

## Pakistan's Untapped Blue Economy Potential

*Dost Muhammad Barrech<sup>1</sup>*

*Muhammad Abbas Brohi<sup>2</sup>*

*Najeeb Ullah<sup>3</sup>*

### Abstract

*Oceans, no doubt have a great significance in human history. In the early ages, human connectivity across unattached landmass was only possible via oceans. In the era of globalization, the importance of oceans has further increased. The blue economy is an emerging concept. In a short time, it has accomplished great success. The blue economy is an ocean-oriented sustainable use of ocean resources for economic growth - improving livelihood and creating job opportunities. The blue economy includes many activities including fisheries, maritime transport, and tourism. Oceans contribute nearly US\$1.5 trillion annually to the world's economy. The world's approximately 90% trade takes place via oceans and 350 million jobs across the world are linked to fisheries. It is prognosticated that by 2025, the world's 34% of crude oil production will come from oceans. Pakistan has a massive potential of the blue economy, having a coastal area of 1,050km Makran coastal belt with Exclusive Economic Zone (EEZ) and continental shelf. Under the China-Pakistan Economic Corridor (CPEC), the blue economy of Pakistan is expected to be flourishing. Pakistan needs to diversify and concentrate on the blue economy to create job opportunities in fisheries, aquaculture, shipping, tourism, and energy production. Pakistan on account of its coastal areas has massive potential to discover the blue economy by promoting renewable energy, maritime transport, and tourism. Pakistan has to learn lessons from the countries that have made headway in the blue economy.*

Keywords: Blue Economy, Ocean, Marine fisheries, Coastline, Mangrove Forests

---

<sup>1</sup>Research Associate India Study Centre (ISC), the Institute of Strategic Studies Islamabad (ISSI).

<sup>2</sup> The writer is an independent researcher who has done his M.phil in International Relations from National Defence University, Islamabad.

<sup>3</sup>The writer is M.Phil in IR from National Defence University, Islamabad. He has been associated with the Centre for Strategic and Contemporary Research (CSCR) as Research Associate and is currently working with an autonomous and independent agency in Islamabad.

## Introduction

Oceans have monumental importance in human history. Through oceans, great civilizations traveled from one part to another. Oceans cover approximately 72% of the surface of the planet and nearly 40% of the world's population inhabits within 100 km of coastal areas.<sup>4</sup> The world's most big cities are located adjacent to coastal areas. Kenya in 2018, in this regard, held the “Sustainable Blue Economy Conference”, where opportunities and challenges, and benefits of the blue economy were discussed compressively and highlighted.<sup>5</sup> Presumably, without oceans, human beings cannot take a breath, and the ocean is responsible for producing oxygen. Oceans provide 15% of the proteins required by humans.<sup>6</sup> They slow down climate change, absorbing 30% of carbon dioxide emissions. Most considerably, 90% of international trade takes place via oceans.<sup>7</sup> In the prevailing globalized world, the importance of oceans will further increase by leaps and bounds.

Currently, oceans provide hundreds of millions of jobs in shipping, tourism, fisheries, aquaculture, and energy production. They also provide 30% of the world's gas and oil resources and half of the world's harvested seafood is provided by small-scale fishing. Marine fisheries are traditionally located near the coast as the coastal area water is more useful than the open ocean. Intriguingly, the world's 10% of people depend on marine fisheries for their basic nutrition.<sup>8</sup> For the poor segments of society, marine fisheries are the best primary source of nutrition. Humanity has benefited massively from oceans in the productions of different medicines. It is in man's nature to go for recreational services; the ocean, thus, is the best source of entertainment and enjoyment. Without oceans, there would not have been air and without air, humanity could not exist. Life without oceans is simply out of the question.<sup>9</sup>

## What is the Blue Economy?

The origin of the “blue economy” is an innovative phenomenon that came into being in 2012 in Rio de Janeiro, Brazil, at the United Nations Conference on Sustainable Development. The Economist, the Intelligence Unit of 2015 in its report defined the blue economy as: “A sustainable

---

<sup>4</sup> The Ocean Conference, United Nations, New York.

<https://www.un.org/sustainabledevelopment/wp-content/uploads/2017/05/Ocean-fact-sheet-package.pdf>  
(Accessed on June 9, 2020)

<sup>5</sup> The Blue Economy: Prosperous, Inclusive, Sustainable.

