



Received: 2023/03/04  
Accepted: 2023/12/31  
Published: 2024/09/14

1. Professor, Faculty of Humanities, Tarbiat Modares University, Tehran, Iran. Correspondin Author.  
Email: Ahmadyz@modares.ac.ir

2. Ph.D. student, Faculty of Humanities, Tarbiat Modares University, Tehran, Iran.  
Email: Niloo.ahroon@gmail.com

How to cite this article:  
Ahmadipoor, Z., & Ahroon, N. (2024). Indian Ocean and Blue Economy of Persian Gulf Cooperation Council. *The International Journal of Humanities* 31(3): 1–22.

## RESEARCH ARTICLE

# Indian Ocean and Blue Economy of Persian Gulf Cooperation Council

Zahra Ahmadipoor<sup>1\*</sup> , Niloofar Ahroon<sup>2</sup> 

In recent years, the international system has witnessed the dynamics of competition between great powers over regional key Regions. In this context, the Indian Ocean appears as a strategic and vital region for the powers inside and outside it, and any development in it affects the security of the region. Considering the need to establish security in the current situation where increasing competition prevails in the Indian Ocean, analyzing and investigating the economic developments of these countries is of great importance. The purpose of this research, which has been carried out by using the descriptive-analytical method and library sources, is to describe the concept of the Blue Economy and evaluate it in the countries of the Persian Gulf Cooperation Council: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. It also explains the challenges and opportunities they face in the Indian Ocean. The results of the study of the water economy of the Persian Gulf Cooperation Council countries indicate the relative difference in the level of these countries to each other, so if these countries seek to achieve development and maximum use of resources and opportunities which the Indian Ocean has provided for them, they also have the intention of overcoming the challenges governing this ocean, and they should put special emphasis on the actions that lead to convergence.

**Keywords:** Blue economy, Indian Ocean, Convergence, Persian Gulf Cooperation Council.

## 1. Introduction

Institutions are the main subject of economics. Human social-institutional reality has a common underlying structure and these structures are matters of status functions (Khodamoradi et al, 2015: 53). For more than five decades, especially since the 1970s, after the quadrupling of oil prices, economic development in the countries of the Persian Gulf Cooperation Council, has brought strong growth and good social welfare. They rely on oil as the main source of export and financial income has improved the level of public sector employment, the amount of funding for infrastructure development, and the level of quality of social services such as

education or health, and have significantly increased living standards during this period (Kouvelis, 2021: 8). In recent years, studies at the global level have shown the understanding that due to the instabilities, the shock of the covid-19 epidemic, as well as the decrease in oil revenues, the need to have "economic diversity" to advance the goals of these countries for further development is undeniable. Although diversifying oil-based economies is not easy, the Persian Gulf Cooperation Council countries are trying to reduce the dependence on the oil income. They would develop and strengthen sectors that produce net value for their economy and have high growth potential, and are more resistant to price shocks as sectors related to the blue economy; They are taking steps to realize this. The Indian Ocean may be the most vital dimension of the foreign policy of the Persian Gulf Cooperation Council countries in the next decade from economic, political, and strategic points of view. In the last two decades, maritime security has attracted increasing attention, and its importance has been manifested in specific maritime security strategies, maritime operations, and global investments (Bueger & Liebetrau, 2022: 34). This importance is not only of the various interests of countries that have coastlines, rather, it also comes from a wider range of "Indian Ocean users" i.e., countries whose navy and commercial fleets travel, are present in the waters of the Indian Ocean (Niblock et al., 2009: 1). According to the report of the European Union (2021), entitled "Dialogue of the European Union and the Persian Gulf Cooperation Council on economic diversity", Abu Dhabi held the blue economy summit in the UAE in 2014. The approval of the "Abu Dhabi Declaration" recognized the significant contribution of the blue economy in reducing hunger, eradicating poverty, creating sustainable livelihoods, and reducing climate change in coastal countries. In 2019, Oman hosted the international conference "Ocean Economy and Future Technology" in Muscat. This event focused on the need for dialogue to strengthen investment and innovation in the blue economy sectors as a key sector of the economy in the Sultanate's 5-year national planning cycle and "2040 long-term vision". In March 2019, Abu Dhabi hosted the sixth edition of the World Ocean Summit in the UAE. It was the first international conference held in the Persian Gulf Cooperation Council and the Middle East. The Oman Maritime Expo was scheduled for March 2020 in Muscat but was postponed due to the Covid-19 pandemic. Morgan and her colleagues (2022) wrote in a book titled "Blue Economy and Investment, a Path to Sustainable Development and Ocean Governance": Some comprehensive study reports on the blue economy have attempted to define the concept of the blue economy as "a set of environmentally and socially sustainable business activities, products, services and investments that depend on and affect coastal and marine resources. Maxine Burkett in an article entitled "The United States of America and the Atlantic Ocean" on the importance of the issue of the blue economy in the oceans, declares that the United States has focused on three strategic priorities related to the ocean since the first days of the Biden-Harris administration: 1- Maximizing the environmental, economic, and social benefits of the ocean. 2- Develop an ocean action plan to focus on solutions to reduce the effects of climate change. 3- Identification of strategic directions in the field of scientific and technological ocean studies. Not only all these

priorities interrelated, but they are also geopolitically related as well (Morgan et al, 2022). Andrade, in article titled "Azures and Inter-Atlantic Relations" expresses the problem that the basis of inter-oceanic relations is democracy, freedom, solidarity, citizenship, and the rule of law (Burkett, 2022). All these cases point the need to form a common and integrated view of the ocean bed, and in this case specifically among the member states of the Persian Gulf Cooperation Council (Andrade, 2022). The purpose of this research is to evaluate the development process of the water economy in six member countries of the Persian Gulf Cooperation Council, including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, and to explain the dimensions of the challenges in the Indian Ocean. We also examine the opportunities available to move the relations of these countries towards interactive geopolitical relations in the Indian Ocean.

## **2- Research Methodology**

From the point of view of the practical goal, this research is a type of development with a strategic approach, which is based on the descriptive-analytical method using library resources such as books, articles, and internet resources, and while explaining the concept of blue economy, it discusses the ocean economy and specifically explains the challenges and opportunities of the Indian Ocean for the countries of the Persian Gulf Cooperation Council.

