



# NAUTILUS SHIPPING

MOVING FREIGHT the COASTAL WAY

Just 6% of India's freight uses coastal routes, and that is changing





Ajay Krishnamani  
Managing Director

EDITORIAL

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# Charting a New Course for India's Coastal Shipping

As I reflect on the trajectory of India's coastal shipping sector, I see a landscape ripe with potential yet constrained by outdated perceptions and operational hurdles. The conversation around coastal shipping is changing, and it needs to change faster.



# Breaking the Misconception

Let me address the elephant in the room: the outdated belief that coastal vessels are poorly maintained and substandard. This simply doesn't reflect today's reality. The quality of ships plying our coast is transforming dramatically. New age norms, better technology, and improved vessel standards are redefining the sector. Thanks to focused government efforts, we're witnessing a generational shift in fleet quality and operational excellence.

# What Needs to Change

For coastal shipping to realize its full potential, we need a fundamental shift in perspective: starting at the policy level. Government authorities must begin viewing coastal vessels with the same seriousness and standards as foreign-going vessels. This isn't about relaxing standards; it's about appropriate regulation.

Clearances need to be faster. The procurement of connecting spares must be streamlined. Importing ship spares should be made easier, not as a compromise on quality, but as an enabler of it. We need regulations that are strict on quality and safety, yes, but also pragmatic enough to allow seafarers adequate rest and operational ease. The current regulatory framework often acts as a deterrent rather than a facilitator. What we need is a balanced approach: stringent on quality, structured and sensible on process.







# Nautilus: Leading by Example

At Nautilus, we've never been content with the status quo. We're actively engaged with the Directorate General of Shipping on critical safety and business issues. We've pioneered ventures into new sectors, including Sri Lanka operations. We were among the first to class vessels with foreign classification societies, raising the bar for competition and standardization across the board.

But our commitment goes beyond operations. We're investing in the future through enhanced training programs, awareness campaigns, recruitment drives for seafarers, comprehensive insurance solutions, and rejoining facilities that support our maritime professionals throughout their careers.



# A Message to Our Stakeholders

To **shipowners**: We understand that cost efficiency matters, but long-term outcomes are closely tied to maintaining quality.

To **policymakers**: We believe strengthening coastal cargo movement, alongside enabling quality-led operations and infrastructure, is central to building a more resilient maritime ecosystem.

To **young maritime professionals**: The future of coastal shipping is being written now. It's a sector on the cusp of transformation, and your skills, commitment, and fresh perspectives are exactly what we need to take it to the next level.

The **opportunity before us is clear**: a robust coastal shipping network can transform India's logistics ecosystem, reduce pressure on our roads and railways, and create sustainable maritime careers for thousands. But opportunity alone isn't enough. We need commitment, quality, and collaboration.

INTRODUCTION 

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# Coastal Shipping: India's Next Logistics Shift

## We're at an inflection point

India's coastal shipping is moving from underused to intentional. Ports are better prepared, policy is clearer, and domestic cargo is steadily returning to sea routes. Coastal trade is beginning to look less like an alternative and more like a planned part of India's logistics network.

## Coastal shipping in the world: The original short-haul backbone

For centuries, countries linked coastal towns through near-shore voyages carrying grain, timber, metals, and essentials. Over time, this evolved into organized short-sea networks built on three constants: clear domestic trading rules, dedicated port infrastructure, and seamless multimodal connections. In regions where this matured, coastal and inland waterways now handle a significant share of freight.

## India's coastal shipping story: ancient strength, modern return

India's coastal trade dates back to the dockyard at Lothal, where sea routes connected inland settlements over 4,000 years ago. This continuity weakened during the colonial era, when foreign ships dominated domestic routes. In 1919, Walchand Hirachand's voyage of SS Loyalty symbolised a return of Indian enterprise to the sea. Yet for decades after independence, coastal trade remained secondary to road and rail. The current shift marks a return to that older coastal logic.