<http://www.blueeconomyconference.go.ke/> (Accessed on June 9, 2020)

<sup>6</sup> Human Population Growth And Oceans.

[https://www.biologicaldiversity.org/programs/population\\_and\\_sustainability/oceans/](https://www.biologicaldiversity.org/programs/population_and_sustainability/oceans/) (Accessed on June 8, 2020)

<sup>7</sup> The Ocean Conference, United Nations, New York.

<https://www.un.org/sustainabledevelopment/wp-content/uploads/2017/05/Ocean-fact-sheet-package.pdf>  
(Accessed on June 9, 2020)

<sup>8</sup> Oceans Crucial For Our Climate, Food and Nutrition.

<http://www.fao.org/news/story/en/item/248479/icode/> (Accessed on June 8, 2020)

<sup>9</sup>The Oceans – the Significance, the Challenges, the Opportunities,

<https://studentclimates.wordpress.com/2017/06/08/oceans-significance-challenges-opportunities/> (Accessed on April 20, 2019)

ocean economy (that) emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy”<sup>10</sup>The Rio+20 Green Economy Initiative, the blue economy further highlighted the blue economy and said the blue economy needs to improve the wellbeing of the people, bringing social equality and reducing ecological scarcities, environmental risks and endorsing low carbon.<sup>11</sup>

The blue economy is thoroughly dependent on oceans. States by realizing the potential of the blue economy are now interested in investing in it and diversifying their economies to be more competitive in this era of globalization.<sup>12</sup>

### Major Beneficiaries of Blue Economy:

#### 1: China’s Blue economy

China's emergence as an economic giant has become a buzzard, its Belt and Road Initiative (BRI) project has dazzled the world. China leaves no stone unturned to speed up its blue economy via BRI. Director-General of National Marine Data and Information Service (NMDIS), Guangshun says that Beijing has given top priority to the blue economy in BRI and further articulates that "China advocates building a blue partnership. The Chinese government has put forward the initiative of 'building blue partnership' and has carried out a series of work to promote the building of blue partnership.”<sup>13</sup>

Guangshun says China's blue economy comprised of shipping and fisheries has been transformed magnificently and has given an important lesson to the world to learn from China's blue economy. China's growing development in marine-based industries and vibrant aquaculture are some examples of China's commitments to bolstering its blue economy. Guangshun says that China is committed to developing international cooperation in marine economic fields and has encouraged the Chinese coastal cities to play their massive role in their local chrematistics and strengthen cooperation with the countries along the Marine Silk Road by facilitating the implantation of relevant projects.<sup>14</sup>

China has approximately 9,000 miles of coastline; its blue economy interest is generated in the 11th Five-Year plan. Beijing's strategic economic development plan, covering the years 2006 to 2010 including the blue economy saw impressive outcomes and created 33 million jobs by the end of 2010. Meanwhile, 12th Five-Year Plan, spanning the years 2011-16, the Chinese supreme

<sup>10</sup> United Nations Conference on Sustainable Development, 2012. Blue Economy Concept Paper, s.l.: United Nations Conference on Sustainable Development. <https://sustainabledevelopment.org/>

<sup>11</sup> Steffen, J., 2012. IUCN Oceania Office, Green to Blue Economy, s.l.: IUCN. [http://cmsdata.iucn.org/downloads/iucn\\_green\\_to\\_blue\\_economy.pdf](http://cmsdata.iucn.org/downloads/iucn_green_to_blue_economy.pdf) (Accessed April 22 2019)

<sup>12</sup>Maritime security and the Blue Economy: intersections and interdependencies in the Indian Ocean, <file:///C:/Users/Mohammad%20Hussain/Downloads/Maritime%20security%20and%20the%20Blue%20Economy%20intersections%20and%20interdependencies%20in%20the%20Indian%20Ocean.pdf>, Accessed on April 27, 2019)

<sup>13</sup>China keen to promote win-win cooperation in the blue economy: official, [http://www.xinhuanet.com/english/2018-11/28/c\\_137637579.htm](http://www.xinhuanet.com/english/2018-11/28/c_137637579.htm), ( Accessed on May 1, 2015)

<sup>14</sup> Ibid.

executive body, the state council showcased China's blue economy target "including total output value growth of 8% per year, value-added growth of 9% annually, and a goal for the Blue Economy to make up 10% of total national gross domestic product, or GDP, by 2015".<sup>15</sup>