## **3- Concepts and Theoretical Foundations**

### **3-1 Oceans in the Global Economy**

"Oceans cover 71% of our planet's surface and contain 96% of Earth's water by volume" is a common statement about a fact that we could not deny in the past. It would not be denied in the present and even in the future. Today we know that oceans play an important role in cooling the planet and making it habitable, producing more than half of the oxygen we need to breathe and absorbing 50 times more carbon dioxide than the atmosphere. But throughout history, even though this knowledge was not available, oceans had always been a rich source of all kinds of natural resources, a way to discover and conquer new lands and trade goods. These activities continue to play a decisive role in economy, as oceans are still the main source of protein for more than a billion people and act as a highway for more than 90% of goods and materials internationally. In the current economic system, we see the highest density of flows between the two poles of development in the South Asian region, and we can see significant maritime traffic from the south to the north, which shows the density of traffic from South Africa to the Indian Ocean. But the blue economy is not solely related to international maritime trade. The value of the ocean's economic sectors (2015) is estimated at \$3 trillion per year, 5% of global GDP, equal to the size of the world's fifth largest economy. There has been a growing connection between the ocean and the global economy over the last two decades, and this is largely due to three main reasons:

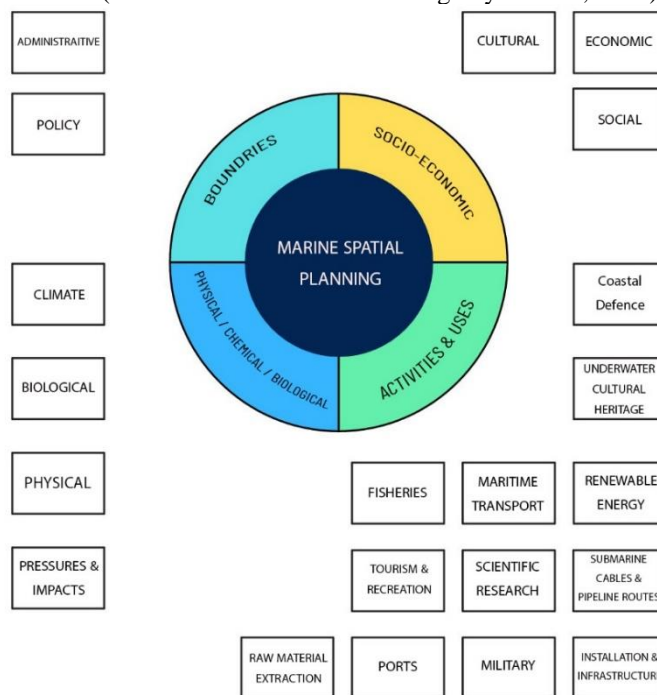
- (1) The development of technology that provides the possibility of presence and operations in the open seas and the development of new activities and "new" uses of the ocean.
- (2) The need to exploit new sources of raw material to maintain or increase economic performance at the global level;
- (3) "Science" has revealed the fundamental role of the ocean in regulating life on earth and has shown how the process of exploitation in the past decades accelerated the changes in natural conditions causing climate change of the planet (Ribeiro, 2022: 14).

### **3-2 The Blue Economy Concept**

The European Commission defines it as "all economic activities related to oceans, seas and coasts" (United Nations<sup>a</sup>, 2022: 1). According to the World Bank, this concept seeks to promote economic growth, social inclusion, livelihood improvement, and at the same time environmental sustainability in the oceans and coastal areas. A sustainable blue economy causes growth and employment. It also helps us fight climate change, restore biodiversity and use marine resources responsibly (European Commission, 2022). The World Bank also defines the blue economy as the long-term and sustainable use of the benefits and resources of the sea for less developed coastal countries (World Bank, 2017: 3). The Commonwealth of Nations considers it an "emerging concept" that will help us better monitor ocean or blue resources. A representative of the United Nations recently defined the blue economy as a type of economy that "comprises a wide range of economic sectors and interrelated policies" that determine whether human use of ocean resources is sustainable or not. First of all, the important challenge of the blue economy is the better management of many aspects of ocean sustainability, from fisheries to ecosystem health and pollution prevention. Second, the blue economy challenges us to understand that the sustainable management of ocean resources requires cooperation across borders and sectors through a variety of partnerships and on a scale that has not been realized before (United Nations<sup>a</sup>, 2022: 1). At its core, this concept refers to the separation of socio-economic development through ocean-related sectors and activities. Therefore, as mentioned, the important challenge of the blue economy is to understand that the sustainable management of ocean resources requires cooperation between governments and public-private sectors on a global scale (UNESCO, 2022).

**Figure (1): The Conceptual Model of Importance Dimensions in Blue Economy Studies**

Source: (The World Bank 2022- Redesign by authors, 2023).

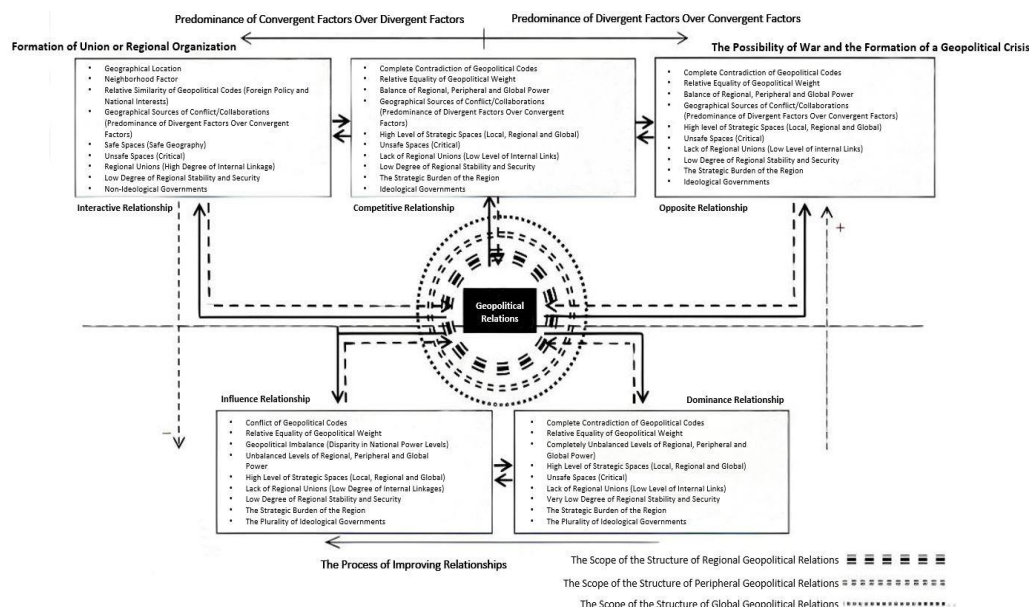


### 3-3 Geopolitical Relations

A model of relations in geopolitical regions is presented by Reza Hussain Pourpouyan (2011) in his PhD thesis, which forms the spatial structure of relations within the region (between countries and actors within the region), the region (the top and dominant actors of the geopolitical region) with the periphery (the top and dominant actors of the geopolitical region) and the region (the top and dominant actors of the geopolitical region) with the world (the top and dominant actors of the geopolitical region) (Ahmadinohadani & Ghorbaninezhad, 2015: 138).

**Figure (2): Conceptual Model of Explaining the Pattern of Relations in Geopolitical Regions at the Triple Levels of the Geopolitical Region, Region/Geopolitical Structure and Global Geopolitical Structure**

Source: (Hosseinpourpouyan, 2013: 196).