## The modern reset

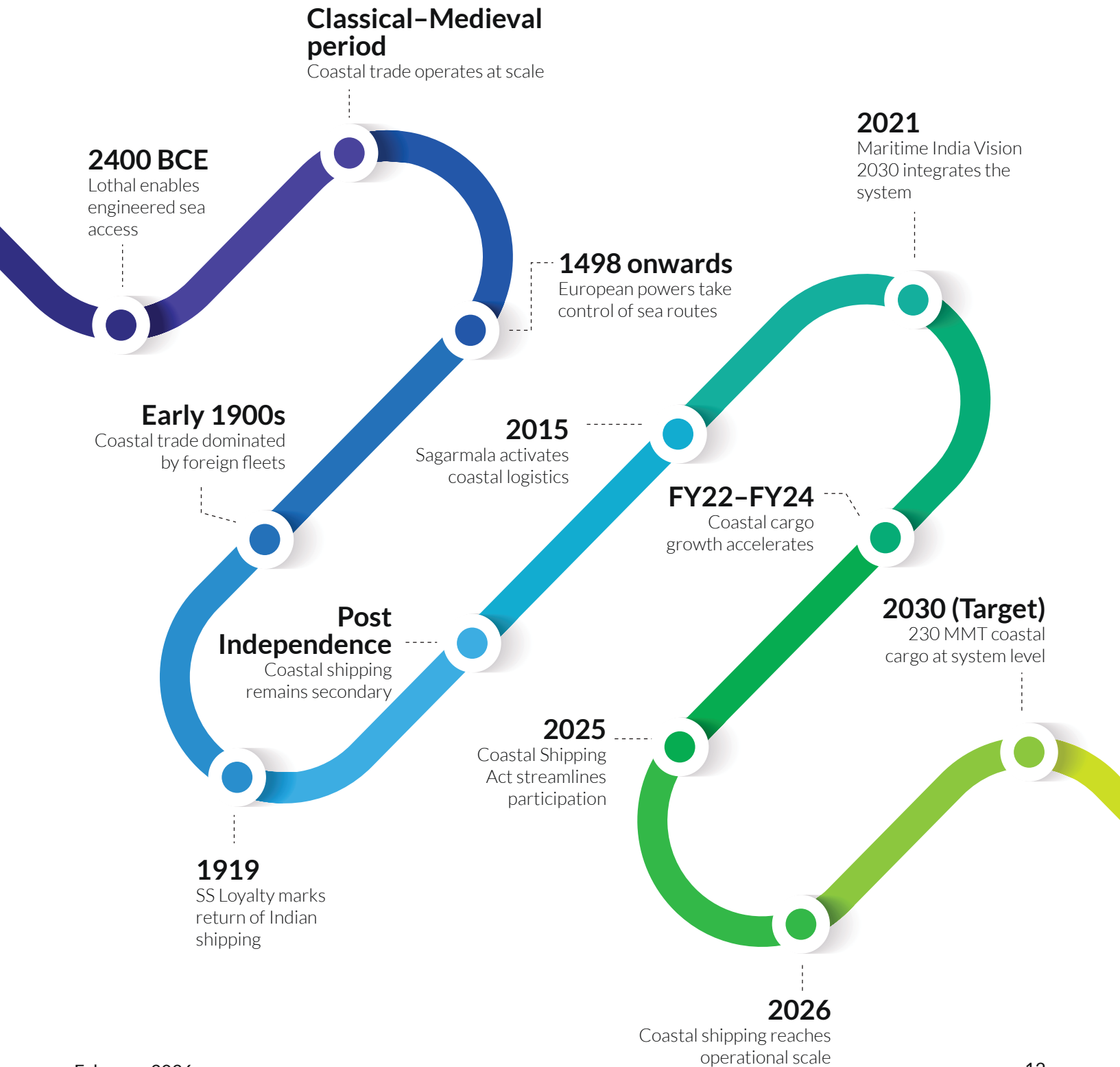
- ▶ Over the past decade, port-led development has begun restoring coastal shipping to its natural place in domestic trade
- ▶ Water freight costs around ₹1.06 per ton-km, compared to ₹1.36 by rail and ₹2.50 by road
- ▶ The Coastal Shipping Act, 2025, simplifies participation for Indian vessels
- ▶ The Sagarmala Programme has strengthened port and coastal berth infrastructure
- ▶ Major Ports now report coastal cargo as a visible share of throughput, over 23% in Apr–Aug FY26

## Coastal shipping today: India is already moving

The opportunity now lies in strengthening the system: better coastal berths, faster turnaround, predictable cabotage, improved rail-sea links, and digital voyage tracking. With a direction of 230 MMT coastal cargo by 2030, this shift sits within Maritime India Vision 2030, where coastal shipping is designed as part of India's larger logistics engine rather than a standalone mode.



# Coastal Shipping: From Ancient Docks to Modern Systems



# India's Green Coastal Shipping Transformation



## The harbour is going electric

In December 2025, steel-cutting began at Deendayal Port Authority for India's first all-electric harbour tug.

Designed with a 60-ton bollard pull and powered by a 4.4 MWh battery system (rated for ~30,000 charge cycles over ~15 years), this zero-emission tug is the first of 16 vessels under Phase 1 of the Green Tug Transition Programme (2024–27).

Next deployments are planned at Jawaharlal Nehru Port Authority, Paradip Port Authority, and V.O. Chidambaranar Port Authority.

