



## Sustainable Coastal Tourism in India: A Blue Economy Approach

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### ABSTRACT

The Blue Economy is a concept that has gained significant attention in recent years, particularly in the context of sustainable development and environmental conservation. This paper explores the concept of the Blue Economy as an emerging development paradigm and proposes a policy framework for its implementation. The paper provides a conceptual framework for understanding the Blue Economy and its various components, including sustainable fisheries, renewable energy, and eco-tourism. It also discusses the potential benefits and challenges of implementing a Blue Economy approach and identifies policy recommendations for governments and stakeholders.

### Introduction:-

The world's oceans cover over 70% of the planet, and they play a crucial role in regulating the climate, providing food, and supporting economic development. However, the oceans are facing unprecedented threats from human activities, including overfishing, pollution, and climate change. The Blue Economy concept has emerged as a response to these challenges, promoting sustainable development and environmental conservation in the ocean economy.

The emerging development paradigm of Blue Economy that nests the essential features of ocean economy, green economy, coastal economy and marine economy seems to possess a great potential for higher GDP growth in the Indian Ocean Region. Blue Growth focusing on the long-term sustainability of oceans has become a realistic policy frame within Indian Ocean Rim Association (IORA) during the last



two years. Oceans are essential to human life as they provide food, nutrition and income for millions of people, and act as highways to global trade. Technological innovations are paving the way for deeper interactions of human beings with the oceans. It drives economic growth and brings enormous benefits to the society. Approximately, 350 million jobs are linked with the oceans and international trade in fish products spans across 85 nations and worth US\$102 billion per annum.<sup>1</sup> Potential economic value from coral reefs in the Philippines is estimated around US\$ 9 billion (Chou et.al, 2002). Blue Economy advocates similar outcome as the green economy, namely improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. This policy brief provides an account of the ongoing developments on blue economy in the Member States of IORA with a view to recommend a policy framework for achieving sustainable development in the Indian Ocean region.

### **Principles of Blue Economy -:**

Blue Economy is slowly emerging as a development paradigm in the IORA region. The core principles of Blue Economy are to maximize economic gains from Blue Economy as Emerging Development Paradigm: A Policy Framework for IORA \* Chair, Indian Ocean Rim Studies, Indian Ocean Rim Association (IORA), University of Mauritius, Mauritius. marine resource use and ensure environmental and ecological sustainability.<sup>2</sup> Academia, business groups and governments are putting their minds to settle broad sectors of Blue Economy. The main factors that govern the success of Blue Economy are: Good Governance, Technology, Resource Management, Monitoring & Surveillance, Institutional and Regulatory Reforms (see Figure 1). The questions that need to be answered in order to implement the Blue Economy are: estimation of the size of the blue economy, nature of risks involved, understanding of investment opportunities in the oceans, available capital for investment and scaling up of blue industries. In order to answer these questions, it is imperative to evolve a national accounting framework within IORA. In some countries Blue Economy plays an important role like USA, China, South Korea, EU, Australia, Canada, France, the United Kingdom, Ireland and the Philippines. The importance of measuring the contribution of the Blue Economy to the gross domestic product of a country is viewed with utmost priority.

### **Conceptual Framework:**

The Blue Economy conceptual framework consists of three main components:

**1. Sustainable Use of Ocean Resources:** This component focuses on the sustainable use of ocean resources, including fisheries, renewable energy, and minerals.

**2. Environmental Conservation:** This component emphasizes the importance of environmental conservation and protection of marine ecosystems.

**3. Economic Development:** This component highlights the potential economic benefits of a Blue Economy approach, including job creation, poverty reduction, and sustainable economic growth.

**Figure 1: Factors Governing Success of Blue Economy**



### **Policy Framework:**

The policy framework for implementing a Blue Economy approach includes the following components:

**1. Integrated Ocean Management:** This involves the development of integrated ocean management policies and frameworks that take into account the multiple uses of the ocean and the potential impacts on the environment.

**2. Sustainable Fisheries Management:** This involves the implementation of sustainable fisheries management practices, including catch limits, marine protected areas, and monitoring and enforcement.

**3. Renewable Energy Development:** This involves the development of renewable energy sources, including offshore wind, tidal, and wave energy.



**4. Eco-Tourism Development:** This involves the development of eco-tourism activities that promote the conservation of marine ecosystems and support local communities.

**5. Marine Protected Areas:** This involves the establishment of marine protected areas to conserve marine ecosystems and biodiversity.

**6. Research and Development:** This involves the promotion of research and development in the ocean economy, including the development of new technologies and innovative solutions.