Political actors may compete with each other to access a scarce element, without being fully aware of the existence of their rivals or wanting to prevent them from achieving their goals. Competition turns into a conflict when two parties try to strengthen their position and weaken the other's position and prevent others from achieving their goals. Conflict would be violent or non-violent, open or hidden, controllable or uncontrollable, and solvable or insolvable, depending on different conditions (Zareidaramarvdi, Mohammadi & Azizzadehtasuj, 2022: 87). The word tension is related to a set of attitudes and tendencies such as lack of trust and suspicion that people and policy makers have towards other parties. Tensions by themselves do not cause disruption, but only prepare the parties to adopt or show conflict-based behavior in case of trying to achieve incompatible goals. The tension does not necessarily go beyond the level of tendencies and perceptions and does not include obvious practical conflict and restraining efforts. While conflict is a situation in which a socio-political group or other groups have a conscious state due to the real or apparent incompatibility of their goals. In general, a conflict is a situation in which two or more opponents use their forces against each other to achieve certain goals, and the victory or victory of one requires the loss and defeat of the other (Ahmadinohadani & Ghorbaninezhad, 2015: 235). Ribaz Ghorbani-Najad (2013) in his PhD dissertation proposed a new theory entitled “The pattern of geopolitical factors of tension and conflict in the relations between countries”, and taking a critical look at Peter Haggett's Hypothetica model, he has tried to explain a more comprehensive and complete model in the field of geopolitical sources of tension between political units at the national level by eliminating its shortcomings and adding new issues. The presented model has a geographical and geopolitical foundation and by relying on geographical components, it tries to provide a geopolitical analysis of the issues of tension and debate between countries. In other words, the common feature of the eight groups of tension-causing factors proposed in this theory is that they all have a geographical nature and emphasize the spatial and territorial dimensions of the variables that cause tension between the states (Ahmadinohadani & Ghorbaninezhad, 2015: 252).

#### **4-Findings**

##### **4-1 The Economy of the Persian Gulf Cooperation Council Countries before the Covid-19**

For decades, and certainly, before the Covid-19 pandemic, economic stability in the region was mainly ensured by the production and export of oil, or by other sectors that had an increasing, yet oil-related contribution to the GDP (Kouvelis, 2021: 9). The Persian Gulf Cooperation Council economic model relies on oil as the main source of exports and financial income. The government is the dominant force in the economy and distributes the revenues from oil exports to the citizens. Most of the Persian Gulf Cooperation Council countries have a long-term horizon for oil and/or gas production, and as a result, have considerable wealth underground as well as invested funds in central banks. However, it is unlikely that oil prices will show a



significant increase in the future, so this strategy may no longer be very reliable (Callen et al., 2014: 6). The importance of increasing exports as an engine for economic growth has long been the subject of considerable interest in the economic development and growth literature. The economic growth is an important index for raising the standard of living and increasing the per capita GDP in a country. Export promotion would be considered as a strategy that enables an economy to grow (Dizaji et al. 2014, 46-47). The table (1) shows the gross domestic status of the Persian Gulf Cooperation Council.



**Figure (3): Map of the PGCC Countries and Indian Ocean**

Source: (Mappr, 2023).

**Table (1): Population and GDP of the PGCC Countries in 2022**

Source: (World Bank, 1 July 2023).

Country Name	Population in 2022 (Thousands)	Gross Domestic Products in 2022 (Millions of US Dollars)
Bahrain	1,472	44,391
Kuwait	4,409	184,558
Oman	4,576	114,667
Qatar	2,695	237,296
Saudi Arabia	36,409	1,108,149
United Arab Emirates	9,441	507,535

#### 4-2 Developments in the Economy of the Persian Gulf Cooperation Council Countries in the Post-Covid-19

In recent years, the Persian Gulf Cooperation Council countries have increasingly sought for "diversify their economies" and reduce their dependence on black gold. As this issue is reflected in the relevant vision documents of these countries, they implement new reforms and various economic development programs to attract foreign investment. The "blue economy" is the focal point of this economic diversity. In their history, especially before the development of oil as the main part of their production, export, and income, the Persian Gulf Cooperation Council countries had important maritime activities, especially in the transportation, food, and pearl fishing sectors. (Kouvelis, 2021: 9). With the outbreak of the Corona pandemic, the issue of "diversifying the economy and reducing dependence on oil" became a double issue, and dealing with the blue economy was placed on the agenda of these countries. The assessment of the impact of the economic crisis of Covid-19 on the economy shows that the blue economy sector is more affected by this crisis than other areas of the economy, but its different parts have been

subjected to this effect to a different extent. Except for marine renewable energy, which was moderately affected by this pandemic, all newly established sectors in 2020 were among the sectors which suffered the most damage. Although sectors related to living resources, non-living resources, port activities, and maritime transport were severely affected, they are all expected to recover quickly (Ribeiro, 2022: 18).

### **4-3 Blue Economy of Persian Gulf Cooperation Council**

#### **4-3-1 Blue Economy in Bahrain**

In terms of live marine resources, fisheries resources in the waters around the Kingdom of Bahrain cannot meet the demand in this country. Therefore, in the long term, it is felt that "investing in the development of the aquaculture sector" will help to achieve food security and self-sufficiency in Bahrain. But for many years, the National Agricultural Center of Bahrain has been supplying finfish seeds to all the countries of the Persian Gulf Cooperation Council and other countries that are members of the Regional Fisheries Commission. Therefore, the Kingdom of Bahrain has maintained its leading position in the region as a producer and exporter of finfish seed. In the coastal tourism sector, Bahrain performs very well due to access to the Gulf with warm and clear water. Also, the world's largest underwater park is located in this country. Investment levels have been growing in recent years, for example, 22 hotels are being prepared, which are expected to be operational in 2023.

#### **4-3-2 Blue Economy in Kuwait**

In the sector of live marine resources, fisheries and aquaculture is the second export industry after oil in Kuwait. After the liberation of Kuwait from the Iraqi occupation in 1991, industrial fishing capacity increased significantly (illegal fishing is also common). In the last decade, the shrimp catch has fluctuated up to about 1740 tons per year. On the other hand, aquaculture production has been at the level of about 300 tons in recent years, which is insignificant, and most of it is Nile tilapia, which is produced by about 80 fish breeding ponds using water for irrigation. In the field of maritime transport and port infrastructure, Kuwait is planning to build a new urban center called Madinat-ul-Harir (Silk City) near the coast of Iraq and hopes that this will further strengthen the regional connection and become universal for this country. The city, with an area of 250 square kilometers, will be served by an international airport, rail and road links, and a large seaport and transportation zone. The first phase of this project started in February 2019 with an estimated cost of 86 billion dollars. Once the port is effectively connected to the rest of Kuwait by road and rail, it could serve as a new entry point, freeing up three existing ports in the south and offering significant potential for redevelopment. In the field of environmental protection, the coastal waters of the Gulf of Kuwait are also widely used for domestic sewage disposal and show a high level of pollution.



### 4-3-3 Blue Economy in Oman

The Sultanate of Oman has introduced aquaculture as one of the key elements for diversifying its national economy. Since 1997, the Ministry of Fisheries has been engaged in various projects for research and development in the field of fish and oyster farming. The main part of this research has been focused on oyster and shrimp breeding, the implementation of an experimental project for the cultivation of finfish in cages and pools, choosing the right place for aquaculture, development of feed for farmed aquatic animals, sea cucumber aquaculture, and tilapia farms. According to official statistics, the volume of fish exports has been steadily increasing over the past ten years - from "62.3 thousand tons" in 2002 to "132.5 thousand tons" in 2014. In 2011, half of the exports were to the United Arab Emirates, where demand is high. In the sector of living marine resources, fisheries, and aquaculture, self-sufficiency in fisheries was 193% in 2017, so it is seriously considered an industry that can strongly contribute to the export sector. More than half (56%) of Oman's large marine fishes and 68% of Oman's important benthic species have been overexploited. Currently, there are two commercial aquaculture projects in Oman: A white Indian shrimp (*Penaeus indicus*) cultivation project and a Fish culture in cages (*Sparus aurata*) (Food and Agriculture Organization of the United Nations, 2022). In the marine tourism sector, which has become the most important component of the growing tourism industry in Oman, due to its various types the demand for use has been increasingly expanded. Its long coastline with clean and unpolluted water has many corals, flora, and fauna. This country has several species of turtles and dolphins and various species of whales along with 460 different species of birds. All these species of wildlife have made marine tourism very attractive. Oman is one of the most important tourist destinations due to its geographical features and special marine nature. Many tourist companies specialize in cruises and plan different types of trips including fishing trips, island tours, dolphin watching, and sunset trips. Oman considers tourism as its main source of income and it plans to develop its beaches along the Arabian Sea and develop infrastructure and sports activities in inland waters. In terms of maritime transport and port infrastructure, Oman's strategic location has made it an important junction in maritime trade routes, therefore it hosts several industries related to the sea and has attracted many investors in recent years (Kouvelis, 2021: 48).

