

## BLUE ECONOMY

NEWS: MoES new paper on "Transforming India's Blue Economy: Investment, Innovation and Sustainable Growth"

WHAT'S IN THE NEWS?

### Definition and Conceptual Foundation

- **Definition by World Bank:** The Blue Economy refers to the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the ocean ecosystem's health.
- **Origin of the Concept:** The term was popularized by **Gunter Pauli in 2010** in his book "*The Blue Economy: 10 years, 100 innovations, 100 million jobs*".
- **Alignment with SDGs:** The concept directly contributes to **SDG 14** – "Life Below Water" – and intersects with other goals like SDG 2 (Zero Hunger), SDG 13 (Climate Action), and SDG 1 (No Poverty).

### Key Highlights of the White Paper

- **Investment Mobilization:** Emphasizes sustained investment in blue infrastructure, innovation, and ocean-based research to unlock India's marine economic potential.
- **Public-Private Partnerships (PPP):** Encourages financial mechanisms and PPP models for infrastructure, port development, sustainable aquaculture, and marine research.
- **Roadmap to 2035:** Lays out a strategic vision up to the year 2035 focusing on investor confidence, economic resilience, and sustainability.
- **Showcase Models:**
  - *Community Seaweed Cultivation in Odisha:* Demonstrates inclusive livelihood generation through sustainable marine agriculture.
  - *Kochi Smart Port Transformation:* Focuses on digital and green port infrastructure for enhanced logistics and reduced environmental impact.
  - *Alang Shipbreaking Yard (Gujarat):* Upgraded to follow the **Hong Kong International Convention** standards, ensuring eco-friendly dismantling and resource recovery.
  - *Sustainable Tourism in Andaman & Nicobar Islands:* Promotes community-based eco-tourism, coral reef conservation, marine protected areas (MPAs), and bans on single-use plastics.

## Importance of Blue Economy for India

- **Vast Maritime Assets:** India has a 7,500+ km coastline, 9 coastal states, and an Exclusive Economic Zone (EEZ) covering 2.2 million sq. km.
- **Economic Contribution:** Blue Economy currently contributes ~4% to India's GDP and holds the potential for further growth.
- **Trade & Transport:** Oceans facilitate 80% of global trade and contribute nearly 3–5% to global GDP.
- **Fisheries Sector:** Supports the livelihood of over 28 million people, especially in coastal and island regions.
- **Food Security:** Sustainable fishing practices will ensure long-term marine food resources for India's growing population.
- **Climate Change Mitigation:** Oceans act as carbon sinks and climate regulators by absorbing CO<sub>2</sub> and stabilizing temperatures.
- **Energy Security:** Harnessing ocean-based renewable energy sources (tidal, wave, offshore wind) reduces dependence on fossil fuels.
- **Strategic & Security Dimension:** India's maritime strength is critical to countering China's String of Pearls strategy, safeguarding sea lanes, and preventing piracy and terrorism (e.g., 2008 Mumbai attack).
- **Marine Resource Extraction:** Deep ocean exploration can unlock valuable minerals like polymetallic nodules for high-tech and industrial use.

## Challenges to Realizing a Robust Blue Economy

- **Conservation vs Development:** Striking a balance between environmental protection and economic expansion remains a major dilemma.
- **Low Investment in R&D:** India invests less than 2% of GDP in research, limiting innovation in ocean technologies and sustainable marine practices.
- **Climate-related Threats:** Rising sea levels, ocean acidification, coral bleaching, and biodiversity loss endanger marine ecosystems.
- **Maritime Security Concerns:** Issues like illegal fishing, trafficking, piracy, and coastal terrorism present security and economic challenges.
- **Policy and Regulatory Gaps:** Absence of a unified legal and institutional framework hampers effective blue economy governance.

- **Funding Shortfalls:** Limited fiscal support, reduced global development assistance, and slow private investment act as bottlenecks.

### Major Indian Government Initiatives

- **Sagarmala Programme:** Aims to modernize India's port infrastructure, enhance connectivity, and promote coastal community development.
- **Deep Ocean Mission:** Focuses on seabed mapping, underwater mining, marine biodiversity, and advanced marine tech development.
- **O-SMART Scheme:** Provides ocean observation systems, early warning services, and supports marine research.
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** Targets a 200% expansion in marine fisheries and promotion of sustainable aquaculture.
- **Integrated Coastal Zone Management (ICZM):** Seeks to protect coastal ecology and strengthen coastal livelihoods.
- **Maritime India Vision 2030:** Strategic document aiming to boost India's maritime logistics, shipbuilding, and maritime clusters.
- **India-Norway Ocean Dialogue:** Promotes marine resource collaboration, clean oceans, and sustainable fisheries.
- **Blue Bonds by SEBI:** Introduced as a new category of green bonds to mobilize sustainable finance for blue economy projects.
- **Blue Economy Coordination Committee:** Ensures better policy integration between national and state maritime plans.

### Interim Budget 2024 – “Blue Economy 2.0”

- Focus on **climate-resilient coastal development** through restoration of mangroves, seagrass beds, and coral reefs.
- **Strengthening mariculture and aquaculture** practices with sustainable technologies.
- Emphasis on **community resilience**, livelihood diversification, and eco-based adaptation models.

### Strategic Roadmap and Recommendations (“Way Forward”)

- **Blue Accounting Framework:** Establish an economic valuation system to track and assess blue economy contributions in national accounts.
- **Marine Spatial Planning:** Adopt **Coastal Marine Spatial Planning (CMSP)** practices based on **IOC-UNESCO (2009)** guidelines for sustainable marine governance.
- **Blue Knowledge & Education:** Incorporate ocean science, marine biology, and coastal resilience in higher education and vocational training.
- **Blue Skills & Capacity Building:** Train officials and coastal communities in low-carbon fisheries, eco-tourism, marine conservation, and pollution monitoring.
- **Expand Marine Conservation Areas (MCAs):** Increase protected ocean areas to 10% of territorial waters to meet SDG 14 targets.
- **Marine Litter Policy:** Draft and enforce a national framework for **plastic elimination and marine waste management**.
- **Fishery Management Regions (FMRs):** Implement **Ecosystem Approach to Fisheries Management (EAFM)** to ensure sustainable fish stock use.
- **Ease of Doing Business (EoDB):** Streamline maritime investment clearances and regulatory approvals to attract private and foreign investments.
- **Maritime Development Fund:** Establish a dedicated blue economy investment fund to support SMEs and coastal infrastructure.
- **Blue Diplomacy:** Promote India's maritime diplomacy, especially in the Indian Ocean Region (IOR), ASEAN, and Africa's east coast.
- **SSS Strategic Axis (Seychelles–Singapore–Samoa):** India seeks to establish a strategic economic and maritime corridor from East Africa to the Western Pacific.
- **Swachh Prithvi, Swachh Sagar Campaign:** Scale up the Swachh Bharat Abhiyan towards a cleaner land-sea interface with active citizen participation.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2150833#:~:text=The%20Ministry's%20white%20paper%20titled,infrastucture%2C%20research%20and%20ocean%20innovation>