## 2: The US Blue Economy

The United States (US) policymakers are keen to pursue a blue economy as the US is encompassed by the oceans and its economy relies on oceans including great lakes and coastal areas. The US blue economy consists of six job sectors depending on natural resources i.e. marine transportation, marine construction, ship and boat building, tourism, recreation, and offshore mineral extraction. In 2014, the aforementioned sectors generated 75,000 new jobs.<sup>16</sup> A National Ocean Economics Program study of 2014 says that the US ocean economy in 2010 was comprised of 2.7 million jobs and contributed approximately \$258 billion to the GDP of the United States. Above all, in 2012 coastal areas of the US created 48.8 million jobs and contributed \$6.6 trillion to the US GDP.<sup>17</sup> One can imagine that the US coastal states consisting of 10% of land areas are home to 40% of the US population mostly rely on the blue economy. People are keen to inhabit coastal areas to obtain maximum benefits from the blue economy.<sup>18</sup>

The US blue economy has expedited immensely in the last couple of years. A recent economic report by National Oceanic and Atmospheric Administration (NOAA) shows the gross domestic product (GDP) from the ocean economy grew 5.7% between 2014 and 2015, more than twice as fast as the U.S. economy as a whole, which grew by 2.7%.<sup>19</sup> Tourism recreation sectors have also generated 2.3 million jobs added \$116 billion to the US GDP.<sup>20</sup>

## 3: Southeast Asia States' Blue Economy

South Asian countries have a coastline of 173,000 km, economically and ecologically rich oceans claim 35% of mangroves and at least 18% of seagrass meadows, and nearly 30% of the world's coral reefs.<sup>21</sup> Most of the South Asian states solely depend on the blue economy, Blue economy contributes to the GDP of Indonesia and Vietnam 15% and 22% respectively. Thailand and Vietnam two of the region's developing countries are the top three seafood exporters in the region. The south-East Asian States have the world's sixth top busiest container ports.<sup>22</sup> The South China

<sup>15</sup> Developing a Blue Economy in China and the United States, <https://cdn.americanprogress.org/wp-content/uploads/2015/05/ChinaBlueEcon-report-final.pdf>, (Accessed on May 1, 2019)

<sup>16</sup> Our Blue Economy, <https://oceanservice.noaa.gov/aa-updates/ocean-economy-113017.html>, (Accessed on May 2, 2019)

<sup>17</sup> Judy Kildow and others, "State of the U.S. Ocean and Coastal Economies 2014" (Monterey, CA: National Ocean Economics Program, 2014), p. 8, available at [http://cbe.miis.edu/noep\\_publications/1/](http://cbe.miis.edu/noep_publications/1/)

<sup>18</sup> Ibid.

<sup>19</sup> NOAA report: U.S. Ocean Economic Sectors Growing Twice as Fast as Overall Economy, <https://oceanservice.noaa.gov/news/may18/ocean-economy-report.html> (Accessed on May 2, 2020)

<sup>20</sup> Ibid.

<sup>21</sup> ASEAN-Indian Workshop on Blue Economy: From Concepts to Actions. <https://www.oceangov.eu/wp-content/uploads/2018/02/Annex-B-Concept-note-ASEAN-India-Workshop-on-Blue-Economy.pdf> (Accessed June 7, 2020)

<sup>22</sup> Blue Economy in Southeast Asia: Oceans As The New Frontier Of Economic Development.

Sea is blessed with natural resources having petroleum deposits, and most of the Southeast Asian States are situated on Sunda Shelf - a huge continental shelf known as rich subsea hydrocarbon deposits.<sup>23</sup> The Governments of Southeast Asian States, thus, are trying to harness their economies by exploring the blue economy. Indonesia has developed gas resources in Natuna Islands and wave energy in Yogyakarta and initiated tide energy in East Lombok. The Philippines, on the other hand, 2018 opened the first ocean energy plant 2018.<sup>24</sup>

Southeast Asian states' reliance on coastal areas made them discover tapped and untapped natural resources of oceans to take maximum advantage of the blue economy and properly utilize for the well-being of the people. Therefore, "the Asia-Pacific Economic Cooperation (APEC) forum has listed blue economy projects as "Rank 1 APEC-funded Projects", led by the APEC Oceans and Fisheries Group". In 2015 APEC high-level policy meeting prioritized the blue economy and called for greater cooperation among the members' economies to strengthen the blue economy to "unlock the potential of blue economy and achieve sustainable, inclusive growth in the region".<sup>25</sup>