### 4-3-4 Blue Economy in Qatar

Aquaculture in Qatar has been increasing in recent years because fish is an important source of food in Qatar, so it significantly pursues the issue of food security. The second national development strategy of Qatar shows that the catch has increased by 25% from "12995 tons" in 2012 to "16213 tons" in 2014. Therefore, Qatar has taken measures to increase fisheries stocks and improve their management, implement effective laws and provide opportunities for local aquaculture to meet the needs of its population. Since 1988, significant efforts have been made to develop this sector. There are a few fish ponds in the private sector that use extensive and semi-intensive culture systems. The Ministry of Fisheries is planning new pilot projects for the

growth of aquaculture industries as a profitable investment. Coastal tourism has been identified by the leader of Qatar as one of the five priority sectors to diversify Qatar's economy and increase the participation of the private sector. Qatar hopes the development of maritime tourism will help boost "total tourist numbers" as the country tries to offset a drop in tourist numbers that it has suffered since 2017 due to sanctions imposed by four Arab countries. It is estimated that after the completion of all the development projects of the maritime tourism sector, this sector will attract more than 500,000 visitors to Qatar and generate 78.2 million Euros in annual revenue by 2026. In the maritime transport and port infrastructure sector, Hamad Port whose current capacity is less than two million containers is supposed to transport six million containers annually through its three container terminals after the completion of the operation in 2020. The port will also have a livestock terminal, a multipurpose terminal, a marine logistics base, a coast guard center, and a port marine unit.

#### **4-3-5 Blue Economy in Saudi Arabia**

In comparison, the share of the fishing industry compared to the share of the oil industry in the economy of Saudi Arabia is very small. The goal of Saudi Arabia is to achieve safe and sufficient strategic food reserves to overcome possible crises in the future. Improving the fishing and aquaculture sector will help the food security of the Saudi Arabian population because the demand for seafood such as various species of shrimp and oysters is continuously increasing in this country due to the trend towards protein-rich diets. While the citizens of this country own traditional and industrial ships, the activity of this sector relies heavily on migrant workers who are often Bangladeshi or Indian. Yet, the aquaculture sector in this country is developing and expanding rapidly. This country has prioritized aquaculture production and in the medium term, the target production rate of this sector has been considered to be 48,000 tons. The main product of Saudi Arabia's aquaculture industry is shrimp, and most of the farmed shrimps produced in Saudi Arabia are exported abroad, while most of the farmed fish products are consumed inside the country (Kouvelis, 2021: 53). The aquaculture sector of this country, due to its high safety standards, the ability to continuously monitor production, and access to modern technology, has turned this country into a regional producer and exporter of seafood to the whole world. Therefore, aquaculture has become an essential pillar in the new economy of Saudi Arabia to help increase the gross domestic product, create jobs for skilled labor, and help to effectively solve the issue of food security. Despite the huge potential that exists in Saudi Arabia for marine tourism, this industry has not yet been seriously developed in this country (Saudi Gazette report, 2016). The Red Sea Project, belonging to the Kingdom's General Investment Fund, is described as the most ambitious and exciting hospitality project in the world. "Amaala" is an ultra-luxury tourist destination that has been developed along the coast of the Red Sea in the north-west of Saudi Arabia and was inspired by the Red Sea project. The first phase of the development of this center will be completed by the middle of 2024, which includes more than 1300 rooms in eight resorts. After the completion of the project in 2027,

this complex will include more than 3,000 rooms located in 25 hotels, approximately 900 luxury residential villas, and apartments, and next to them high-end and expensive retail establishments, fine dining, and entertainment facilities. Also, the energy supply of this complex will be 100% from renewable energies, with zero connection to the national grid, and after the full launch, the landfill operation will be carried out using the zero-carbon method. (Amaala, 2022). Simply put, net zero means reducing greenhouse gas emissions as close to zero as possible, meaning that the remaining greenhouse gas emissions from the atmosphere are reabsorbed by oceans and forests (United Nations, 2022). The maritime sector of Saudi Arabia is trying to turn this country into a regional logistics center and a pioneer in the transportation sector, and its goal is to place Saudi Arabia in 25th place globally in the logistics performance index. Considering the geographical location of Saudi Arabia, this country is considered a key player in this field. The project of Malek-Abdullah Port has seen an investment worth more than 10.7 billion dollars and will help to increase Saudi Arabia's exports to more than 160 billion dollars by 2030. This port is the first port in the region that is fully owned, developed, and managed by the private sector and it is classified as the fastest-growing container port. In less than 4 years after its launch, it has emerged as one of the largest ports in the world. One of the biggest projects recently carried out in this sector is the Malek-Salman International Maritime Industries and Services Complex, a joint venture product of Aramco, Saudi Arabian National Shipping Company (Bahri), Hyundai Heavy Industries, and Lamprel. This new joint venture will localize essential Saudi Aramco supply chain links related to drilling and marine transportation activities (Aramco, 2017). According to Aramco, the entire project is designed to contribute to the Kingdom's GDP of about \$17 billion, increase import substitution for maritime products and services by about 45 billion rupees, and create more than 80,000 direct and indirect jobs by 2030 (Hand, 2019). This country is now advancing stronger than ever as an oceanic country focusing on the Red Sea and the Persian Gulf.

#### **4-3-6 Blue Economy in the United Arab Emirates**

The growth of the United Arab Emirates in recent years has been due to the strategic plans of its ambitious leaders. These leaders have revolutionized the field of national economy based on digital and technical models, which has helped to create real opportunities for foreign direct investments, opportunities, and branding of this wonderful country. This port would provide cost-effective transportation and become a new "regional transportation" center. The strategy of the leaders has been implemented through the creation of a digital economy for the fourth industrial revolution in the United Arab Emirates to increase economic security. It also aims to place the United Arab Emirates as a "global model" in adopting advanced technologies to serve society and achieve happiness and sustainability. In the documents of this country, during the discussion of food and water security, under the title of "Future Security" it is stated that: The United Arab Emirates intends to use bioengineering, advanced science, and technology, as well as renewable energy, to create a water ecosystem. and create sustainable food (Quest, 2022). A