### **Coverage of Blue Industries-:**

The ecological health and economic productivity of marine and coastal ecosystems can be enhanced by shifting to a more sustainable economic paradigm that taps national potential of IORA countries ranging from generating renewable energy and promoting eco-tourism to sustainable fisheries and transport. At the global level, the potential economic gains from reducing fishing capacity to an optimal level and restoring fish stocks<sup>4</sup> is in the order of US\$50 billion a year. Apart from fishing, there is ample potential for harnessing renewable energy in the Indian Ocean Region. According to the Inter-governmental Panel on Climate Change, the technically exploitable potential for marine-based renewables excluding offshore wind would reach 7400 exajoules per year, exceeding the current global energy needs. However, marine-based renewable energy represented less than 1 per cent of all renewable energy production in 2008. Marine-based renewable energy also carries significant potential for green job creation. This will involve the transition from a conventional economy to a Blue Economy. This could be a big economic and investment opportunity, but there are great risks and challenges. A new and intensive phase of economic activity in the oceans needs to be linked with the scientist's warnings as seas are facing unprecedented pressures from human beings with their overexploitative activities. The gap between economic activity and ocean health needs to be bridged soon; otherwise 'Blue Speak' in terms of a sustainable ocean economy may recede rather than advance or flourish for common good. Economic activities in the oceans are expanding rapidly driven primarily by global population growth, economic development, trade, rising income levels, climate and environment, and technology. Looking to 2030, many ocean-based industries have the potential to outperform the growth of global economy as a whole, both in terms of value added and employment. The projections suggest that between 2010 and 2030 on a "business-as-usual" scenario basis, the ocean economy could more than double its contribution to global value added, reaching over US\$3 trillion. In particular, strong growth is expected in marine aquaculture, offshore wind, ship building and repairs, port activities and seafood processing sectors.



Ocean-based industries Figure 1: Factors Governing Success of Blue Economy Institutional and Regulatory Reforms Sustainable Blue Economy Good Governance Technology Monitoring & Surveillance Resource Management 19 identified as traditional and emerging are presented in Coastal and marine areas support a wide variety of traditional industries such as shipping, fisheries and coastal tourism, and technological advancement makes it possible to access new resources through emerging industries such as renewable energy, marine aquaculture, offshore wind energy, marine biotechnology and seabed mining. These Blue Economy industries contribute significantly to creation of employment opportunities and economic output.<sup>5</sup> It is to be noted that these industries vary from one county to another. The industries mentioned above contribute roughly US\$1.5 trillion (2.5 per cent) to global gross value added. Calculations on the basis of the OECD's Ocean Economy Database value the ocean economy's output in 2010 (the base year for the calculations and subsequent scenarios to 2030) at US\$1.5 trillion in value added, or approximately 2.5 per cent of world gross value added.<sup>6</sup> The Blue Economy industries contribute some 13 million fulltime jobs in 2010 constituting around 1 per cent of the global workforce (and about 1.5 per cent of the global workforce actively employed). Blue Economy for the next 20 years is being driven primarily by developments in the global population growth, urbanization and coastal development.

### **Policy Recommendations -:**

#### **The policy recommendations for implementing a Blue Economy approach include:**

**Develop Integrated Ocean Management Policies:** Governments should develop integrated ocean management policies and frameworks that take into account the multiple uses of the ocean and the potential impacts on the environment.

**Promote Sustainable Fisheries Management:** Governments should promote sustainable fisheries management practices, including catch limits, marine protected areas, and monitoring and enforcement.

**Invest in Renewable Energy:** Governments should invest in renewable energy sources, including offshore wind, tidal, and wave energy.

**Support Eco-Tourism Development:** Governments should support the development of eco-tourism activities that promote the conservation of marine ecosystems and support local communities.

**Conclusion-:**

The Blue Economy is an emerging development paradigm that promotes sustainable development and environmental conservation in the ocean economy. Implementing a Blue Economy approach requires a policy framework that takes into account the multiple uses of the ocean and the potential impacts on the environment. Governments and stakeholders must work together to develop and implement policies that support the sustainable use of ocean resources, environmental conservation, and economic development.

The success of Blue Economy in the IORA is contingent upon two integral components: - a paradigm shift in thinking concerning the vitality and potential of ocean resources and mainstreaming of Blue Economy activities in national economic policy. Specific policy measures incorporating the above mentioned two components may be adopted by the IORA countries to kickstart Blue Economy in the region. The bilateral cooperation initiatives taken by India, Mauritius, Seychelles, Thailand and Bangladesh for the promotion and strengthening of Blue Economy may be extended to the sub-regional and regional levels. Certain sectors of Blue Economy such as fishing & aquaculture, ocean renewable energy, coastal tourism, ports & shipping, deep sea mining, marine biotechnology and marine services can be considered as priority sectors for the IORA region. The primary economic goal of Blue Economy in the regional economies should focus on job creation. For systematic assessment of the size of blue economy in the region, a joint study group may be constituted by the IORA countries for developing a proper accounting system for recording blue economic activities. Blue Economy policies should be holistic and inclusive so as to realize the benefits of untapped ocean resources for higher economic growth and development. Universities in the region may offer specialized academic programmes on blue economy for creating the skill pool to be required by the blue industries. In addition, capacity building programmes in fishing, mining, drug development & pharmaceuticals, tourism and other areas may be conducted from time to time. The major barriers facing some emerging blue industries particularly SMEs such as lack of finance, lack of entrepreneurship and regulatory uncertainty need to be effectively addressed through a coordinated regional framework.

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