The long-term plan scales to 50 green tugs by 2030 and 400 by 2040.

## Sustainability is now embedded in port law

The Indian Ports Act, 2025 replaces the 1908 framework with a modern governance structure that embeds environmental compliance into port operations.

- ▶ Aligns ports with global conventions such as MARPOL and Ballast Water Management
- ▶ Mandates pollution control, disaster preparedness, and environmental safeguards
- ▶ Strengthens audits and compliance oversight
- ▶ Integrates sustainability into core port administration

For coastal operations, this means stronger environmental discipline at the harbour and berth.




# Harit Sagar: Green Port Guidelines

Launched in 2023, Harit Sagar aligns with Maritime India Vision 2030 and India's COP26 commitments to cut emission intensity by 45% by 2030 and achieve net-zero by 2070.

The guidelines require ports to:

<p><b>01</b></p> <p>Cut carbon emissions per tonne of cargo by</p> <p><b>30% by 2030 and 70% by 2047</b></p>	<p><b>02</b></p> <p>Raise renewable energy share above</p> <p><b>60% by 2030 and 90% by 2047</b></p>	<p><b>03</b></p> <p>Electrify over 50% of equipment by</p> <p><b>2030, rising to 90% by 2047</b></p>	<p><b>04</b></p> <p>Expand green cover and provide phased</p> <p><b>shore-to-ship power</b></p>	<p><b>05</b></p> <p>Achieve full waste water reuse and reduce</p> <p><b>fresh water use by 2030</b></p>
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New Mangalore Port's 100% solar integration in 2025 stands as a benchmark for green transition.



## Inland waterways and the coast are being linked through green mobility

At IWDC 3.0 (Kochi Declaration, Jan 23, 2026), the Inland Waterways Authority of India approved ₹1,500+ crore in projects focused on green mobility:

**₹465 crore** allocated for vessels and dredging assets; **10 hybrid electric vessels** cleared for NW-49 (Jhelum).

Over **₹900 crore** in new projects, including **110 jetties** across Odisha and the Northeast.

Cargo on national waterways has grown from **18 MT (2013–14)** to **145.84 MT (2024–25)**, with operational waterways increasing from **3 to 32**.

Inland waterways are being positioned as a fuel-efficient complement to coastal shipping within India's multimodal logistics framework.

This creates a lower-emission river-to-coast cargo chain that supports coastal shipping.

Sustainability, in this context, is not an overlay. It is being built into how coastal vessels **arrive, berth, manoeuvre, connect inland, and eventually refuel.**



# Coastal Shipping: Where the Opportunity Now Sits

For decades, coastal shipping was acknowledged as efficient but under-prioritised. What has changed is not just intent, but the enablers: policy clarity, port readiness, digital tracking, financial support, and national targets that now make coastal movement commercially viable at scale.

## India's Coastal Shipping – The Gap and the Opportunity

Indicator	India	Global / Benchmark
Coastal / waterway share in freight mix	~6%	EU ~40%, China 24%, Bangladesh 16%
Logistics cost as % of GDP	~8%	Germany 8%, USA 9%, Japan 11%
Coastline	7,500 km	Among the longest usable coastlines
Ports	12 major + 200+ non-major	Comparable maritime density
EXIM trade by sea	95% by volume	Maritime economies depend similarly

**Visual takeaway:** India has the coastline, cargo volumes, and ports of a maritime nation, but its domestic freight mix does not yet reflect that strength.



## Fleet reality vs tonnage reality

As of **December 2024**, India's merchant fleet comprised **1,545 vessels**, including **1,056 operating in coastal trade** and **489 in overseas trade**.

While **68% of vessels serve coastal routes**, they account for only **about 12% of total gross tonnage**, compared to **88% deployed in overseas trade**, highlighting the outward-focused capacity of India's fleet.

## Cargo trends show adoption has begun

- ▶ Coastal cargo movement: **87 MMT (2014) → 165 MMT (2025)**
- ▶ Major ports handled **819 MT** in FY24
- ▶ Port handling capacity increased **87%** in a decade to **1,629 MT**

Cargo is already shifting. What is improving now is the system that supports it.

## Programmes and schemes making coastal commercially viable

- ▶ **Sagarmala** – dedicated coastal berths, port modernisation, and rail connectivity that reduce turnaround time and improve berth access.
- ▶ **Maritime India Vision 2030** – treats ports, coastal shipping, and inland waterways as one integrated logistics framework.
- ▶ **Coastal Shipping Act, 2025** – simplifies participation for Indian vessels and sets a **230 MMT coastal cargo target by 2030**.

