

5. Blue Cities – Economy

The Blue Cities Paradigm – Reimagining India's Maritime Future. "Blue Cities" are coastal hubs that integrate sustainable ocean-based economic activities (Blue Economy) with urban development. India is leveraging its vast coastline and port modernization initiatives, like Sagarmala and MIV 2030, to develop pilot Blue Cities and capitalize on the global green shipping transition.

Blue Cities

Global Trend – Around the world, leading maritime hubs are actively transforming into "Blue Cities."

Core Definition – Blue Cities refer to coastal or port cities that strategically integrate ocean-based economic activities with sustainable urban development.

Conceptual Root – The concept is rooted in the idea of a "Blue Economy". This means utilizing ocean resources for economic growth, job creation, and prosperity while simultaneously ensuring the preservation and health of marine ecosystems.

Key Features of Blue Cities

Sustainable Maritime Economy – Promoting core activities like shipping, fisheries, offshore energy, and maritime tourism in a manner that is eco-friendly and sustainable for the long term.

Resilient Coastal Infrastructure – Constructing ports, terminals, and coastal protection infrastructure that is resilient to the impacts of climate change, such as sea-level rise and extreme weather events.

Marine Ecosystem Protection – Implementing policies for the conservation of critical marine habitats like mangroves, coral reefs, and wetlands, which support biodiversity and act as natural barriers protecting shorelines.

Circular and Low-Carbon Practices – Actively encouraging waste recycling, the adoption of renewable energy for port and city operations, and the promotion of low-emission logistics to reduce the carbon footprint.

Digital and Smart Technologies – Leveraging digital tools, data analytics, and automation to improve the efficiency and safety of maritime operations and enhance overall urban management.

The Opportunity for India

Vast Maritime Assets – India is in a strong position with a coastline of 11,098.81 km, 13 major ports, and over 200 non-major ports.

Global Decarbonisation Drive (IMO 2050) – The global maritime sector is undergoing a massive decarbonisation drive (an international effort to reduce greenhouse gas emissions, primarily by shifting from fossil fuels to cleaner sources). This transition requires an estimated \$1–\$3 trillion in investment. This presents a major opportunity for India to integrate green shipping finance and innovation into its maritime sector.

Financial Integration – India can uniquely link GIFT City's financial tools with its port development strategy to attract and deploy capital for green and digital maritime projects.

India's Pilot Blue Cities

India plans to develop a national network of blue cities to showcase this urban-maritime integration. The pilot cities include –

Mumbai – To combine port logistics with sustainable finance and innovation.

Vizag (Visakhapatnam) – To leverage its existing naval and shipbuilding expertise.

Chennai – To focus on the integration of its strong tech and advanced manufacturing sectors.

Mundra – To lead in private investment and the development of clean-energy logistics.

Kochi – To become a hub for maritime services and offshore renewable energy.

India's Port Sector – An Overview

Structure – India has 13 Major Ports (controlled by the Central Government) and 217 Non-major (Minor/Intermediate) Ports (controlled by State Governments).

Management – The sector is managed by the Ministry of Ports, Shipping and Waterways.

Strategic Position – Located along the world's busiest shipping routes, India is a key global trading hub and a rising power.

Economic Importance – The maritime sector is critical to India's economy, handling 95% of India's trade by volume and 70% by value.

Global Ranking – India's port ranking has significantly improved from 54th in 2014 to 38th in 2023. Nine Indian ports are now ranked in the top 100 globally.

Capacity Growth – Between 2014-15 and 2023-24, the annual cargo-handling capacity of major ports increased by 87.01%.

Maritime Status – India is the 16th-largest maritime nation and holds a key position in global shipping.

Future Goals – India has outlined investments of US\$ 82 billion in port infrastructure projects by 2035. There is a plan to establish a new shipping company to expand India's fleet by at least 1,000 ships within a decade.

Challenges in India's Maritime Sector

Infrastructure Gaps – Some ports suffer from inadequate infrastructure and outdated facilities, which limit capacity and efficiency.

Congestion – High traffic volumes at major ports often lead to delays, increased turnaround times for ships, and reduced productivity.

Environmental Concerns – The sector faces pressure regarding pollution and sustainability, including emissions from ships and port operations.

Logistics Bottlenecks – There is often inefficient transport connectivity (last-mile) between ports, roads, and railways, which impacts the smooth movement of cargo.

Global Competition – India faces rising competition from other global maritime hubs, necessitating continuous investment and modernization.

Government Initiatives

Sagarmala Programme – A flagship program focusing on leveraging India's coastline and navigable waterways for port-led development. It supports port infrastructure modernization, coastal development, and connectivity enhancement. Provides financial aid for projects like coastal berths, rail/road connectivity, fish harbours, and cruise terminals.

Maritime India Vision 2030 (MIV 2030) – A 10-year blueprint aiming for India to become a top 10 shipbuilding nation by 2030. It seeks to create a world-class, efficient, and sustainable maritime ecosystem through 150+ initiatives across ten key sectors.

Inland Waterways Development – The Inland Waterways Authority of India (IWAI) has identified 26 new national waterways. This aims to provide an alternative, sustainable, and cheaper mode of transport, thereby easing congestion on roads and railways.

Green Tug Transition Program (GTTP) – This program aims to replace all fuel-based harbour tugs with eco-friendly, sustainable fuel-powered tugs. The complete transition is set to be completed by 2040 across all major ports.

Sagarmanthan Dialogue – An annual maritime strategic dialogue designed to position India as a global center for maritime conversations and strategy.

Maritime Development Fund – A ₹25,000 crore fund set up to provide long-term financing for modernizing port and shipping infrastructure, encouraging private investment.

Shipbuilding Financial Assistance Policy (SBFAP 2.0) – A modernized policy to provide financial support to Indian shipyards, helping them compete with global giants.

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