



## BLUE ECONOMY - GS III MAINS

**Q.** Describe the blue economy and explain its significance. Bring out the measures taken by the Indian government to explore its marine resources. (15 marks, 250 words)

**News:** *Budget 2024: What is 'Blue Economy 2.0' announced to boost aquaculture*

### What's in the news?

- Finance Minister Nirmala Sitharaman proposed the launch of 'Blue Economy 2.0' in her interim budget presentation to the Parliament.

### Key takeaways:

- The move is a bid to boost the country's aquaculture, also known as aquafarming, which refers to the cultivation of aquatic organisms in controlled aquatic environments for commercial purposes.
- Blue Economy 2.0 is a blueprint to make further progress on India's existing initiatives to explore the potential of the Indian maritime blue economy.

### 3rd Global Maritime India Summit:

- Notably, during the third edition Global Maritime India Summit held in October 2023, PM Modi laid the foundation stone for projects worth over Rs 23,000 crore for the Indian maritime blue economy.
- He also dedicated over 300 Memorandums of Understanding (MoUs) worth over Rs 7 trillion for partnerships in the maritime sector.
- The projects are aligned with the Centre's aim to build a "Viksit Bharat (developed nation)" by the year 2047, the 100th anniversary of the country's independence.

### Blue economy:

- Blue economy refers to the **ocean resources available in the country** that can be harnessed to aid the production of goods and services.
- It enables economic growth, environmental sustainability and national security.
- 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.



- Blue Economy emphasizes on integration of development of ocean economy with **social inclusion, environmental sustainability, combined with innovative business models.**
- This is reflected in Sustainable Development Goal (SDG 14), which calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

## Components of Blue economy:

- 1. Renewable Energy:** Sustainable marine energy can play a vital role in social and economic development.
- 2. Fisheries:** Sustainable fisheries can generate more revenue, more fish and help restore fish stocks.
- 3. Maritime Transport:** Over 80% of international goods traded are transported by sea.
- 4. Tourism:** Ocean and coastal tourism can bring jobs and economic growth.
- 5. Climate Change:** Oceans are an important carbon sink (blue carbon) and help mitigate climate change.
- 6. Waste Management:** Better waste management on land can help oceans recover.
- 7. Mineral resources:** Manganese nodules contain significant concentrations of manganese, iron and copper, nickel, and cobalt all of which have numerous economic uses.

## India & Blue economy:

India's blue economy is a subset of the national economy. It comprises of

- Ocean resources
- Human-made economic infrastructure in marine, maritime and onshore coastal zones.
- India has 7,500 km of coast line (9/29 states as coastal) and 1,382 islands. Exclusive Economic Zone of India covers over 2 million sq.km.
- 199 ports, including 12 major ports that handle approximately 1,400 million tons of cargo each year.
- It provides a **vast socio-economic opportunity** for India to utilize ocean resources for societal benefit responsibly.
- EEZ of India has a bounty of living and non-living resources with significant recoverable resources such as crude oil and natural gas.
- Also, the coastal economy sustains over 4 million fisher folk and coastal communities.

## Challenges in Blue Economy:

- 1. Unsustainable extraction from marine resources,** such as unsustainable fishing, exploited by illegal, unreported, and unregulated fishing.
  - Illegal whaling
  - Unsustainable fishing
  - Bottom trawler based destructive fishing.
- 2. Physical alterations and destruction of marine and coastal habitats** and landscapes due largely to coastal development, deforestation, and mining.
  - Oil spills
  - Ship accident
  - Discharge of various hazardous waste into the ocean.



**3. Unplanned and unregulated development** in the narrow coastal interface and nearshore areas has led to the marginalization of poor communities, and loss or degradation of critical habitats.

**4. Marine pollution**, for example, in the form of excess nutrients from untreated sewage, agricultural runoff, and marine debris such as plastics.

- Micro plastics
- Nano plastics.

**5. Impacts of climate change**, for example, in the form of both slow-onset events like sea-level rise and more intense and frequent weather events.

- Changes in the ocean circulation
- High frequency of Super Cyclones
- Marine heat waves.

**6. Other Factors:** Ineffective governance institutions, inadequate economic incentives, technological advances, lack of or inadequate capacities, lack of full implementation of the United Nations Convention on the Law of the Sea (UNCLOS) and other legal instruments, and insufficient application of management tools have often led to poorly regulated activities

## Government Initiatives:

The Government of India has launched bold initiatives to promote the development of a blue economy such as

1. The **Sagarmala** initiative promotes port-led development.
2. The **Shipbuilding Financial Assistance Policy** encourages domestic ship-building.
3. The **Pradhan Mantri Matsya Sampada Yojana** is actively engendering a ‘blue revolution’ through sustainable and responsible development of the fisheries sector.
4. The **Sagar Manthan dashboard** tracks vessels in real-time.
5. The **Deep Ocean Mission** explores deep-sea resources in the EEZ and continental shelf as well as development of technology for harnessing them.
6. India adopted the **Coastal Regulation Zone** notification to classify and better manage coastal regions and conserve ecologically sensitive coastal and marine areas including ecosystems.
7. The global community rallied together for a multilateral treaty on addressing plastic pollution. The same year, India introduced an amendment to the Plastic Waste Management Rules **banning select single-use plastic items** and introduced policies for extended producer responsibility in waste management in order to combat plastic pollution, including in the marine environment.
8. **Lifestyle for the Environment**’ that promotes mindful utilization over mindless consumption patterns.
9. MoES has joined the United Nations on the “**Clean Seas Programme**” to develop strategies for estimating and reducing Marine Litter/Plastic in the oceans, which is also a part of SDG-14.
10. **MoES has also signed two contracts with the International Seabed Authority (ISBA)** for deep ocean exploration of minerals (Polymetallic Nodules and Hydrothermal Sulphide) in the Indian Ocean