#### 4: Bangladesh's Blue Economy

Bangladesh has huge coastal areas and marine resources; by virtue of its geographical location, it has fertile and productive coastal areas of the world. Bangladesh is home to vast water areas with biological diversity, mangrove forests supporting a high number of fisheries. Bangladesh made a delta plain in the Bay of Bengal and the Himalayan range in the North. Construction of delta was attributed to the creation of habitats and human habitation embarking on the path to social-economic structures, development priorities. Bangladesh has a 710 km long coastline extending from St. Martin's Island to the west coast of Satkhira. These areas are having ecological and economic importance and potential. The human flow has seen an escalation in the southern part of Bangladesh amid the emergence of the blue economy; the region has seen job opportunities and development in other social activities.<sup>26</sup>

Bangladesh has exploited a large number of important fisheries having high export values. Fisheries markets in Bangladesh have improved the living standards of the people and making headway by leaps and bounds. Currently, shrimp aquaculture is massively traded. Meanwhile, aquaculture has become one of the fastest-growing foods in the world providing approximately 47% of the fish for human consumption and Bangladesh has aquaculture potential and exploiting it accordingly. Tourism has become a major global industry; tourists are fascinated by visiting coastal areas. The United Nations World Tourism Organization (UNWTO) report says one of

<https://www.tandfonline.com/doi/full/10.1080/09733159.2016.1244361?scroll=top&needAccess=true&>

(Accessed June 6, 2020)

<sup>23</sup> "Blue Economy for Business in East Asia", 39

<sup>24</sup>Blue Economy for Business in East Asia", 43.

<sup>25</sup>The blue economy in Southeast Asia: Oceans as the new frontier of economic

development, <file:///C:/Users/Mohammad%20Hussain/Downloads/Blue%20economy%20in%20Southeast%20Asia%20Oceans%20as%20the%20new%20frontier%20of%20economic%20development.pdf>, Accessed on May 3, 2019).

<sup>26</sup>The Prospects of Blue Economy to Promote Bangladesh into a Middle-Income Country,

<https://www.scirp.org/journal/PaperInformation.aspx?PaperID=84707> ( Accessed on May 3, 2019)

every two tourists desires to visit the seaside. Bangladesh, therefore, leaves no stone unturned to get maximum advantage from the tourist sector.<sup>27</sup>

Blue economy contributes \$6 billion annually to Bangladesh's economy and has the potential to add more income, said Jacqueline Alder, fish code manager of the Food and Agriculture Organization (FAO). He further says in Bangladesh, "There are a lot of opportunities in the area of the blue economy, especially in post-harvest processing,"<sup>28</sup> Meanwhile, Mr. Khurshid Alam, secretary to the maritime affairs unit of the Ministry of Foreign Affairs of Bangladesh says that blue economy is offering mineral resources, opportunities in fisheries, shipping, and energy.<sup>29</sup>

## 5: Sri Lanka's Blue Economy

Sri Lanka, an island strategically positioned in the Indian Ocean has major trade routes engulfed by an important sea route which is considered seven times larger than its land area. Sri Lanka, therefore, has an immense potential of the blue economy having its 90% land covered by 103 river basins. Its 25% population inhabits within the coastal areas of the country. Fish is the main source of protein in the country amounting to 70% of total animal protein.<sup>30</sup>

Sri Lanka has many advantages as far as its blue economy is concerned. Having a distinctive geographical location, high access to ocean resources, adjacent to major sea lanes, being a diverse range of coastal and marine ecosystems, blessed with high potential of tourism and recreation. The Sri Lankan government has taken some pragmatic steps for the promotion of the blue economy and initiated the Sri Lanka NEXT programme in October 2016. The purpose of the aforementioned initiative was to make Sri Lanka the hub of maritime in the region getting the benefit of the central geographical position of the country and its proximity to the sea lanes.<sup>31</sup> Its government initiated new tourism development attributed to bolster the blue economy. The Sri Lankan state minister Wedaarachchi says that blue economy is an emerging concept "introduced to the fisheries sector, the tourism industry affiliated with the fisheries sector has planned to broaden the tourism and earn foreign exchange for the country".<sup>32</sup>

## Pakistan's potential of the Blue Economy

It is not an exaggeration to say that Pakistan has immense potential for the blue economy. Blessed with a coastal area of 1,050 km including the continental shelf and Exclusive Economic Zone (EEZ). The mentioned coastal areas provide a monolithic opportunity to Pakistan to exploit ocean-

<sup>27</sup> Ibid.