- ▶ **Cabotage policy relaxation (2026)** — prioritizes Indian-flag vessels for domestic routes.
- ▶ **Jal Vahak scheme** — offers **35% operating cost reimbursement** for cargo moved through waterways feeding coastal routes.
- ▶ **NDCS digital portal** — improves voyage visibility, reduces empty legs, and optimizes berth usage.

These correct the friction points that historically kept cargo on roads.

## Union Budget 2026 — enabling the shift to water

The Union Budget 2026–27 reinforced water-based freight through targeted measures:

- ▶ Launch of a **Coastal Cargo Promotion Scheme** to encourage modal shift from road and rail to coastal and inland waterways
- ▶ Plan to operationalize **20 new National Waterways** over five years, improving port–hinterland connectivity
- ▶ Strengthening **multimodal links**, including Dedicated Freight Corridor integration with coastal and inland routes
- ▶ Development of **ship repair hubs at Varanasi and Patna** to support inland and feeder vessel reliability

The direction is clear: lower logistics costs and ease congestion by making water transport more viable.

## Challenges that remain

- ▶ Return cargo imbalance is causing empty vessel legs
- ▶ Draft limitations at several non-major ports
- ▶ Last-mile road dependence for hinterland distribution
- ▶ Vessel size mismatch for coastal parcel volumes
- ▶ Awareness gap among cargo owners accustomed to road/rail

- ▶ Need for better coordination between inland waterways and coastal schedules

These are active problem statements and areas of ongoing work.

## Where Nautilus fits into this shift

As coastal cargo rises, demand increases for:

- ▶ Crew skilled in cabotage and short-sea operations
- ▶ Reliable vessel operations along coastal bulk corridors
- ▶ Compliance with new digital and environmental norms
- ▶ Integration between inland, port, and coastal logistics

Nautilus’ growth in coastal shipping aligns directly with this transition.

## The bottom line

India has a coastline, cargo, and ports.

Now it also has policy support, funding direction, and measurable targets.

The opportunity is no longer in proving the value of coastal shipping.

It is in participating in the scale-up that is already underway.

# Building Officers, Not Just Careers: **The Nautilus NCV Cadetship Pathway**

# At Nautilus, coastal shipping is about the people who will command these vessels tomorrow.

To address common hurdles like long sailing gaps and slow progression, the **NCV Cadetship Program** was created in **collaboration with JSW Shipping & Logistics**, combining real sea time with a clear career path.

Designed for GP Ratings and eligible diploma candidates, this DG-compliant pathway enables faster movement toward officer and engineer roles through continuous sailing on active NCV routes.



From enrolment to onboard cadetship, the program reduces early-career uncertainty and aligns seafarers with the growing demand for NCV-trained officers.

# News & Insights



## Visakhapatnam Convergence: Feb 2026

From 15–25 February, Visakhapatnam hosted three major events together: the **International Fleet Review 2026** with 50+ nations and INS Vikrant on display, **Exercise MILAN 2026** focused on interoperability, and at the **IONS Conclave of Chiefs**, India assumed chairmanship for 2025–27.



## A New Shipbuilding Chapter

Deendayal Port Authority announced a ₹4,500-crore JV with GRSE to build an automated shipyard at Kandla for large vessels. In the same month, stealth frigate **INS Mahendragiri** is set for delivery, a milestone for indigenous naval construction.



## AI Moves to the Dock

India cleared its first **autonomous shipyard** in Andhra Pradesh. With the IMO's MASS Code due in May 2026 and SAP-led automation rolling out at major ports, digital systems are becoming part of core maritime operations.

# Operational Excellence in Coastal Shipping: Lessons from Managing a Modern Indian MBC Fleet



**Capt. Ravindra Kumar**

Operations Head – JSW Shipping & Logistics Pvt. Ltd.

India's coastal shipping sector is undergoing a quiet but decisive transformation. With increasing emphasis on efficiency, safety, environmental responsibility and skill development, coastal operations today demand the same rigour and professionalism traditionally associated with deep-sea shipping.

At JSW Shipping & Logistics, managing a growing fleet of MBCs has provided valuable insights into what it truly takes to achieve sustainable operational excellence in coastal trade.

## Operational discipline as the foundation

Coastal vessels operate under intense schedules, frequent port calls and varying berth conditions. Unlike long-haul voyages, there is little margin for error.

Strict adherence to SOPs, cargo handling procedures, maintenance routines and reporting protocols forms the backbone of safe and efficient operations. Consistency in execution is what separates average performance from excellence.

## People first: The core of safe operations

No system can outperform the people operating it. Skilled Masters, motivated officers and a well-supported crew make the real difference.