sustainable blue economy can provide a prosperous and flexible future for the UAE by protecting precious natural resources and creating new opportunities for innovation, economic growth, and human well-being (Kouvelis, 2021: 59). In the aquaculture sector, the United Arab Emirates launched what it calls the "world's largest fish farm" to produce Siberian caviar and sturgeon products (Grydeland, 2018). The coastal tourism sector has been one of the main sectors of this country for a long time. Activities based on diving are among the most popular activities in this sector. The UAE prioritizes all aspects of the marine sector, especially marine tourism, which plays a greater role in the development of the local marine cluster, driving economic growth, as well as promoting tourism and economic diversification. Abu Dhabi has emerged as the main destination for marine tourism. At the end of last year, Sarbeniyas Island in the western region was opened to cruise ships and became the only coastal station in the region (Kouvelis, 2021: 60). Many diverse projects are being carried out in this country in the field of marine leisure activities. Also, the increasing number of shipping lines that dock at the ports of the United Arab Emirates indicates the successful performance of the maritime sector in promoting this country as an important global maritime player (Koumelis, 2017). For the first time, Canada and the United Arab Emirates supported the "Green Fuel in the Maritime Sector" project. This country has also announced the implementation of the zero-carbon initiative until 2050, which aims to achieve carbon emissions close to zero (International Chamber of Shipping, 2022). It is worth noting that the beaches of the United Arab Emirates are currently the only beaches in the Persian Gulf Cooperation Council region that have the "Blue Beaches" certificate, which means that these beaches are environmentally sustainable (Kouvelis, 2021: 61).

## **5-Discussion**

### **5.1 Blue Economy and Maritime Security in the Indian Ocean: PGCC**

The ocean is a resource that directly or indirectly affects any country (Burkett, 2022: 23). In recent decades, water economic activities such as tourism, aquaculture, biotechnology, advanced exploration and development of oil and gas, etc. have emerged and a wide variety of "service industries" have been created to support these activities. Economic activities related to the ocean contribute significantly to the economy of countries (Ribeiro, 2022: 15). While competition provides basic opportunities, it also creates challenges that arise from the increasing use of ocean space by countries. Among all aspects of Persian Gulf Cooperation Council foreign relations, what is related to the "Indian Ocean" may be the most vital for the future of the PGCC countries in the next 10 years. The blue economy in the PGCC region has not developed much except in some notable cases (Newsletter, 2021: 2). Maximizing the environmental, economic, and social benefits provided by the ocean is not a problem that can be achieved by any country alone (Burkett, 2022: 23). In this regard, it is necessary to prepare mechanisms beyond bilateral cooperation to lead this competition peacefully (Herz, 2022: 21). At an early stage (in the 1970s and 1980s), considerable research was done on the relationship

between the Persian Gulf States and the Indian Ocean in terms of the Soviet threat to the sea lanes that carried Persian Gulf oil to the industrialized West. However, since the end of the Cold War, such research has lost its relevance. In practice, the Indian Ocean region has become important for the global economy as well as for major and regional powers (Niblock et al., 2009: 2). Today, similar projects are carried out in other oceans, such as "Atlas Pole to Pole Observation Systems" (APPOSS), which is a long-term landmark project in cooperation with the countries of the region (Mora, 2022: 33). Currently, it is possible to define effective projects for the Indian Ocean by setting similar projects as a model to promote the cooperation of countries. At the time examining the relationship between the PGCC countries and the Indian Ocean, to achieve a comprehensive approach, one should use the comprehensive advantage of the science of political geography, the priority of realizing the interests of the first circle countries over the realization of the interests of the second circle countries should always be considered to prevent the spread of foreign interventions. In the first circle (coastal countries), the roles, interests, and strategies of the governments of East Africa, South, and Southeast Asia, and Australia should all be considered in the second circle, the main user countries such as China, Japan, South Korea, the United States, and the European Union countries are considered. The PGCC countries have access to the Indian Ocean through the Gulf of Oman, the Gulf of Suez, the Gulf of Aqaba, the Strait of Hormuz, the Red Sea, and the Arabian Sea (Kouvelis, 2021: 9). Most of the trade of the Persian Gulf Cooperation Council, instead of being on the edge of the ocean towards the Red Sea and the Suez Canal, is now transferred through the Indian Ocean (to the east and south). Considering the level of economic participation and interdependence of countries, major political and strategic issues will inevitably arise (Niblock et al., 2009: 3-4).

**Table (2): Maritime Profile of PGCC Countries-2022**

Source: (UNCTAD, 29 September 2023).

Country	Merchandise Trade (Millions of US\$)	Transport Services Trade (Millions of US\$)	Coast/Area Ratio (m/km <sup>2</sup> )	Fleet - National Flag (ship)	Fleet – Ownership (Dead Weight Tons (thousand))	Container Port Throughput (Twenty-foot equivalent unit (TMU))	Transport services exports growth rate in 2022
Bahrain	45,731	20,153	324.8	193	97	404,904	not announced
Kuwait	133,626	38,153	42.4	170	5,252	not announced	+ 65.2/5
Oman	105,160	13,394	9.1	56	9,332	5,226,000	not announced
Qatar	164,443	71,728	79.1	124	7,010	1,543,600	+ 70.6%
Saudi Arabia	601,061	114,693	3.5	416	17,414	9,875,946	+ 77.4%
United Arab Emirates	953,307	251,585	40.4	637	28,721	19,182	+ 77.3%

## 5-2 Explanation of Challenges and Opportunities in the Indian Ocean

The peace and looking for ways to keep it have been one of the most essential obsessions of the human beings throughout the history (Karimi et al, 2015). Countries should create blue oceans in order to reach new opportunities for growth and profitability (Shabandarzadeh and Kabgani, 2016: 117).

1. The role of non-state actors and asymmetric threats in the region: It is clear that in the current situation of the Indian Ocean, there have long been concerns about piracy, especially on the coast of Somalia. Therefore, currently, some countries of the Persian Gulf Cooperation Council are involved in anti-piracy operations with the cooperation of foreign powers. Considering the expansion of violent extremist organizations in recent years the possibility of new threats from such organizations in the Indian Ocean region is probable. Therefore, it is necessary to evaluate the strategies of the PGCC countries to cooperate with other countries/users of the Indian Ocean to deal with these threats.

2. Environmental issues: The Indian Ocean is currently exposed to environmental threats. Some of these threats are due to climate changes and some are due to the environmental destruction caused by the intensification of industrialization and heavy use of sea lines. All of these affect the Persian Gulf. Solving these problems requires the formulation of strategies and measures in the form of cooperation between all the coastal countries of the Indian Ocean and even other users at different levels: national, regional, and even global.

3. Interactions between Persian Gulf Cooperation Council countries: Currently, the three countries of the PGCC, including Oman, the United Arab Emirates, and Saudi Arabia, have a constant maritime conflict in the Indian Ocean. But it is better that the countries of the Gulf Cooperation Council avoid any disputes and take steps towards interaction and cooperation.

4. Population movement: A significant part of the world's population movements, especially the movement of migrant labor, takes place around the Indian Ocean. Its impact on the relations between the countries of the Indian Ocean basin and the internal issues of those countries (especially when it leads to the instability of a particular country) is evident.

5. New communication infrastructures: Both India and China are playing an active role in the development of roads, railways, and oil pipelines that connect the Indian Ocean region's "interiors" to coastal cities and ports so that goods can move from the interior to their respective coastlines on the other side of the ocean.

6. Food security and exploitation of marine resources in the Indian Ocean: As discussed in the previous section for each country, PGCC countries have already invested in agricultural projects around the Indian Ocean to improve their food security and some (especially Oman) have fishing fleets.

