 2019). Hydrocarbons or off shore Oil & Gas Industry exploration accounts for 37% of global production (Rao, 2020), however completely unexplored. 500 million Barrels of oil are lying underneath in Pakistan's EEZ near Makran. Although, its exploration and digging are a cumbersome and expensive effort, however, with continuous dedication and investment, they can be explored (Haq, 2019). It is heartening that Pakistan's efforts are there and Pakistan is progressing in its exploration.

9.6.1 Challenges & Way Forward

a. Murray Ridge has a strong possibility of finding Zinc/ copper (Shahzad, 2020l). It needs to be explored. However, it will be only possible with Joint ventures. However, nothing has been done yet for any joint venture in this regard. These untapped resources can change the future of this country, if tapped. Serious efforts at state level are required.

b. As far as hydrocarbons are concerned, joint ventures are the key. An agreement is in place between US Company ExxonMobil & Govt of Pakistan whereby the USA will have 25% share (Haq, 2019). Due long experience of US Company, it's a good omen for Pakistan and hopefully in some time in future it will bring requisite economic benefit to the country. The last serious exploration was undertaken in 2019, however it was not successful. The same need to be continuously explored by the state.

9.7 Development of Coastal Tourism

Pakistan has unexplored beaches alongside its coast particularly in Baluchistan area. With the development of Makran coastal highway along the Arabian Sea, new avenues have emerged which if develop can fetch economic dividend for the nation. Khund Malir is one of them.

Coastal tourism is a source of jobs and helps the economy grows (Rao, 2020). Pakistan coast particularly in Baluchistan Sea belt has so many beautiful areas which can be developed for tourism (Shahzad, 2020). This area has lot of potential to grow in coming years and can be a source of revenue for local and international tourist.

9.7.1 Challenges & Way Forward

They are as below:

a. Sea transportation is associated with Coastal tourism. Cruise ships, boats voyages will automatically flourish/ increase if the beaches are

developed alongside coast. Safety of the country is the pre-requisite for this. Pakistan's is now a comparatively safe country after the US peaceful withdrawal from Afghanistan. As per the conservative estimates, it has the potential of \$4 Billion per annum.

b. Marine protected areas need to be developed for increasing sustainable tourism. Marine parks are another concept which will automatically develop once the coastal tourism flourishes. Joint ventures are the key along with strong will of the decision makers for its development.

10. Recommendations

Maritime sector wise recommendation has already been mentioned at tactical levels for each maritime domain in this paper. However, strategic level recommendations are as below:

1. Pakistan has to change its mindset from continental to a Maritime nation to develop itself fully as an economically independent and sovereign nation.

2. Government Policies pertaining to Maritime sector needs a complete relook / revision in order to make it business friendly for reaping economic benefits, where relevant.

3. Vision 2025 document be amended and Blue Economy development be made a major part of it so that maritime sectors as discussed in this paper be developed.

11. Conclusion

Pakistan is full of Maritime potential due its vast coast line and EEZ. However, due continental mindset and lack of will of the decision makers, Pakistan has not flourished in this domain. Given State blessings in terms of favourable policies, undertaking of Joint ventures coupled with strong will, this sector has the potential to give a big financial boost to its economy and in turn to the lifestyle of its citizens.

Blue economy, if developed will help in developing of Coastal Economy and development of human capital for Maritime Industry. Maritime Security would be required which is another avenue which will contribute directly and indirectly towards the economic benefit of Country. Pakistan Maritime Security Agency and Pakistan Navy will play its traditional effective role in it accordingly.

It is thus the integration of social, political, economic & environmental factors which forms the backbone of solid blue economy. A conducive national & transnational cooperation along with monitoring and evaluation of the methodologies, record & data, indicators etc. will help in maritime activities at sea on sustainable basis for the betterment of the country.

Above all, it's the will of the government which matter the most, Mere slogans will not yield the results unless the policies are made maritime friendly for the economic growth of country in a business friendly manner like UAE, Mauritius and Sri Lanka while being cognizant of the cultural constraints of the country.