<sup>28</sup> Blue economy worth \$6.2bn, <https://www.thedailystar.net/business/news/blue-economy-worth-62bn-1704688> ( Accessed on May 4, 2019)

<sup>29</sup> Ibid.

<sup>30</sup> the strategic importance of Blue Economy to Sri Lanka and Challenges, <http://ir.kdu.ac.lk/bitstream/handle/345/1711/004.pdf?sequence=1&isAllowed=y> ( Accessed on May 4, 2019)

<sup>31</sup> Sri Lanka's future towards a Blue Economy, [http://www.island.lk/index.php?page\\_cat=article-details&page=article-details&code\\_title=166534](http://www.island.lk/index.php?page_cat=article-details&page=article-details&code_title=166534) ( Accessed on May 4, 2019)

<sup>32</sup> Blue Economy maritime tourism plan for Weligama proposed, [http://www.colombopage.com/archive\\_19A/Feb01\\_1549041888CH.php](http://www.colombopage.com/archive_19A/Feb01_1549041888CH.php) ( Accessed on May 6, 2019)

based resources resulting in creating economic opportunities. Under the China-Pakistan Economic Corridor (CPEC), the blue economy is believed to be flourishing as China desires to reach the Gwadar. Apart from Gwadar, Pakistan can expedite the blue economy by promoting tourism in the Markan Coastal areas, promoting fisheries in the region, and tapping untapped minerals of the ocean. Post- CPEC blue economy was not focused on by Pakistan's policymakers. Under CPEC, Pakistan has realized and has been learning from the other states to take maximum advantage of the blue economy. The blue economy will also diversify Pakistan's economy creating economic job opportunities in shipping, tourism, fisheries, aquaculture, and energy production.<sup>33</sup>

### 1. Fisheries and Blue Economy

Pakistan's coastal areas are rich in the production of fisheries; annually nearly 600,000 metric tons of fish have yielded the country. Baluchistan's coastal areas are well-known for lobster, shrimp, and cuttlefish. Most of the tourists and travelers use nets to catch fish in the sea. They succeed in catching fish merely 10% of the time and 90% fish are uncaught and go back into the ocean. In 2016, the production in coastal areas was very high at 611,247 metric tons annually and it became very low from 2009 to 2015, remained the same at 584461 metric tons. Pakistan's fisheries contribution to GDP is not as high as other Asian countries contributing only 1% whilst employment was at the top in 1997 with 416,405. Pakistan's 15,000 families depend on 12,000 fish processing units/farms for their bread and butter. The fisheries industry contributes 1% to the GDP of Pakistan.<sup>34</sup>

Pakistan should prioritize fisheries production. It is a matter of grave concern that fisheries production is dwindling slowly and gradually. However, a new term has been proposed called "Blue Revolution" to enhance fisheries production. "The time is right for Pakistan to launch the revolution" suggests the World Bank, stating that such "blue growth" prioritizes the sustainable management of natural aquatic resources in the delivery of economic and social benefits".<sup>35</sup> Blue revolution helping workers in aquaculture, fisheries along with seafood and also attributed to managing resources for the future generation.

Thus, the Food and Agriculture Organisation (FAO) has expressed satisfaction and said that in the coastal areas of Sindh and Balochistan, marine and fishing have tremendous economic potential and can boost up the blue economy of the country in no time. The World Bank report "Revitalizing Pakistan's Fisheries" says that the US, Japan, and the European Union are the world's biggest export markets for seafood. However, the aforementioned market accounts for less than 3% of Pakistan's fisheries export earnings which are nearly \$9.3m annually.<sup>36</sup> Pakistan's

<sup>33</sup>Is the Blue Economy model feasible in Pakistan? <https://dailytimes.com.pk/223783/is-the-blue-economy-model-feasible-in-pakistan/>, (Accessed on May 8, 2019)

<sup>34</sup>Water as Blue Economy for Sustainable Growth in Pakistan, <https://www.lifescienceglobal.com/pms/index.php/jbas/article/download/4663/2642> (Accessed on May 9, 2020)