7. The need for continuous evaluation of existing gaps: This region needs to create dialogue opportunities between the coastal countries so that it can help to identify and organize the existing gaps based on the existing needs and common interests of all countries. For example, seminars and conferences can be held to equip the minds of relevant officials, elites, officials,



and academics. Food security and exploitation of marine resources in the Indian Ocean: As discussed in the previous section for each country, PGCC countries have already invested in agricultural projects around the Indian Ocean to improve food security and Some (especially Oman) have fishing fleets.

## 6- Conclusion

To summarize, the PGCC Countries heavily rely on the Indian Ocean for their economic activities, primarily based on sectors such as oil and gas, trade, finance, and tourism. They have invested in developing port infrastructure and trade relationships with Indian Ocean countries to enhance their access to this vital maritime route.

1. **Economy of PGCC Countries:** The PGCC Countries have robust economies primarily driven by oil and gas reserves. They are among the world's major oil producers and exporters, contributing significantly to global energy markets. In recent years, they have also made efforts to diversify their economies by investing in various sectors such as finance, tourism, real estate, and infrastructure development.
2. **Trade and Shipping in the Indian Ocean:** The Indian Ocean is a vital maritime route connecting the PGCC countries with major trading partners in Asia, Europe, and Africa. The PGCC countries rely heavily on the Indian Ocean for trade, including the import and export of goods. The ports in the region play a crucial role in facilitating international trade, serving as important trans-shipment hubs for cargos within the PGCC countries.
3. **Investments and Geostrategic Interests:** The PGCC Countries have made significant investments in port infrastructure and logistics facilities in and around the Indian Ocean region. These investments aim to enhance connectivity, promote trade, and strengthen their economic presence globally. Additionally, some PGCC countries have established military bases or naval facilities in the vicinity of the Indian Ocean to safeguard their interests and ensure maritime security.

The PGCC Countries have undertaken various initiatives to diversify their economies beyond the oil and gas sector. Some of the key strategies and sectors they have focused on include:

1. **Tourism:** The PGCC Countries have invested significantly in developing their tourism industry. They have built luxurious resorts, theme parks, and cultural attractions to attract international visitors. Destinations such as Dubai, Abu Dhabi, and Doha have become popular tourist destinations in the region.
2. **Financial Services:** The PGCC Countries have aimed to become financial centers, attracting global financial institutions and fostering a robust banking sector. They have established financial free zones and introduced regulatory reforms to encourage foreign investment and facilitate financial activities.
3. **Real Estate and Infrastructure:** Significant investments have been made in real estate projects and infrastructure development. This includes the construction of commercial

buildings, residential areas, airports, seaports, and transportation networks. The objective is to create economic hubs and attract international businesses and investors.

4. **Manufacturing and Industry:** The PGCC Countries have emphasized the growth of manufacturing and industrial sectors, aiming to reduce their reliance on imports. They have established industrial cities and free zones to promote local production in areas such as automotive, petrochemicals, metals, and construction materials.
5. **Information Technology and Innovation:** There is a growing focus on digital transformation and innovation in the PGCC Countries. They have launched initiatives to develop smart cities, encourage entrepreneurship, and support technology startups. Additionally, investments have been made in research and development to promote innovation and knowledge-based industries.

These efforts aiming to diversify the economies of the PGCC Countries form part of long-term plans, such as Saudi Arabia's Vision 2030 and the UAE's Vision 2021, which outline specific goals and strategies for economic diversification and sustainable development.

As for the percentage of each country's economic use of the Indian Ocean, obtaining precise data on the economic utilization of the ocean by each PGCC Country individually is challenging. The Indian Ocean hosts various economic activities, including trade, fishing, offshore oil exploration, and transportation. It would require a comprehensive analysis of multiple factors and data sources to determine the exact percentage of economic use for each country. The specific economic contribution of the Indian Ocean to these countries varies based on their respective economic priorities and industries.

**Table (3): GCC Countries Economy and Utilization of the Indian Ocean for Various Economic Activities.**

PGCC Countries	Economy	Use of Indian Ocean
Bahrain	Diverse economy (banking, finance, tourism)	Relies on the Indian Ocean for import and export activities, facilitated by strategic ports.
Kuwait	Oil industry	Relies on neighboring countries' ports (e.g., UAE) for maritime trade through the Indian Ocean.
Oman	Diverse economy	Establishing strategic ports (e.g., Port Sultan Qaboos, Port of Salalah) to facilitate trade connections with Indian Ocean countries.
Qatar	Natural gas exports	Investments in port infrastructure (e.g., Hamad Port) to enhance access to the Indian Ocean and promote regional trade.
Saudi Arabia	Oil and gas industry, petroleum product exports	Relies on the Indian Ocean for maritime trade and exporting petroleum products.
UAE	Diverse economy (finance, real estate, tourism, logistics)	Major shipping hubs such as Jebel Ali and Khalifa Port facilitate trade connections with Indian Ocean countries.

1. **Saudi Arabia:** As the largest country in the PGCC, Saudi Arabia has a significant impact on the Indian Ocean's economy. It relies on the Indian Ocean for maritime trade, particularly for exporting petroleum products. The country's oil and gas industry play a vital role in its economy and contributes largely to its use of the Indian Ocean.
2. **United Arab Emirates (UAE):** The UAE is another prominent PGCC member mainly reliant on the Indian Ocean for economic activities. Ports such as Jebel Ali in Dubai and Khalifa Port in Abu Dhabi serve as major shipping hubs, facilitating trade connections with countries across the Indian Ocean. The UAE's economy is diversified, with sectors such as finance, real estate, tourism, and logistics, driving its trade through the Indian Ocean.
3. **Qatar:** Although Qatar is a relatively smaller country within the PGCC, it is economically significant. Its economy mainly relies on natural gas exports. The Qatari government has invested in developing port infrastructure, such as the Hamad Port, to enhance its access to the Indian Ocean and promote regional trade.
4. **Kuwait:** Kuwait is primarily known for its oil industry, which heavily influences its economy. While it does not have direct access to the Indian Ocean, it relies on the ports of the neighboring countries, such as the UAE, for its maritime trade.
5. **Bahrain:** being an island nation in the Persian Gulf, it has significant ties to the Indian Ocean. The country's economy is diversifying beyond oil and gas, focusing on sectors like banking, finance, and tourism. Maritime trade through the Indian Ocean is crucial for Bahrain's import and export activities.
6. **Oman:** As a coastal nation in the Arabian Peninsula, Oman has a long history of maritime trade. It has established several strategic ports along the Indian Ocean, such as the Port Sultan Qaboos in Muscat and the Port of Salalah. These ports facilitate trade connections between Oman and various Indian Ocean countries, contributing to the country's economy.

