



DAILY EDITORIAL ANALYSIS

TOPIC

**SHAPING THE PORT OF THE
FUTURE**

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Context

- **India's maritime sector** is undergoing a transformation with the recent development of Vizhinjam International Seaport, the **country's first deep-water container transshipment port**.

Vizhinjam International Seaport (Thiruvananthapuram, Kerala)

Historical Significance and Development

- **Ancient Maritime Legacy:** Vizhinjam has a rich maritime history dating back to the **Pandya-Chola era (1129 AD)**, when it was known as **Rajendra Chola Pattinam**.
- Historians believe that **Balita, a port** mentioned in the first-century travelogue **The Periplus of the Erythraean Sea**, refers to **Vizhinjam**.
- In the 1940s, the **princely state of Travancore** commissioned a study to explore Vizhinjam's potential **to set up a world-class port**.

Modern Revival

- **Project Cost:** About 8,800 crore
- The **Kerala State Government**, **Adani Ports**, and the **Union Government** collaborated on the project, with the latter providing **Viability Gap Funding (VGF)** of 817.8 crore.

Key Features of Vizhinjam Port

- **Deep-Water Advantage:** The port has a **natural depth of 24 meters**, allowing it to **accommodate Ultra Large Container Ships (ULCS)**.
 - ♦ It requires minimal dredging, making operations more efficient, unlike other Indian ports.
- **Technological Advancements:**
 - ♦ India's first semi-automated port, featuring fully automated yard cranes and remotely operated ship-to-shore cranes.
- **Economic Importance:**
 - ♦ **Boosting Trade and Employment:** The port is expected to handle millions of **TEUs (twenty-foot equivalent units)** annually, strengthening India's position in global trade.
 - ♦ Creates new economic opportunities for Kerala and the broader South Asian maritime sector.
- **Reducing Transshipment Costs:**
 - ♦ Currently, 75% of India's transshipment cargo is handled at ports like Colombo, Singapore, and Klang.
 - ♦ Vizhinjam aims to retain Indian cargo, reducing costs and boosting domestic trade.
- **Geopolitical and Strategic Importance:**
 - ♦ It is strategically positioned just 10 nautical miles from global shipping routes.
 - ♦ It is positioned near the **east-west shipping corridor**, connecting Europe, the Persian Gulf, Southeast Asia, and the Far East.
 - Mediterranean Shipping Company (MSC) has already included Vizhinjam in its Jade and Dragon shipping services, connecting Europe, Asia, and the Mediterranean.
 - ♦ It is expected to significantly reduce India's reliance on transshipment hubs like Colombo, Singapore, and Dubai.
 - ♦ It strengthens connectivity under initiatives like **PM Gati Shakti** and the **India-Middle East-Europe Economic Corridor (IMEC)**.

Port-Led Development in India

History of India's Port Economy:

- **Ancient India:** Lothal (Gujarat), Muziris (Kerala), and Arikamedu (Tamil Nadu) served as vibrant centers of Indo-Roman, Indo-Greek, and Southeast Asian trade.
- **Medieval India:** Ports like Surat, Calicut, and Masulipatnam emerged as key hubs for trade with Arabs, Persians, Chinese, and Europeans.

Current Status:

- India has a vast coastline with **13 major ports and over 200 non-major ports**.
 - ♦ The major ports are **wholly owned by the Government of India** and governed by the **Major Port Authorities Act, 2021**.
 - ♦ All the **Non-Major Ports (minor ports)** are governed under the **Indian Ports Act, 1908**.
 - Recently, the Union Government introduced **Indian Ports Bill 2025** to amend the **Indian Ports Act, 1908**.
- **Cargo Handling:** Around 95% of India's EXIM cargo by volume and 70% by value.
 - ♦ India ranks among the **top 20 countries in global shipbuilding (2024–25)**.
 - ♦ Two Indian ports, **Jawaharlal Nehru Port Authority (JNPA)** and **Mundra Port**, are among the **top 30 globally**.
- **World Bank's Logistics Performance Index (LPI), 2023:**
 - ♦ 22nd Rank in the Global Ranking in International Shipments Category
 - ♦ 38th Rank in Logistics Performance Index.

List of Major Ports in India	
West Coast of India	East Coast of India
Deendayal Port, Kandla (Gujarat)	V.O. Chidambaranar Port, Tuticorin (Tamil Nadu)
Mumbai (Maharashtra)	Chennai (Tamil Nadu)
Jawaharlal Nehru (Nhava Sheva) (Maharashtra)	Kamarajar Port, Ennore (Tamil Nadu)
Marmugao (Goa)	Visakhapatnam (Andhra Pradesh)
New Mangalore (Karnataka)	Paradip (Orissa)
Cochin (Kerala)	Syama Prasad Mookerjee Port, Kolkata, Haldia (West Bengal)
	Port Blair, Haddo (Andaman and Nicobar Islands)

Benefits of a Robust Port Economy

- **Geostrategic Value:** Ports enhance India's maritime influence and support initiatives like **Security and Growth for All in the Region (SAGAR)** and **Project Mausam**.
- **Regional Development:** Port-led industrial zones catalyze infrastructure growth and attract private investment in hinterland regions.
- **Environmental Efficiency:** Well-managed ports reduce carbon emissions by improving turnaround times and facilitating modal shift to railways/inland waterways.
 - ♦ Turnaround time is the time a ship spends at port from arrival to departure.
 - ♦ **Inland Water Transport (IWT)** emits 50% less CO₂ per tonne-km than road transport.
- **Employment Generation:** Ports directly and indirectly support millions of jobs in logistics, warehousing, and ancillary sectors.

Challenges

- **High Logistics Costs:** India's logistics cost is about 13-14% of GDP, compared to 8-9% in developed economies.
- **Dependency on Foreign Ports:** Major transshipment activities rely on foreign establishments due to lack of domestic deepwater capacity.
 - ♦ Port Congestion, procedural inefficiencies and lack of digitization lead to delays, reducing global competitiveness.
- **Environmental Concerns:** Port construction and dredging damage coastal ecosystems and marine biodiversity.

Key Initiatives Driving Port-Led Development

- **Sagarmala Programme (2015):** Over 574 projects worth 6.01 lakh crore have been identified under the program, covering port modernization, new port development, and inland waterways expansion.
- **PM Gati Shakti:** It integrates ports, railways, highways, and airways to create a seamless logistics network.
 - ♦ It focuses on reducing ship turnaround time, improving cargo handling efficiency, and doubling port capacity.
- **Amrit Kaal Vision 2047:** It builds on the **Maritime India Vision 2030** and encompasses aspirations in Logistics, Infrastructure, and Shipping, supporting **India's 'Blue Economy'**.
- **One Nation One Port (ONOP) Process:** It focuses on mapping and standardizing port processes and documentation, and anticipated to significantly **reduce paperwork by approximately 25%** for both container operations and bulk cargo, leading to a reduction in logistics costs.

Conclusion

- The deep-sea port at Vizhinjam has the potential to trigger an economic boom similar to **Shenzhen, China's first Special Economic Zone (SEZ)**, which turned the city into the **Silicon Valley of China**, provided that governments, concessionaires, businesses, and local communities work together to build a strong and sustainable investment ecosystem.

Source: TH

Mains Practice Question

[Q] Discuss the key factors influencing the development of modern ports. How can technological advancements, sustainable practices, and strategic infrastructure planning contribute to shaping the port of the future?

