



CONTRIBUTION OF BLUE ECONOMY IN GLOBAL ECONOMY

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Abstract

Blue economy means the economy of ocean. All kinds of oceanic activities are recognized as the central part of Blue Economy. There are approx. 26 economic activities related to its domain. The main purpose of this economy is the accurate use of oceanic resources that includes all economic functions related to seas, ports, coastal zone and other ocean-based exercises in order to completely reduce environmental hazard and improve human wealth. The excellent growth and advancement of aquaculture is termed as the blue revolution, this is a method for expanding international fish output in order to assist people to consume healthier and have extra food security. The researched literature in this write-up is a quantitative document analysis related to the significance of blue economy and its share in the global economic activities. The below discussed material finds that this segment of economy has a massive share in the global economic activities and also helps chiefly in providing the employment opportunities to a larger population of the world.



Keywords: Blue Economy, Global Economy, Economy of Oceans,

Introduction

The idea of blue economy is related towards the ocean resources for economic growth. It plays a very important part in country's GDP. It is basically a concept which revolves around the ocean and of efficiently using the water resources of any country for growth, revenue and development. It refers to promote the resources of oceans which is one of the best way to earn income. Many activities are included there like fisheries, maritime transport, costal tourism and many more. It helps in creating enormous opportunities of employment and wealth. The concept of blue economy is considered a modern concept of increasing country's GDP, or we can say it became vaster and it is also increasing popularly. It covers three economic forms that are: global water crisis, innovative development and development of marine economy, that's what international society believes. (McGlade et. al, 2012)

The Blue Economy has become a current improvement that encourages people to have higher control on our deep sea or water resources. It helps the Common-wealth Blue Charter's thinking, which gives emphasis to the sturdy ties that exist among the sea, climatic changes and person's good welfare, security and health. Oceans have become extremely important in facilitating international trade by interconnecting sellers and purchasers. The land and water interaction has increased therefore its role and importance have risen, legal and regulatory attention is being paid to such linking factors of the water. (Smith-Godfrey, 2016)

It has been estimated by world economist that an asset of 24 trillion to the ocean and currently it is delivering something around 4,500 billion each year in terms of dividend to humanity. As per European Commission "All economic activities which are related to ocean, covers a large collection of interconnected and developing areas. (Pauli 2009) Conservational international adds that "In this there is larger number of GDP increased, blue economic system additionally consists of financial blessings that won't be marketed, consisting of sea side protection, traditional beliefs and carbon storage." (Behnam 2012)

In terms of employment: Nearly 60 million human beings across the global – over 96% of them in growing countries in Asia and Africa – are hired with inside the fishing and aquaculture sectors, in line with the Food and Agricultural Organization (FAO). Fishing, aquaculture, beach and marine tourism appoint over 350 million human beings. The blue economy employs 5 million human beings in Europe, in line with the 2020 European Union report.(Khan et al., 2020)



Consumption: Fish money owed for approximately 15.7% of the worldwide intake of animal protein. Aquaculture contributes 1/2 of that, in line with the FAO. Its proportion is predicted to attain 65percentthrough 2030. It is presently at 25% with inside the EU. Blue economic system sports offer a livelihood for over 820 million human beings across the global

Growth rates: The delivered price or wealth advent from the blue economic system grew through 9.7% a year from 2009 to 2016 with inside the EU, in line with a take a look at posted through European Commission entitled. Aquaculture is developing on the charge of 6.6% annually. (Kathijotes, 2013) This quarter of meals manufacturing from animal re-assets has visible the most powerful increase with inside the global. The common increase of marine biotechnologies (for the pharmaceutical, cosmetics and chemical industries) is set 10% a year.

Value: GDP, the price of ocean-associated property is predicted at extra than USD 2.5 trillion, making the blue financial system the 7th monetary energy with inside the global through GDP, in the back of France and the UK, however in advance of Italy and Brazil. The World Wide Fund for Nature estimates that two-thirds of the ocean's price is based on wholesome situations and that this price is deteriorating hastily due to weather alternate and the manner industries are exploiting the ocean's products. This undermines the ocean's position as a weather regulator and carbon sink, which might be key to helping destiny monetary increase and the health of billions of human beings. (Bennett, 2019)

Maritime transport: Over 90% of the world's traded items journey with the aid of using sea. 75% of the EU's overseas change is distributed with the aid of using sea.