As mentioned earlier, obtaining precise and up-to-date data on the use of the Indian Ocean by PGCC countries and its direct impact on their economies IS challenging. However, based on general knowledge and considering the geographic and economic factors, a hypothetical ranking of PGCC countries in terms of their overall utilization of the Indian Ocean, is provided:

**Table (4): Ranking of PGCC Countries in Terms of Their Overall Utilization of the Indian Ocean.**

Rank	Country	Utilization of Indian Ocean
1	Saudi Arabia	High
2	United Arab Emirates (UAE)	High
3	Qatar	High
4	Oman	Moderate
5	Kuwait	Moderate
6	Bahrain	Low

The categorization of use as "Moderate" or "High" is a general assessment and may vary depending on specific criteria and data sources. The PGCC Countries are strategically located along the Arabian Gulf, and therefore have a significant stake in the utilization of the Indian

Ocean for various purposes such as trade, shipping, and resource exploration. This ranking is not based on precise data or specific studies, and it should be considered as a general estimation based on factors like geographic location, economic activities, and maritime influence. The actual ranking may vary depending on various criteria and the specific data available. It requires more accurate and up-to-date information, and it would be advisable to refer to official reports, research papers, or studies conducted by relevant authorities or organizations that focus on maritime activities and the economic utilization of the Indian Ocean by PGCC Countries.

The level of development of various sectors and activities in the field of water economy is significantly different among the Countries of the Persian Gulf Cooperation Council. The analysis of the activity in different sectors of the water economy for each country is presented in this research. In the field of living resources, food security is a basic priority for all Persian Gulf Cooperation Council Countries, so providing high-quality protein from fishing and aquaculture is a targeted activity in the aquatic economy. But prioritization for these two sectors varies, and in addition, in some industries and value chains, some countries are more developed than the others. In Bahrain, although there is no specific reference to the water economy, coastal tourism is in coordination with the protection of coral reef ecosystems and aquaculture has been introduced as the most prominent sector for the development of the water economy. Kuwait does not have significant success in terms of the blue economy, however, the fishing sector in Kuwait remains an important activity and is the second largest export industry after oil. In Oman, the fisheries sector as well as the further development of coastal tourism are part of its 2040 Vision 2040 implementation plan. Equally important is the role of aquaculture as a source of food security and economic diversification. Qatar's perspective is focused on sustainable development, yet, the sectors that develop within the framework of the perspective are directly related to the blue economy. These sectors include environmental protection and marine ecosystems, coastal and marine tourism, aquaculture, and ports. In the vision document of the United Arab Emirates, the role of the sea in the country is recognized as a basis for various economic activities the most important of which are shipping and ports, aquaculture, coastal tourism, and the need to protect the marine environment and sustainable management of the coastal area. For Saudi Arabia, the vision of 2030 has introduced the sea and coastline as the fundamental components of the kingdom's heritage, and several marine industries are supposed to be developed under this vision. Such as sustainable desalination, coastal tourism and marine recreation and sports, aquaculture and fisheries, shipping, and to some extent marine energy, although there is still no specific activity for the latter. At the same time, the strategic geographical location of this country has provided an ideal opportunity to become a major seafood exporter and great target markets such as Persian Gulf Cooperation Council Countries and even beyond that, it has provided for this country in the Asian and European markets through the Indian Ocean. Finally, despite the existence of huge resources in the bed of the Indian Ocean, the Gulf Council countries play a relatively small role in exploiting its marine resources and currently, have not been able to interact and converge well in this huge spider

web and growing network of the Ocean. Although achieving a unified vision for the security of the Indian Ocean is not an easy task, the Persian Gulf Cooperation Council is in a good position to achieve this goal, which is very important to keep the Indian Ocean away from foreign destabilizing interventions, this way, the Persian Gulf Cooperation Council should decide whether it wants to interact more with "others" to achieve convergence. If the Persian Gulf Cooperation Council countries seek to achieve development and maximum use of the resources and opportunities, they should put special emphasis on actions that lead to convergence. It is also necessary to mention that to realize this convergence, interactions for cooperation should take place in the first step to prevent foreign interference between the Persian Gulf Cooperation Council countries themselves and in the second step between them and other deals of the Indian Ocean.

### Funding Acknowledgement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### References:

- [1] Ahmadihadani, S and R, Ghorbaninezhad. (2015). Research Based Scientific Theories in Political geography and Geopolitics, Volume 1, The results of researches which have been done in political geography department at Tarbiat Modares University. Mashhad: Papelli Publications, 344 pages. [In Persian]
- [2] Ahmadipoor, Z., and N, Ahroon. (2023). The water economy of the (Persian) Gulf Cooperation Council in the Indian Ocean. National Conference on Maritime Civilization. Konarak. Iran. <http://www.maritimecivilization.ir/fa/>. [In Persian]
- [3] Amaala. (2022). Raising the bar for luxury travel. <https://www.amaala.com/en/about-us>.
- [4] Andrade, L. (2022). The Azores and Transatlantic Relations. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 42-44 pp.
- [5] Aramco. (2017). King Salman complex for maritime industries. <https://www.aramco.com/en/news-media/news/2017/king-salman-complex-for-maritime-industries>.
- [6] Bueger, C and T Liebetrau. (2022). Maritime Security in the Atlantic: The Vulnerabilities of Subsea Data Infrastructure. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 34-41 pp.
- [7] Burkett, M. (2022). The United States and the Atlantic. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 23-25 pp.
- [8] Callen, T., Cherif, R., Hasanov, F., Hegazy, A., and P, Khandelwal. (2014). Economic Diversification in the GCC: Past, Present, and Future. *International Monetary Fund*. Washington, DC, United States, 64 Pages.
- [9] Dizaji. F. S., Hosseininasab. E., Bergeijk. V. A.G. P. and A. Assari. (2015). Exports, Government Size and Economic growth: Evidence from Iran as a Developing Oil- based Economy. *The International Journal of Humanities*. Volume:21 Issue: 3. 45-86 pp. <http://www.magiran.com/p1422124>.
- [10] European Commission. (2022). Blue Economy. [https://oceans-and-fisheries.ec.europa.eu/ocean\\_en](https://oceans-and-fisheries.ec.europa.eu/ocean_en).
- [11] Food and Agriculture Organization of the United Nations. (2022). Fisheries and Aquaculture. <https://www.fao.org/fishery/en/home>.
- [12] Grydeland, O. (2018). Fish farms being built in the desert. <https://www.fishfarmingexpert.com/archive/fish-farms-being-built-in-the-desert/1264330>.

