

Blue Economy

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For Prelims: Blue Economy concept, Deep Ocean Mission, Sagarmala project, Integrated Coastal Zone Management.

For Mains: Concept of Blue Economy and its significance, Need for a Blue Economy Policy and related steps taken.

Why in News?

Recently, the union minister of science and technology and earth science said that the **Blue Economy is** the sixth dimension of Government of India's Vision of New India by 2030.

A <u>Draft Policy document on Blue Economy</u> has been prepared by the Ministry of Earth
Sciences taking into consideration the reports of the expert working groups which emphasizes
holistic development and growth of India's Blue Economy.

What is Blue Bond?

- It is a debt instrument issued by governments, development banks etc., to raise capital from investors to finance marine and ocean-based projects.
- It will help in expansion of marine protected areas, improved governance of priority fisheries and the development of the blue economy.
- The blue bond is inspired by the green bond concept.
- Seychelles became the first country in the world to launch sovereign Blue Bonds.
- According to the <u>Securities and Exchange Board of India (SEBI)</u>, in India, the concept of blue bonds is a mode of sustainable finance, such securities can be utilised for various blue economy-related activities, including oceanic resource mining and sustainable fishing.

What is Blue Economy?

- The concept was introduced by Gunter Pauli in his 2010 book- "The Blue Economy: 10 years, 100 innovations, 100 million jobs".
- It is the **sustainable use of ocean resources** for economic growth, improved livelihoods and jobs, and ocean ecosystem health.
- It advocates the greening of ocean development strategies for higher productivity and conservation of ocean's health.
- It encompasses-
 - Renewable Energy: Sustainable marine energy can play a vital role in social and economic development.

- **Fisheries:** Sustainable <u>fisheries</u> can generate more revenue, more fish and help restore fish stocks.
- Maritime Transport: Over 80% of international goods traded are transported by sea.
- Tourism: Ocean and coastal tourism can bring jobs and economic growth.
- <u>Climate Change</u>: Oceans are an important **carbon sink** (blue carbon) and help mitigate climate change.
- Waste Management: Better waste management on land can help oceans recover.
- Blue Economy emphasizes on integration of development of ocean economy with social inclusion, environmental sustainability, combined with innovative business model.
- This is reflected in <u>Sustainable Development Goal</u> (**SDG 14**), which calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

What is the Need for Blue Economy?

- Oceans **cover three-quarters of the Earth's surface**, contain 97% of the Earth's water, and represent 99% of the living area on the planet.
 - Oceans protect biodiversity, keep the planet cool, and absorb about 30% of global CO₂ emissions.
 - At least 3-5% of global GDP is derived from oceans.
- Blue economy, through sustainable use of oceans, has great potential for boosting the economic growth by providing opportunities for income generation and jobs etc.
- It can support food security, and diversification to address new resources for energy, new drugs valuable chemicals, protein food, deep sea minerals, security etc.
- It is the next sunrise sector.
 - Sunrise Sector is a sector that is expanding rapidly and is expected to be increasingly important in the future.

What are the Factors that affect Blue Economy?

- Threat of Sea Borne Terror: Piracy and armed robbery, maritime terrorism, illicit trade in crude oil, arms, drug and human trafficking and smuggling of contraband etc.
- Natural Disasters: Every year tsunamis, cyclones, hurricanes typhoons etc leave thousands of people stranded and property worth millions destroyed.
- Man-Made Problems: Oil spills, climate change continue to risk the stability of the maritime domain.
- Impact of Climate Change: Changes in sea temperature, acidity, threaten marine life, habitats, and the communities that depend on them.
- Marine Pollution: In form of excess nutrients from untreated sewerage, agricultural runoff, and marine debris such as plastics
- Overexploitation of Marine Resources: Illegal, unreported, and unregulated extraction of marine resources.

What is the Significance of the Blue Economy?