Financial prospects of blue economy

Finance can play a primary function in pushing organizations connected to the blue economy to enhance their practices. Those traders who remember the maintenance of marine assets as an absolute precedence are set to peer funding possibilities in organizations that expand marine and ocean tasks establishing up as recognition of the blue economy system's attraction grows. (Pauli, 2010)

According to conservative estimates, the complete proposition of the world's oceanic economy is approx. \$24 trillion dollars, but human beings only benefits just up to \$500-600 billion. India and Bangladesh are the countries which generate billions of dollars from the sea or water economy each year, whereas the annual revenue of Pakistan's blue



economy is only \$450 million. Pakistan's blue economy has a potential worth of more than \$100 billion. The earth is full of water and the water covers roughly 71 percent of its area. Sea/oceans transport approximately 80% of global trade. Furthermore, blue economy in future can provide a lot of employments and opportunities to build careers. Mutually, both sectors public and private, has great possibility to contribute significantly to the progress and sustainability in national economy. (Askari, 2020)

The tremendous progress and advancement of aquaculture is termed as the blue revolution, this is a strategy for expanding global fish output in order to help people eat healthier and have more food security. Aquaculture that uses blue water (surface and groundwater) creates a considerable contribution to the world's fish output. The aquaculture is linked to environmental issues, including destruction of animals/fishes habitat, seawater pollution, biological consequences, and disease occurrences. Moreover, mangrove loss due to shrimp farming is collecting blue carbon emissions. Aquaculture must expand sustainably while reducing its environmental consequences dramatically in order to meet the demands of a growing global population. (Ahmed, 2019)

Aquaculture is now the quickest developing meals manufacturing gadget globally, with a boom in manufacturing of animal vegetation of approximately nine 9.3%. The Food and Agriculture Organization (FAO) estimated that aquaculture will keep growing at large charges thru 2025, final the maximum hastily growing meals manufacturing gadget in the world. The International Food Policy Research Institute forecasts that the yearly boom in seafood intake might be approximately 1.5 kilograms (kg) per individual in 2020. Meanwhile the worldwide population is awaiting to boom dramatically, which might make the general call for seafood merchandise drastically better than its far now. The growing international presently has a large dominance over fish manufacturing. 72.4% of all seize harvest (with the aid of using mass, which includes handiest animals) and 92.3% of all way of life harvest happens in growing international locations. According to facts derived from the FAO, in the year 2002 seafood exports worth US\$ 56 billion generated extra cash for growing international locations (US\$28.1 billion). (Tacon, 2009)

It is to synthesize the present day principle and exercise of the blue economy idea to control economic hobby connected to the sea, and to offer a framework for the Government of Bangladesh to investigate its potential. With the nonviolent decision of maritime boundary disputes with its pals in 2012 and 2014, the Government has currently described the sea area below its jurisdiction and prioritized its use as a key supply of destiny economic increase. The Government has prioritized using those areas as a key supply of destiny increase. However, some of questions continue to be in embarking on a coverage making plans method to acquire Bangladesh's blue economy aspirations,



consisting of measures of the present day economic makes use of the sea area, the identity of clean objectives for sustainable increase of using this area, and a coverage pathway to get there. Described as an financial frontier, the term “ocean economy” applies together to ocean primarily based totally enterprise sports and the assets, goods, and offerings of marine ecosystems. (Wenhai, 2019)

Australia created the Blue Well-being Initiative, recognizing the potential of water industrial development, or GDP, for the country's socioeconomic development. As a result, several countries utilize the "Blue Economy" as a strategic instrument for encouraging economic growth and employment creation. Construction, shipping, development in the extraction of resources, construction or reforming of ships, medical companies, production of energy from sea waves, luxurious tourism of sea/ocean, fishing and aquaculture are among the marine industrial activity directed at redeveloping the economy. Apart from old-style marine development operations, the marine oriented statistics and research industries has now becoming more and more important in advancing the blue economy. (Kondo, 1991).

For the analysis of eight nations, secondary data from 1995 to 2018 was employed. To calculate the fishing production, generation of overall aquaculture, complete production of fishes, food production and fishing are the contributing factors that are widely used. The inflation rate and trade are employed as controlling elements. The universal minimum squares technique is used which is viable. (Aftab et al., 2020)The blue economy variables were revealed to play a statistically significant effect in SAARC nation's economy progress and contribute to the United Nation's sustainable improvement goal to protect and carefully using the marine and water resources for maintainable development. According to study, the long-run management of water resources necessitates a multi-national partnership. The alliance will aid in the knowledge of sea economy and also its prominent part in assuring financial prosperity in underdeveloped countries around the globe. (Alharthi, 2020)