<sup>35</sup>'Blue Revolution' to enhance fisheries production, dawn newspaper

<sup>36</sup>Patil, Pawan G.; Kaczan, David James; Roberts, Julian Peter; Jabeen, Rahat; Roberts, Bradford L.; Barbosa, Jorge Guillermo; Zuberi, Saima. 2018. *Revitalizing Pakistan's Fisheries: Options for Sustainable Development (English)*. Washington, D.C.: World Bank Group, page 47.

fisheries can contribute a lot and could capture a bigger percentage of these markets.<sup>37</sup>

## 2. Marine resources in Blue Economy

Marine resources have enormous potential to contribute to national economic growth. Coastal areas of Pakistan are a great asset in the production of marine resources that required serious efforts to bolster the blue economy of the country. Coastal areas of Balochistan and Sindh are marine zones of Pakistan extending to 350 nautical miles. There are offshore territorial waters up to 12 nautical miles. An area beyond 200 nautical miles is considered an Exclusive Economic Zone (EEZ) covering an area of 240,000 km of the Arabian Sea.<sup>38</sup> Marine resources are an integral part of Pakistan's blue economy and also act as Pakistan's strategic way. Marine fish stocks and Mangroves are essential resources of the blue economy in coastal areas. Coastal areas of Pakistan also possess small patches of coral reef, dolphins, turtles a rich bird fauna, and migratory species. Mangroves and small-scale fishing is crucial subsistence activity for the people of Balochistan and Sindh.<sup>39</sup>

Pakistan's mangroves area is believed to be the sixth-largest in the world. In coastal areas of Sindh, mangroves contribute US\$ 4 billion to export earnings. Each family near a coastal area catches 173 kg of mangrove wood per month, giving total annual exploitation of 18,000 tons annually.<sup>40</sup> "The annual value of about \$20 million and the domestic value of \$70 million generate from mangrove depend on fish species and shrimp industry".<sup>41</sup>

## 3. Export by Sea and Blue Economy

Trade by sea route in Pakistan contributes 6.5 billion dollars to economic growth. Pakistan National Shipping Corporation has handled nearly 99% import of gasoline products. The United Nations Commission on Trade and Development (UNCTAD) report says that Pakistan could accelerate national carriers to 40% of total maritime trade. In 2002, it was estimated that the annual maritime bill for foreign shipping organizations was nearly \$1.3 billion.<sup>42</sup> Under the China-Pakistan Economic Corridor (CPEC), Gwadar port could become a flagship for the export of the sea and will contribute immensely to the GDP of the country. Pakistan's more than 86% of exports occur via sea.<sup>43</sup> CPEC will enhance the connectivity of the railway and road to the other remote areas of Pakistan to Karachi and Gwadar. Gwadar port's connectivity will not only increase the competitiveness of existing firms but will also incentivize the exports. The CPEC connectivity will

---

<http://documents.worldbank.org/curated/en/122481529566117025/pdf/Revitalizing-Pakistan-s-Fisheries-Options-for-Sustainable-Development.pdf>

<sup>37</sup>Water as Blue Economy for Sustainable Growth in Pakistan,

<https://www.lifescienceglobal.com/pms/index.php/jbas/article/download/4663/2642> ( Accessed on May 9, 2020)

<sup>38</sup> MFF Pakistan (2016). A Handbook on Pakistan's Coastal and Marine Resources. MFF Pakistan, Pakistan. Page 5

[https://www.iucn.org/sites/dev/files/pk\\_coastal\\_resources\\_handbook.pdf](https://www.iucn.org/sites/dev/files/pk_coastal_resources_handbook.pdf)

<sup>39</sup> Pakistan coastal and Marine Resources, Ministry of Climate change Government of Pakistan

<sup>40</sup>Water as Blue Economy for Sustainable Growth in Pakistan,

<https://www.lifescienceglobal.com/pms/index.php/jbas/article/download/4663/2642> (Accessed on May 17, 2020)

<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

<sup>43</sup>CPEC: trade prospects, Dawn newspaper



shrink the long-distance of the country connecting the northern area full of vegetables and fruits such as cherries, apples, apricots. Export of Pakistani indigenous production will also increase in the future. "A large fraction of Pakistan's trade with China — \$16bn — occurs through the sea route: 97% through the sea, 2% by air and 1% by land".<sup>44</sup>

