



DAILY EDITORIAL ANALYSIS

TOPIC

**INDIA'S WATERWAYS REDISCOVERED:
CHARTING A NEW COURSE FOR VIKSIT
BHARAT**

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INDIA'S WATERWAYS REDISCOVERED: CHARTING A NEW COURSE FOR VIKSIT BHARAT

Context

- India's rivers, once the arteries of trade and cultural exchange, are being reimagined as engines of modern economic growth.
- As India Maritime Week 2025 approaches, the nation's focus on inland waterways reflects a shift towards green logistics, inclusive growth, and sustainable development.
- The government's efforts under the Inland Waterways Authority of India (IWAI) embody the vision of Viksit Bharat 2047, where ecological balance and economic efficiency coexist.

River Transport in India

- India's rivers were the **nation's first highways**, goods floated effortlessly from the **Ganga and Brahmaputra in the north** to the **Godavari and Krishna in the south**, carrying grain, salt, and stories downstream.
 - Ancient cities like **Varanasi and Kolkata** thrived as river ports, and colonial powers relied heavily on riverine routes for trade.
- But with time, **steel rails and asphalt** replaced these natural arteries, leaving rivers as silent witnesses to a bygone era of trade.
- Infrastructure neglect and sedimentation further reduced navigability, leaving this once-thriving network underutilized.

Strategic Shift Toward Waterways

- India's vast network of 14,500 km** of navigable inland waterways is being positioned as a key pillar of sustainable infrastructure, which were historically underutilized. It includes:
 - Jal Marg Vikas Project on the Ganga River** to enhance navigation from Haldia to Varanasi.
 - Development of National Waterways**, with **over 100 declared routes**.
 - Integration with PM GatiShakti**, the national master plan for multi-modal connectivity.

Economic and Environmental Advantages

- Waterways offer distinct advantages: lower fuel consumption, reduced emissions, and cost-effective logistics.
 - Cargo Movement:** from **18 million tonnes (2013–14)** to **145 million tonnes (2024–25)**;
 - Target:** **200 million tonnes by 2030** and **450 million tonnes by 2047**;
- These advantages are especially critical as India aims for 8–10% annual growth to meet its development targets.
- Every litre of fuel can move 24 tonnes/km by road; 95 tonnes/km by rail; and 215 tonnes/km by inland waterway;
 - Thus, expanding inland shipping could save billions in fuel imports while slashing emissions, aligning with **India's commitment to net-zero by 2070**.
- Reviving Riverine Economies:**
 - Boosting local employment through port development and logistics hubs.
 - Encouraging tourism and cultural exchange along heritage river routes.
 - Enhancing connectivity for remote regions, especially in the **Northeast and Eastern India**.

Related Initiatives & Efforts

- Jal Marg Vikas Project (JMVP):** It is supported by the **World Bank**, aims to restore the **Ganga** as a viable economic corridor, spanning **1,390 km from Varanasi to Haldia**.
 - Its terminals at **Varanasi, Sahibganj, Kalughat**, and **Haldia** handle cargo.
 - It complements the **Eastern Waterway Grid Connectivity Project**, linking the **Ganga, Brahmaputra**, and **Barak** rivers into a seamless network.
- Inland Waterways Authority of India (IWAI):** It has spearheaded a revival — rediscovering, reimagining, and rejuvenating India's rivers as sustainable transport routes.

- ♦ India now boasts **111**, covering **14,500 km** of navigable channels, from just **5 national waterways in 2014**. Of these, **32 are operational**, marking a tenfold expansion in less than a decade.
- **Ro-Ro, Ro-Pax & Smart River Systems:** The introduction of **Ro-Ro and Ro-Pax** services in **Assam, Kerala, Bihar, and West Bengal** has created floating bridges for passengers and vehicles, reshaping daily commutes.
 - ♦ Meanwhile, **digital tools** like:
 - **Jal Samriddhi Portal:** streamlines approvals for jetties and terminals;
 - **Naudharshika:** a real-time river traffic monitoring system, acting as India's maritime GPS;
 - ♦ These innovations ensure safety, transparency, and efficiency across India's waterways.
- **Cruise Tourism:** River tourism has surged from just **5 vessels a decade ago to 25 cruise ships** across **13 waterways**.
 - ♦ The **Ganga, Brahmaputra, and Kerala backwaters** host luxury cruises equipped with electric shore power and 24-hour navigation systems.
 - ♦ Future plans include:
 - **Cruise tourism** on the *Narmada* and *Yamuna*;
 - **Eco-tourism circuits** along *Ravi, Chenab, and Jhelum*;
 - **Urban water metros** in *18 cities*, modeled on *Kochi's Water Metro*, integrating sustainability with everyday life.
- **Key Legislation and Green Innovation:** India's legislative reforms have modernized the inland waterways ecosystem:
 - ♦ **National Waterways Act (2016):** expanded the network;
 - ♦ **Inland Vessels Act (2021):** standardized safety and certification;
 - ♦ **Harit Nauka Guidelines (2024):** promoted hybrid and green vessels;
 - ♦ **Jalvahak Scheme:** incentivizes modal shift from road to water, exploring **carbon credits**;
 - ♦ The **Cochin Shipyard** has launched **India's first hydrogen-fuel-cell vessel** in **Varanasi**.
 - ♦ **Hybrid and electric barges** are being deployed to reduce emissions, while digital systems like **CAR-D, PANI, and Vessel Tracker** enhance logistics management.
- **Building Skills for a Blue Economy:** Reviving river highways means nurturing a new generation of skilled professionals — **navigators, engineers, and environmentalists**.
 - ♦ To bridge this gap, IWAI has established training hubs such as:
 - **National Inland Navigation Institute, Patna;**
 - **Centre of Excellence, Bogibeel (Assam);**
 - ♦ These institutions are preparing India's workforce for a **blue economy** built on innovation and ecological balance.

Strengthening India's Waterways Transport

- The Union Ministry of Ports, Shipping and Waterways recently announced that India is targeting **₹80 lakh crore in maritime investments** and the **creation of 1.5 crore jobs by 2047**. It includes:
 - ♦ Expansion of port capacity across all 12 major ports;
 - ♦ Development of National Waterways, with over 100 declared routes;
 - ♦ Integration with PM GatiShakti for multimodal logistics;
- India's rediscovery of its waterways is more than a logistics reform — it's a civilizational reconnection.
- As **Viksit Bharat 2047** envisions a high-income, sustainable economy, rivers are reasserting their role as catalysts of inclusive development.
- Inland waterways could transform the way India moves, trades, and thrives, with policy continuity, digital navigation systems, and private participation.

Source: BS

Daily Mains Practice Question

[Q] Discuss how the revitalization of India's inland waterways contributes to the vision of Viksit Bharat. Evaluate the economic, environmental, and social implications of this shift in transport strategy.