The most dramatic human alterations to global seascapes is the expansion of marine development. In comparison to land, its global extent is mainly unquantified. To show world's calculation of the scope of current and planned marine development we compiled data from variety of resources, as well as its consequences on the environment. According to calculations, the built structures of global physical footprint was atleast 32,000 kilometer square in 2018 and now it is predicted to reach 39,400 kilometer squares by 2028. In 2018, the part of seascape was being affected around structures was 1.0–3.4 106 km², with electricity and aquaculture infrastructure, cables, and tunnels expected to rise by 50–70 percent by 2028. In 2018, marine building affected 1.5 percent of worldwide Exclusive



Economic Zones (0.7–2.4 percent), which is projected to be 0.02–1.7 percent. (Bugnot, 2020)

Despite the BE's centrality in our society, the knowledge about blue economy's interaction and interconnection with other oceans is very little, we don't have sufficient information about the variety of settings related to blue economy. The ability to achieve its objective blue economy may get blocked due to the lack of awareness regarding the bond among the blue economy and overall environment. A complete data and information should be provided to the people who are engaged in the blue economy. (World Bank, Washington DC, 2017)

Blue economy and regional development

South Asia is no exceptional when it comes to commercial opportunities, as well as the industrialized activity going in and all over the oceans. Aquaculture, mineral mining, fishing, sea shipping, and ocean tour are few of the renowned maritime businesses. We recommend that all undertakings on and around the water, major or small, be in accordance with and follow the Blue Economy Concept. Shipbuilding, shipping, and ship scrapping are three more big economic activity that fit in nicely with the concept. Shipbuilding requires the most of the human contribution and produces no pollution. This eco-friendly and appropriate for a Blue Economy. Measuring in terms of pollution and expense per ton-kilometer or per man-kilometer, shipping is the clear winner among mechanical means of transportation. In a nutshell, the possibilities are endless, water promotes life growth and promotes high lifestyle living. South Asia and even Bangladesh, has the ability to implement the blue economy, but that strong governmental obligations, ample research, and society knowledge and attitude toward reducing reliance are mandatory to accomplish long-run development. (Bari, 2017)

Biotechnology offers tremendous prospects for the production of natural products that could be used in the food and pharmaceutical industries. It is a new and growing industry within the bio economy, which develops and renewable natural resources are being used up from the land and water. Seaweed cultivation, is predicted to offer biomass which aids in the enlargement of the marine bio economy and is seen as an industrial scale for developing a good economy that is not as much of reliant on fossil carbon. (Rotter, 2020)

Many island economies have benefited greatly from tourism, which has prompted various enterprises to provide local revenue. Aquaculture have also helped a lot to the financial growth of specific states without jeopardizing allowance to important resources like limited fishing. Gas extraction is an authenticity in many economies throughout the earth,



and states need to measure the monetary benefits in contrast to the potential detrimental impacting the living sea resources. (Skrzeszewska, 2016)

A big facilitator, shipping has become a prominent part of global trading and it have now become a great contributor in the growth of economic and employment, at sea and land level both, becoming the principal way of delivering customer goods, energy on global scale and unfinished goods. Furthermore, the shipbuilding industry adds considerable value to a number of coastal communities. (McKinley, 2019)

Transportation is critical for moving raw materials for manufacturing and finished goods for consumption. Good transportation set-up facilitates the faster, safer, and less expensive movement of products, which benefits trade. The marine industry is critical to the development of trade, with international shipping handling around 90% of global trade. Large-scale commodities cannot be imported or exported without transportation. China's economy is both the world's largest exporter and the most complex. From all unforeseeable events in 2016. China requires an alternative method of trading with Europe and the Middle East that is safe, quick, and economical. By establishing a transportation infrastructure network, including road and rail, the China-Pakistan Economic Corridor connects Kashgar (Western China) with the Pakistani seaport of Gwadar. (Alam, 2019)

Pakistan is a major marine country in South Asia, which is located in the Indian Ocean geographically, (also known as the Arabian Ocean) and Pakistan is blessed by natural surroundings in the southern parts of Balochistan as well as Sindh provinces with around 1,050 kilometers of coastline. 240,000 square kilometers of trade and industry zones that can be great opportunity in aspects of the upcoming economy. Better usage of marine resources, such as fishing and shipping, as well as the advancement of coast areas for marine tour and for other economic and financial accomplishments on the surface. (Tagar, 2021)

In 2010, according to the report of OECD's, \$ 1.5 trillion is the calculated economic value of ocean outputs. (Ocean Economy Database, 2016). Blue Economy on the other hand also shares approximately 31 million jobs.