- [13] Hand, M. (2019). Saudi Arabia undergoing major expansion in maritime. <https://www.seatrade-maritime.com/middle-east-africa/saudi-arabia-undergoing-major-expansion-maritime>.
- [14] Herz, M., (2022). Systemic Competition and Cooperation in the South Atlantic. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 21-22 pp.
- [15] Hosseinpourpouyan, R. (2013). Expounding Geographical and Geopolitical Factors of Relations in Geopolitical Regions. *Quarterly of Geopolitics*. 9(30), pp. 161-203. [In Persian]. [http://journal.iag.ir/?\\_action=article&au=373116&\\_au=%D8%B1%D8%B6%D8%A7++%D8%AD%D8%B3%DB%8C%D9%86+%D9%BE%D9%88%D8%B1+%D9%BE%D9%88%DB%8C%D8%A7%D9%86](http://journal.iag.ir/?_action=article&au=373116&_au=%D8%B1%D8%B6%D8%A7++%D8%AD%D8%B3%DB%8C%D9%86+%D9%BE%D9%88%D8%B1+%D9%BE%D9%88%DB%8C%D8%A7%D9%86). [In Persian]
- [16] International Chamber of Shipping. (2022). Canada and United Arab Emirates first to back maritime sector's green fuel initiative. <https://www.ics-shipping.org/press-release/canada-and-united-arab-emirates-first-to-back-maritime-sectors-green-fuel-initiative/>.
- [17] Karimi, M., Hafeznia, M. H., Ahmadipour, Z. and A. B. Murthy. (2015). ASEAN and Regional Peace in the South East Asia. *The International Journal of Humanities*. Volume:23 Issue: 2. 75-93 pp. <http://www.magiran.com/p1705734>.
- [18] Khodamoradi, S. M., Momeni, F., and A. Naseri. (2015). Functionalist Economics: A Deweyan Approach. *The International Journal of Humanities*. Volume:23 Issue: 3. 53-97 pp. <http://www.magiran.com/p1636999>.
- [19] Koumelis, T. (2017). Growth of maritime tourism gives major boost to UAE's global competitiveness. <https://www.traveldailynews.com/post/growth-of-maritime-tourism-gives-major-boost-to-uaes-global-competitiveness>.
- [20] Kouvelis, S. (2021). Assessment of the challenges and opportunities for the development of Blue Economy projects in GCC member countries. *GFA Consulting Group GmbH*. Hamburg, Germany, 90 Pages.
- [21] Magiran. <https://www.magiran.com/>.
- [22] MAPPR. (2023). Map of the PGCC Countries and Indian Ocean. <https://www.mappr.co/thematic-maps/persian-gulf-countries-council/>
- [23] Mora, B. M. (2022). Science Diplomacy and the Atlantic. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 27-33 pp.
- [24] Morgan, O. P., Huang, C. M., Voyer, M., Benzaken, D. and A. Watanabe. (2022). Blue Economy and Blue Finance Toward Sustainable Development and Ocean Governance. *Asian Development Bank Institute*. Tokyo, Japan, 380 Pages.
- [25] Newsletter. (2021). The latest news from EU-GCC project. <https://www.eeas.europa.eu/sites/default/files/documents/Newsletter%2024.pdf>.
- [26] Niblock, T., Ahmad, T., and D, Sun. (2009). The GCC and the Indian Ocean: Economic Opportunities and Political Challenges. *Gulf Research Center Cambridge*. Cambridge, United Kingdom, 1-8 pp.
- [27] Quest, K. N. (2022). Understanding the UAE's Fourth Industrial Revolution (4IR) Strategy. <https://thedashafrica.com/2022/02/02/inside-the-uaes-fourth-industrial-revolution-4ir-strategy/>.
- [28] Ribeiro, S., (2022). Europe and the Blue Economy in the Atlantic. *International Seminar of Shifts in World Geopolitics: Cooperation and Competition in the Atlantic*, Ponta Delgada, Azores, Portugal, 14-20 pp.
- [29] Saudi Gazette report. (2016). Ocean of opportunities awaits investors in marine tourism. <https://saudigazette.com.sa/article/164034>.
- [30] Shabandarzadeh, H. and M. H. Kabgani. (2016). Quantitative analysis of growth opportunities and profitability based on Blue Ocean strategy. *Journal of Business Management*. Tehran, Iran. 117-136 pp. [In Persian]. <https://www.magiran.com/paper/1542302/quantitative-analysis-of-growth-opportunities-and-profitability-based-on-blue-ocean-strategy?lang=en>.
- [31] UNCTAD. (2023). Maritime profile. <https://unctadstat.unctad.org/CountryProfile/MaritimeProfile/en-GB/004/index.html>.



- [32] UNESCO. (2022). Blue Economy. <https://ioc.unesco.org/topics/blue-economy>.
- [33] United Nations<sup>a</sup>. (2022). Blue Economy Definitions. [https://www.un.org/regularprocess/sites/www.un.org.regularprocess/files/rok\\_part\\_2.pdf](https://www.un.org/regularprocess/sites/www.un.org.regularprocess/files/rok_part_2.pdf).
- [34] United Nations<sup>b</sup>. (2022). For a livable climate: Net-zero commitments must be backed by credible action. [https://www.un.org/en/climatechange/net-zero-coalition?gclid=Cj0KCQiA99ybBhD9ARIsALvZavWiKMGuV9KkhEujmxRC\\_LjimpNoKlqYR0DYnFQfSKKwuD6fjla\\_uRzIaAitNEALw\\_wcB](https://www.un.org/en/climatechange/net-zero-coalition?gclid=Cj0KCQiA99ybBhD9ARIsALvZavWiKMGuV9KkhEujmxRC_LjimpNoKlqYR0DYnFQfSKKwuD6fjla_uRzIaAitNEALw_wcB).
- [35] World Bank. (2017). The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. *World Bank*, Washington DC, United States, 50 Pages.
- [36] World Bank. (2023). World GDP Data-2022. [https://databankfiles.worldbank.org/public/ddpext\\_download/GDP.pdf](https://databankfiles.worldbank.org/public/ddpext_download/GDP.pdf).
- [37] World Bank. (2023). World Population Data-2022. [https://databankfiles.worldbank.org/public/ddpext\\_download/POP.pdf](https://databankfiles.worldbank.org/public/ddpext_download/POP.pdf).



## اقیانوس هند و اقتصاد آبی شورای همکاری خلیج فارس

زهرا احمدی پور\*<sup>1</sup> ID، نیلوفر اهرن<sup>2</sup> ID

### چکیده

در سال‌های اخیر، نظام بین‌الملل شاهد پویایی رقابت بین قدرت‌های بزرگ بر سر مناطق کلیدی منطقه‌ای بوده است. در این زمینه اقیانوس هند به عنوان یک منطقه استراتژیک و حیاتی برای قدرت‌های داخل و خارج ارایه می‌شود و هرگونه تحول در آن امنیت منطقه را تحت تاثیر قرار می‌دهد.

با توجه به لزوم برقراری امنیت در شرایط کنونی که رقابت فزاینده در اقیانوس هند حاکم است، تحلیل و بررسی تحولات اقتصادی این کشورها از اهمیت بالایی برخوردار است. هدف این پژوهش که با روش توصیفی - تحلیلی و با استفاده از منابع کتابخانه‌ای انجام شده است، توصیف مفهوم اقتصاد آبی و ارزیابی آن در بین کشورهای عضو شورای همکاری خلیج فارس شامل بحرین، کویت، عمان، قطر، عربستان سعودی و امارات متحده عربی و همینطور بررسی چالش‌ها و فرصت‌هایی است که آن‌ها در اقیانوس هند با آن روبرو هستند.

نتایج بررسی اقتصاد آبی کشورهای شورای همکاری خلیج فارس بیانگر تفاوت سطح این کشورها با یکدیگر است، بنابراین اگر این کشورها به دنبال دستیابی به توسعه و استفاده حداکثری از منابع و فرصت‌هایی هستند که اقیانوس هند در اختیار دارد و با قصد غلبه بر چالش‌های حاکم بر این اقیانوس، باید بر اقداماتی که منجر به همگرایی می‌شود تاکید ویژه داشته باشند.

**کلیدواژگان:** اقتصاد آبی، اقیانوس هند، همگرایی، شورای همکاری خلیج فارس

۱. استاد گروه جغرافیای سیاسی،  
دانشگاه تربیت مدرس، تهران،  
ایران.

\* نویسنده مسئول

Email:  
Ahmadyz@modares.ac.ir

۲. دانشجوی دکتری گروه  
جغرافیای سیاسی، دانشگاه  
تربیت مدرس، تهران، ایران.

Email:  
Niloo.ahroon@gmail.com