Most considerably, Gwadar port is the convergent point of China's Belt and Road Initiative (BRI) and will connect 3 billion people of the world providing direct access to Central Asia and Europe. The 21st century belongs to Asia. China is emerging as one of the largest trading countries. Pakistan's trade with China is improving by leaps and bounds. Last year's bilateral trade between China and Pakistan reached up to \$19 billion. It can be ascertained that China's interest was developed in Pakistan due to blue water and Gwadar port. There would not have been the existence of CPEC, had there been no ocean and Gwadar port in Pakistan. Predictably, Pakistan can get more benefits from the blue economy under CPEC.<sup>45</sup>

#### 4. Off Shore Drilling and Blue Economy

Oceans are home to innumerable natural resources and play the role of engine for the global economy. Pakistan, in this regard, by exploiting the ocean's natural resources has taken pragmatic steps to capitalize on the blue economy. Thus, offshore drilling proximity to Karachi Indus G-Block (Kekra-1) has been completed. The drilling has been done via a joint venture (JV) of four companies. According to Petroleum Division Pakistan, the work at JV has accomplished the offshore drilling on Kekra-1 well some 280 kilometers away from Karachi, the target of the depth of 5,470 meters has been achieved at the cost of Rs14 billion. Meanwhile, the drill stem test (DST) was conducted to determine the actual reserves of oil and gas. The report of the Petroleum Division of Pakistan further said that "DST would be completed in the next three days and a report regarding the total quantity of oil and gas reserves would be prepared within a week."<sup>46</sup>

Under CPEC Pakistan has been perceived by the world community as a commercial hub. Countries across the world are now interested in Foreign Direct Investment in Pakistan (FDI). Saudi Arabia close ally of Pakistan in international politics has expressed its desire to invest in Pakistan. Saudi Arabia will set up a \$10 billion oil refinery port in Gwadar. Saudi Energy Minister Khalid al-Falih says: "Saudi Arabia wants to make Pakistan's economic development stable through establishing an oil refinery and partnership with Pakistan in the China-Pakistan Economic Corridor."<sup>47</sup> Once the work of the refinery is completed, it would produce 300,000 barrels per day creating job opportunities for marginalized and deprived people of Balochistan. According to Petroleum Minister Ghulam Sarwar Khan, Saudi Arabia intended to establish reservoirs for liquefied natural gas in Pakistan. He further says that "once established, the project will help the South Asian nation

---

<sup>44</sup> Ibid.

<sup>45</sup> Ibid

<sup>46</sup> Offshore drilling near Karachi coast completed, <https://profit.pakistantoday.com.pk/2019/05/14/offshore-drilling-near-karachi-coast-completed/>, ( Accessed on May 17, 2020)

<sup>47</sup> Saudi Arabia To Build \$10 Billion Oil Refinery In Pakistan's Gwadar, <https://www.rferl.org/a/saudi-arabia-to-build-10-billion-oil-refinery-in-pakistan-s-gwadar/29706488.html> ( Accessed on May 18, 2020)

cut its annual crude oil imports by up to \$3 billion annually, in addition to creating thousands of job opportunities in the impoverished western province”.<sup>48</sup>

At the current juncture, Pakistan has only five oil refineries that can merely satisfy the country’s annual demand. The oil refinery would be the catapult for Pakistan's crude oil. Sarwar Khan further said that "Pakistani-Arab Refinery Co. (PARCO) was also setting up an oil refinery at Khalifa Point, near the city of Hub in Balochistan”.<sup>49</sup>

### **5. Tourism in Gwadar and Blue Economy**

Whenever the name of Gwadar port comes, it evokes in our minds Gwadar port as one of the deepest seaports of the world, a flagship of CPEC and convergent point of Belt and Road Initiative (BRI). But most of us are still oblivious of Gwadar’s untapped stunning beaches that can become a great asset for Pakistan’s blue economy. Coastal areas of Balochistan and Gwadar port are home to one of the stunning and most beautiful sceneries of the world providing clear and visible views of the Arabian sea. Hammerhead in Gwadar mass of rock made by mud volcano that erupted in the past shows thrilling seen for the tourists. Hammerhead in its South provides a thrilling view of the Arabian Sea and in its North; it gives a spectacular view of the Gwadar port. Under CPEC, Pakistan needs to bolster its blue economy and should discover such untapped views of the Gwadar for foreign tourists.<sup>50</sup>