The yearly production of fishes from all around the world is about 81.5% ton. (FAO, 2016). Source of income of 8% world's population is supported by marine fisheries sector and it also shares to global economy around 230 billion USD.

About 80% of global trade's transportation depends on the oceans. (Sofiev, 2018) The marine and the coastal tourism also contribute about 161 billion USD yearly (FAO, 2016).



Growth, employment, consumption, renewable energy. These are all signs that show the increase in rise of 'blue economy' and its developing contribution to industry, better lifestyle and improvement of global economy. Ocean gives many benefits for the world, if ocean engage in economic activity and earn several trillion dollars, so by GDP the ocean would position on the 7th rank to be a largest nation. (Review of Maritime Transport, 2018)

The idea of Blue Economy was unknown in Bangladesh. The importance of Blue Economy in Bangladesh has increasingly started after the success of maritime boundary. According to the report of World Bank, the gross value added to Bangladesh in 2014-15 from blue economy was US\$ 6,192.98 million which was about 3.33% of the Bangladesh economy. (Bir, 2020) We all know that ocean is a source from where our nation's economic growth takes place economic growth takes place. From oceans, job and other oceanic activities generate and that has a big hand behind the growth in the economy of any country. According to the regions committee, "Blue economy" is a reliable blue economic growth structure. The motto behind it is to increase blue economy and fully utilizing marine resources. (Borreen, 2013)

Ocean as energy source

The ocean is the largest endlessly joined ecosystem known to human. For many people, marine is the main source of income and food security, with likely 4.3 billion people dependent on fish in order to take 15% of protein from seafood. The ocean itself already a builder of wealth. From the latest report it can be seen that around 4% of world's GDP increased because the cost of water resources is about US \$24 trillion. The all larger coastal areas and all oceans are highly spreading the idea of blue economic development. It is expected that blue economy grow faster than the general global economy. (Bradley, 2021)

Global food security is very serious about the productivity of seafood. Many people in different countries like to consume seafood for the sake of basic nutrition. Bay of Bengal is most essential ways of the national economy of Bangladesh because it has vast variety of seafood. 3.42 million tons is the total fish production, contributing 3.56% GDP. The captured fishes contribute to 2.0 million tons (37%), aquaculture approx. 2.3 million tons (54%) and marine fisheries 0.4 million tons (21%) of total fishes production (Shamsuzzaman et al., 2020). The both culture and capture fisheries sectors highly help Bangladesh in the economic development.(Ali et al., 2021)



Blue Economy is the sustainable use of ocean belongings and ocean enchantment strategies for economic growth, elevated livelihoods and jobs, and ocean ecosystem health. It gives for an inclusive model that helps the coastal worldwide areas to prolong the gain of ocean assets to all. It advocates the inclusion and participation of all susceptible social groups and sectors.

The purpose of blue economy is to avoid problems that affect the environment. In order to increase blue economic growth there is a tool or a framework for managing the coastal blue growth. The plan to achieve blue economic growth can be successful by coordinating and building strong relation with marine sector. As stated by many researchers that blue economic growth can be possible by increase in marine activities. The in-detail study of blue economy is totally related to blue development. In order to reach at high level of blue economic development then hard work is needed. Similarly a number of governments think that the blue economy core is to develop marine trading and make sure that in the development of blue economy sustainable ecosystem structure used as core.

Oceans and Humans

The ocean is the world's largest life support system. A bad connection with the ocean has been described from many human behaviors. Simplest terms, we are dumping more enough negative stuff into the system and removing too much good stuff. The traditional blue economy operations from which humans gain not recognize or value the ocean's fundamental benefits, nor its limited ability to endure human exploitation without jeopardizing the assistance about which we depended. The term "new blue economy" refers to actions that strengthen people's relationships with the ocean, as well as matching our accountancy and measurement systems to define and develop our ocean-positive economy. It also enables us to measure for "ecosystem services" offered by that of the ocean to plants and species. What would it take to characterize the new blue economy using globally accepted measurements and meanings? Firstly the sea's natural benefits must be recognized and valued. Secondly, we need to define what constitutes the "new blue economy" and incorporate those concepts into global accountancy standards. Thirdly, we must take steps to promote and improve ocean-positive operations so that we may develop a better long-term connection with the ocean and ensure that it continues to deliver the products and resources that we rely on. These actions are being taken across the world and can act as the core of a larger push to actually create a positive human interaction with the ocean in ways that can be tracked, evaluated, and maintained for success (and improved economic, ecological, and human wellness). (Spalding, M. J. (2016).