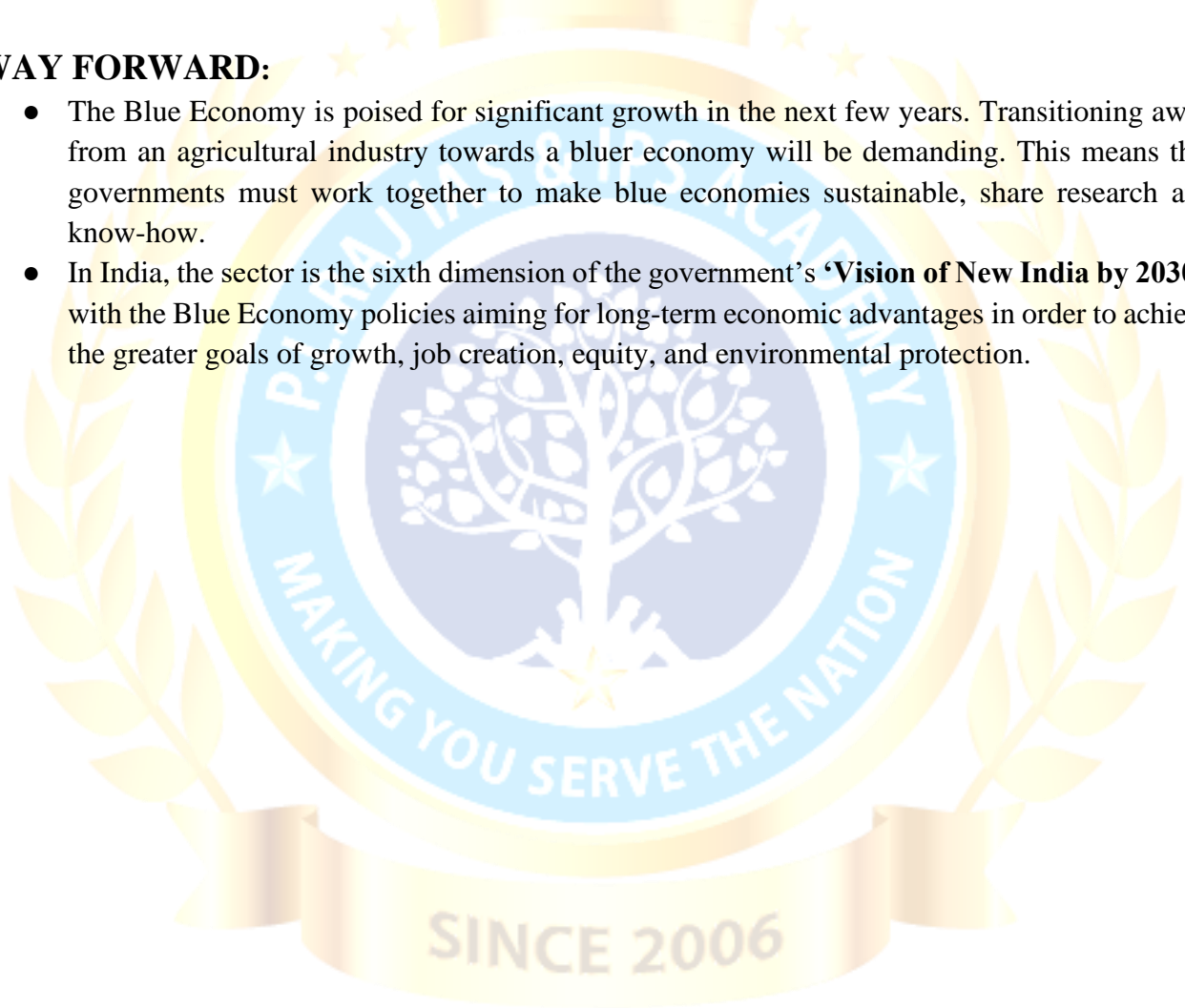
**11. O-SMART scheme** - The Ocean Services, Modelling, Applications, Resources and Technology (O-SMART) Scheme aims at stepping up ocean research and setting up early warning weather systems.

- a. It addresses ocean development activities such as services, technology, resources, observations and science and provides necessary scientific and technological background required for implementation of various aspects of Blue Economy.

**12. Blue Economy Vision 2025** - India also has a 'Blue Economy Vision 2025', published by the Federation of Indian Chambers of Commerce and Industry (FICCI). It suggests that the Blue Economy's impacts are not limited to the ocean but also include other areas such as poverty, climate change, employment opportunities, food security, and maritime cooperation.

## WAY FORWARD:

- The Blue Economy is poised for significant growth in the next few years. Transitioning away from an agricultural industry towards a bluer economy will be demanding. This means that governments must work together to make blue economies sustainable, share research and know-how.
- In India, the sector is the sixth dimension of the government's '**Vision of New India by 2030**'; with the Blue Economy policies aiming for long-term economic advantages in order to achieve the greater goals of growth, job creation, equity, and environmental protection.



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