On the other hand, Ormara situated 240 km away from Karachi is in the middle of Karachi and Gwadar, having outstanding beaches for tourists and its water remains untouched. Ormara was supposed to be a pit stop for Alexander the Great and one of his generals perished here. Ormara has a great history as well as stunning beaches that ought to be exploited for the blue economy. Astola Island situated in the Pasni district of Gwadar is known as the island of the seven hills that engrosses the tourists. Astola Island gives amazing views of the Arabian sea. Pakistan, thus, has great opportunities to discover unforeseen places to strengthen its blue economy.<sup>51</sup>

### **6. Tidal Energy for Blue economy**

Balochistan due to its coastal areas is the best place for renewable energy and blue economy of the country that needs to be exploited for sustainable deployment of Pakistan. Balochistan's huge renewable energy resources such as wind power turbines, micro-hydel power planets biogas plants, tidal energy solar and thermal devices could be useful in the future. Balochistan’s coastal area of 770-KM along the Arabian Sea is 70% of Pakistan; the total coastal area needs a great deal of consideration for the blue economy. Coastal areas of Balochistan like Pasni, Makran, and Gwadar provide an immense condition for both climate installation and tidal energy generators.

<sup>48</sup>The Saudi oil refinery in Gwadar to help Islamabad save \$3 billion a year, <http://www.arabnews.com/node/1453211/business-economy>, (Accessed on May 17, 2019)

<sup>49</sup> Ibid.

<sup>50</sup>9 Places To Visit In Gwadar, <https://travel.jumia.com/blog/pk/9-places-visit-gwadar-2861>, ( Accessed on May 19, 2019)

<sup>51</sup> Ibid.

Balochistan has sufficient wind speed to generate electricity and most of its wind energy is ocean-oriented.<sup>52</sup>

National Institute of Oceanography (NIO) in 1988 conducted a study showing that 17 creeks on the coastal belt of Pakistan had the potential to generate tidal energy enough to meet the requirements of coastal areas at a very cheap rate.<sup>53</sup> On the other hand, Pakistan Meteorological Department conducted a wind power potential survey in the coastal areas of Pakistan said that apart from Balochistan, the province of Sindh had massive potential for wind energy. Sindh's total area for the wind farm is 9749 km, having a wind power potential of 18 MW wind farm in approximately 1 km area.<sup>54</sup>

### Conclusion

It is a fact that geography has been a monolithic blessing for Pakistan, bestowed upon the world's highest mountains and the deepest seaport of the world. On account of its geography regional and global powers do not want to alienate Pakistan. Pakistan's proximity to the Indian Ocean enhances its credentials for China. According to Robert Kaplan, World War 1 and World War 2 were Atlantic and Pacific Ocean oriented. But now the 21st century would be Indian ocean-oriented, whoever dominates the Indian ocean will dominate the world. Consequently, China has initiated the Belt and Road Initiative (BRI) and CPEC is the flagship project of (BRI). Pakistan is a crucial player in the domination of China in the Indian Ocean. China's presence in Gwadar port will be useful for Pakistan in two ways. Firstly, Pakistan's naval base will be buttressed in presence of China. Secondly, CPEC is expected to embark on the path for the consolidation of Pakistan's blue economy.

Pakistan, therefore, should capitalize on the opportunity of the blue economy presented in the shape of CPEC. As mentioned earlier that Pakistan has innumerable opportunities in bolstering the blue economy having a coastal area of 1,050 kilometers. The blue economy will also diversify Pakistan's economy creating economic job opportunities in shipping, tourism, fisheries, aquaculture, and energy production.

---

<sup>52</sup>Balochistan has the best resource for exploiting the tidal energy, <http://www.pakistaneconomist.com/2017/07/24/balochistan-has-the-best-resource-for-exploiting-the-tidal-energy/>, ( Accessed on May 17, 2019)

<sup>53</sup>Future in tidal power plants in coastal areas <http://www.pakistaneconomist.com/2018/07/30/future-in-tidal-power-plants-in-coastal-areas/>, (Accessed on May 20, 2019)

<sup>54</sup> Why not wind energy, [http://www.pmd.gov.pk/wind/Wind\\_Project\\_files/Page767.html](http://www.pmd.gov.pk/wind/Wind_Project_files/Page767.html), ( Accessed on May 20, 2019)