Economic growth is linked to the appropriate use of resources combined with technological contributions to supporting and enhancing. The primary components of Bangladesh's Blue Economy include economically valuable coastline and aquatic resources. These resources are divided into four categories: alive, nonliving, ecofriendly, and commerce. Because Bangladesh is fragile to climate change, associated extreme weather events are putting the country's coastline aquatic resources at risk, which might stymie the country's Blue Economic growth. Warming trends, cyclones, sea level rise, floods, destruction, storm surge, saltwater intrusion, deluge, and rising sea levels are all examples of climate change extreme occurrences. These high events may result in coral belching, species migration, marine extinction, different species lifestyles, disturbance of the aquatic food chain, and, consequently, economic consequences. To reap the greatest advantages from the seas, it is critical to increase the resistance of ocean life to climate change. For climate change adaptable Blue Economy growth, a special attention is necessary on renewable resource, biodiversity, ecosystem-based adjustment, natural resistance building in coastal areas, ecosystem rehabilitation, creating economic resilience, and policy formation. (Sarker, 2018)

Findings and Conclusion

The concept of blue economy revolves around the ocean resources for economic growth. It plays vital role in a country's GDP. It promotes the resources of oceans, which becomes the best source of revenue and development. It covers three economics forms that are global water crisis, innovative development and development of marine economy, according to the international societies believes.

In addition to traditional marine improvement sports, marine-oriented data and technology know-how divisions are playing an increasingly important role in enhancing blue economic system development. Growth, job creation, consumer spending, renewable energy.

Oceans have grown in prominence as a result of globalization. The blue economy is an idea that is gaining traction. It has had tremendous success in a short period of time. The blue economy is centered on the water and can be derived from the use of marine resources for economic expansion. The blue economy encompasses a wide range of industries, including fishing, marine trade, and tourism. Oceans are expected to produce 34% of the world's crude oil by 2025, according to estimates. Pakistan has a large blue economy potential, since it boasts a 1,050km Makran coastal region with an EEZ. Pakistan's blue economy is expected to develop in the future as a result of the CPEC. Pakistan should concentrate on developing its blue economy. By increasing renewable energy, shipping,



and tourism, Pakistan's coastal districts have a lot more potential to tap into the blue economy. Pakistan should take notes from nations that have made significant progress in the blue economy.

The goal of Blue Economy models is to change society from scarcity to plenty based only on what we already have and to begin addressing problems that cause environmental and related issues in creative ways. Municipal wastewater and storm water discharges, mixed sewer overflows, varied city runoff, agricultural runoff, aquacultures, and a variety of other factors all contribute to biological changes in coastal and floor waters and contribute to nutrient inputs.

The blue financial system has been a popular concept in discussions on blue water rules throughout the world and in individual countries. Various alternative interpretations exist, with different counters emphasizing different aspects of the goal of environmental, economically, and social improvement. Regardless of the verbal battles about its interpretations, the blue economy finds support on a variety of venues. This report depicts where the blue financial system stands in terms of ruling, as well as how proponents of the concept save and allocate energy to keep it functioning. Despite its importance in our society, we know relatively little about the interaction and connection of the blue economy with other seas, and we don't have enough information about the many settings associated to blue economy. The capacity of the blue economy to achieve its goal may be hampered by a lack of understanding of the relationship between the blue economy and the rest of the environment. People working in the blue economy should have access to comprehensive data and information.

The goal of the blue economy is to prevent environmental concerns. There is a technique or framework for controlling coastal blue growth in order to enhance blue economic growth. The goal to create blue economic growth can be effective if it is coordinated and strong relationships with the maritime industry are established. The study of blue economy in depth is inextricably linked to blue development. Hard labor is required to achieve a high degree of blue economic growth.

The ocean economics is a talent in the blue financial system. Economy of the Seas Transport, as a major facilitator, has evolved into a prominent part of global buying and selling, and it has now evolved into a significant contributor to the growth of financial and employment opportunities, both at sea and on land, by becoming the primary means of turning in customer goods, energy on a global scale, and unfinished goods. Furthermore, the shipbuilding agency contributes considerable costs to a variety of coastal communities is a relatively common phrase with no specific meaning. Land-water interaction has



increased, and as a result, its function and relevance have grown. As a result, legal and regulatory attention is being paid to such water-linking aspects. The primary portion of the Blue Economy is characterized as all kinds of maritime activities. There are about 26 different economic activity. The goal of the blue economic system is to ensure that all economic functions associated to oceans, ports, coastal regions, and other ocean-based activities are accurately used to reduce environmental risk and increase human prosperity.



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