### Key focus areas include:

- ▶ Stable crew tenures to build ship-specific experience
- ▶ Continuous mentoring of junior officers and NCV cadets
- ▶ Clear accountability combined with empowerment onboard

## Proactive maintenance over reactive repairs

In coastal operations, downtime directly impacts supply chains. Preventive and condition-based maintenance planned well ahead of dry docks helps avoid operational surprises.

Regular inspections, early defect identification and coordination between ship staff and shore teams ensure vessels remain operationally ready while extending asset life.

## Safety culture beyond compliance

Compliance with regulations is essential, but safety culture goes beyond checklists.

Encouraging near-miss reporting, open communication, and lessons-learned discussions creates an environment where safety becomes instinctive rather than enforced. A strong safety culture reduces incidents, protects assets and builds confidence among stakeholders.

## Sustainability and efficiency go hand in hand

Fuel efficiency and disciplined consumption monitoring are no longer optional, they are business necessities.

By integrating operational planning with environmental responsibility, coastal shipping can remain both competitive and sustainable, contributing meaningfully to India's logistics ecosystem.

## The road ahead

India's coastal shipping sector holds immense potential. With structured operations, skilled manpower and a forward-looking mindset, Indian coastal fleets can set global benchmarks for efficiency and safety.

Operational excellence is not a single initiative; it is a continuous journey driven by people, processes and purpose.

# Stories from the sea



**V.N. Surendran**

Chief Engineer

## A Life at Sea: Surendran's Journey Through Coastal and Foreign Shipping

With nearly three decades at sea, Surendran has witnessed the Indian maritime industry evolve from traditional practices to today's increasingly regulated environment. Now 62 years old and sailing as a Chief Engineer, his career spans both foreign-going vessels and India's coastal (NCV) fleet.

Holding a foreign-going certificate issued by Panama in the early 2000s, Surendran transitioned into coastal shipping over time. Reflecting on the shift, he acknowledges that while foreign-going vessels once carried more prestige, NCV vessels have improved significantly in recent years, especially in terms of standards, operations, and professional acceptance.

**"I like working on NCV vessels," he says. "Things are much better now compared to earlier years."**

However, he believes there is still work to be done. From a policy perspective, Surendran feels that greater government-led education and awareness about shipping careers could encourage more young people to enter coastal shipping.

**"If youngsters are properly educated about shipping and if rules and regulations are framed with seafarers' benefits in mind, more people will join," he explains.**

He also highlights the growing administrative burden in shipping today, particularly paperwork and regulatory compliance, drawing comparisons with European and US standards. While safety and compliance are essential, he feels that regulations often lean more towards owners than seafarers, and a better balance is needed.

On the operational side, Surendran confirms that timely salary payments are critical to crew morale and stability, an area where consistency makes a noticeable difference to seafarers' confidence in their employers.

When asked about his most memorable experience at sea, Surendran recalls a deeply personal and challenging Mumbai-Gulf voyage from when he was around 30 years old. Newly married at the time, with his wife pregnant back home, the ship was caught in a cyclone and left stranded at sea after the engine failed. For three days, the crew worked under intense pressure and uncertainty, unsure of what would happen next. When the engine finally came back to life and the vessel made it safely to shore, the relief was overwhelming. Decades later, the experience remains etched in his memory, not just for the technical challenge but for the emotional weight it carried.

Originally from Kerala, Surendran continues to sail with the same sense of professionalism and commitment that has defined his career. His journey stands as a reminder that experience, adaptability, and dedication remain the backbone of the maritime industry, especially as coastal shipping continues to grow in importance.

# NEAR MISS REPORT

Location: Engine Room

## Description of Incident:

While carrying out routine rounds in the engine room, the wiper slipped due to unsecured floor plates. It was observed that the floor plates were not properly fastened with screws, creating a tripping and slipping hazard. Fortunately, no injury occurred.

## Root Cause:

- ▶ Engine room floor plates not properly secured with screws
- ▶ Lack of routine inspection of floor plate fastening condition

## Immediate Corrective Action Taken:

- ▶ The wiper was assisted to safety and checked for any injuries
- ▶ The affected area was immediately cordoned off to prevent further movement
- ▶ The loose floor plates were temporarily secured to avoid recurrence

## Preventive Action to Avoid a Similar Incident in Future:

- ▶ All floor plates in the engine room will be checked and properly secured
- ▶ A regular inspection schedule will be implemented for all floor plates and walking areas
- ▶ Crew members will be reminded to report unsafe conditions immediately

# Stories from Ashore

## From the Technical Desk



**Sudha Kumari**

Technical Assistant

### Coastal Vessels: Design, Operations, and India's Path to Maritime Efficiency

In India, the establishment of transport network is a key component of infrastructure development. Inadequacy of transport can seriously affect the development process. Despite continuous efforts made since 1951 in our country to augment the capacity of various modes of transport, the transport sector, barring Railways and Road has been exposed to bottlenecks and capacity shortages, inhibiting smoother and faster growth of the economy. However, the existing transport network is struggling with major bottlenecks and is unable to meet the growing demands of India's expanding economy. Transport cost forms part of the cost of production of goods and services, and the objective is to minimize this cost so that the economy can derive maximum benefit.