- High Return on Investment: According to research commissioned by the high-level panel for a sustainable ocean economy shows that USD1 invested in key ocean activities yields five times i.e. USD5 in return, often more.
- Synergy With SDG: It supports all of the <u>United Nations' Sustainable Development Goals</u> (SDGs), especially SDG14 'life below water'.
- **Sustainable Energy**: Supporting the increasing demand for <u>renewable energy</u>, offshore regions have tremendous potential in the form of offshore wind, waves, ocean currents including tidal currents, and thermal energy.

How Blue Economy is Important for India?

- Blue economy presents India with an unprecedented opportunity to meet its national socioeconomic objectives as well as strengthen connectivity with neighbors.
- Blue Economy can help in focusing on livelihood generation, achieving energy security,

- building ecological resilience, and improving health and living standards of coastal communities.
- Blue economy would reinforce and strengthen the efforts of the Indian government as it strives to achieve the SDGs of hunger and poverty eradication along with sustainable use of marine resources by 2030.
- With an over 7,500-km-long coastline spread across nine coastal states, 12 major, and 200 minor ports, India's blue economy supports 95% of the country's business through transportation and contributes an estimated 4% to its Gross Domestic Product (GDP).
- The Indian Ocean is a major conduit of trade with as much as 80% of global oil trade happening through it.
- Better connectivity in the region will significantly cut the transport cost and maritime wastage
 of resources making the trade sustainable and cost effective.

What are the Steps taken to Promote Blue Economy?

- Deep Ocean Mission: It was launched with an intention to develop technologies to harness the living and non-living resources from the deep-oceans.
- India-Norway Task Force on Blue Economy for Sustainable Development: It was inaugurated jointly by both the countries in 2020 to develop and follow up joint initiatives between the two countries.
- **Sagarmala Project:** The **Sagarmala project** is the strategic initiative for port-led development through the extensive use of IT enabled services for modernization of ports.
- O-SMART: India has an umbrella scheme by the name of O-SMART which aims at regulated use
 of oceans, marine resources for sustainable development.
- Integrated Coastal Zone Management: It focuses on conservation of coastal and marine resources, and improving livelihood opportunities for coastal communities etc.
- National Fisheries Policy: India has a National Fisheries policy for promoting 'Blue Growth Initiative' which focuses on sustainable utilization of fisheries wealth from marine and other aquatic resources.

What is Sagarmala Project?

- The **Sagarmala Programme** was **approved by the Union Cabinet in 2015** which aims at holistic port infrastructure development along the 7,516-km long coastline through modernisation, mechanisation and computerisation.
- The vision of the Sagarmala Programme is to **reduce logistics costs for EXIM** (Export-Import) and domestic trade with minimal infrastructure investment.
- Sagarmala could boost India's merchandise exports to USD 110 billion by 2025 and create an estimated 10 million new jobs (four million in direct employment).
- The Ministry has started the ambitious Project of Sagarmala Seaplane Services (SSPS) with potential airline operators.

What can be the Way Forward?

- India should look to adopt the Gandhian approach of balancing economic benefits with sustainability for meeting the broader goals of growth, employment generation, equity and protection of environment.
- India must focus on marine ICTs, and transport (shipping) and communication services, and the creation of a knowledge hub for marine research and development.
- An effective response mechanism to address humanitarian crises and natural disasters should be made for the **evolving** <u>Indian Ocean</u> **security strategy.**
- India should not look at its oceans as just water bodies, but as global stage for continued economic, social, and cultural dialogue.
- With its vast maritime interests, the blue economy occupies a vital potential position in India's economic growth.
- It could well be the **next multiplier of GDP and well-being**, provided sustainability and socioeconomic welfare are kept center-stage.

 India should look to adopt the Gandhian approach of balancing economic benefits with sustainability for meeting the broader goals of growth, employment generation, equity and protection of environment.

UPSC Civil Services Examination, Previous Year's Question (PYQs)

<u>Mains</u>

Q1. Explain various types of revolutions, took place in Agriculture after Independence in India. How these revolutions have helped in poverty alleviation and food security in India? **(2017)**

Q2. Defining blue revolution, explain the problems and strategies for pisciculture development in India. **(2018)**