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References

- Ali. (2022). *IPRI holds conference on blue economy of Pakistan*. Institute of Policy Research and International Affairs (IPRI). <u>https://ipripak.org/ipri-holds-conference-on-blue-economy-of-pakistan/</u>
- Asghar, P. (2020). *Proposed national maritime strategy*. National Institute of Maritime Affairs (NIMA). <u>https://www.nima.gov.pk</u>
- Askari, M. U., Tahir, M., & Shaheen, N. (2020). Blue economy of Pakistan: Challenges and prospects. *Journal of the Punjab University Historical Society*, 33(2), 123–135.
- Azmie, M. S. A. (2017). Maritime awareness in Pakistan. CISS Insight Journal, 5(4), 62–85.
- China–Pakistan Economic Corridor (CPEC). (n.d.). *CPEC: Prospects for Pakistan's* blue economy. <u>https://cpec.gov.pk</u>

Cruise Mapper. (2022). Gadani ship breaking yard (Pakistan) cruise port schedule. https://www.cruisemapper.com

- Dawn. (2022, October 29). Front page. https://www.dawn.com
- Doyle, T. (2018). Blue economy and the Indian Ocean rim. Journal of the Indian Ocean Region, 14(1), 1–6. <u>https://doi.org/10.1080/19480881.2017.1420573</u>
- Fisheries Data. (2020). Pakistan Total fisheries production (metric tons). Food and Agriculture Organization of the United Nations. <u>https://www.fao.org</u>
- Government of Pakistan. (2014). *Pakistan Vision 2025*. Ministry of Planning, Development, and Reform.
- Haq, I. (2019). Pakistan's blue economy.
- Karachi Shipyard & Engineering Works. (n.d.). Karachi Shipyard & Engineering Works. <u>https://www.karachishipyard.com.pk</u>
- Mahan, A. T. (2012). *The influence of sea power upon history*, *1660–1783*. Courier Corporation.
- Maritime Winter School. (2020). Maritime Winter School 2020.
- Pascoe, S., & Gréboval, D. F. (Eds.). (2003). *Measuring capacity in fisheries* (No. 445). Food and Agriculture Organization of the United Nations.
- Ministry of Maritime Affairs. (2019). Yearbook 2019–20. Ministry of Maritime Affairs, Government of Pakistan.
- Ministry of Maritime Affairs. (n.d.). *Ministry of Maritime Affairs*. <u>http://www.moma.gov.pk</u>
- National Institute of Oceanography. (n.d.). *Oceanography*. <u>http://www.niopk.gov.pk</u>
- Pakistan National Shipping Corporation. (n.d.). *Pakistan National Shipping Corporation*. <u>https://www.pnsc.com.pk</u>
- Port of Karachi. (n.d.). Port of Karachi. https://www.kpt.gov.pk
- Rao, R. (2020). *Elements of blue economy*. IPS Press.
- Riaz, M. (n.d.). Pakistan coastal development: Integrated Coastal Zone Management (ICZM).

- Scott, J. (2000). Rational choice theory. In G. Browning, A. Halcli, & F. Webster (Eds.), Understanding contemporary society: Theories of the present (pp. 126–138). SAGE Publications.
- Senate Committee. (n.d.). The Senate committee recommends revisiting merchant marine shipping policy.
- Senate of Pakistan. (n.d.). Senate of Pakistan. https://www.senate.gov.pk
- Shahzad, S. M. (2020). Impact of Pakistan maritime affairs on blue economy in backdrop of CPEC. SM Shahzad.
- The Blue Economy Challenge. (n.d.). *The blue economy challenge*. https://theblueeconomychallenge.com
- United Nations Development Programme. (2021). In H. Canton (Ed.), *The Europa directory of international organizations 2021* (pp. 179–184). Routledge.
- Van Oord. (n.d.). Maritime infrastructure. https://www.vanoord.com
- Worldometer. (2022). Pakistan population (2022). https://www.worldometers.info
- Yousafzai, G. (2019, June 14). Saudi Arabia to set up \$10 billion oil refinery in Pakistan. *The News*. <u>https://www.thenews.com.pk</u>