To envisage Coastal Shipping as a means to remove the bottlenecks in the existing transport network would be taking a restricted view of the potentialities of Coastal Shipping, especially in a country like India, which is blessed with a very long coastline. India has to utilize this cheap mode of transport to her best advantage.

The immediate hinterland for coastal trade includes 40 districts across five states on the west coast and four states on the east coast, along with Pondicherry, covering over 3,80,000 sq. km. The Lakshadweep and Andaman & Nicobar Islands are also part of this coastal network and rely heavily on coastal shipping for cargo and passenger movement with the mainland and between islands. Many of these coastal districts are rich in minerals such as silica, bauxite, iron ore, manganese ore, and limestone, highlighting the economic importance of coastal trade.

The distribution of minerals indicates a rich concentration of iron ore in Goa, the Ratnagiri district of Maharashtra, the North Kanara district of Karnataka, the Calicut district in Kerala, the Ongole district in Andhra Pradesh, and the Cuttack district of Orissa. Limestone is abundantly available in the coastal districts of Gujarat, Maharashtra, and Orissa, which also have rich deposits of bauxite. In view of the availability of these mineral resources along the coast, some of these districts are ideally suited for the development of extractive industries. With the growth of such industries, there is significant potential for the expansion of coastal trade in the long term.

Coastal vessels are specialized shallow-draft ships (typically 1000–15000 DWT) designed for transporting cargo along coastlines, acting as an efficient and sustainable alternative to road and rail transport. They are essential for domestic trade, utilizing shorter routes to reduce logistics costs, emissions, and road congestion. With the introduction of the Coastal Shipping Act 2025 in India, the sector prioritizes Indian-flagged vessels to boost domestic capacity and reduce dependence on foreign ships.

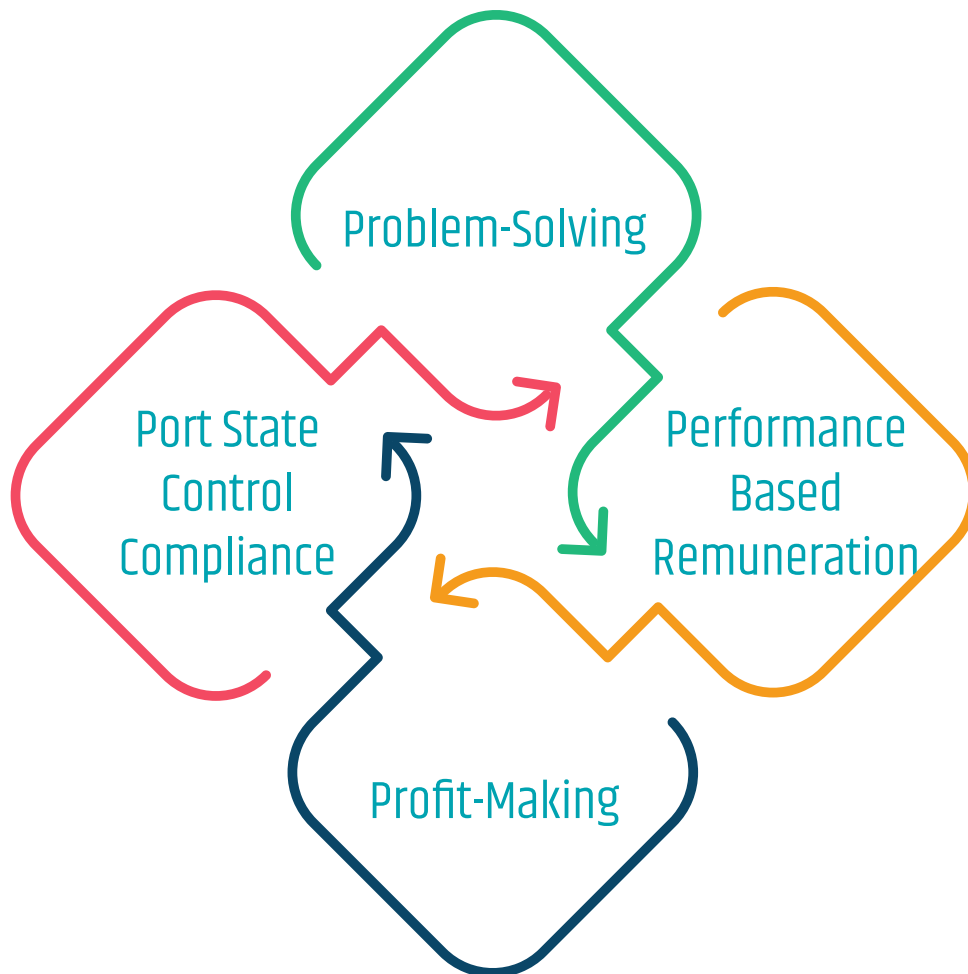
### Measures For Strengthening Coastal Shipping

Recognizing that coastal shipping is a very energy-efficient and comparatively cheaper mode of transport that can relieve pressure on rail and road networks, the Government set up a working group in August 1992 under the chairmanship of the Director General of Shipping. The group consisted of members from various ministries and organizations to study issues connected with the development of coastal shipping.

## NAUTILUS 4Ps Approach for Coastal Vessels

**At Nautilus Shipping**, we work alongside owners across Indian coastal trades, providing technical management and structured crewing support. Coastal shipping plays a vital role in India’s maritime logistics, and managing such a large fleet requires a structured technical approach, a strong safety culture, and strict regulatory compliance.

From a Technical Superintendent’s perspective, our primary responsibility is to ensure that all vessels remain seaworthy, compliant, and operationally efficient while minimizing downtime and operational costs. At Nautilus, we follow a disciplined **4P approach** to maintain operational excellence:



This framework helps ensure maximum vessel availability, zero detentions, and strong operational performance, demonstrating the effectiveness of proactive maintenance and the adoption of modern technology.

Our fleet operates under Indian coastal trade regulations and undertakes frequent short voyages with multiple port calls. From a technical standpoint, coastal vessels are exposed to higher machinery running hours and frequent operational stress. This makes preventive maintenance, close monitoring of machinery performance, and timely repairs critical to avoiding breakdowns.

# Photos from the sea



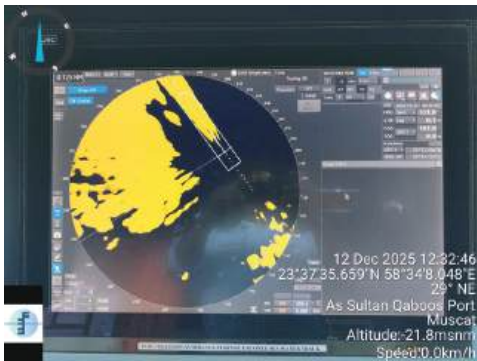
JSW Ratangad



Capt. Prasant Behera



JSW Ratangad



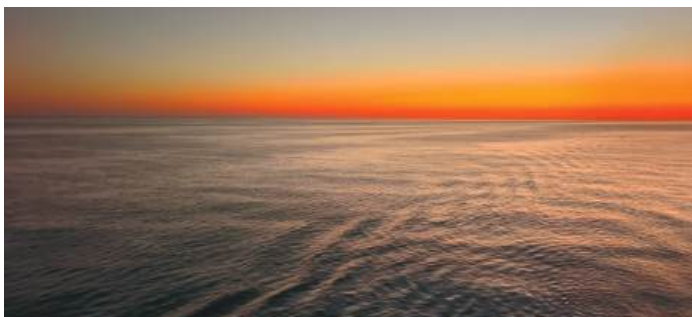
Capt. Prasant Behera



Capt. Prasant Behera



JSW Ratangad



SSL Godavari

# Photos from Ashore



## Team Visit to Vessel Adinath

We visited Vessel Adinath with our team: Revathy, Selin, Priya, Akash, Rajesh, Gagan, and myself.

The Chief Officer and Second Officer walked us through the Bridge, explaining navigation, route monitoring, steering and speed control, AIS, communication with ports and vessels, and the monitoring of weather, traffic, and alarms.

The TME then briefed us on the Engine Room, covering propulsion systems, generators, the main engine, and pumps.

**Vanishree**  
CFO



# Can you guess?

1. Can you guess how many trucks one coastal ship can replace?

- 100
- 300
- 1,000

2. Can you guess which policy change boosted India's coastal shipping after 2018?

- New port tariffs
- Cabotage relaxation
- Inland waterway subsidies

3. Can you guess how ancient Indian ships were held together before iron nails?

- Wooden pegs
- Leather straps
- Coir ropes stitched through planks

4. Can you guess which authority frames coastal shipping regulations in India?

- Indian Navy
- Ministry of Ports, Shipping and Waterways
- Port Trusts

# Can you guess?

5. Can you guess the biggest reason coastal shipping is still underused in India?

- Lack of ships
- Last-mile connectivity gaps
- Crew shortages

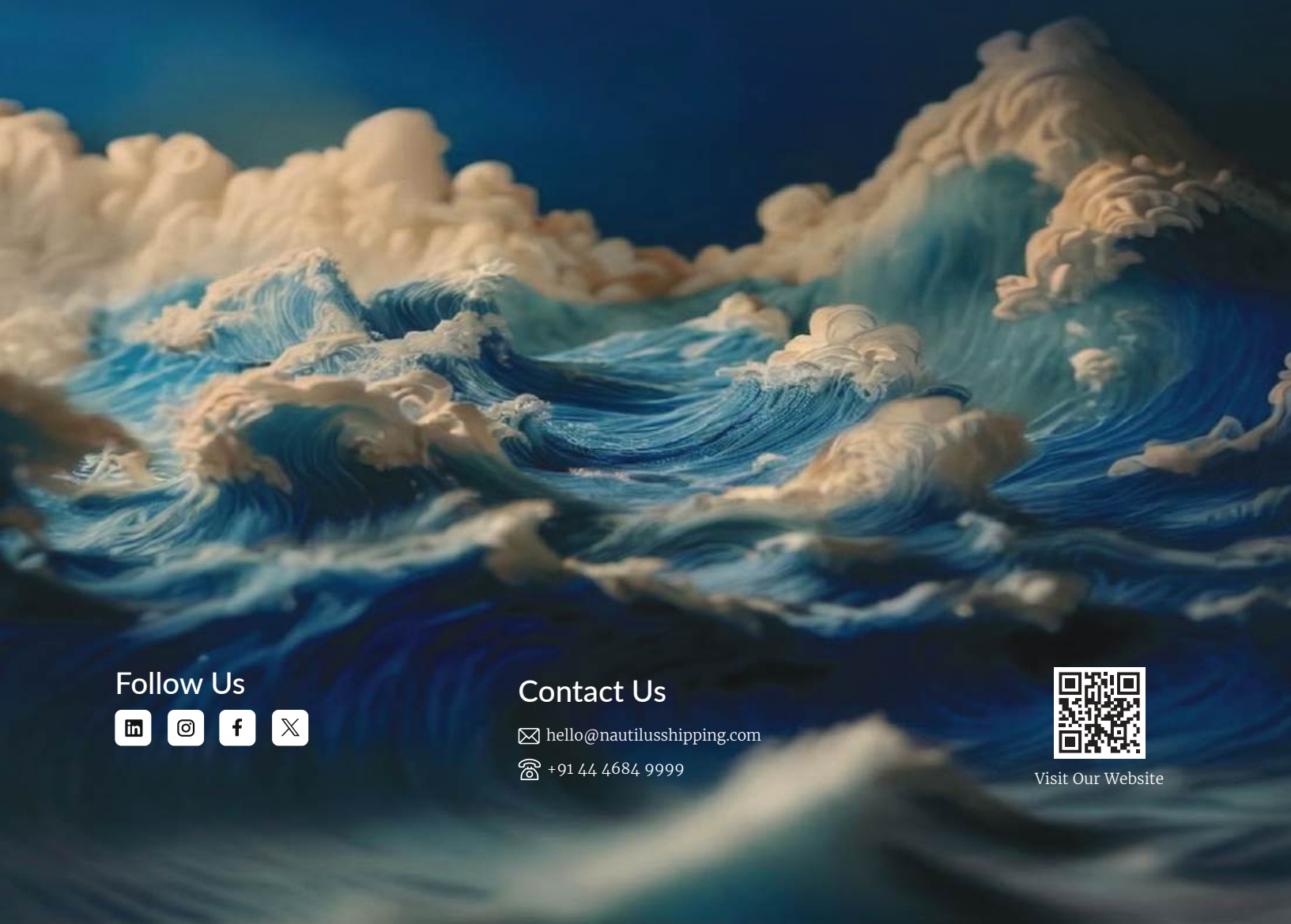
6. Can you guess why ancient Indian sailors stayed close to the coast during monsoons?

- Fear of deep waters
- Ability to seek shelter quickly
- Navigation limits

7. Can you guess one hidden economic benefit of coastal shipping over road transport?

- Faster customs clearance
- Lower cargo damage and insurance costs
- Less documentation

**Answer:** 1. Up to 1,000 trucks 2. Relaxation of cabotage rules 3. Coir stitching, often sealed with natural oils 4. MoPSW (via DG Shipping) 5. Poor last-mile and port connectivity 6. Safer coastal shelter during rough weather 7. Lower damage and insurance risk



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